

HENDERSON BEACH STATE PARK

APPROVED PLAN

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

December 6, 2001



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

December 7, 2001

Ms. BryAnne White
Office of Park Planning
Division of Recreation & Parks
3900 Commonwealth Blvd., M.S. 525
Tallahassee, Florida 32399-3000

Re: Henderson Beach State Park

Lease Number: # 3297

Dear Ms. White:

On December 6, 2001, the Acquisition and Restoration Council recommended approval of the Land Management Plan for Henderson Beach State Park. Therefore, the Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund approves this plan. Pursuant to Section 253.034 and 259.032, Florida Statutes, and Chapter 18-2, Florida Administrative Code the plan's five-year update will be due in December 2006.

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

Henderson Beach State Park is located within the Destin city limits, in Okaloosa County. Access to the park is from U.S. Highway 98 (see vicinity map).

The State of Florida acquired Henderson Beach State Park to develop and manage the property for public outdoor recreation and related purposes. The park was purchased in 1983, under the Save Our Coast program and comprises 221.70 acres.

The park is designated as single-use to provide resource-based public outdoor recreation and other related uses. The Division of Recreation and Parks (DRP) manages the property for the purpose of conservation and protection of natural and historical resources and to provide for resource-based public outdoor recreation, which is compatible with the conservation and protection of the park. There are no legislative or executive directives that constraint the use of the park (see Addendum 1).

The park contains examples of the once prominent coastal dune system that existed in the Panhandle before Florida's coastal development boom. It also contains a relatively undisturbed coastal sand pine scrub community that is becoming scarce outside of protected areas. The unit's primary feature is its fine white sand beach and active dune system. With over one mile of uninterrupted saltwater beach, the area offers an outstanding scenic vista contrasting the white sand beach with the blue-green waters of the Gulf of Mexico. Purchased for its recreational potential and aesthetic qualities, the park is managed to protect its natural features while providing compatible outdoor recreation activities.

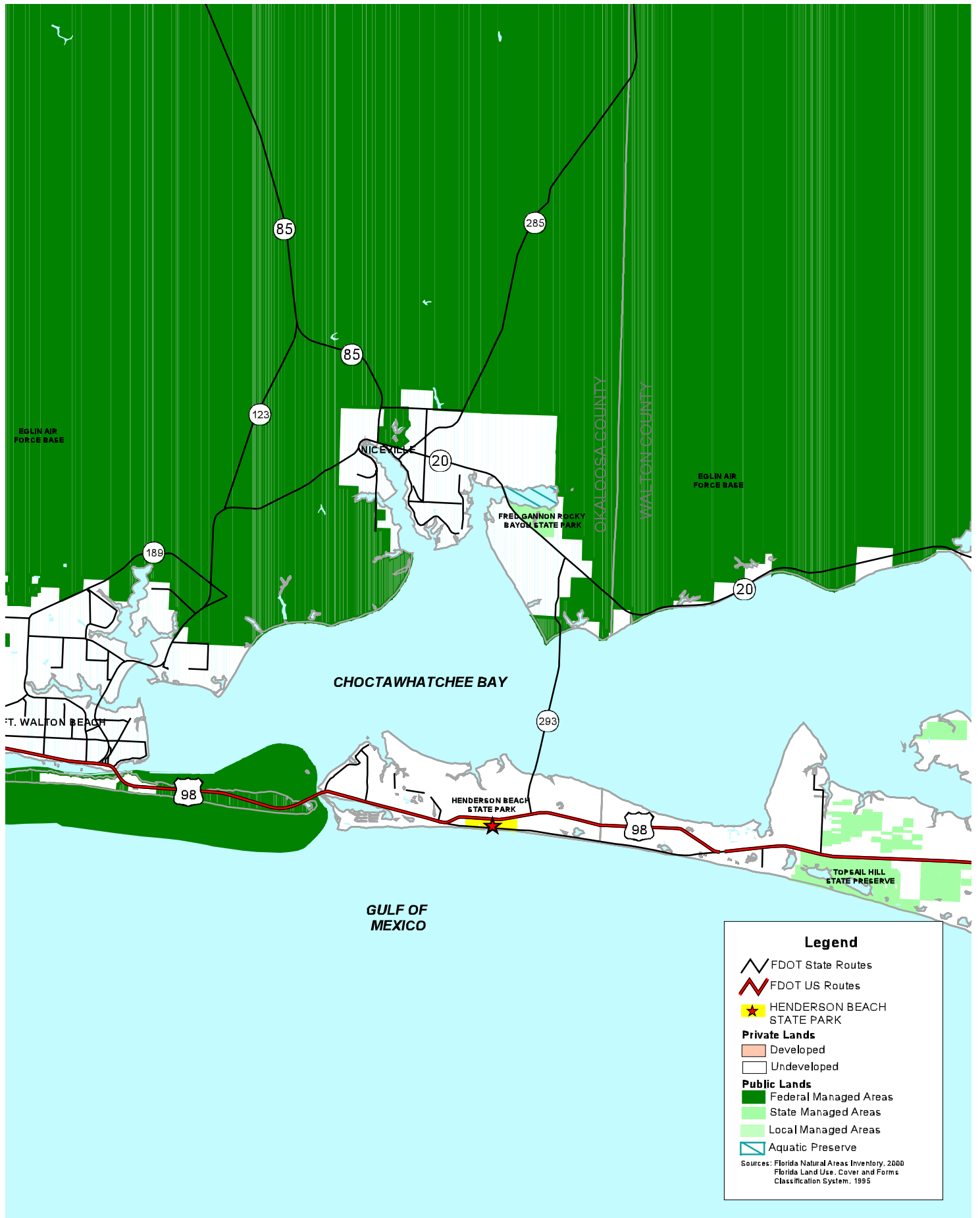
PURPOSE AND SCOPE OF THE PLAN

This plan serves as the basic statement of policy and direction for the management of Henderson 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 November 18, 1996. 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 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

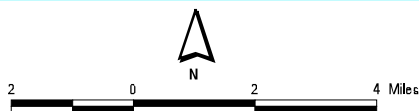


Legend

- FDOT State Routes
- FDOT US Routes
- HENDERSON BEACH STATE PARK
- Private Lands**
 - Developed
 - Undeveloped
- Public Lands**
 - Federal Managed Areas
 - State Managed Areas
 - Local Managed Areas
 - Aquatic Preserve

Sources: Florida Natural Areas Inventory, 2000
Florida Land Use, Cover and Forms Classification System, 1995

HENDERSON BEACH STATE PARK VICINITY MAP



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

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 Henderson Beach State 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 (DRP) is charged with the responsibility of developing and operating Florida's recreation and parks system. These are administered in accordance with the following policy:

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

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

Many operating procedures are standard system wide and are set by policy. These procedures are outlined in the DRP 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 Henderson Beach State Park, major emphasis is placed on maximizing the recreational potential of the recreation area; however, preservation of resources remains important. Depletion of a resource by any recreational activity is not permitted. In order to realize the unit's recreational potential, development in the park is aimed at providing facilities that are accessible, convenient and safe, as needed, to support recreational use or the unit's natural, aesthetic, and educational attributes.

Park Goals and Objectives

The following park goals and objectives express the DRP's long-term intent in managing the state park. At the beginning of the process to update this management plan, the DRP 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 DRP's legislative budget process. The DRP prepares an annual legislative budget request based on the priorities established for the entire state park system. The DRP 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 DRP 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 Resources

1. Continue to implement natural systems management, whereby primary resource management emphasis is placed on restoring and maintaining the natural processes that shape the structure, function and species composition of the natural communities of the park.
 - A. Control erosion by replanting unauthorized footpaths and interpreting the negative impacts of unregulated foot traffic through sensitive dune areas.
 - B. Restore, to the extent possible, natural vistas by removal of overhead telephone poles or burying of lines.
 - C. Protect ephemeral freshwater swale areas behind foredunes as important wildlife habitat.
2. Effectively manage monitoring programs for designated species within the park.
 - A. Continue to conduct seasonal, shorebird surveys.
 - B. Post significant shorebird nesting/resting areas in accordance with Division Policy.
 - C. Continue to collect sea turtle nesting data.
 - D. Post and monitor sea turtle nests.
 - E. Survey and map both active and inactive gopher tortoise burrows.
 - F. Periodically monitor the rare plant species of the park in order to identify any change in status.

Cultural Resources

1. Identify, preserve, interpret and actively manage cultural resources.
 - A. Pursue funding for a phase I archaeological survey of the park.
 - B. Conduct ground disturbing activities in accordance with the Department of State, Division of Historical Resources (DHR) policy.

Recreational Goals

1. Continue to provide quality resource based outdoor recreational and interpretive programs and facilities at the state park.
 - A. Provide controlled access to the beach and sheltered space for picnicking within designated beach use areas.
 - B. Provide modern campground facilities to accommodate tent and RV campers.
 - C. Provide a nature trail that allows exploration of the scrub community.
 - D. Promote an understanding of and appreciation for park resources through signage, kiosks, regularly scheduled interpretive programs and outdoor classroom opportunities.
2. Seek funding to expand recreational and interpretive opportunities through the improvement of programs and the development of new use areas and facilities, as outlined in this management plan.
 - A. Provide additional parking and beach use areas to accommodate increases in visitation at the park.

Park Administration/Operations

1. Provide visitors with a quality recreation experience through visitor service.
 - A. Obtain a Park Service Specialist to meet the goals, objectives, and resource needs of the Choctaw GEOpark.
 - B. Obtain two Park Ranger Positions to meet the goals, objectives and resource needs of the park.
 - 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. Conduct regular inspections of the park to provide a clean, well-maintained and safe environment for visitors and staff.
 - F. Recruit and maintain volunteer support to assist park staff with the development, implementation and maintenance of park programs and facilities.
2. Minimize natural resource impacts of recreation uses and facilities.
 - A. Provide clear directional signage and use barriers, if necessary, to minimize off-trail use.
 - B. Provide boardwalk beach access to protect the sensitive dune system.
 - C. Encourage responsible use by educating visitors to the impact on SRA resources from inappropriate visitor behavior.
 - D. Minimize the footprint of proposed developed areas by concentrating parking lots and facilities as close to existing ones as is practical.
 - E. Regularly monitor recreational impacts to sensitive resources, particularly resting and nesting shorebirds, and institute appropriate management measures, if necessary.
3. Mitigate non-recreation related land use impacts to the visitor experience.
 - A. Work with Gulf Power and Light to remove the overhead powerlines that run along the old Highway 98 corridor.

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 DRP staff in the development of wildfire emergency plans and provides the authorization required for prescribed burning. The Florida Fish and Wildlife Conservation Commission (FFWCC), assists staff in the enforcement of state laws pertaining to wildlife, freshwater fish and other aquatic life existing within park boundaries. In addition, the FFWCC aids the DRP 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 Coastal Systems aids staff in planning and construction activities seaward of the Coastal Construction Line. In addition, the Bureau of Beaches and Coastal Systems aids the staff in the development of erosion control projects. Emphasis is placed on protection of existing resources as well as the promotion of compatible outdoor recreational uses.

Public Participation

An initial public workshop was held on October 16, 2000. The purpose of the meeting was to solicit comments from the public before the development of this management plan.

A second public workshop was held March 28, 2001. The purpose of this meeting was to present this draft management plan to the public.

A DEP Advisory Group meeting was held March 29, 2001. The purpose of this meeting was to provide the Advisory Group members the opportunity to discuss this draft management plan. See Addendum 1.

Other Designations

Henderson Beach State Park is not within and has not been designated as an Area Of Critical State Concern as defined in section 380.05, Florida Statutes. Currently it is not under study for such designation.

All waters within the unit have been designated as Outstanding Florida Waters, pursuant to Chapter 62-302 Florida Administrative Code. Surface waters in this unit are classified as Class III waters by DEP. This park is not within or adjacent to an aquatic preserve as designated under provision of the Florida Aquatic Preserve Act of 1975 (section 258.35, Florida Statutes).

Several other significant land and water resources exist near the park. They include: Blackwater River State Forest, Eglin Air Force Base, Hurlburt Field, Fred Gannon Rocky Bayou State Park, Gulf Islands National Seashore, Rocky Bayou Aquatic Preserve, and Yellow River Water Management Area.

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

Henderson Beach State Park lies within the Coastal Lowlands physiographic region. The topography of the lowlands is generally flat. Exceptions include the presence of dunes or alterations to the surface by erosion or underground solution. Elevation at the park ranges from sea level along the beach, to approximately 25 feet above sea level along well established dunes. The topography has been modified by former highway construction, sand roads, and the recreational infrastructure of the park. In addition, storm surge associated with Hurricane Opal altered elevations along portions of the primary dune line.

The shoreline at Henderson Beach has been shaped by the wave action, winds and long shore currents of the Gulf of Mexico. The shoreline has experienced some degree of accretion and erosion along various portions; however, this is considered a natural occurrence.

Geology

The park lies within the geomorphologic division known as the West Florida Coast Strip, which extends from the mouth of the Ochlockonee River, west to Mississippi and is characterized by islands and narrow peninsulas along the coast. East of the Choctawhatchee River, karst features such as sinkholes and caves occur when limestone lies close to or at the surface. A geologic core taken near the park reveals unconsolidated quartz sand overlying the Intracoastal Formation of calcilutite and calcarenite to 350 feet

(Wiggs-Clark and Schmidt). A wedge-shaped tongue of quartz sands protrudes into the intracoastal formation at this location. Below this intracoastal formation are Bruce Creek and Chickasawhay Limestone strata overlying a base of dolomite and limestone in the Ocala Limestone group. West of the Choctawhatchee River the limestone strata continues to dip westward until, at Pensacola, it is found in the stratigraphic column 1,000 feet below the surface (Wiggs-Clark and Schmidt).

Soils

Three distinct soil types are found at the park. Unconsolidated quartz sandy soils known as Beaches Series, comprises the open beach. This soil type grades into Newhan-Corolla Series, well-drained, sandy soils, located in the rolling, largely unvegetated dune area of the park. Further inland, Kureb Sandy Series is found on the sand pine scrub dominated dunes. Kureb soil series is acidic, droughty sand, with depths of sand to about seven feet or more, with a developing hardpan horizon known as a spodic layer at about two feet.

Land management practices that continue to protect and conserve natural ground cover vegetation, vital to the stability of coastal areas, will conserve soil resources by helping to prevent soil erosion, particularly during major tropical weather events.

Minerals

There are no known mineral deposits of commercial value at Henderson Beach State Park.

Hydrology

The western panhandle of Florida, for the most part, is underlain by two hydrologic units. The uppermost is commonly referred to as the Sand and Gravel Aquifer. Below this surficial aquifer is the Floridan Aquifer.

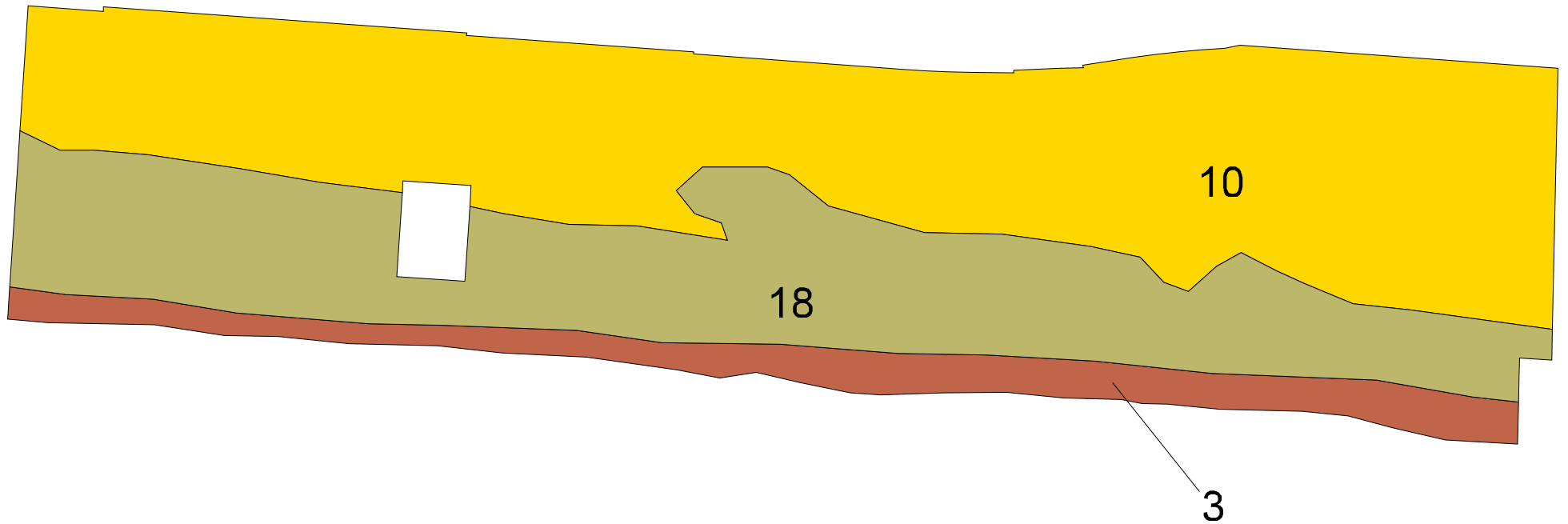
The Sand and Gravel Aquifer consists primarily of quartz sand along with very coarse pea-sized gravel and a small amount of clay (Barracough). This surficial aquifer is directly recharged by local rainfall. Natural discharge occurs via seeps and springs into streams, evapotranspiration, and seepage into the underlying Floridan Aquifer. Water in the sand and gravel aquifer is not only abundant but also extraordinarily soft (low in calcium and magnesium carbonates) and relatively unmineralized. Additionally, chloride content of water from the Sand and Gravel Aquifer is generally low, indicating very little lateral encroachment of saltwater (Barracough).

Park water, obtained from the City of Destin, is pumped from the Florida Aquifer. The water in this area of Destin has less than 500 ppm dissolved solids and less than 250-ppm chlorides. However, when sharp drops in water table occur, some nearby cities have experienced extensive salt-water intrusion and lower quality water (Barracough).




Natural Communities

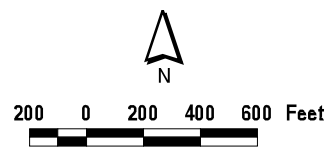
The system of classifying natural communities employed in this plan was developed by the Florida Natural Areas Inventory (FNAI). The premise of this system is that physical factors, such as climate, geology, soil, hydrology and fire frequency generally determine the species composition of an area, and that areas 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 three distinct natural communities (see natural communities map) in addition to ruderal and developed areas. The acreage for each natural community is



LEGEND

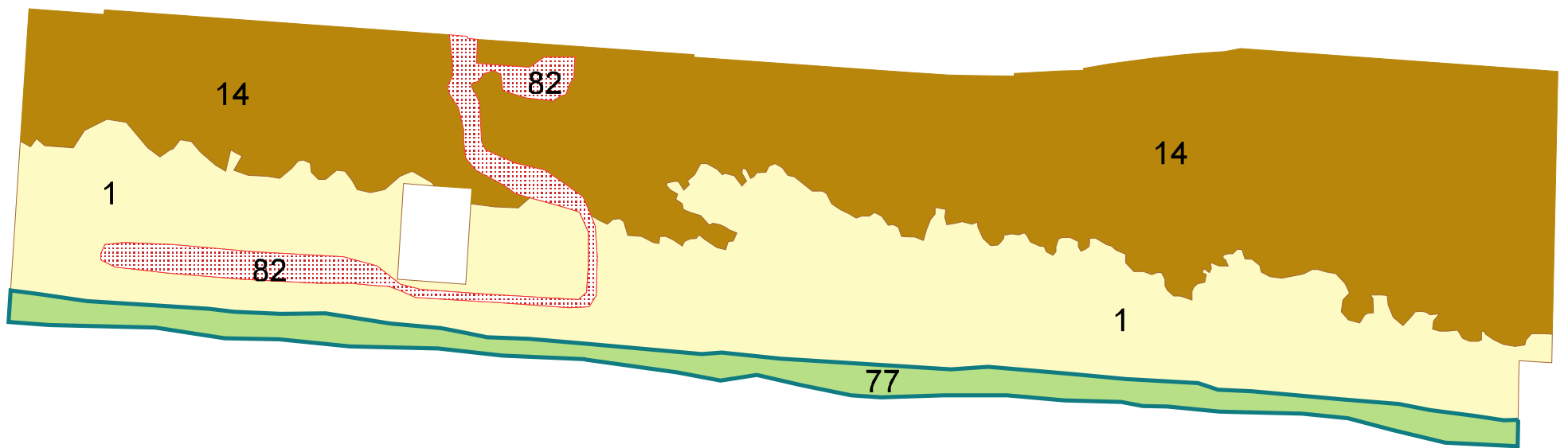
-  03-BEACHES
-  10-KUREB SAND, 0 TO 8 PERCENT SLOPES
-  18-NEWHAN-COROLLA COMPLEX, ROLLING



**HENDERSON BEACH
STATE PARK**

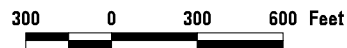
Florida Department of Environmental Protection
Division of Recreation and Parks
Office of Park Planning

SOILS MAP



LEGEND

- 1 - Beach Dune - 82.32 a.c
- 14 - Scrub - 114.97 ac.
- 77 - Marine Unconsolidated Substrate - 16.30 ac.
- 82 - Developed - 8.11 ac.



**HENDERSON BEACH
STATE PARK**

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

**NATURAL COMMUNITIES
MAP**

reflected on the natural communities map. Park specific assessments of the existing natural communities are provided. FNAI descriptions of these natural communities are contained in Addendum 4. A list of plants and animals occurring in the park is contained in Addendum 5.

Beach dune. The beach dune community at the park extends from the gentle undulating foredunes, near the gulf waters, to the higher, mobile, and largely unvegetated dunes extending landward of the beach. These larger dunes may reach an approximate height of 30 feet.

Distinct microhabitats fall within this picturesque area of shifting, white sand dunes. Some of the plants occurring in the swales are characteristic of coastal grassland areas. These bluestem dominated swales occur sporadically along a narrow band in front of the second dune ridge. Coastal grassland of gulf bluestem grass occupies a narrow band in front of the second dune ridge. The remnants of old U.S. Highway 98 parallel, in part, what was formerly coastal grassland. For consistency with the soil evidence and for ease of management, this remnant community is lumped within the larger beach dune community.

In the lowlands, wet swale grasses and rushes occur, with ephemeral ponds providing fresh water in the summer. Perennial plant pioneers with deep-rooted systems such as golden aster, woody goldenrod, lupines, whitlow-wort and gulf bluestem, are most often found in flattened areas of the dune topography referred to as blowouts. Sea oats, camphor weed, beach elder, sea rocket, and saltwort help stabilize the primary dunes facing the Gulf.

A major step towards restoration of dune habitat was accomplished in 1999 with the removal of the old U.S. Highway 98 from the park. The asphalt and underlying roadbed materials were broken up and hauled away. The profile of the road way, along with small, scattered, asphalt remnants remain, yet with time, natural dune building processes of the dynamic beach dune community will continue restoration of this ruderal site.

Adequate dune cross-over points are provided at the park. However, given the high level of visitation, the potential for unauthorized dune traffic is ever present. Foot traffic through natural dune areas damages dune-building vegetation, disrupts wildlife habitat, and causes dune blowouts during storms. Park staff is alert to the need to funnel visitor traffic along the boardwalk dune crossover points.

Scrub. Two distinctly different types of scrub habitat combine to form the overall scrub community as reflected in the natural communities' map. The low, salt-pruned oak scrub lies inland of the beach dune community. Sand live oaks and Chapman's oak combine to form a dense, nearly continuous canopy that rarely exceeds 4 feet in height. The best examples of this form of scrub occur in the eastern portion of the park. Open sandy areas within the low oak scrub are home to Golden Asters, Gulf Coast Lupine, and Whitlow wort. Sand pine, sand live oak, Chapman's oak, myrtle oak, rosemary, magnolia and red bay dominate the park's more typical portions of the scrub community. In these areas, sand pine forms a relatively patchy canopy. Slightly lower and more mesic areas are dominated by saw palmetto.

In general, the scrub community at Henderson Beach is very well established. In some areas, the scrubby oaks and sand pines have formed a dense canopy characteristic of old growth, coastal scrub. Sand pines in these areas have been aged at over 100 years old.

Relatively open areas dominated by dune rosemary and stunted scrub oaks are also home to large-leaved jointweed, a state listed species that has become increasingly rare due to loss of habitat. The deep sandy soil and presence of succulent plants also make these areas suitable for gopher tortoises, which were likely more abundant many years ago, prior to

habitat fragmentation.

This community, which had been degraded by off-road vehicle trails and numerous footpaths through the scrub, has begun to restore naturally. The natural restoration has occurred since the property came under state ownership.

Marine unconsolidated substrate. The exposed beach and submerged shore combine to form the marine unconsolidated substrate. The quartz sand of the marine unconsolidated substrate is an integral part of the natural dune building process and beach dynamics. In general, the smaller waves of spring and summer carry sand from near shore bars onto the shore thus serving to build the beach. Wind blown sand particles from the beach in turn build up dunes as they encounter vegetation in the beach dune community. The larger waves of fall and winter have the tendency to erode the beach gradually. This sand is deposited back to the near shore bars. The beach dunes and near shore sandbars are vital sand reservoirs in this cyclical process. With this in mind, the status of the marine unconsolidated substrate is very much dependent on the status of the adjacent beach dune natural community.

Despite the impacts of recent tropical storms, the beach of the park continues to be supported by natural systems. It should be noted that accretion and erosion are to be expected in this highly dynamic area.

Ruderal and developed. Developed areas consist of an entrance station, campground, parking areas, roads, picnic shelters and restroom facilities. Ruderal areas resulting from past off-road vehicle use have improved significantly under Park Service Protection.

Designated Species

Designated species are those which 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 6 contains a list of the designated species and their designated status for this park. Management measures will be addressed later in this plan.

There are 14 state and/or federally listed species of plants and animals at the park. For a list of these species, including current listing status, see addendum 6.

Significant plants, rare and largely endemic to the Panhandle of Florida, occur in the park's coastal dunes and low scrub. Gulf Coast Lupine and Godfrey's & Cruise's golden asters grow in the open sand dunes near the beach. Large-leaved jointweed, a species that is becoming increasingly rare due to loss of habitat, occurs sporadically throughout relatively open areas within the scrub community.

Federally and state listed marine turtles occasionally nest along the beach from May through October. The park provides a dark stretch of beach in Okaloosa County vital to the nesting success of these threatened and endangered turtles.

The park lies within the historic range of the Choctawhatchee beach mouse. Designated protected areas, within the beach dune community, may be considered for potential recovery sites. Consideration may be given to reintroducing the Choctawhatchee beach mouse at Henderson Beach State Park. A decision on reintroduction will need to consider the following factors, among others.

1. Viability of habitat at the park.
2. Availability and quality of habitat in all panhandle parks.
3. Current and anticipated demand for beach recreation at the park, in balance with

carrying capacity and resource protection.

4. Effect of reintroduction on the Division's long range ability to manage the park for its primary purpose of acquisition (i.e. provision of public beach recreation).

Other state-listed species regularly encountered at the park include snowy egrets, brown pelicans, snowy plovers, piping plovers, and least terns.

Special Natural Features

Special natural features at Henderson Beach State Beach Park include exceptional beach dune

Vistas, high plant endemism, excellent sea turtle and shore bird nesting habitats and a high quality quality quartz sand beach.

Cultural Resources

Based on information from the Florida Master Site File (FMSF), there are no recorded archaeological or historical resources at the park. World War II era artifacts such as shell casings and the remains of metal grates used to provide traction for military vehicles in the sand are scattered throughout the park. Additionally, various sites with historical or archaeological significance are found in the Destin area. Consequently, cultural sites may potentially occur at the park.

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 park is below the 1,000-acre threshold that is required pursuant to Florida Statutes.

Additional Considerations

In the future, proposed renourishment of private and commercially owned beach frontage may be considered in Okaloosa County. Beach and associated dune communities within the coastal state parks of the western Florida Panhandle are intact systems, sustained by natural means. The Division of Recreation and Parks therefore supports management without beach renourishment within these parks. This position was followed in 1998 during the Bay County beach renourishment project. The Division excluded St. Andrews State Park and Camp Helen State Park from the overall project. The beaches at both parks are stable and continue to be supported by an intact, cyclical process that provides for natural sand replenishment relative to the highly dynamic beach and dune community.

Management Needs and Problems

Efforts were made during fiscal year 1998/99 to post shorebird nesting/resting areas along the beach and adjacent fore dunes. This signage needs to be maintained by park staff as part of the shorebird-monitoring program, particularly during the spring and summer months.

Sustained efforts have been made to monitor sea turtle nesting at the park. These efforts

should be continued. Partnerships between the park and local organizations that expand the park's monitoring efforts should be encouraged.

Gopher tortoise burrows occur within the park. Currently, only one active burrow has been identified by park staff. A current survey needs to be conducted in order to locate any additional active burrows.

Unauthorized foot traffic through sensitive dune areas continues to be a concern at the park. Appropriate signage is in place delineating these sensitive areas. Periodic monitoring of the beach dune community should continue so that unauthorized footpaths are identified and marked with signs.

Exotic plant species do not currently pose a significant problem at this park. However, park staff should remain vigilant to the threat of upland exotic species such as cogon grass and Chinese tallow that can easily become established from areas adjacent to the park.

Management Objectives

The resources administered by the Division of Recreation and Parks are divided into two principal categories: natural resources and cultural resources. The Division's 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. Continue efforts to conduct seasonal, shorebird surveys.
2. Continue efforts to collect sea turtle nesting data.
3. Remove exotic species outlined in the DRP Operations Procedures Manual (OPM).
4. Make effort to control erosion by replanting unauthorized footpaths with native/local vegetation, and interpreting to park visitors the negative impacts of unregulated foot traffic through sensitive dune areas.
5. Make effort to conduct gopher tortoise burrow surveys and mapping.
6. Continue efforts to compile a complete list of park biota.
7. Conduct ground disturbing activities in accordance with the Department of State, Division of Historical Resources (DHR) policy.
8. Pursue funding for a Phase I archaeological survey of the park.

Management Measures for Natural Resources

Hydrology

The park is on city water. Destin draws from the Florida Aquifer, but with the tremendous increase in population in this area, water supplies are stressed and costs of city water may rise.

There are no permanent bodies of freshwater on the property. All efforts should be made to protect ephemeral wet swales behind the primary dune line. The removal of the western cul-de-sac and the addition of ribbon curbing and riprap along parking areas, has minimized impacts from stormwater run off. The Gulf of Mexico borders the unit to the south. Activities in this area are closely monitored to maintain the quality of the Gulf shoreline.

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 DRP and the DOF.

Prescribed burning of portions of the sand pine scrub may be a management consideration at this park. Natural fire return intervals and regimes in coastal Panhandle oak scrub, with sand pine, is still unclear. Over the last five years, some research has been conducted in order to determine the age of dominant sand pines throughout the scrub community. The age of some large sand pines was determined to be more than 100 years, indicating that the coastal scrub community at Henderson Beach has not been exposed to catastrophic fire in at least that many years. For areas of scrub in such close proximity to the Gulf of Mexico, it is likely that endemic plants such as large-leaved jointweed may be maintained by other disturbance factors such as major tropical storm events, as well as fire.

If prescribed burning is deemed appropriate at this park, safety factors such as smoke screening should be a top priority.

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 which aggravate the particular problems of a species.

The status of designated species at Henderson Beach is directly proportional to the status of the natural communities of the park, particularly since natural areas surrounding the park have succumbed to development. Negative impacts to the open beach of the park, beach dune and scrub will weigh heavily on the designated species within these communities, and should therefore be minimal in nature and sensitive to these fragile resources.

Shorebirds tend to congregate and nest in disturbed areas, relatively clear of vegetation. These areas are sometimes the result of human activity, but most often the result of natural events such as storm blowouts within the beach dune. As disturbed areas restore/revegetate naturally, shorebird activity tends to diminish accordingly.

At Henderson Beach State Park, asphalt remnants from the removal of old Highway 98 along the primary dune line created an artificial shorebird nesting habitat. Natural restoration processes are restoring the former roadbed to a beach dune community. The use of this area by shorebirds for nesting may diminish as sand continues to build and the dunes revegetate. Suitable habitat may remain or be created in the future in some areas that are opened by periodic weather events.

Southeastern snowy plover, least tern and black skimmer seasonal nesting habitat shall be monitored and appropriate measures shall be taken to ensure the protection and maintenance of the nesting habitat for these species. Annual surveys will be conducted in order to identify and protect those areas currently utilized by shorebirds. Any future development within the beach dune community will be preceded by additional wildlife and plant surveys, in order to accurately assess wildlife use patterns and the possible occurrence of rare plants. viable shorebird nesting habitat. The Division will develop a survey protocol in coordination with the FWCC that provides a consistent data collection methodology. Data will be collected for an appropriate length of time prior to any additional beach use area development to avoid potential impacts to listed species. The new recreation area development proposed in this plan will not proceed if viable nesting

habitat remains in the area identified for that land use on the Conceptual Land Use Plan.

Management activities will include installation of appropriate signs, to prohibit access, and use of other measures such as posts, widely-spaced pickets, high visibility string, tape, or line to prevent park visitors' access to bird nesting areas before and throughout seasonal nesting activities during the nesting season. As recommended by FWCC staff, sand fencing in some blowout areas that provide suitable nesting habitat will be removed to slow the dune restoration process and encourage use of these areas by snowy plovers.

All of the above species and the piping plover also tend to congregate in certain locations and use them for resting. Resting areas shall also be monitored for unnatural disturbance. If major significant disturbances are occurring, visitor management actions will be taken to minimize the disturbances. In addition to the above actions, park visitors will be informed about sensitive bird habitats through interpretative handouts and programs.

Finally, in order to operate an effective shorebird protection program, it is essential to control both feral and domestic cats and dogs as outlined in the OPM and DEP Program Directive 930. Local pet ordinances shall be enforced and educational programs with nearby neighbors should be implemented.

Seasonal monitoring will also be conducted for nesting sea turtles. following Department policies. The location and design of proposed beach use development will be sensitive to the historic uses of the area by nesting sea turtles and all facilities will be designed so that they do not adversely affect nesting activities. Impacts from depredation, or human disturbance, if evident, will be managed appropriately. Gopher tortoise burrow survey and mapping will also be undertaken at this park, as time and funding permit. Measures to protect habitat for this species will be implemented, as appropriate.

Exotic Species Control

Exotic species are those plants or animals that are not native to Florida, but were introduced as a result 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 impact non-resistant native species. Thus, the policy of the Division is to remove exotic species from native natural communities.

Park staff will remove exotic species when encountered, as outlined in the OPM. Assistance with exotic removal should be requested, as needed, from District environmental staff.

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 to be a threat or problem.

Problem species, which are occasionally encountered at Henderson Beach State Park, include sharks, stingrays and jellyfish in the swimming areas, and pygmy rattlesnakes in the camping area. There has been some evidence that park visitors have killed pygmy rattlesnakes within the campground of the park. Information regarding the protection of all plants and animals within the park will be posted in highly visible portions of the campground. If rattlesnakes pose a significant threat to visitor safety, they should be relocated to a more remote area of the park.

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. A statement of DHR's policies and procedures for the management and protection of cultural resources is contained in Addendum 7.

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. All ground-disturbing activities will be conducted in coordination with DHR, and as outlined in Addendum 7.

Research Needs

Natural Resources

Any research or other activity that involves the collection of plant or animal species on park lands 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. Monitoring of rare plant species as well as breeding populations of least terns and snowy plovers along with the development of management procedures to protect these species provide important research opportunities. The occurrence of sea turtles in this urban park requires monitoring and data collection as well.
2. Very little is known concerning life histories of rare panhandle endemics such as large-leaved jointweed, Gulf coast lupine and golden asters. Understanding the biology of these species and the issues responsible for their rarity is of importance in their management.

Cultural Resources

A Phase I Archaeological Survey of the park is needed.

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 8. Cost estimates for conducting priority management activities are based on the most cost effective methods and recommendations currently available (see Addendum 8).

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.

If the land management review team determines that reviewed lands are not being

managed for the purposes for which they were acquired or in compliance with the adopted land management plan, management policy statement, or management prospectus, or if the managing agency fails to address the review findings in the updated management plan, the department shall provide the review findings to the board, and the managing agency must report to the board its reasons for managing the lands as it has.

Henderson Beach State Park has not been the subject of a land management review. Currently, it has not been scheduled for review.

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, 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's 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.

Henderson Beach State Park is located in the West Florida Planning District, which includes Bay, Escambia, Holmes, Okaloosa, Santa Rosa, Walton, and Washington Counties. The coastline of the District is becoming increasingly urbanized, driven in large part by tourism-related development. The 2000 Florida Statistical Abstract reports the West Florida as the seventh most populated of the state's 11 planning districts, with an estimated population of 825,472. The District population has grown over 22 percent since 1990 and is estimated to grow nearly 19 percent more by 2010. Escambia County is the most populous, accounting for nearly 37 percent of the District's total population. The park is located in Okaloosa County (population 175,568) and the city of Destin (population 11,363).

Existing Use of Adjacent Lands

Residential apartment and condominium development presently exists immediately east of the site. U.S. Highway 98 runs along the northern boundary of the park, with commercial land uses, including restaurants, hotels, and a large shopping center located across this busy thoroughfare. A 14-story condominium stands imposingly just to the west of the site. Intensive resort and commercial development lines U.S. Highway 98 as one continues west up to the East Pass Bridge. There is no undeveloped beachfront for miles in any direction from Henderson Beach State Park.

Planned Use of Adjacent Lands

The lands surrounding the park have been largely built out with a mix of residential, resort and commercial uses. The larger Destin area is anticipated to continue experiencing rapid growth with remaining undeveloped areas transitioning to more intense uses in the very near future.

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

The park is typical of the northern Gulf of Mexico coastal dune system. Three natural communities are found on the park: Marine unconsolidated substrate, beach dune, and scrub. The beach dune community forms an irregularly shaped east-west band running the length of the park and extending inland from the Gulf about 450 feet at the widest point.

The right-of-way of U.S. Highway 98 forms the northern boundary for most of the park. Except for the beach and the area disturbed by the old U.S. Highway 98 right-of-way, the entire park exhibits an irregular ridge and swale topographic profile typical of coastal dune systems. The existing beach development was located on the old roadbed to lessen the environmental impacts and reduce construction costs.

Water Area

Henderson Beach is an attractive fine white sand shelf washed by the emerald waters of the Gulf of Mexico. The beach provides safe swimming conditions and has been a popular area with local residents for many years. Surf fishing is of moderate quality.

Shoreline

The property includes over 6,600 linear feet of shoreline on the Gulf of Mexico. The sugar white, sandy high-energy beach is outstanding; it is also the focal point for most of the recreation activities at this park. The beach profile rises steeply from the beach shelf to the primary dune ridge, which was flattened for the construction of old U.S. Highway 98. The Gulf side of the primary dune is vegetated with sea oats, but vulnerable to erosion from foot traffic through the dunes.

Natural Scenery

The beach, foredunes, and back dunes provide visitors with an opportunity to view three distinct kinds of coastal scenery. Interpretation of all three areas will greatly enhance the users' experience and understanding of coastal ecology. In providing access to the foredune zone, consideration will be given to possible damage to the resource from foot

traffic over fragile dune vegetation.

The beach area provides excellent views to the south with pleasing contrasts between the white sand, the emerald green surf, and the deep blue offshore waters. Negative visual impacts affecting the beach occur at the east and west ends of the park, where commercial and residential development encroaches on the view shed, on the western half of the property, where the U.S. Air Force maintains a radar installation, and along the old U.S. Highway 98 corridor where Gulf Power maintains above ground power lines. It will be impossible to mitigate these impacts completely.

The foredunes possess a dynamic visual character, contrasting the exposed sand dunes with green or gray-green vegetation. Many of the plants in this zone have assumed interesting shapes in response to the salt-spray environment. The back dunes provide a very different visual experience. The pines and oaks in this community create some shade from the intense sunlight. As in the foredunes, many of these trees have assumed unusual forms. The twisted shapes of the sand pines in this zone are some of the most outstanding visual features of the park. The height of the dunes and associated vegetation serves to shield visitors from some of the negative visual impacts from the land uses noted above.

Significant Wildlife Habitat

The beach dune community provides important resting and nesting habitat for shorebirds, including snowy plovers, piping plovers, least terns and skimmers. Birds have been reported nesting along the old 98 roadbed east of the park drive. Natural processes are restoring this area as vegetation moves in and sand accumulates. Traffic through these areas should be restricted during nesting season to avoid disturbance to shorebirds. The park also provides one of the few remaining undeveloped stretches of beach that is important sea turtle nesting habitat, and the scrub community provides habitat for gopher tortoises. The presence of listed species, natural restoration processes and the role of the park as a wildlife habitat island within an urban context, provides unique opportunities for interpretation.

Natural Features

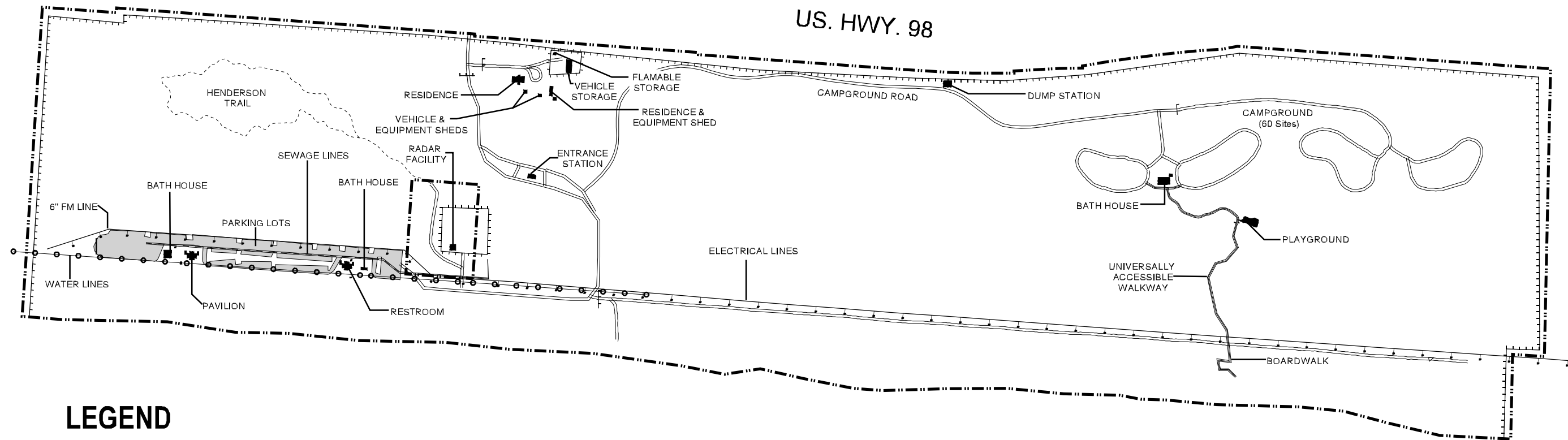
One outstanding natural feature at this unit is the active dune system that fronts the Gulf of Mexico along the southern third of the park. The visibility of the geologic processes at work, and the vegetation which survives under such harsh conditions, provide an excellent educational opportunity for visitors. Boardwalks are provided to allow visitors easy access to the beach without damaging the dunes and vegetation. Another outstanding natural feature is the mature sand pine scrub community on the northern side of the park. It is an exceptional example of the coastal scrub ecosystem that dominated this coast before development. A short nature trail provides controlled access to this community and an interesting contrast to the beach.

Assessment of Use












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

Past Uses

Henderson Beach had been used for many years as an unimproved beach park. The inland portion had been vacant land without notable uses. Old U.S. Highway 98 previously traversed the park along the primary dune. Occasional use by the U.S. Air Force during military training maneuvers has occurred since World War II. Before the



LEGEND

-  TRAILS
-  WALKWAYS
-  FENCES
-  6" FM LINES
-  ELECTRICAL LINES
-  SEWAGE LINES
-  WATER LINES
-  ROADS
-  STRUCTURES
-  PARK BOUNDARY
-  PARKING LOTS

GULF OF MEXICO



200 0 200 400 Feet



**HENDERSON BEACH
STATE PARK**

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

BASE MAP

park was staffed, the property was used by individuals operating off-road vehicles. Significant damage to vegetation and dunes in the foredune zone was evidence of the inappropriate nature of this activity.

Before acquisition, it was recognized that through traffic along U.S. Highway 98 would pose significant constraints to development of a quality beach park. Since the Florida Department of Transportation was planning the relocation of the highway to the northern park boundary, the Department of Environmental Protection reached an agreement with Okaloosa County Board of County Commissioners transferring ownership of the road corridor within park boundaries to the Department of Environmental Protection on completion of the project. The closing of old U. S. Highway 98 made it possible to utilize the existing road pavement and built-up shoulders for the park drive and parking areas. This arrangement provides safe and convenient access to the beach. The environmental impacts and development costs of the park have been significantly decreased by using this disturbed area for the purposes of public circulation and parking.

Recreational Uses

Swimming, sunbathing, surf fishing, picnicking, camping and related beach activities are the primary current uses of the property.

Other Uses

The U.S. Air Force makes occasional use of an existing radar installation adjacent to the existing beach use area. Twenty four-hour access to the facility needs to be maintained. Gulf Power Corporation maintains the overhead powerlines that run alongside the old U.S. 98 Highway road corridor. The Division will continue to encourage Gulf Power to place the power lines underground to improve the viewshed of the park.

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 Henderson Beach State Park, the remaining areas of the scrub and beach dune communities (see natural communities map) not currently proposed for additional development are designated as protected zones.

Existing Facilities

A main beach use area is located at the western end of the park. Picnic shelters and restrooms support day use and an interpretive nature trail provides access to the backdune and scrub communities. The first phase (30 sites) of a planned 60-site full service campground has been completed at the eastern end of the park. Phase two, slated for completion in the very near future, will include the remaining 30 sites, an additional bathhouse, and a fire circle. The campground is connected to the beach by a universally accessible concrete pathway and boardwalk. Bicycle and pedestrian access is encouraged by a park-maintained sidewalk that runs along the outside of the park fence along the northern boundary. Designated bike lanes on park roads support bicycle use within the park. Support facilities are located just off the main drive as one enters the park, and includes two staff residences. The following is a comprehensive list of existing facilities.

Beach Use Area

Beach boardwalks (3)
Large picnic shelters with grills (2)
(28 tables total)
Interpretive signs (3)
Nature trail (0.6 mi.)
Bathhouses (2)
Paved parking
(239 spaces; includes 10 handicapped
and 8 oversized)

Campground

Campsites (60)
Playground equipment
Campfire circle
Universally accessible sidewalk
and beach boardwalk

Campground—Continued

Interpretive sign
Bathhouse (2)

Support Facilities

Entrance station/administration office
Standard residence
Mobile home residence
Fenced maintenance area
3-bay shop
Equipment shed
Flammable storage building
Boundary fence
Entry gate and sign
Paved park roads (1.1 miles)
Sidewalk (1 mile)

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 (see conceptual land use plan). 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

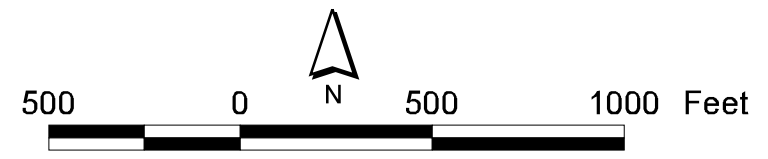
The existing recreational uses are appropriate and should continue. Proposed recreational uses and facilities focus on improving beach access by providing an additional beach use area.

Recreation Facilities

The need for a second beach use area was identified in the previous unit management



**HENDERSON BEACH STATE PARK
CONCEPTUAL LAND USE PLAN**



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

plan for this park. Existing parking areas are exceeding capacities on peak days, indicating a growing need for expansion of beach parking. Therefore, additional parking areas for up to 214 cars, beach bathhouses, and boardwalks are still recommended for future development at the park.

The second phase of beach development was previously proposed entirely east of the park drive. However, it is recommended that as much of the proposed beach use expansion as is practical be located between the Air Force radar installation and the park drive. The parcel containing the radar installation has been identified on the optimum boundary map of this plan. Acquisition of that parcel would provide additional space for the expansion of beach facilities, further minimizing the need for development east of the park road. Up to six medium picnic shelters, two bathhouses with outside showers and boardwalk dune crossovers will be needed to support visitor use. An interpretive kiosk is also recommended to provide important visitor education in what is anticipated to be a high traffic area. Modifications to the existing park drive will be necessary so pedestrians do not have to cross the park road to gain entry to established beach access points.

If site constraints do not allow the development of sufficient parking in this area, then consideration should be given to expanding parking east of the park drive. There are concerns that future development of the old U.S. Highway 98 roadbed may affect resting and nesting habitat for listed shorebirds. The District biologists and Bureau of Natural and Cultural Resources will coordinate with the Bureau of Design and Recreation Services to conduct biological surveys assessing any impacts to listed shorebirds within areas proposed for development, when funding is allocated for this project. As discussed in the Resource Management Component, District biologists will conduct biological surveys of this area before construction to assess potential impacts to shorebirds. The proposed location or the recommended numbers of parking spaces may be modified if it is determined that unacceptable impacts would result from the proposed development east of the park drive. The Bureau of Design and Recreation Services will coordinate with District biological staff to ensure the project is designed to minimize environmental impacts.

Playground equipment and two small shelters are recommended to the west of the existing beach use area to provide an alternative play area for families with children. This location is within a disturbed area that was the former site of a paved cul-de-sac. A boardwalk is proposed to provide universal access to the beach.

Support Facilities

An additional 3-bay shop equipment storage facility is needed to protect park equipment from the salt air. The Division is currently working with Gulf Power and Light to have the overhead powerlines removed from the old Highway 98 corridor within the park boundary. Partial funding for this project would come from Destin Water Users in return for placement of a small lift station within the cul-de-sac located on the eastern most boundary of the park. The cul-de-sac is currently outside the functional boundary of the park and would have no negative impacts to park resources or the visitor experience. Completion of this project would significantly improve the visual quality of the park landscape.

Facilities Development

Preliminary cost estimates for the following list of proposed facilities are provided in Addendum 8. 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.

Beach Use Areas

- Medium picnic shelters (6)
- Small picnic shelters (2)
- Bathhouses (2)
- Beach boardwalks
- Playground equipment

Interpretive kiosk

Paved parking (up to 214 spaces)

Support Facilities

Equipment storage facility

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
Camping	240	240			240	240
Nature Trail	12	48			12	48
Swimming/Picnicking	717	1,434	642	1,284	1,359	2,718
TOTALS	969	1,722	642	1,284	1,611	3,006

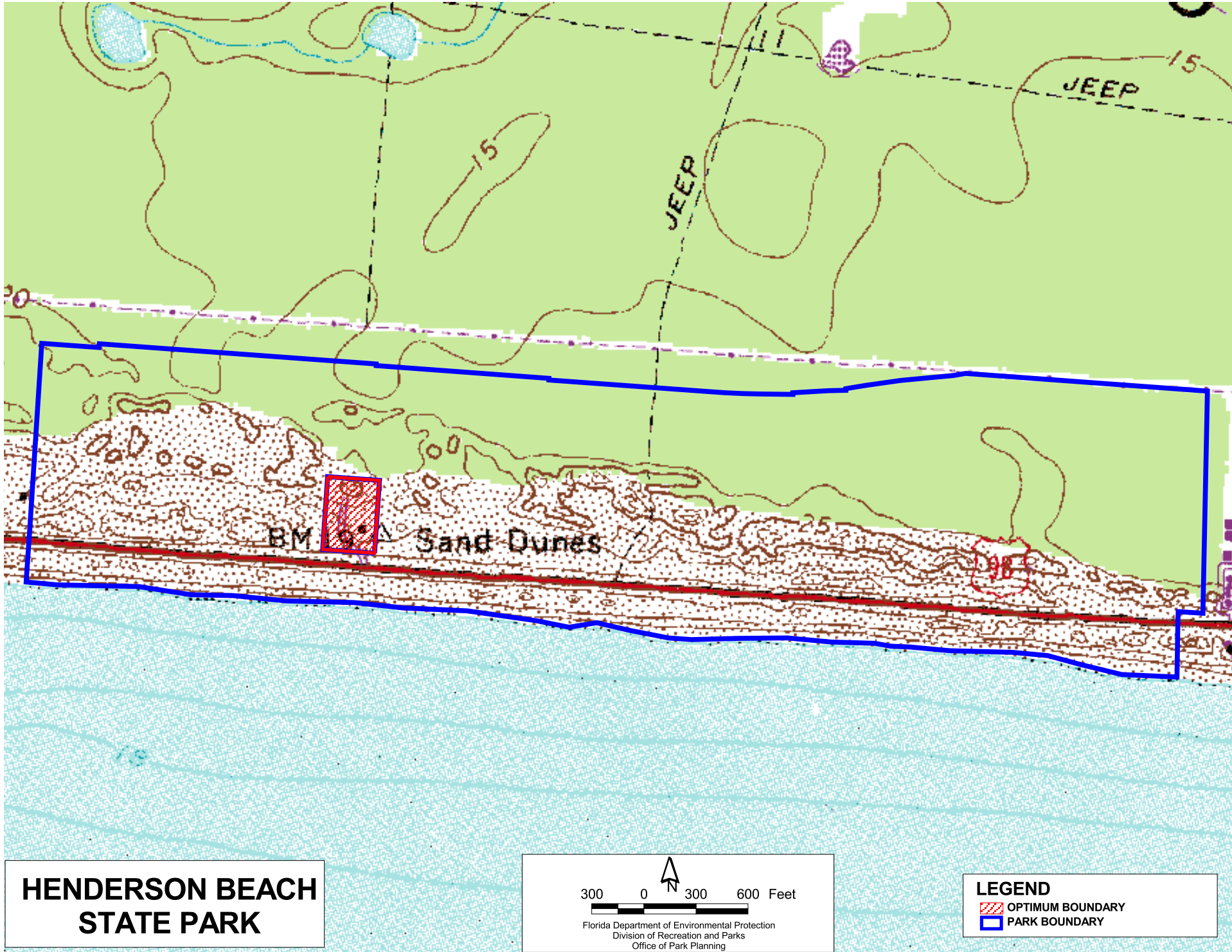
Optimum Boundary

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

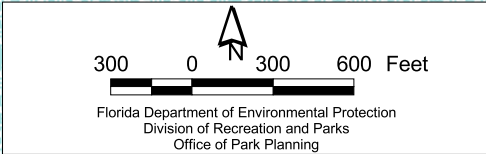
boundary may occur for the enhancement of natural and cultural resources, recreational values, and management efficiency. At this time, no lands are considered surplus to the needs of the park.

The optimum boundary map reflects lands identified as desirable for direct management by the Division as part of Henderson Beach State Park (see optimum boundary map). These parcels may include public as well as privately owned lands that improve the continuity of existing park lands, provide additional natural and cultural resource protection, and/or allow for future expansion of recreational activities.

The optimum boundary includes the federally owned parcel housing the radar facility. Acquisition of this parcel would provide additional space for the expansion of beach use areas and serve to minimize development impacts to existing natural resources.



**HENDERSON BEACH
STATE PARK**



LEGEND

-  OPTIMUM BOUNDARY
-  PARK BOUNDARY

Addendum 1—Acquisition History

**Henderson Beach State Park
Acquisition History**

Purpose of Acquisition

The State of Florida acquired Henderson Beach State Park to develop and manage the property for public outdoor recreation and related purposes.

Sequence of Acquisition

On February 2, 1983, the Board of Trustees of the Internal Improvement Trust Fund (Trustees) obtained title to Henderson Beach State Park. The State purchased the property under the Save Our Coast program. On April 17, 1984, the Trustees purchased additional property and added it to Henderson Beach State Park. Presently, the park comprises 221.70 acres.

On June 6, 1983, the Trustees conveyed management authority of Henderson Beach State Park to the Department of Environmental Protection, Division of Recreation and Parks.(DRP) under Lease No. 3297. The lease is for a period of fifty (50) years and expires on June 5, 2033.

Title Interest

The Trustees hold fee simple title to Henderson Beach State Park. In accordance with the lease from the Trustees, the park will be managed for the purpose of conservation and protection of natural and historical resources and for resource-based public outdoor recreation, which is compatible with the conservation and protection of the property.

Special Conditions on Use

Henderson Beach State Park is designated single-use to provide resource-based public outdoor recreation and other related uses. There are no legislative or executive directives that constraint the use of the park. 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 will be discouraged.

A copy of the Trustees Lease Agreement # 3297 is available upon request.



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

February 21, 2001

Liz Cloud, Chief
Bureau of Administrative Code
Department of State
Elliot Building
Tallahassee, Florida 32399-0250

Dear Ms. Cloud:

Enclosed are an original of the public notice and an agenda (with disk) for the Henderson Beach State Park DEP Public Workshop. We would appreciate publication of this notice in the Florida Administrative Weekly's issue of March 9, 2001.

Please send all invoices for publication of this notice to the letterhead address, Mail Station 525.

If you have any questions, please call (850) 488-2200. Your attention to this matter is appreciated.

Sincerely,

BryAnne White

BryAnne White, Planner
Office of Park Planning
Division of Recreation and Parks

BW/

Enclosures

More Protection, Less Process"

Printed on recycled paper.

PUBLIC NOTICE

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

DATE AND TIME: Wednesday, March 28, 2001, 7:00 PM (CST)

PLACE: Destin Elementary School
Cafeteria
630 Kelly Street
Destin, Florida 32541

PURPOSE: To present the proposed land management plan for Henderson Beach State Park to the public. A copy of the agenda may be obtained by writing Florida Department of Environmental Protection, Division of Recreation and Parks, Office of Park Planning, 3900 Commonwealth Boulevard, Mail Station #525, Tallahassee, Florida 32399-3000, or by calling the Office of Park Planning at (850) 488-2200.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting is asked to advise the agency at least 48 hours before the meeting by contacting Carl Keen, Park Manager, Henderson Beach State Park, at (850) 837-7550. If you are hearing or speech impaired, please contact the agency by calling 1-800-342-1335.

**Florida Department Of Environmental Protection
Division Of Recreation And Parks (DRP)
Public Workshop**

Henderson Beach State Park Public Workshop

This Meeting Is Open To The Public

Date: Wednesday, March 28, 2001

Time: 7:00 PM (CST)

Location: Destin Elementary School

Cafeteria

630 Kelly Street

Destin, Florida 32541

AGENDA

1. Call To Order
2. Introduction Of Staff And Review Of Agenda
3. Presentation Of Proposed Land Management Plan: The DRP is required to submit an updated land management plan for this property at least every five years under Chapters 253 and 259, Florida Statutes. The DRP proposes to revise the current plan for the property.
4. Public Comment On Proposed Land Management Plan.
5. Adjournment



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

February 21, 2001

Liz Cloud, Chief
Bureau of Administrative Code
Department of State
Elliot Building
Tallahassee, Florida 32399-0250

Dear Ms. Cloud:

Enclosed are an original of the public notice and an agenda (with disk) for the Henderson Beach State Park DEP Advisory Group Meeting. We would appreciate publication of this notice in the Florida Administrative Weekly's issue of March 9, 2001.

Please send all invoices for publication of this notice to the letterhead address, Mail Station 525.

If you have any questions, please call (850) 488-2200. Your attention to this matter is appreciated.

Sincerely,

BryAnne White

BryAnne White, Planner
Office of Park Planning
Division of Recreation and Parks

BW/

Enclosures

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PUBLIC NOTICE

The Florida Department of Environmental Protection, Division of Recreation and Parks announces a DEP Advisory Group Meeting to which all persons are invited.

DATE AND TIME: Thursday, March 29, 2001, 9:00 AM (CST)

PLACE: Destin City Hall
4200 Two Trees Road
Destin, Florida 32541-3323

PURPOSE: To discuss the proposed land management plan for Henderson Beach State Park with the DEP Advisory Group. A copy of the agenda may be obtained by writing Florida Department of Environmental Protection, Division of Recreation and Parks, Office of Park Planning, 3900 Commonwealth Boulevard, Mail Station #525, Tallahassee, Florida 32399-3000, or by calling the Office of Park Planning at (850) 488-2200.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting is asked to advise the agency at least 48 hours before the meeting by contacting the Carl Keen, Park Manager, Henderson Beach State Park, at (850) 837-7550. If you are hearing or speech impaired, please contact the agency by calling 1-800-342-1335.

HENDERSON BEACH STATE PARK ADVISORY GROUP MEETING

This Meeting Is Open To The Public

Date: Thursday, March 29, 2001

Time: 9:00 AM (CST)

Location: Destin City Hall

4200 Two Trees Road

Destin, Florida 32541-3323

AGENDA

1. Call To Order
2. Introduction Of Staff And Review Of Agenda
3. Presentation Of Proposed Land Management Plan: The DRP is required to submit an updated land management plan for this property at least every five years to the Board of Trustees of the Internal Improvement Trust Fund under Chapters 253 and 259, Florida Statutes. The DRP is seeking input from the advisory group on the proposed land management plan.
4. Discussion By The Advisory Group On The Proposed Land Management Plan.
5. Public Comments
6. Vote Of The Advisory Group On A Recommendation Concerning The Proposed Land Management Plan. This is a non-binding advisory recommendation to the DRP.
7. Adjournment

February 21, 2001

To: Carl O. Keen, Park Manager
Henderson Beach State Park

From: BryAnne White, Planner
Office of Park Planning

Subject: Henderson Beach State Park
DEP Second Public Workshop and
DEP Advisory Group Meeting

The following information (also on disk) is being provided in order to comply with subsection 259.032(10), Florida Statutes:

1. A copy of subsection 259.032(10), Florida Statutes, which requires that:

**Notice of such public hearing shall be posted on the
parcel or project designated for management,
advertised in a paper of general circulation**

2. Public Notice and Agenda for the Public Workshop
3. Public Notice and Agenda for the DEP Advisory Group Meeting

Please post the Public Notice and the Agenda for each of these meetings in the areas of the park that you feel are appropriate for the greatest visibility. In addition, have a public service announcement or an advertisement for the public workshop placed in the local newspaper. It is important that the public workshop is aggressively promoted at the local level, and that local government, adjacent property owners, special interest groups and the Citizen Support Organization is notified of this workshop.

If you have any questions or concerns, please do not hesitate to call me at (850) 488-2200 or SunCom 278-2200, or email me. My email address is BryAnne.White@dep.state.fl.us. Your consideration and attention to this matter are greatly appreciated.

BW/

Attachments

cc: Mr. Ed Higgins with attachments
Mr. Roland Hall with attachments



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

February 21, 2001

Christopher L. Holley, County Manager
Okaloosa County
1804 Lewis Turner Boulevard
Suite 400
Fort Walton Beach, Florida 32547

Dear Mr. Holley:

The Florida Department of Environmental Protection, Division of Recreation and Parks will conduct a public workshop for Henderson Beach State Park on Wednesday, March 28, 2001, 7:00 PM (CST). The purpose of the meeting is to present the proposed land management plan for Henderson Beach State Park to the public.

The DEP Advisory Group meeting for this park is scheduled for Thursday, March 29, 2001, 9:00 AM (CST). The purpose of the meeting is to discuss the proposed land management plan for Henderson Beach State Park with the DEP Advisory Group

In compliance with subsection 259.032(10), Florida Statutes, the Division of Recreation and Parks is requesting that an announcement of the Division's public workshop and the DEP Advisory Group meeting be made at the Okaloosa County Board of County Commissioners meeting on Tuesday, March 20, 2001. Enclosed are a copy of subsection 259.032(10), Florida Statutes, the public notice and an agenda for the workshop as well as the DEP Advisory Group meeting.

If you have any questions or concerns, please do not hesitate to call me at (850) 488-2200 or email me. My email address is BryAnne.White@dep.state.fl.us. Your consideration and attention to this matter are greatly appreciated.

Sincerely,

BryAnne White

BryAnne White, Planner
Office of Park Planning
Division of Recreation and Parks

BW/

Enclosures

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Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

February 21, 2001

Larry J. Rubenstein, City Manager
Destin City Hall
4200 Two Trees Road
Destin, Florida 32541

Dear Mr. Rubenstein:

The Florida Department of Environmental Protection, Division of Recreation and Parks will conduct a public workshop for Henderson Beach State Park on Wednesday, March 28, 2001, 7:00 PM (CST). The purpose of the meeting is to present the proposed land management plan for Henderson Beach State Park to the public.

The DEP Advisory Group meeting for this park is scheduled for Thursday, March 29, 2001, 9:00 AM (CST). The purpose of the meeting is to discuss the proposed land management plan for Henderson Beach State Park with the DEP Advisory Group

In compliance with subsection 259.032(10), Florida Statutes, the Division of Recreation and Parks is requesting that an announcement of the Division's public workshop and the DEP Advisory Group meeting be made at the City of Destin Council meeting on Monday, March 19, 2001. Enclosed are a copy of subsection 259.032(10), Florida Statutes, the public notice and an agenda for the workshop as well as the DEP Advisory Group meeting.

If you have any questions or concerns, please do not hesitate to call me at (850) 488-2200 or email me. My email address is BryAnne.White@dep.state.fl.us. Your consideration and attention to this matter are greatly appreciated.

Sincerely,

BryAnne White

BryAnne White, Planner
Office of Park Planning
Division of Recreation and Parks

BW/

Enclosures

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**Henderson Beach State Park
Advisory Group List**

Local Government Representatives

The Honorable Kenneth B. Beard
Mayor
City of Destin
4200 Two Trees Road
Destin, Florida 32541-3323
W (850)837-4242

Shirley Ransom, Chair
Okaloosa County Board of County
Commissioners
101 East James Lee Boulevard
Crestview, Florida 32536
W (850)689-5030

Agency Representatives

Greg Evers, Chair
Yellow River Soil and Water Conservation
District
938 North Ferndon Boulevard
Crestview, FL 32536
W (850)682-3714
H (850)537-3661

Carl Keen, Park Manager
Henderson Beach State Park
17000 Emerald Coast Parkway
Destin, FL 32541
W (850)837-7550

Ms. Lorna Patrick
U.S. Fish and Wildlife Service
1601 Balboa Avenue
Panama City, Florida 32405
W (850)769-0552

Billy Sermons, Regional Biologist
Florida Fish and Wildlife Conservation
Commission
3911 Highway 2321
Panama City, FL 32409-1658
W (850)265-3676

Mr. Ron Rozar
Florida Fish and Wildlife Conservation
Commission
3911 Highway 2321
Panama City, FL 32409-1658
W (850)265-3676

Agency Representatives—Continued

Marie Wilson, Okaloosa County Forester
Florida Division of Forestry
1132 Butler Circle
Crestview, FL 32536
W (850)689-7838

Mr. David Crane
Florida Division of Forestry
1132 Butler Circle
Crestview, FL 32536
W (850)689-7838

Greenways and Trails Council

Noah Valenstein, Chair
Florida Greenways and Trails Council
430 East Jefferson Street
Tallahassee, FL 32301
W (850)222-7920

Environmental Representatives

Alan Knothe, President
Choctawhatchee Audubon Society
712 Bradford Court
Fort Walton Beach, FL 32541
W (850)862-3498

Sharon Maxwell, Chair
Sierra Club NW Florida Group
74 Birch Street
Freeport, FL 32439
H (850)897-5228

Tourism Representative

Darrel Jones, Executive Director
Emerald Coast Convention and Visitors
Bureau
Post Office Box 609
Fort Walton Beach, FL 32549-0609
W (850)651-7131

User Group Representatives

Joe Striska, Executive Director
Florida Association of RV Parks and
Campgrounds
1340 Vickers Drive
Tallahassee, FL 32303-3041
(850)562-7151W

**Henderson Beach State Park
Advisory Group List**

Citizen Support Organization

Mr. John Hofer, President
Friends of Henderson Beach State Park
Post Office Box 970
Destin, Florida 32541
W (850)837-1898
H (850)837-1879

Adjacent Landowner

Ms. Susie Nunnelley
Henderson Park Inn
2700 Scenic Highway 98 East
Destin, FL 32541
W (850)654-0400

**Henderson Beach State Park
Advisory Group Staff Report**

The Advisory Group appointed to review the proposed land management plan for Henderson Beach State Park met at Destin City Hall on March 29, 2001. Mr. Ron Rozar represented Mr. Billy Sermons. Mr. David Crane represented Marie Wilson. Mr. Darryl Williams, Mr. Alan Knothe, Mr. Noah Valenstein, and Ms. Susie Nunnally did not attend. All other appointed advisory group members attended. Attending staff were Mr. Roland Hall, Mr. Carl Keen, Mr. John McKenzie, and Mr. 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 how the meeting would be conducted.

DISCUSSION ON THE PROPOSED MANAGEMENT PLAN

Staff then gave a brief explanation of the proposed resource management measures and the proposed land use concept for Henderson Beach State Park. Mr. Kinnison then asked each member of the advisory group to express his or her comments on the plan.

SUMMARY OF ADVISORY GROUP COMMENTS

Mr. Darryl Jones asked for clarification as to the frequency in which the park is meeting its parking capacity. **Mr. Keen** indicated that the park was closed for a period on six peak days last year. Mr. Jones also asked when park facilities would be built. **Mr. Kinnison** explained that funding would largely dictate when facilities would be built but that additional factors, such as competition with other District needs, also affects the prioritization of proposed facilities. Staff indicated that the frequency with which parking capacity is exceeded would be an important factor in considering when to construct the additional beach use and parking area.

Mr. Jones asked if a trail had been considered near the campground. **Mr. Keen** and **Mr. Kinnison** explained that there was not enough room to construct a separate trail in this area and that the existing beach boardwalk and concrete walkway served this function.

Mayor Beaird urged staff to proceed as quickly as possible to provide additional parking. He does not want to see public access impacted due to insufficient parking on peak days. He discussed the current problems facing public beach access in Destin and the resulting conflicts with private landowners, and encouraged the park to continue to advertise the availability of public beach access at the park. **Mr. Keen** outlined current efforts to advertise the park.

Mayor Beaird was also in favor of considering establishing beach access at the east end of the park that would serve campers, residents and renters in this area. **Ms. Sharon Maxwell** was opposed to this concept due to concerns regarding impacts to listed shorebird species within the protected zone of the park. She pointed out that the presence of the birds serves as a draw to park visitors and that they should be protected for the enjoyment of future visitors. **Mr. Kinnison** also expressed concern about opening this area to additional users given that the campground, which is planned to double its capacity in the near future, already places visitors on the beach at that end of the park. **Commissioner Shirley Ransom** was not supportive of establishing an additional access route and emphasized the need to protect the sensitive resources of the park. **Mr. Keen** suggested that the shuttle that currently collects residents and drops them at a nearby public access point east of the park boundary arrange to drop visitors at the park.

Mr. Joe Striska asked if concerns for accessibility would be addressed in the development of the new use area. **Mr. Keen** explained that new facilities are built to accommodate persons with disabilities. He also discussed the accessibility of existing facilities, including the use of a wheel chair designed for beach use. Mr. Striska also asked how many parking spaces were planned in the new beach use area. **Mr. Kinnison** indicated that approximately 214 additional spaces were proposed.

**Henderson Beach State Park
Advisory Group Staff Report**

Ms. Sharon Maxwell was interested in seating being designed into additional beach boardwalks so that people could relax and view the water off of the beach. She pointed out that hand rails obstruct the view for visitors seated in the existing picnic pavilions and urged the design of future facilities in a manner that provides an unobstructed view of the water. **Mr. Keen** indicated that park staff has constructed seating on one existing boardwalk and that handrail heights are determined by building code standards.

Ms. Maxwell asked about plans to address the use of CCA treated wood at the park. **Mr. Keen** indicated that recycled plastic is increasingly being used by the park service. **Mr. Hall** explained that a temporary moratorium has been instituted on the use of CCA wood and that methods of sealing existing structures are being considered. He also indicated that alternative treatment methods and materials are being considered to replace the traditional use of pressure treated lumber.

Ms. Maxwell also asked about sea turtle nesting on the beach of the park. **Mr. Keen** explained that two nests were documented last year.

Commissioner Ransom suggested considering additional parking along the western boundary with a shuttle service to the beach. **Mr. Kinnison** explained that the old US 98 roadbed was selected as the location for existing and proposed parking areas to limit impacts to undisturbed areas of the park. **Ms. Lorna Patrick** urged staff to consider expanding the additional parking area towards the west boundary before allowing construction east of the park road. **Mr. Kinnison** indicated that staff would consider this.

Mr. Striska asked how frequently the Air Force uses the radar facility. Mr. Keen indicated that they entered the facility about once a month, and explained the park's previous unsuccessful attempts to acquire this parcel. Mr. Striska also asked about the suitability of this area as a playground. **Mr. Keen** indicated that the preferred location for the playground was a ruderal area near the existing trailhead and parking area.

Mr. Striska supported an appropriate mix of sites in the planned campground expansion. He was concerned that the state parks are favoring large, more developed sites designed for RV users at the expense of tent and pop-up campers and urged appropriate buffering between different types of campers. **Ms. Maxwell** supported his comments regarding tent camping. Staff acknowledged the need to consider the camping experience of all visitors, and indicated that less urban parks offer a more secluded camping experience for tent campers. Staff explained that camping designs are reflecting current recreational user trends that indicate growth in RV camping.

Commissioner Ransom asked about the new nature trail. **Mr. Keen** indicated that the trail has been routed and is nearly complete. He explained that terraces, bench seating and interpretive signs are soon to be in place.

Ms. Patrick expressed her support for the plan. She would like to see the footprint of a second use area minimized to the greatest extent possible. She explained that the USFWS is considering Henderson Beach State Park as a location for introduction of the federally endangered Choctawhatchee beach mouse. She asked when an LMR was scheduled for the park. **Mr. Kinnison** indicated he would check and let her know. She suggested adding piping plovers to the Designated Species List. She also urged inclusion of the beach mouse on the list with an indication that it has been extirpated from the area. **Ron Rozar** supported this idea and suggested language is added to the plan that discusses the feasibility of reintroducing the beach mouse.

Mr. Striska asked about the presence of trashcans. Mr. Keen explained that cans are located at each boardwalk access point.

Mr. David Crane commended the staff on a well-balanced plan. He particularly liked the plan goals and objectives.

**Henderson Beach State Park
Advisory Group Staff Report**

Mr. John Hofer indicated that the Friends of Henderson Beach State Park could provide quick funding for small projects such as benches. He explained the CSO's role in creating the nature trail and indicated a trail had been the most commonly requested facility by park visitors (second only to an additional playground area). He supported the plans call for additional shade and picnic areas.

Commissioner Ransom asked about reserving the existing picnic pavilions. **Mr. Keen** indicated that the pavilions are available for reservation only in the off-season.

Mayor Beaird explained how proud he was of the park and that it has become accepted as an asset by city residents. He explained that the city had purchased 500 passes for Destin residents and complemented the staff on their management of the park.

Mr. Rozar expressed his support for the plan. He was pleased to see a gopher tortoise survey planned and asked about the presence of feral cats. **Mr. Keen** indicated that cats are trapped and removed from the park when encountered. Mr. Rozar encouraged the use of education to avoid encounters with potential problem species, such as pygmy rattlesnakes. **Ms. Maxwell** also encouraged the use of signs promoting sensitive/responsible use. Mr. Rozar also would like to see the protected zone extended west to the park drive.

Mr. Carl Keen discussed the growth of the area and anticipated increases in park visitation. He feels that an additional beach use area will be needed in the near future and indicated he favors considering expanding parking towards the western boundary.

SUMMARY OF PUBLIC COMMENTS

Mr. Gary Muller asked that the proposed playground equipment be placed on the beach. **Mr. Kinnison** explained that the park service does not construct permanent facilities directly on the beach due to potential impacts from storms and the importance of this area as habitat for listed species.

ADVISORY GROUP RECOMMENDATION

Following public comments, the Advisory Group members were asked for a non-binding recommendation concerning the draft unit management plan for Henderson Beach State Park. All members present agreed that the draft plan was appropriate and should be approved.

The meeting was then adjourned.

**Henderson Beach State Park
Advisory Group Staff Report**

STAFF RECOMMENDATIONS

Staff supports approval of the proposed management plan for Henderson Beach State Park as presented with the following recommendations.

1. Beach Use Expansion
 - A. Staff recommends against extending the existing beach use parking area toward the western boundary. The current parking area concentrates a significant number of visitors into a relatively small area of the park. Expanding the parking area toward the boundary would further concentrate use in this area, contribute to crowded conditions, with potential negative impacts to the overall visitor experience.
 - B. Staff recommends against expanding the Dune Restoration/Protected Zone west to the park drive. Additional beach parking is needed at the park. The existing beach use area cannot be expanded due to reasons cited in 1.A and the location of the radar facility outparcels. While the plan calls for establishing parking between the outparcel and the park drive, this area is not large enough to accommodate the amount of parking needed. Therefore, some parking expansion will need to occur east of the park drive toward the Dune Restoration/Protected Zone.
2. Designated Species
 - A. Add “piping plover” to the Designated Species List.
 - B. The following language will be added to the Resource Component addressing the feasibility of reintroducing beach mice.
 - Consideration may be given to reintroducing the Choctawhatchee beach mouse at Henderson Beach State Park. A decision on reintroduction will need to consider the following factors, among others:
 - 1) Viability of habitat at the park.
 - 2) Availability and quality of habitat in all panhandle parks.
 - 3) Current and anticipated demand for beach recreation at the park, in balance with carrying capacity and resource protection.
 - 4) Effect of reintroduction on the Division’s long range ability to manage the park for its primary purpose of acquisition (i.e. provision of public beach recreation).
3. Playground Area
 - A. The proposed location of the playground area is recommended to be relocated to the western edge of the existing beach use area. This location provides sufficient space for proposed facilities in an area of previous disturbance and allows for safer beach access. The location that had been proposed is believed to lie within the outparcel boundary.



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

July 19, 2001

Craig Mahlman, Director
Okaloosa County Planning and Inspection
1804 Lewis Turner Boulevard
Suite 200
Fort Walton Beach, Florida 32547

Dear Mr. Mahlman:

Enclosed is our proposed management plan for Henderson Beach State Park. Please advise in writing as to the following:

1. Whether or not a Local Government Comprehensive Plan has been adopted for the area which encompasses this park, pursuant to Section 163.3167, Florida Statutes.
2. Whether or not a determination of compliance with regard to the Local Government Comprehensive Plan has been made by the Department of Community Affairs, pursuant to Section 163.3167, Florida Statutes.
3. Whether or not this management plan is consistent with the Local Government Comprehensive Plan.

I appreciate your timely review of this management plan. Please provide your response by September 1, 2001, so I may share them with the Office of Environmental Services.

You may send your comments by fax (850) 487-3939 or SC 277-3939. If you prefer, email BryAnne.White@dep.state.fl.us. Please do not hesitate to call me at (850) 488-2200 if you have any questions or concerns that you would like to discuss. Your consideration and attention to this matter are greatly appreciated.

Sincerely,

BryAnne White

BryAnne White, Planner
Office of Park Planning
Division of Recreation and Parks

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Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

July 19, 2001

Ken Gallander, Planner
City of Destin
4200 Two Trees Road
Destin, Florida 32541-3323

Dear Mr. Gallander:

Enclosed is our proposed management plan for Henderson Beach State Park. Please advise in writing as to the following:

4. Whether or not a Local Government Comprehensive Plan has been adopted for the area which encompasses this park, pursuant to Section 163.3167, Florida Statutes.
5. Whether or not a determination of compliance with regard to the Local Government Comprehensive Plan has been made by the Department of Community Affairs, pursuant to Section 163.3167, Florida Statutes.
6. Whether or not this management plan is consistent with the Local Government Comprehensive Plan.

I appreciate your timely review of this management plan. Please provide your response by September 1, 2001, so I may share them with the Office of Environmental Services.

You may send your comments by fax (850) 487-3939 or SC 277-3939. If you prefer, email BryAnne.White@dep.state.fl.us. Please do not hesitate to call me at (850) 488-2200 if you have any questions or concerns that you would like to discuss. Your consideration and attention to this matter are greatly appreciated.

Sincerely,

BryAnne White

BryAnne White, Planner
Office of Park Planning
Division of Recreation and Parks

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Enclosure

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Addendum 2--References Cited

Henderson Beach State Park
References Cited

- Barraclough, J.T. & O.T. Marsh. 1962. Aquifers and quality of ground water along the Gulf Coast of western Florida. Rept. Of Invest. No. 29, FL Geological Surv., Tallahassee, FL.
- U.S.D.A., 1990. Soil Survey of Okaloosa County, Florida. Prepared in cooperation with the Institute of Food and Agricultural Services
- Florida Natural Areas Inventory and the Florida Department of Natural Resources, 1990. Guide to the natural communities of Florida. Tallahassee, FL. 111 pp.
- Wiggs-Clark M. & W. Schmidt. 1982. Shallow Stratigraphy of Okaloosa County and Vicinity Florida. (IC67) Florida Geologic Survey.

Addendum 3--Soil Descriptions

Henderson Beach State Park
Soil Descriptions

(3) Beaches, Beaches consist of narrow strips of very rapidly permeable white sand on the coastline along the Gulf of Mexico. Individual areas range from 200 to 500 feet in width. As much as half of the beach can be flooded daily by high tides, and all of the beach can be flooded by storm tides. The shape and slope of the beaches commonly change with every storm. Most areas have a uniform, gentle slope and a short, stronger slope at the edge of the water.

Natural vegetation grows only on some of the low dunes. It is sparse and consists primarily of sea oats and a few other salt-tolerant plants.

The water table is at the surface to a depth of more than 4 feet, depending on distance from the edge of the water, the height of the beaches, the effect of storms, and the time of year.

Sand dunes border the beaches on the north side. They consist mainly of Newhan and Corolla soils. The dunes are not subject to wave action, except during storms, but they commonly receive salt spray.

Beaches are not suited to cultivated crops, improved pasture, or pine trees because of periodic flooding, excessive salt content, low natural fertility, and droughtiness. Because beaches have great esthetic value, they are an important part of the waterfront.

(10) Kureb sand, 0 to 8 percent slopes. This excessively drained soil is on nearly undulating ridges and short side slopes on upland sandhills and dune-like ridges. Individual areas range from 50 to 800 acres in size. Slopes are smooth, convex, or concave.

On 97 percent of the acreage mapped as Kureb sand, 0 to 8 percent slopes, Kureb and similar soils make up 87 to 100 percent of the mapped areas. Dissimilar soils make up 0 to 13 percent.

Typically, the surface layer of the Kureb soil is dark gray sand about 5 inches thick. The subsurface layer is light gray sand about 12 inches thick. The subsoil is yellowish brown sand about 16 inches thick. The underlying material to a depth of 80 inches or more is sand. The upper part is brownish yellow, the next part is yellow, and the lower part is very pale brown.

Dissimilar soils included with this soil in mapping are Corolla and Mandarin soils. Corolla soils are somewhat poorly drained and are in the slightly lower landscape positions. Mandarin soils have a well-developed subsoil and are somewhat poorly drained.

The Kureb soil has a loose, well-aerated root zone to a depth of more than 72 inches. The available water capacity is very low. Permeability is rapid. Natural fertility and the content of organic matter are very low. Fertilizer is rapidly leached through the soil. Rainfall is rapidly absorbed in protected areas, and there is little runoff. The seasonal high water table is at a depth of more than 6 feet during most of the year.

The natural vegetation consists mostly of bluejack oak, myrtle oak, sand live oak, and sand pine. In some areas, sand pine is dominant. The understory includes dwarf huckleberry, gopher apple, pricklypear, and saw palmetto. The most common native grass is pineland threeawn (wiregrass). Other vegetation includes grassleaf golden aster, reindeer moss, and cat greenbrier. The vegetation nearest the Gulf of Mexico is stunted because of salt spray.

(18) Newhan-Corolla complex, rolling. These nearly level to steep, Excessively drained and moderately well drained or somewhat poorly drained soils are in areas of undulating dunes near the gulf coast. Individual areas range from 40 to 800 acres in size.

On 90 percent of the acreage mapped as Newhan Corolla complex, rolling, Newhan, Corolla, and similar soils make up 80 to 100 percent of the mapped areas. Dissimilar soils make up 0 to 20 percent. Generally, the mapped areas are about 54 percent Newhan and similar soils and 26 percent Corolla and similar soils.

Typically, the Newhan soil is white sand to a depth of about 45 inches. Below this to a depth of 80

Henderson Beach State Park
Soil Descriptions

inches or more is light gray sand. Some pedons have black, horizontal bands of mineral material.

Permeability is very rapid in the Newhan soil. The available water capacity, the content of organic matter, and natural fertility are very low. The water table is at a depth of more than 72 inches.

Typically, the surface layer of the Corolla soil is gray sand about 3 inches thick. Below this to a depth of 80 inches or more is light gray sand. Some pedons have black, horizontal bands of mineral material and lenses of gray sand.

Permeability is very rapid in the Corolla soil. The available water capacity, the content of organic matter, and natural fertility are very low. The water table is at a depth of 18 to 36 inches for 2 to 6 months during most years and at a depth of 36 to 60 inches during the rest of the year.

Dissimilar soils included with the Newhan and Corolla soils in mapping are Duckston soils. These included soils are in the lower landscape positions.

The natural vegetation on this map unit consists of sea oats, stunted sand pine, and sand live oak.

Addendum 4--FNAI Natural Communities Descriptions

Henderson Beach State Park
FNAI Natural Community Descriptions

(1) Beach Dune - (synonyms: sand dunes, pioneer zone, upper beach, sea oats zone, coastal strand). Beach Dune is characterized as a wind-deposited, foredune and wave-deposited upper beach that are sparsely to densely vegetate with pioneer species, especially sea oats. Other typical pioneer species include beach cordgrass, sand spur, dune or bitter panic grass, railroad vine, beach morning glory, seashore paspalum, beach elder, dune sunflower, sea purslane, and sea rocket. Typical animals include ghost crab, six-lined racerunner, kestrel, red-winged blackbird, savannah sparrows, beach mouse, and raccoon. Beach dune, especially along its ecotone with the unvegetated beach, is also the primary nesting habitat for numerous shorebirds and marine turtles, including many rare and endangered species.

Beach Dune communities are found along shorelines subject to high energy waves which deposit sand-sized grains to form the open beach. Onshore winds move the sand grains inland until slowed by an obstacle, usually plant stems, causing the grains to drop. As the plants grow upward and burial continues, a foredune is built. Dune height is largely determined by the strength and the directional constancy of winds and by the growth habits of dune-forming plants. As a cape or barrier island grows seaward, new beaches are deposited seaward of the old one and a characteristic ridge and swale topography develops.

Beach Dunes are very dynamic communities and mobile environments. The wind continually moves the sand inland from the beach until trapped by vegetation. Beach Dunes are subject to drastic topographic alterations during winter storms and hurricanes. Taking the brunt of storm surge, intact Beach Dunes are essential for protection of inland biological communities.

The soils of Beach Dunes are composed of sands that are similar to those washed onto the adjacent beach, except that the wind selectively lifts out the smaller sand particles, blows them inshore, and deposits them around plant stems. These deep siliceous or calcareous sands drain rapidly, creating decidedly xeric conditions.

Beach Dunes occur in an extremely harsh environment. The dune vegetation must be able to tolerate loose, dry, unstable, nutrient poor soils, as well as exposure to wind, salt spray, sand abrasion, intense sunlight, and storms. Thus, dune species have evolved several morphological adaptations to survive in this harsh environment. Many of them root easily from fragments washed ashore in storm debris, or they produce large floating seeds that can be transported by ocean currents. Some have thickened cuticles and succulent foliage to better retain water and to reduce the effects of salt spray and sand abrasion. Some spread by subterranean or surface runners that creep across the barren sands. Many readily reroor from higher up their stems when buried by blowing sand and consequently develop a matted or wiry root system. Some have become so dependent on the dune habitat that they lose vigor without shifting sands constantly stimulating them to send out new shoots and reroor. These characteristics are the primary reasons for their unique ability to stabilize aeolian sand into nearly static beach dunes.

In spite of their ability to withstand the harsh maritime environment, plants of the Beach Dunes are extremely vulnerable to human impacts. A footpath or off-road vehicle trail over the beach dunes can damage the vegetation, giving wind and water the leverage needed to begin erosional processes. A gap, or blowout, forms and continually widens until it is slowly revegetated and stabilized. The sand from the gap moves inland, and rapidly buries vegetation, destabilizing the beach dunes and often disturbing adjacent communities. When a storm ensues, the unvegetated gap allows storm surges easy access to these communities for further disruption. Because of their vulnerability, Beach Dunes require protection from trampling (i.e., boardwalks for beach access) and off-road vehicles. Coastal developments which affect the sand sources that are necessary for Beach Dune replenishment should be strongly discouraged.

(14) Scrub - (synonyms: sand pine scrub, Florida scrub, sand scrub, rosemary scrub, oak scrub). Scrub occurs in many forms, but is often characterized as a closed to open canopy forest of sand pines with dense clumps or vast thickets of scrub oaks and other shrubs dominating the understory.

Henderson Beach State Park
FNAI Natural Community Descriptions

The ground cover is generally very sparse, being dominated by ground lichens or, rarely, herbs. Open patches of barren sand are common. Where the overstory of sand pines is widely scattered or absent altogether, the understory and barren sands are exposed to more intense sunlight. Typical plants include sand pine, sand live oak, myrtle oak, Chapman's oak, scrub oak, saw palmetto, rosemary, rusty lyonia, ground lichens, scrub hickory, scrub palmetto, hog plum, silk bay, beak rush, milk peas, and stagger bush. Typical animals include red widow spider, scrub wolf spider, oak toad, Florida scrub lizard, blue-tailed mole skink, sand skink, six-lined racerunner, coachwhip, ground dove, scrub jay, loggerhead shrike, yellow-rumped warbler, rufous-sided towhee, Florida mouse, and spotted skunk. Scrubs of the Lake Wales Ridge are notable for the large number of narrowly endemic plants and animals that occur in them.

Scrub occurs on sand ridges along former shorelines. Some of the sand ridges originated as wind-deposited dunes, others as wave-washed sand bars. Some Scrub soils are composed of well-washed, deep sands that are brilliant white at the surface; some Scrubs occur on yellow sands. The loose sands drain rapidly, creating very xeric conditions for which the plants appear to have evolved several water conservation strategies.

Scrub is essentially a fire maintained community. Ground vegetation is extremely sparse and leaf fall is minimal, thus reducing the chance of frequent ground fires. As the sand pines mature, however, they retain most of their branches and build up large fuel supplies in their crowns. When a fire does occur, this fuel supply, in combination with the resinous needles and high stand density, ensures a hot, fast burning fire. Such fires allow for the regeneration of the Scrub community which might otherwise succeed to Xeric Hammock. The minerals in the vegetation are deposited on the bare sand as ashes, and the heat of the fire generally facilitates the release of pine seeds. As discerned from the life histories of the dominant plants, scrub probably burns catastrophically once every 20 to 80 years or longer.

Scrub is associated with and often grades into Sandhill, Scrubby Flatwoods, Coastal Strand, and Xeric Hammock. Some Xeric Hammocks are advanced successional stages of Scrub, making intermediate stages difficult to classify. Scrub occurs almost exclusively in Florida, although coastal scrubs extend into adjacent Alabama and Georgia.

Because Scrub occurs on high dry ground and is not an aesthetically pleasing habitat, at least to the uninitiated, this ecosystem and its many endangered and threatened species are rapidly being lost to development. Scrub is also readily damaged by off-road vehicle traffic or even foot traffic, which destroys the delicate ground cover and allows the loose sand to erode. Ground lichens may require 50 years or more to recover.

(65/77) Estuarine And Marine Unconsolidated Substrate - (synonyms: beach, shore, sand bottom, shell bottom, sand bar, mud flat, tidal flat, soft bottom, coralgal substrate, marl, gravel, pebble, calcareous clay). Marine and Estuarine Unconsolidated Substrates are Mineral Based Natural Communities generally characterized as expansive, relatively open areas of subtidal, intertidal, and supratidal zones which lack dense populations of sessile plant and animal species. Unconsolidated Substrates are unconsolidated material and include coralgal, marl, mud, mud/sand, sand or shell. This community may support a large population of infaunal organisms as well as a variety of transient planktonic and pelagic organisms (e.g., tube worms, sand dollars, mollusks, isopods, amphipods, burrowing shrimp, and an assortment of crabs).

In general, Marine and Estuarine Unconsolidated Substrate Communities are the most widespread communities in the world. However, Unconsolidated Substrates vary greatly throughout Florida, based on surrounding parent material. Unconsolidated sediments can originate from organic sources, such as decaying plant tissues (e.g., mud) or from calcium carbonate depositions of plants or animals (e.g., coralgal, marl and shell substrates). Marl and coralgal substrates are primarily restricted to the southern portion of the state. The remaining four kinds of Unconsolidated Substrate,

Henderson Beach State Park
FNAI Natural Community Descriptions

mud, mud/sand, sand, and shell, are found throughout the coastal areas of Florida. While these areas may seem relatively barren, the densities of infaunal organisms in subtidal zones can reach the tens of thousands per meter square, making these areas important feeding grounds for many bottom feeding fish, such as redfish, flounder, spot, and sheepshead. The intertidal and supratidal zones are extremely important feeding grounds for many shorebirds and invertebrates.

Unconsolidated Substrates are important in that they form the foundation for the development of other Marine and Estuarine Natural Communities when conditions become appropriate.

Unconsolidated Substrate Communities are associated with and often grade into Beach Dunes, Tidal Marshes, Tidal Swamps, Grass Beds, Coral Reefs, Mollusk Reefs, Worm Reefs, Octocoral Beds, Sponge Beds, and Algal Beds.

Unconsolidated Substrate Communities which are composed chiefly of sand (e.g., sand beaches) are the most important recreational areas in Florida, attracting millions of residents and tourists annually. This community is resilient and may recover from recreational disturbances. However, this community is vulnerable to compaction associated with vehicular traffic on beaches and disturbances from dredging activities and low dissolved oxygen levels, all of which can cause infaunal organisms to be destroyed or to migrate out of the area. Generally these areas are easily recolonized either by the same organisms or a series of organisms which eventually results in the community returning to its original state once the disturbance has ceased. In extreme examples, such as significant alterations of elevation, there is potential for serious long-term impacts from this type of disturbance.

Another type of disturbance involves the accumulation of toxic levels of heavy metals, oils, and pesticides within Unconsolidated Substrates. Significant amounts of these compounds in the sediments will kill the infaunal organisms, thereby eliminating a food source for certain fishes, birds, and other organisms. Such problems occur in some of the major port cities, in areas where there is heavy industrial development, and along major shipping channels where oil spills are likely to occur. **(81/82) Ruderal and Developed** - Ruderal areas are characterized by having the natural substrate or the natural community overwhelmingly altered as a result of human activity. Native vegetation is sparse and is often replaced by weedy or exotic species. These areas require a long-term restoration effort.

Developed areas consist of natural biological communities that have been replaced or nearly replaced by structures or permanently cleared areas such as roads, visitor facilities, campgrounds, recreation areas, parking lots or concessions.

Addendum 5--Plant And Animal List

**HENDERSON BEACH STATE PARK
PLANTS**

Common Name	<i>Scientific Name</i>	Primary Habitat (for designated species)
Bushy beardgrass		<i>Andropogon glomeratus</i>
Broomsedge		<i>Andropogon virginicus</i>
Sandhill milkweed		<i>Asclepias humistrata</i>
Beach orach		<i>Atriplex pentandra</i>
Sea myrtle		<i>Baccharis halimifolia</i>
Saltwort		<i>Batis maritima</i>
Yellow Buttons		<i>Bauldina angustifolia</i>
Sea oxeye		<i>Borrchia frutescens</i>
Sea rocket		<i>Cakile constricta</i>
Partridge-pea		<i>Cassia fasciculata</i>
Wild sensitive plant		<i>Cassia nictitans</i>
Butterfly-pea		<i>Centrosema virginianum</i>
Rosemary		<i>Ceratiola ericoides</i>
Sand-dune spurge		<i>Chamaesyce ammannioides</i>
Bush goldenrod		<i>Chrysoma pauciflosculosa</i>
Cruise's golden aster		<i>Chrysopsis cruiseana</i> ¹
Godfrey's golden aster		<i>Chrysopsis godfreyi</i> ¹
Tread softly		<i>Cnidoscopus stimulosus</i>
Conradina		<i>Conradina canescens</i>
Rattle-box		<i>Crotalaria pallida</i>
Rabbit-bells		<i>Crotalaria rotundifolia</i>
Beach tea		<i>Croton punctatus</i>
Cyperus		<i>Cyperus retrorsus</i>
Panicum		<i>Dichantherium dichotomum</i>
Starrush		<i>Dichromena colorata</i>
Southern fleabane		<i>Erigeron quercifolius</i>
Goldenrod		<i>Euthamia minor</i>
Creeping morning-glory		<i>Evolvulus sericeus</i>
Fimbristylis		<i>Fimbristylis caroliniana</i>
Froelichia		<i>Froelichia floridana</i>
Camphor weed		<i>Heterotheca subaxillaris</i>
Water pennywort		<i>Hydrocotyle bonariensis</i>
Yaupon		<i>Ilex vomitoria</i>
Beach morning-glory		<i>Ipomoea imperati</i>
Railroad vine		<i>Ipomoea pes-caprae</i>
Beach elder		<i>Iva imbricata</i>
Peppergrass		<i>Lepidium virginicum</i>
Gopher apple		<i>Licania michauxii</i>
Gulf Coast Lupine		<i>Lupinus westianus</i> ^{1,14}
Southern magnolia		<i>Magnolia grandipeora</i>
Wax myrtle		<i>Myrica cerifera</i>
Seaside evening primrose		<i>Oenothera humifusa</i>
Prickly-pear cactus		<i>Opuntia humifusa</i>
Beachgrass		<i>Panicum amarum</i>
Fall panicum		<i>Panicum dichotomiflorum</i>
Switchgrass		<i>Panicum virgatum</i>
Whitlow-wort		<i>Paronychia erecta</i>
Knotgrass		<i>Paspalum distichum</i>
Red bay		<i>Persea borbonia</i>

* Non-native Species

**HENDERSON BEACH STATE PARK
PLANTS**

Common Name	<i>Scientific Name</i>	Primary Habitat (for designated species)
Pokeweed		<i>Phytolacca americana</i>
Polygala		<i>Polygala grandiflora</i>
Large-leaved jointweed		<i>Polygonella macrophylla</i>
		14
October flower		<i>Polygonella polygama</i>
Chapman oak		<i>Quercus chapmanii</i>
Myrtle oak		<i>Quercus myrtifolia</i>
Sand-live oak		<i>Quercus geminata</i>
Turkey oak		<i>Quercus laevis</i>
Live oak		<i>Quercus virginiana</i>
Winged Sumac		<i>Rhus copallina</i>
Sagotia		<i>Sagotia triflora</i>
Saw palmetto		<i>Serenoa repens</i>
Sea purslane		<i>Sesuvium portulacastrum</i>
Knotroot foxtail		<i>Setaria geniculata</i>
Beach bluestem		<i>Schizachyrium maritimum</i>
Greenbrier		<i>Smilax auriculata</i>
Greenbrier		<i>Smilax bona-nox</i>
Jackson-brier		<i>Smilax smallii</i>
Seaside goldenrod		<i>Solidago sempervirens</i>
Spanish moss		<i>Tillandsia usneoides</i>
Poison ivy		<i>Toxicodendron radicans</i>
Sea oats		<i>Uniola paniculata</i>
Frost weed		<i>Verbesina virginica</i>
Spanish bayonet		<i>Yucca aloifolia</i>

HENDERSON BEACH STATE PARK

ANIMALS

Common Name	Scientific Name	Primary Habitat (for all species)
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AMPHIBIANS

Oak toad		<i>Bufo quercicus</i> 14
Southern toad		<i>Bufo terrestris</i> 14
Green treefrog		<i>Hyla cinerea</i> 14

REPTILES

Green anole		<i>Anolis carolinensis</i> 14
Atlantic loggerhead sea turtle		<i>Caretta caretta caretta</i> 77
Green sea turtle		<i>Chelonia mydas mydas</i> 77
Southern black racer		<i>Coluber constrictor</i> 14
Six-lined racerunner		<i>Cnemidophorus sexlineatus sexlineatus</i> 14
Corn snake		<i>Elaphe guttata</i> 14
Southeastern five-lined skink		<i>Eumeces inexpectatus</i> 14
Gopher tortoise		<i>Gopherus polyphemus</i> 14
Eastern hognose snake		<i>Heterodon platyrhinos</i> 14
Eastern coachwhip		<i>Masticophis flagellum</i> 14
Slender glass lizard		<i>Ophisaurus attenuatus</i> 14
Eastern glass lizard		<i>Ophisaurus ventralis</i> 14
Southern fence lizard		<i>Sceloporus undulatus</i> 14
Dusky Pigmy Rattlesnake		<i>Sistrurus miliarius barbouri</i> 14

BIRDS

Great Blue Heron		<i>Ardea herodias</i> OF
Cedar Waxwing		<i>Bombycilla cedrorum</i> OF
Red-shouldered hawk		<i>Buteo lineatus</i> OF
Sanderling		<i>Calidris alba</i> 77
Semipalmated sandpiper		<i>Calidris pusilla</i> 77
Dunlin		<i>Calidris alpina</i> 77
Northern cardinal		<i>Cardinalis cardinalis</i> 14
Northern Harrier		<i>Circus cyaneus</i> OF
Willet		<i>Catoptrophorus semipalmatus</i> 77
Snowy plover		<i>Charadrius alexandrinus</i> 1,77
Piping plover		<i>Charadrius melodus</i> 77
Semipalmated plover		<i>Charadrius semipalmatus</i> 77
Blue jay		<i>Cyanocitta cristata</i> 14
Snowy egret		<i>Egretta thula</i> 77
Southeastern kestrel		<i>Falco sparverius</i> OF
Common loon		<i>Gavia immer</i> 77

* Non-native Species

HENDERSON BEACH STATE PARK

ANIMALS

Common Name	Scientific Name	Primary Habitat (for all species)
Loggerhead shrike	<i>Lanius ludovicianus</i>	14
Herring gull	<i>Larus argentatus</i>	1,77
Laughing gull	<i>Larus atricilla</i>	1,77
Ring-billed gull	<i>Larus delawarensis</i>	1,77
Northern mockingbird	<i>Mimus polyglottos</i>	14
Brown Pelican	<i>Pelecanus occidentalis</i>	77
Black skimmer	<i>Rynchops niger</i>	1,77
Least tern	<i>Sterna antillarum</i>	1,77
Caspian tern	<i>Sterna caspia</i>	1,77
Common tern	<i>Sterna hirundo</i>	1,77
Royal tern	<i>Sterna maxima</i>	1,77
Sandwich tern	<i>Sterna sandvicensis</i>	1,77
Brown thrasher	<i>Toxostoma rufum</i>	14
American robin	<i>Turdus migratorius</i>	14
Mourning Dove	<i>Zenaidura macroura</i>	1,14

MAMMALS

Opossum	<i>Didelphis marsupialis</i>	14
Striped skunk	<i>Mephitis mephitis</i>	14
Raccoon	<i>Procyon lotor</i>	1,14,81,82
Choctawhatchee beach mouse	<i>Peromyscus polionotus alloparys</i>	1 (extirpated)
Eastern mole	<i>Scalopus aquaticus</i>	14
Eastern gray squirrel	<i>Sciurus carolinensis</i>	14
Hispid cotton rat	<i>Sigmodon hispidus</i>	14
Marsh rabbit	<i>Sylvilagus palustris</i>	14
Gray fox	<i>Urocyon cinereoargenteus</i>	14

NATURAL COMMUNITY HABITAT DESIGNATION

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
- 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

NATURAL COMMUNITY HABITAT DESIGNATION

MISCELLANEOUS

- 81** Ruderal
- 82** Developed

- MTC** Many Types
Of Communities
- OF** Overflying

Addendum 6--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

**RANK EXPLANATIONS
FOR FNAI GLOBAL RANK, FNAI STATE RANK, FEDERAL STATUS,
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- 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)

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 which 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 which is likely to become an endangered species within the foreseeable 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

**RANK EXPLANATIONS
FOR FNAI GLOBAL RANK, FNAI STATE RANK, FEDERAL STATUS,
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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.

HENDERSON BEACH STATE PARK

DESIGNATED SPECIES

ANIMALS

Common Name/ <i>Scientific Name</i>	DESIGNATED SPECIES STATUS		
	FDA	USFWS	FNAI
Cruise's golden aster <i>Chrysopsis cruiseana</i>	LE		G5,T2,S2
Godfrey's golden aster <i>Chrysopsis godfreyi</i>	LE		G2,S2
Gulf Coast lupine <i>Lupinus westianus</i>	LT		G2,S2
Large-leaved jointweed <i>Polygonella macrophylla</i>	LT		G2,S2
REPTILES			
Atlantic loggerhead turtle <i>Caretta caretta</i>	LT	LT	G3,S3
Green turtle <i>Chelonia mydas</i>	LE	LE	G3,S2
Gopher tortoise <i>Gopherus polyphemus</i>	LS		G3,S3
BIRDS			
Southeastern snowy plover <i>Charadrius alexandrinus</i>	LT		G4,S2
Piping plover <i>Charadrius melodus</i>	LT	LT	G3,S2
Snowy egret <i>Egretta thula</i>	LS		G5,S4
Southeastern American kestrel <i>Falco sparverius paulus</i>	LT		G5,T3,T4,S3
Brown pelican <i>Pelecanus occidentalis</i>	LS		G4,S3
Black skimmer <i>Rynchops niger</i>	LS		G5,S3
Least tern <i>Sterna antillarum</i>	LT		G4,S3
MAMMALS			
Choctawhatchee beach mouse (extirpated) <i>Peromyscus polionotus allophrys</i>	LE	LE	G5T1, S1

Addendum 7—DHR Cultural Management Statement

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A. GENERAL DISCUSSION

Archaeological and historic sites are defined collectively in 267.021(3), F.S., as "historic properties" or "historic resources." They have several essential characteristics that must be recognized in a management program.

First of all, they are a finite and non-renewable resource. Once destroyed, presently existing resources, including buildings, other structures, shipwreck remains, archaeological sites and other objects of antiquity, cannot be renewed or revived. Today, sites in the State of Florida are being destroyed by all kinds of land development, inappropriate land management practices, erosion, looting, and to a minor extent even by well-intentioned professional scientific research (e.g., archaeological excavation). Measures must be taken to ensure that some of these resources will be preserved for future study and appreciation.

Secondly, sites are unique because individually they represent the tangible remains of events that occurred at a specific time and place.

Thirdly, while sites uniquely reflect localized events, these events and the origin of particular sites are related to conditions and events in other times and places. Sites can be understood properly only in relation to their natural surroundings and the activities of inhabitants of other sites. Managers must be aware of this "systemic" character of historic and archaeological sites. Also, it should be recognized that archaeological sites are time capsules for more than cultural history; they preserve traces of past biotic communities, climate, and other elements of the environment that may be of interest to other scientific disciplines.

Finally, the significance of sites, particularly archaeological ones, derives not only from the individual artifacts within them, but equally from the spatial arrangement of those artifacts in both horizontal and vertical planes. When archaeologists excavate, they recover, not merely objects, but also a record of the positions of these objects in relation to one another and their containing matrix (e.g., soil strata). Much information is sacrificed if the so-called "context" of archaeological objects is destroyed or not recovered, and this is what archaeologists are most concerned about when a site is threatened with destruction or damage. The artifacts themselves can be recovered even after a site is heavily disturbed, but the context -- the vertical and horizontal relationships -- cannot. Historic structures also contain a wealth of cultural (socio-economic) data that can be lost if historically sensitive maintenance, restoration or rehabilitation procedures are not implemented, or if they are demolished or extensively altered without appropriate documentation. Lastly, it should not be forgotten that historic structures often have associated potentially significant historic archaeological features that must be considered in land management decisions.

B. STATUTORY AUTHORITY

Chapter 253, Florida Statutes ("State Lands") directs the preparation of "single-use" or "multiple-use" land management plans for all state-owned lands and state-owned sovereignty submerged lands. In this document, 253.034(4), F.S., specifically requires that "all management plans, whether for single-use or multiple-use properties, shall specifically describe how the managing agency plans to identify, locate, protect and preserve, or otherwise use fragile non-renewable resources, such as archaeological and historic sites, as well as other fragile resources..."

Chapter 267, Florida Statutes is the primary historic preservation authority of the state. The importance of protecting and interpreting archaeological and historic sites is recognized in 267.061(1)(a), F.S.:The rich and unique heritage of historic properties in this state, representing more than 10,000 years of human presence, is an important legacy to be valued and conserved for present and future generations. The destruction of these nonrenewable historic resources will engender a significant loss to the state's quality of life, economy, and cultural environment. It is

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therefore declared to be state policy to:

1. Provide leadership in the preservation of the state's historic resources; [and]
2. Administer state-owned or state-controlled historic resources in a spirit of stewardship and trusteeship;...

Responsibilities of the Division of Historical Resources in the Department of State pursuant to 267.061(3), F.S., include the following:

1. Cooperate with federal and state agencies, local Governments, and private organizations and individuals to direct and conduct a comprehensive statewide survey of historic resources and to maintain an inventory of such responses.
2. Develop a comprehensive statewide historic preservation plan.
3. Identify and nominate eligible properties to the National Register of Historic Places and otherwise administer applications for listing properties in the National Register of Historic Places.
4. Cooperate with federal and state agencies, local governments, and organizations and individuals to ensure that historic resources are taken into consideration at all levels of planning and development.
5. Advise and assist, as appropriate, federal and state agencies and local governments in carrying out their historic preservation responsibilities and programs.
6. Carry out on behalf of the state the programs of the National Historic Preservation Act of 1966, as amended, and to establish, maintain, and administer a state historic preservation program meeting the requirements of an approved program and fulfilling the responsibilities of state historic preservation programs as provided in subsection 101(b) of that act.
7. Take such other actions necessary or appropriate to locate, acquire, protect, preserve, operate, interpret, and promote the location, acquisition, protection, preservation, operation, and interpretation of historic resources to foster an appreciation of Florida history and culture. Prior to the acquisition, preservation, interpretation, or operation of a historic property by a state agency, the Division shall be provided a reasonable opportunity to review and comment on the proposed undertaking and shall determine that there exists historic authenticity and a feasible means of providing for the preservation, interpretation and operation of such property.
8. Establish professional standards for the preservation, exclusive of acquisition, of historic resources in state ownership or control.
9. Establish guidelines for state agency responsibilities under subsection (2).

Responsibilities of other state agencies of the executive branch, pursuant to 267.061(2), F.S., include:

1. Each state agency of the executive branch having direct or indirect jurisdiction over a proposed state or state-assisted undertaking shall, in accordance with state policy and prior to the approval of expenditure of any state funds on the undertaking, consider the effect of the undertaking on any historic property that is included in, or eligible for inclusion in, the National Register of Historic Places. Each such agency shall afford the division a reasonable opportunity to comment with regard to such an undertaking.
2. Each state agency of the executive branch shall initiate measures in consultation with the division to assure that where, as a result of state action or assistance carried out by such agency, a historic property is to be demolished or substantially altered in a way that adversely affects the character, form, integrity, or other qualities that contribute to [the] historical, architectural, or archaeological value of the property, timely steps are taken to determine that no feasible and prudent alternative to the proposed demolition or alteration

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exists, and, where no such alternative is determined to exist, to assure that timely steps are taken either to avoid or mitigate the adverse effects, or to undertake an appropriate archaeological salvage excavation or other recovery action to document the property as it existed prior to demolition or alteration.

3. In consultation with the division [of Historical Resources], each state agency of the executive branch shall establish a program to locate, inventory, and evaluate all historic properties under the agency's ownership or control that appear to qualify for the National Register. Each such agency shall exercise caution to assure that any such historic property is not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly.
4. Each state agency of the executive branch shall assume responsibility for the preservation of historic resources that are owned or controlled by such agency. Prior to acquiring, constructing, or leasing buildings for the purpose of carrying out agency responsibilities, the agency shall use, to the maximum extent feasible, historic properties available to the agency. Each agency shall undertake, consistent with preservation of such properties, the mission of the agency, and the professional standards established pursuant to paragraph (3)(k), any preservation actions necessary to carry out the intent of this paragraph.
5. Each state agency of the executive branch, in seeking to acquire additional space through new construction or lease, shall give preference to the acquisition or use of historic properties when such acquisition or use is determined to be feasible and prudent compared with available alternatives. The acquisition or use of historic properties is considered feasible and prudent if the cost of purchase or lease, the cost of rehabilitation, remodeling, or altering the building to meet compliance standards and the agency's needs, and the projected costs of maintaining the building and providing utilities and other services is less than or equal to the same costs for available alternatives. The agency shall request the division to assist in determining if the acquisition or use of a historic property is feasible and prudent. Within 60 days after making a determination that additional space is needed, the agency shall request the division to assist in identifying buildings within the appropriate geographic area that are historic properties suitable for acquisition or lease by the agency, whether or not such properties are in need of repair, alteration, or addition.
6. Consistent with the agency's mission and authority, all state agencies of the executive branch shall carry out agency programs and projects, including those under which any state assistance is provided, in a manner which is generally sensitive to the preservation of historic properties and shall give consideration to programs and projects which will further the purposes of this section.

Section 267.12 authorizes the Division to establish procedures for the granting of research permits for archaeological and historic site survey or excavation on state-owned or controlled lands, while Section 267.13 establishes penalties for the conduct of such work without first obtaining written permission from the Division of Historical Resources. The Rules of the Department of State, Division of Historical Resources, for research permits for archaeological sites of significance are contained in Chapter 1A-32, F.A.C.

Another Florida Statute affecting land management decisions is Chapter 872, F.S. Section 872.02, F.S., pertains to marked grave sites, regardless of age. Many state-owned properties contain old family and other cemeteries with tombstones, crypts, etc. Section 872.05, F.S., pertains to unmarked human burial sites, including prehistoric and historic Indian burial sites. Unauthorized disturbance of both marked and unmarked human burial site is a felony.

C. MANAGEMENT POLICY

The choice of a management policy for archaeological and historic sites within state-owned or

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controlled land obviously depends upon a detailed evaluation of the characteristics and conditions of the individual sites and groups of sites within those tracts. This includes an interpretation of the significance (or potential significance) of these sites, in terms of social and political factors, as well as environmental factors. Furthermore, for historic structures architectural significance must be considered, as well as any associated historic landscapes.

Sites on privately owned lands are especially vulnerable to destruction, since often times the economic incentives for preservation are low compared to other uses of the land areas involved. Hence, sites in public ownership have a magnified importance, since they are the ones with the best chance of survival over the long run. This is particularly true of sites that are state-owned or controlled, where the basis of management is to provide for land uses that are minimally destructive of resource values.

It should be noted that while many archaeological and historical sites are already recorded within state--owned or controlled--lands, the majority of the uplands areas and nearly all of the inundated areas have not been surveyed to locate and assess the significance of such resources. The known sites are, thus, only an incomplete sample of the actual resources - i.e., the number, density, distribution, age, character and condition of archaeological and historic sites - on these tracts. Unfortunately, the lack of specific knowledge of the actual resources prevents formulation of any sort of detailed management or use plan involving decisions about the relative historic value of individual sites. For this reason, a generalized policy of conservation is recommended until the resources have been better addressed.

The generalized management policy recommended by the Division of Historical Resources includes the following:

1. State land managers shall coordinate all planned activities involving known archaeological or historic sites or potential site areas closely with the Division of Historical Resources in order to prevent any kind of disturbance to significant archaeological or historic sites that may exist on the tract. Under 267.061(1)(b), F.S., the Division of Historical Resources is vested with title to archaeological and historic resources abandoned on state lands and is responsible for administration and protection of such resources. The Division will cooperate with the land manager in the management of these resources. Furthermore, provisions of 267.061(2) and 267.13, F.S., combined with those in 267.061(3) and 253.034(4), F.S., require that other managing (or permitting) agencies coordinate their plans with the Division of Historical Resources at a sufficiently early stage to preclude inadvertent damage or destruction to known or potentially occurring, presently unknown archaeological and historic sites. The provisions pertaining to human burial sites must also be followed by state land managers when such remains are known or suspected to be present (see 872.02 and 872.05, F.S., and 1A-44, F.A.C.)
2. Since the actual resources are so poorly known, the potential impact of the managing agency's activities on historic archaeological sites may not be immediately apparent. Special field survey for such sites may be required to identify the potential endangerment as a result of particular management or permitting activities. The Division may perform surveys, as its resources permit, to aid the planning of other state agencies in their management activities, but outside archaeological consultants may have to be retained by the managing agency. This would be especially necessary in the cases of activities contemplating ground disturbance over large areas and unexpected occurrences. It should be noted, however, that in most instances Division staff's knowledge of known and expected site distribution is such that actual field surveys may not be necessary, and the project may be reviewed by submitting a project location map (preferably a 7.5 minute U.S.G.S. Quadrangle map or portion thereof) and project descriptive data, including

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- detailed construction plans. To avoid delays, Division staff should be contacted to discuss specific project documentation review needs.
3. In the case of known significant sites, which may be affected by proposed project activities, the managing agency will generally be expected to alter proposed management or development plans, as necessary, or else make special provisions to minimize or mitigate damage to such sites.
 4. If in the course of management activities, or as a result of development or the permitting of dredge activities (see 403.918(2)(6)a, F.S.), it is determined that valuable historic or archaeological sites will be damaged or destroyed, the Division reserves the right, pursuant to 267.061(1)(b), F.S., to require salvage measures to mitigate the destructive impact of such activities to such sites. Such salvage measures would be accomplished before the Division would grant permission for destruction of the affected site areas. The funding needed to implement salvage measures would be the responsibility of the managing agency planning the site destructive activity. Mitigation of historic structures at a minimum involves the preparation of measured drawings and documentary photographs. Mitigation of archaeological resources involves the excavation, analysis and reporting of the project findings and must be planned to occur sufficiently in advance to avoid project construction delays. If these services are to be contracted by the state agency, the selected consultant will need to obtain an Archaeological Research Permit from the Division of Historical Resources, Bureau of Archaeological Research (see 267.12, F.S. and Rules 1A-32 and 1A-46 F.A.C.).
 5. For the near future, excavation of non-endangered (i.e., sites not being lost to erosion or development) archaeological site is discouraged. There are many endangered sites in Florida (on both private and public lands) in need of excavation because of the threat of development or other factors. Those within state-owned or controlled lands should be left undisturbed for the present - with particular attention devoted to preventing site looting by "treasure hunters". On the other hand, the archaeological and historic survey of these tracts is encouraged in order to build an inventory of the resources present, and to assess their scientific research potential and historic or architectural significance.
 6. The cooperation of land managers in reporting sites to the Division that their field personnel may discover is encouraged. The Division will help inform field personnel from other resource managing agencies about the characteristics and appearance of sites. The Division has initiated a cultural resource management training program to help accomplish this. Upon request the Division will also provide to other agencies archaeological and historical summaries of the known and potentially occurring resources so that information may be incorporated into management plans and public awareness programs (See Management Implementation).
 7. Any discovery of instances of looting or unauthorized destruction of sites must be reported to the agent for the Board of Trustees of the Internal Improvement Trust Fund and the Division so that appropriate action may be initiated. When human burial sites are involved, the provisions of 872.02 and 872.05, F. S. and Rule 1A-44, F.A.C., as applicable, must also be followed. Any state agent with law enforcement authority observing individuals or groups clearly and incontrovertibly vandalizing, looting or destroying archaeological or historic sites within state-owned or controlled lands without demonstrable permission from the Division will make arrests and detain those individuals or groups under the provisions of 267.13, 901.15, and 901.21, F.S., and related statutory authority pertaining to such illegal activities on state-owned or controlled lands. County Sheriffs' officers are urged to assist in efforts to stop and/or prevent site looting and destruction.

In addition to the above management policy for archaeological and historic sites on state-owned

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land, special attention shall be given to those properties listed in the National Register of Historic Places and other significant buildings. The Division recommends that the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Revised 1990) be followed for such sites.

The following general standards apply to all treatments undertaken on historically significant properties.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alterations of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired. (see Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings [Revised 1990]).

Divisions of Historical Resources staff are available for technical assistance for any of the above listed topics. It is encouraged that such assistance be sought as early as possible in the project planning.

D. MANAGEMENT IMPLEMENTATION

As noted earlier, 253.034(4), F.S., states that "all management plans, whether for single-use or multiple-use properties, shall specifically describe how the managing agency plans to identify, locate, protect and preserve, or otherwise use fragile non-renewable resources, such as archaeological and historic sites..." The following guidelines should help to fulfill that requirement.

1. All land managing agencies should contact the Division and send U.S.G.S. 7.5 minute

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- quadrangle maps outlining the boundaries of their various properties.
2. The Division will in turn identify site locations on those maps and provide descriptions for known archaeological and historical sites to the managing agency.
3. Further, the Division may also identify on the maps areas of high archaeological and historic site location probability within the subject tract. These are only probability zones, and sites may be found outside of these areas. Therefore, actual ground inspections of project areas may still be necessary.
4. The Division will send archaeological field recording forms and historic structure field recording forms to representatives of the agency to facilitate the recording of information on such resources.
5. Land managers will update information on recorded sites and properties.
6. Land managers will supply the Division with new information as it becomes available on previously unrecorded sites that their staff locate. The following details the kind of information the Division wishes to obtain for any new sites or structures that the land managers may report:

A. Historic Sites

- (1) Type of structure (dwelling, church, factory, etc.).
- (2) Known or estimated age or construction date for each structure and addition.
- (3) Location of building (identify location on a map of the property, and building placement, i.e., detached, row, etc.).
- (4) General Characteristics: (include photographs if possible) overall shape of plan (rectangle, "L" "T" "H" "U", etc.); number of stories; number of vertical divisions of bays; construction materials (brick, frame, stone, etc.); wall finish (kind of bond, coursing, shingle, etc.); roof shape.
- (5) Specific features including location, number and appearance of:
 - (a) Important decorative elements;
 - (b) Interior features contributing to the character of the building;
 - (c) Number, type, and location of outbuildings, as well as date(s) of construction;
 - (d) Notation if property has been moved;
 - (e) Notation of known alterations to building.

B. Archaeological Sites

- (1) Site location (written narrative and mapped location).
- (2) Cultural affiliation and period.
- (3) Site type (midden, burial mound, artifact scatter, building rubble, etc.).
- (4) Threats to site (deterioration, vandalism, etc.).
- (5) Site size (acreage, square meters, etc.).
- (6) Artifacts observed on ground surface (pottery, bone, glass, etc.).
- (7) Description of surrounding environment.
7. No land disturbing activities should be undertaken in areas of known archaeological or historic sites or areas of high site probability without prior review by the Division early in the project planning.
8. Ground disturbing activities may proceed elsewhere but land managers should stop disturbance in the immediate vicinity of artifact finds and notifies the Division if previously unknown archaeological or historic remains are uncovered. The provisions of Chapter 872, F.S., must be followed when human remains are encountered.
9. Excavation and collection of archaeological and historic sites on state lands without a permit from the Division are a violation of state law and shall be reported to a law

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enforcement officer. The use of metal detectors to search for historic artifacts shall be prohibited on state lands except when authorized in a 1A-32, F.A.C., research permit from the Division.

- 10.** Interpretation and visitation which will increase public understanding and enjoyment of archaeological and historic sites without site destruction or vandalism is strongly encouraged.
- 11.** Development of interpretive programs including trails, signage, kiosks, and exhibits is encouraged and should be coordinated with the Division.
- 12.** Artifacts found or collected on state lands are by law the property of the Division. Land managers shall contact the Division whenever such material is found so that arrangements may be made for recording and conservation. This material, if taken to Tallahassee, can be returned for public display on a long term loan.

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C. ADMINISTERING AGENCY

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

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

Contact Person:

Susan M. Harp
Historic Preservation Planner
Telephone (904) 487-2333
Suncom 277-2333
FAX (904) 922-0496

Addendum 8—Priority Schedule And Cost Estimates

Henderson 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. Convert overhead powerlines, to underground lines. Estimated Cost: \$100,000.
2. Obtain a Park Service Specialist to meet the goals, objectives, and resource needs of the Choctaw GEOPark. Estimated Cost: \$30,000 recurring annually
3. Obtain 2 Park Ranger positions to meet the goals, objectives, and resource needs of the park. Estimated Cost: \$50,000 recurring annually.
4. Replant unauthorized foot paths in dune areas. Estimated Cost: \$10,000.
5. Conduct seasonal shorebird surveys and post and monitor significant shorebird nesting/resting areas. Signs and materials: \$600; Staff hours, three times monthly (incls. winter months for piping plover): \$1,440; Staff hours training and compiling reports: \$1,000. Estimated Yearly Cost: \$3,040.
6. Conduct sea turtle nesting surveys and post and monitor nests. Staff hours surveying and preparing reports: \$4,500; Signs and materials: \$200. Estimated Yearly Cost: \$4,700.
7. Conduct a phase I archaeological survey of the park. Estimated Cost: \$20,000.