



**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

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April 24, 2013

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

**RE: Henderson Beach State Park, Lease 3297**

Dear <sup>Sine</sup>Ms. Murray:

The Division of State Lands, Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund, hereby approves the above referenced management plan. The next management plan update is due April 22, 2023.

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

Sincerely,

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



# **Henderson Beach State Park**

**APPROVED  
Unit Management Plan**

**STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION**

**Division of Recreation and Parks  
April 19, 2013**





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## INTRODUCTION

Henderson Beach State Park is located within the City of Destin, in Okaloosa County (see Vicinity Map). Access to the park is from U.S. Highway 98 (see Reference Map) and from the Gulf of Mexico along the Florida Circumnavigational Saltwater Paddling Trail. The Vicinity Map also reflects significant land and water resources existing near the park.

Henderson Beach State Park was initially acquired on February 2, 1983, with funds from the Save Our Coast program. The Board of Trustees of the Internal Improvement Trust Fund (Trustees) holds fee simple title to the park, and on June 6, 1983, the Trustees leased (Lease Number 3297) the property to the DRP under a 50-year lease. The current lease will expire on June 5, 2033. Currently, the park comprises 222 acres.

Henderson Beach State Park is designated single-use to provide resource-based public outdoor recreation and other park-related uses. There are no legislative or executive directives that constrain 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 white sand beach and active dune system. With over one mile of uninterrupted saltwater beach, the park offers an outstanding scenic vista of brilliant white beach and blue-green gulf waters. 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 SIGNIFICANCE OF THE PARK

The purpose of Henderson Beach State Park is to provide natural areas and sandy beaches for public recreational activities and to preserve natural scenery in a rapidly-developing urban area. Parklands protect a representative portion of Florida's original coastline for future generations and conserve important recreational assets vital to the state's tourist economy. The park provides opportunities for outdoor resource-based recreation for the enjoyment of Florida residents and visitors.

### Park Significance

- Henderson Beach State Park provides 1.25 miles of gulf shoreline for public beach access that is enjoyed by nearly a quarter-million Florida residents and visitors each year.
- The park protects nearly 64 acres of dynamic, gulf front, beach dunes that can reach heights of up to 30 feet.

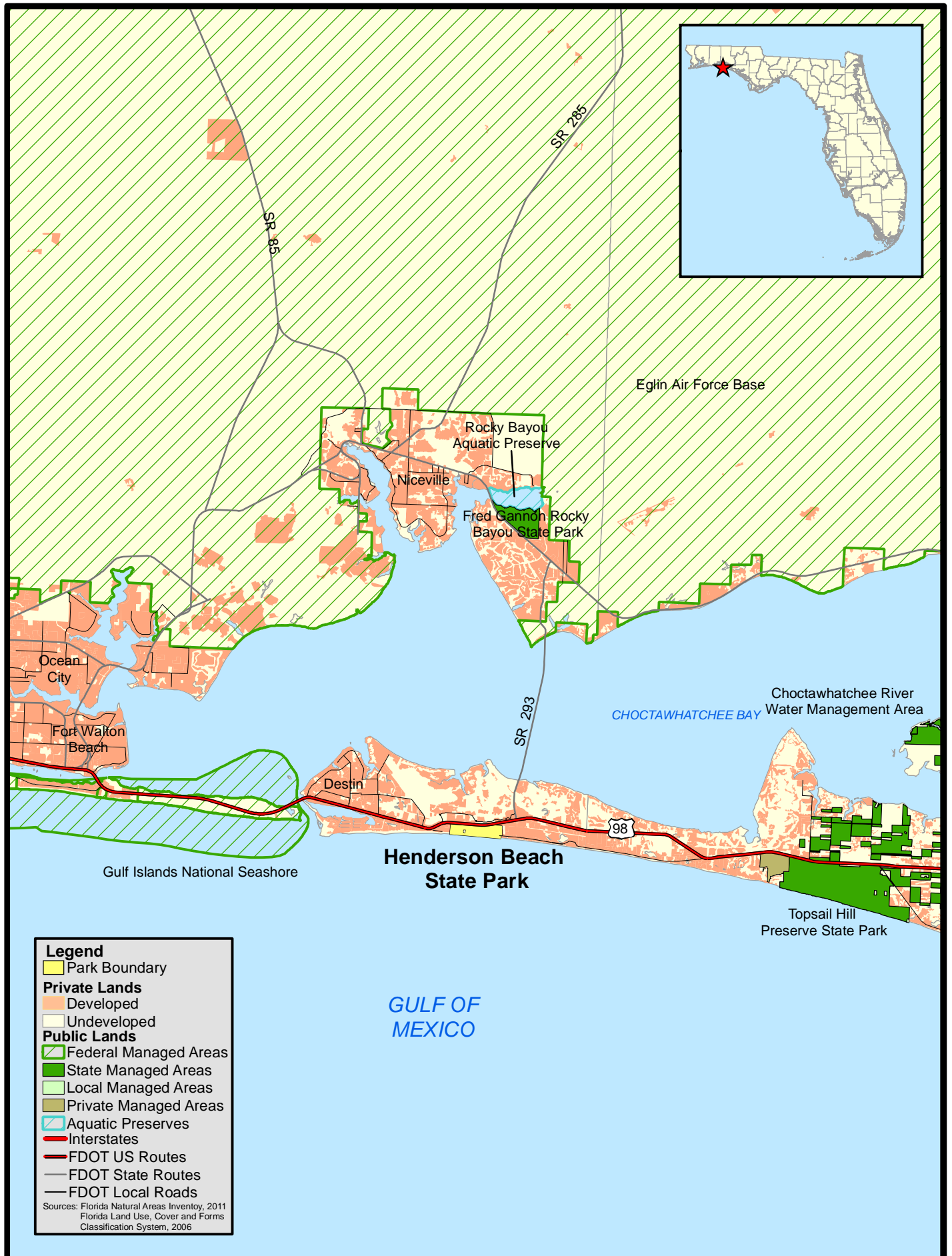
- The park protects an expansive stretch of beach in Okaloosa County with night skies not severely impacted by artificial lighting, providing suitable nesting area for the endangered green sea turtle (*Chelonia mydas*) and the threatened loggerhead sea turtle (*Caretta caretta*).
- The park protects three types of natural communities and their rare and endemic plants and animals, including Cruise's golden aster (*Chrysopsis gossypina* spp. *cruiseana*), Godfrey's golden aster (*Chrysopsis godfreyi*), southeastern snowy plover (*Charadrius alexandrinus*), piping plover (*Charadrius melodus*), and two imperiled species of marine turtle.

Henderson Beach State Park is classified as a state recreation area in the DRP's unit classification system. In the management of a state recreation area, major emphasis is placed on maximizing the recreational potential of the unit. However, preservation of the park's natural and cultural resources remains important. Depletion of a resource by any recreational activity is not permitted. In order to realize the park's recreational potential the development of appropriate park facilities is undertaken with the goal to provide facilities that are accessible, convenient and safe, to support public recreational use or appreciation of the park's natural, aesthetic and educational attributes.

#### **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 goals, objectives, actions and criteria or standards that guide each aspect of park administration, and sets forth the specific measures that will be implemented to meet management objectives and provide balanced public utilization. The plan is intended to meet the requirements of Sections 253.034 and 259.032, Florida Statutes, Chapter 18-2, Florida Administrative Code, and is intended to be consistent with the State Lands Management Plan. With approval, this management plan will replace the 2001 approved plan.

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

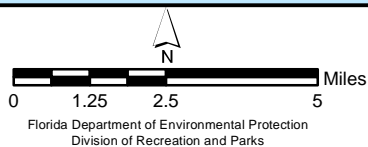


**Legend**

- Park Boundary
- Private Lands**
- Developed
- Undeveloped
- Public Lands**
- Federal Managed Areas
- State Managed Areas
- Local Managed Areas
- Private Managed Areas
- Aquatic Preserves
- Interstates
- FDOT US Routes
- FDOT State Routes
- FDOT Local Roads

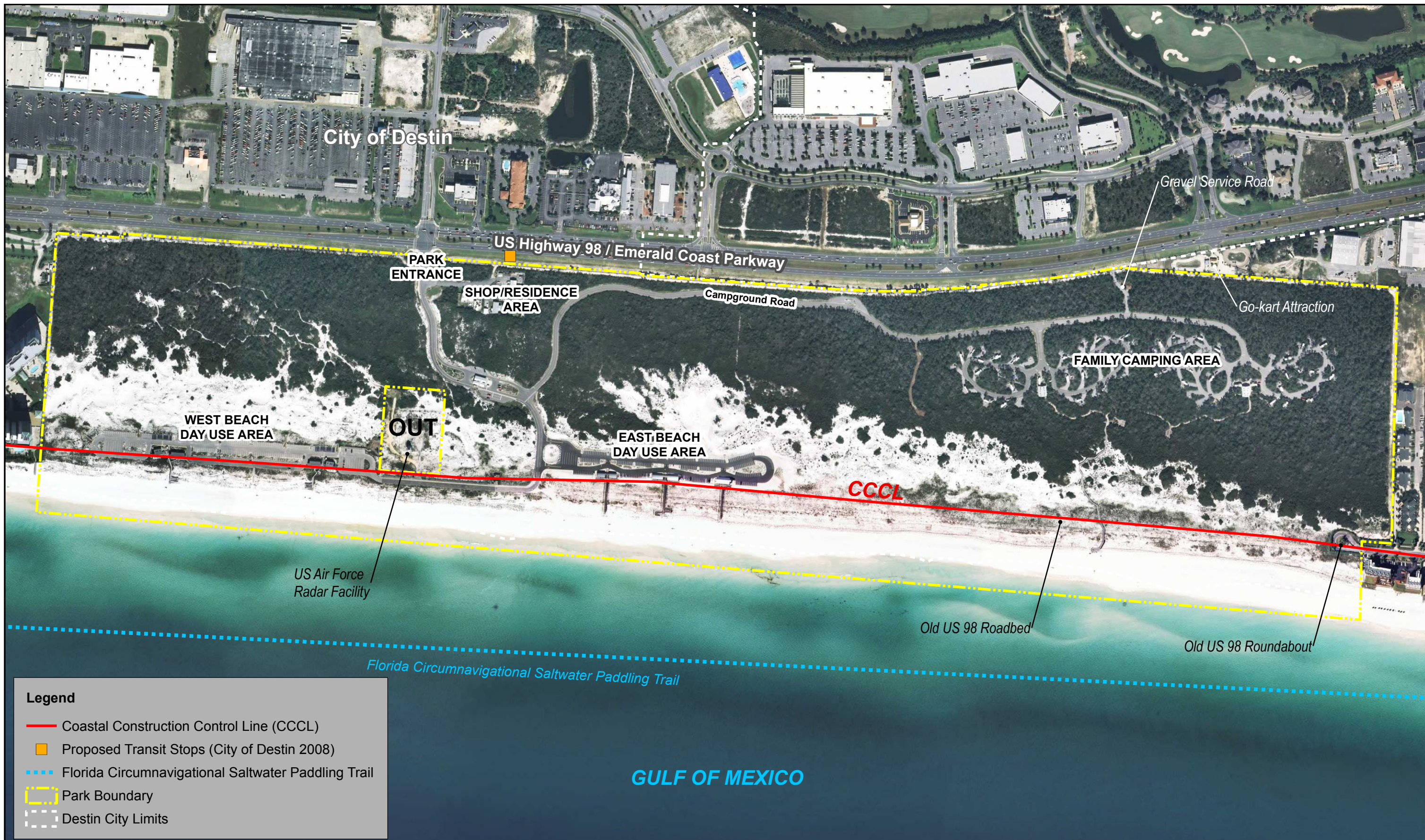
Sources: Florida Natural Areas Inventory, 2011  
Florida Land Use, Cover and Forms Classification System, 2006

**HENDERSON BEACH  
STATE PARK**



**VICINITY  
MAP**

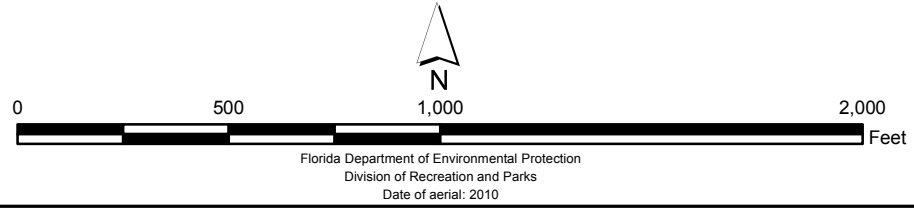




**Legend**

- Coastal Construction Control Line (CCCL)
- Proposed Transit Stops (City of Destin 2008)
- - - Florida Circumnavigational Saltwater Paddling Trail
- Park Boundary
- Destin City Limits

HENDERSON BEACH STATE PARK



REFERENCE MAP



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

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

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

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

The potential for generating revenue to enhance management was also analyzed. 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 park was also analyzed. Decisions regarding this type of management (such as outsourcing,

contracting with the private sector, use of volunteers, etc.) will be made on a case-by-case basis as necessity dictates.

## **MANAGEMENT PROGRAM OVERVIEW**

### **Management Authority and Responsibility**

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

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

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

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



## **Park Management Goals**

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

1. Provide administrative support for all park functions.
2. Protect water quality and quantity in the park, restore hydrology to the extent feasible and maintain the restored condition.
3. Restore and maintain the natural communities/habitats of the park.
4. Maintain, improve or restore imperiled species populations and habitats in the park.
5. Remove exotic and invasive plants and animals from the park and conduct needed maintenance-control.
6. Protect, preserve and maintain the cultural resources of the park.
7. Provide public access and recreational opportunities in the park.
8. Develop and maintain the capital facilities and infrastructure necessary to meet the goals and objectives of this management plan.

## **Management Coordination**

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

The Florida Department of Agriculture and Consumer Services (FDACS), Florida Forest Service (FFS), assists DRP staff in the development of wildfire emergency plans and provides the authorization required for prescribed burning. The Florida Fish and Wildlife Conservation Commission (FWC) assists staff in the enforcement of state laws pertaining to wildlife, freshwater fish and other aquatic life existing within the park. In addition, the FWC aids the DRP with wildlife management programs, including imperiled species management and Watchable Wildlife programs. The Florida Department of State (FDOS), Division of Historical Resources (DHR) assists staff to ensure protection of archaeological and historical sites. 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 aid the staff in the development of erosion control projects.

## **Public Participation**

The DRP provided an opportunity for public input by conducting a public workshop and an Advisory Group Meeting to present the draft management plan to the public. These meetings were held on November 27, 2012, and November 28, 2012, respectively. Meeting notices were published in the Florida Administrative Register, November 19, 2012, Volume 38, Issue 74, included on the DEP Internet Calendar, posted in clear view at the park, and promoted locally. The purpose of the Advisory Group meeting is to

provide the Advisory Group members an opportunity to discuss the draft management plan (see Addendum 2).

### **Other Designations**

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. The park is a component of the Florida Greenways and Trails System, administered by the Office of Greenways and Trails.

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).

## RESOURCE MANAGEMENT COMPONENT

### INTRODUCTION

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

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

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

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

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

<b>Table 1: Henderson Beach State Park Management Zone Acreage</b>		
<b>Management Zone</b>	<b>Acreage</b>	<b>Managed with Prescribed Fire</b>
HB-A	46.00	No
HB-B	23.44	No
HB-C	44.45	No
HB-D	63.71	No
HB-E	50.77	No

## **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 and strong winds associated with multiple hurricanes have altered elevations along the park's sand dunes in recent decades. In particular, the 1995, 2004 and 2005 hurricane seasons saw major land-falling storms, with significant impacts to the park's shoreline and dune profile.

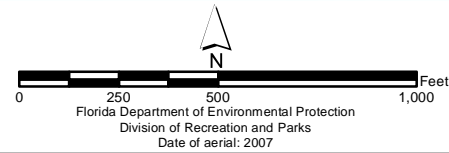
The shoreline at Henderson Beach has been shaped by the wave action, winds and longshore currents of the Gulf of Mexico. While gradual accretion and erosion are considered part of natural process, the park's shoreline had experienced net erosion associated with hurricanes of the past decade. More recently, the beach has experienced an influx of sand due to major renourishment projects both west and east of the park in 2007 and 2008, respectively.

#### **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 1982). 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



HENDERSON BEACH STATE PARK



MANAGEMENT ZONES MAP



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 1982).

### **Soils**

Three distinct soil types are found at the park (see Soils Map, page 17). Unconsolidated quartz sandy soils, known as Beaches Series, comprise the open beach. This soil type grades into Newhan-Corolla Series, well-drained, sandy soils, located in the rolling, sparsely vegetated dune area of the park. Kureb soil is excessively drained, deep sands that occur along the subtle undulating topography of relict dune fields near the Gulf of Mexico. Natural fertility and the content of organic matter are very low. The natural vegetation is primarily sand live oak (*Quercus geminate*), myrtle oak (*Quercus myrtifolia*) and Choctawhatchee sand pine (*Pinus clausa* var. *immuginata*). The vegetation nearest the Gulf of Mexico is stunted with a pronounced salt pruned tapering. Addendum 4 contains detailed soil descriptions.

Land management practices that continue to protect and conserve natural groundcover 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 consist primarily of quartz sand along with very coarse pea-sized gravel and a small amount of clay (Barraclough 1962). 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 (Barraclough 1962).

Park water, obtained from the City of Destin, is pumped from the Floridan 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 saltwater intrusion and lower quality water (Barraclough 1962).

Although freshwater wetlands and associated ephemeral streams occur or once occurred north towards the Choctawhatchee Bay, no former or existing wetlands extend into the park. A few low lying swales within the back dunes can be described as isolated ephemeral wetlands.

The park's deep sandy soils largely preclude surface water sheetflow during rain events. The exception is paved/impervious parking areas and roadways that now drain into designed stormwater retention areas. Most of the stormwater runoff from parking areas is directed into former swales. Hydrologic function is generally intact within the park's remaining natural areas.

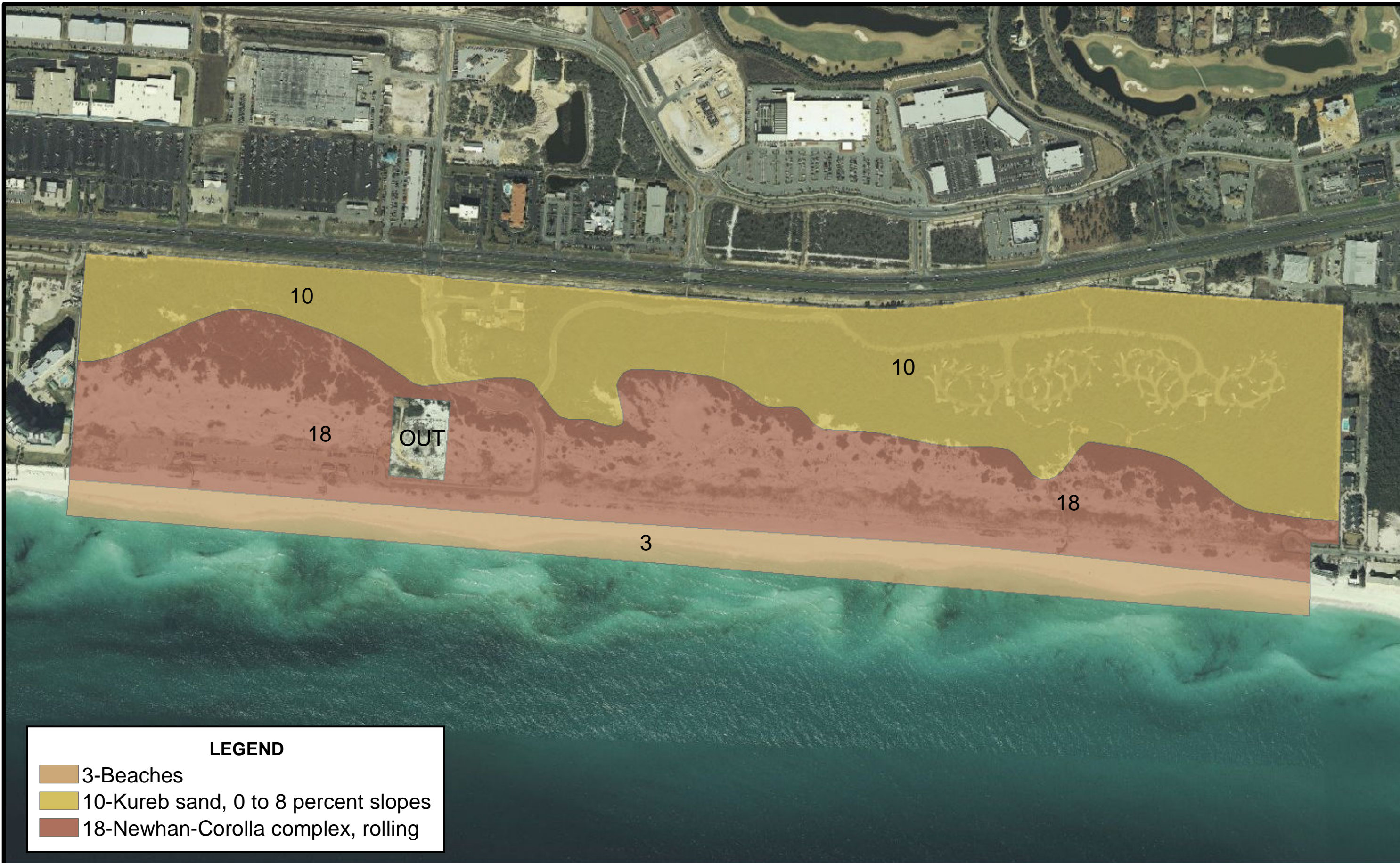
### **Natural Communities**

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

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

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

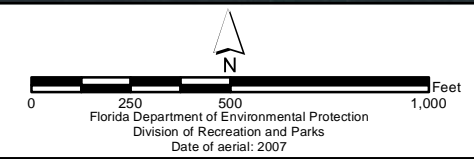




**LEGEND**

- 3-Beaches
- 10-Kureb sand, 0 to 8 percent slopes
- 18-Newhan-Corolla complex, rolling

HENDERSON BEACH STATE PARK







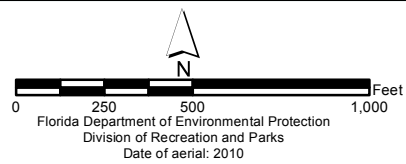
SOILS MAP





**LEGEND**

	BD - Beach Dune 62.29 ac.
	SC - Scrub 108.19 ac.
	MUS - Marine Unconsolidated Substrate 37.41 ac.
	DV - Developed 20.46 ac.





The park contains three distinct natural communities, as well as developed areas (see Natural Communities Map, page 19). A list of known plants and animals occurring in the park is contained in Addendum 5.

## BEACH DUNE

**Desired future condition:** This community should be a coastal mound or ridge(s) of unconsolidated sediments found along shorelines with high-energy waves. Vegetation will consist of herbaceous dune forming grass species, such as sea oats (*Uniola paniculata*) and beach grass (*Panicum amarum*). Other typical species may include sea rocket (*Cakile constricta*), railroad vine (*Ipomea pes-caprae*), knotgrass (*Paspalum distichum*) and beach morning glory (*Ipomea imperati*). Occasionally shrubs, such as saltbush (*Baccharis halimifolia*) and beach elder (*Iva imbricate*), may be scattered within the herbaceous vegetation.

**Description and assessment:** The beach dune community at the park extends from the gentle undulating foredunes, near the gulf waters, to the higher, mobile, dunes extending landward of the beach. These larger dunes may reach heights up to 30 feet during extended periods between major hurricanes.

Subtle microhabitats occur within the beach dune map unit. In a few remaining areas, wet swale grasses and rushes occur, with very small ephemeral ponds providing fresh water after significant rain events. Perennial plant pioneers with deep roots such as golden aster (*Chrysopsis* sp.), woody goldenrod (*Chrysoma pauciflosculosa*), Gulf Coast lupine (*Lupinus westianus*), whitlow-wort (*Paronychia erecta*), and little bluestem (*Schizachyrium maritimum*), are most often found nearer the front dunes. Sea oats, camphorweed (*Heterotheca subaxillaris*), beach elder, sea rocket and saltwort (*Batis maritime*) help stabilize the primary dunes facing the Gulf.

Major beach dune restoration projects have included the removal of old Scenic Highway 98, accomplished in 1999, and sea oat planting in 2006, following back-to-back years with major land-falling hurricanes. The portion of the old highway once ran just landward of the primary dune line. The majority of the asphalt and underlying roadbed materials were broken up and hauled away. The profile of the roadway, along with small, scattered, asphalt remnants, have become far less visible as natural dune building and native plant recolonization have taken place. Tens of thousands of sea oats were strategically planted along hurricane-impacted foredunes in select areas along the park's 1.25-mile stretch of beach. Currently, the planting effort has been very successful in building/anchoring new dune growth within the foredunes. This community is considered to be in good condition.

**General management measures:** Management activities within the park's beach dune natural community will include periodic monitoring for unauthorized access, rare

endemic plants and exotic species, and revegetation projects as necessary following storm events.

## SCRUB

**Desired future condition:** Dominant species over the vast majority of the park's scrub acreage will include sand live oak, myrtle oak, Chapman's oak (*Quercus chapmanii*), Choctawhatchee sand pine, saw palmetto (*Serenoa repens*) and rusty staggerbush (*Lyonia ferruginea*). The oak canopy varies in height based largely on its proximity to the maritime influences of the Gulf of Mexico. Areas closer to the Gulf will consist of a dense, nearly contiguous, salt pruned, oak scrub. Large-leaved jointweed (*Polygonella macrophylla*), endemic to panhandle coastal scrub, occurs here and is routinely blooming in the fall and replenishing its seedbank. In more landward areas, Choctawhatchee sand pine will be dominant in abundance, percent cover or height. Primarily storm events shape, influence and help perpetuate panhandle coastal scrub. Over long periods of time, these disturbances result in multi-aged overstory pines and a mosaic of various stages of succession.

**Description and assessment:** 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, and could be classified separately if an appropriate FNAI category existed. This area, however, has been included within the scrub natural community mapping unit at this park. Primarily sand live oak forms a dense, nearly contiguous canopy that rarely exceeds six to eight feet in height. The best remaining examples of this form of scrub occur in the eastern portion of the park. Large-leaved jointweed can be closely associated with and occur within the oak scrub. Scattered southern magnolias (*Magnolia grandiflora*) occur within the well-anchored back dunes of the oak scrub as well. Only the tops of these trees are emergent from the ever shifting sands. As with beach dune, the soils and vegetation are highly sensitive to and easily damaged by off road vehicle use and foot traffic. Choctawhatchee sand pine, sand live oak, Chapman's oak, myrtle oak, rosemary (*Ceratiola ericoides*), magnolia and red bay (*Persea borbonia*) dominate the park's more inland portions of the scrub community, extending landward to U.S. Highway 98. In these areas, Choctawhatchee sand pine can form an overstory canopy. Most of the scrub community exhibits the uneven age stand character as described by Drewa et al. (2008). Slightly lower areas have saw palmetto as well. The scrub at this park is a very small, remaining sliver of a much larger coastal scrub community that once occurred along this portion of coastline.

In general, the scrub community at Henderson Beach is very well established. In some areas, the scrubby oaks and Choctawhatchee sand pines have formed a contiguous, multi-aged canopy characteristic of panhandle coastal scrub. Some Choctawhatchee sand pines in these areas have been aged at well over 100 years old, with no apparent

signs of having been subjected to past fires. The often twisted and contorted trunks and branches have been shaped by the lashing winds and salt air, providing a great deal of character.

The deep sandy soil and presence of flowering plants, along the low oak scrub/beach dune ecotone, also make these areas suitable for gopher tortoises, which were historically much more abundant in coastal scrub, prior to development and corresponding habitat loss and fragmentation.

**General management measures:** Panhandle coastal scrub is primarily influenced and shaped by storm events. An incremental, “stand replacement” fire management approach, typical of large, expansive, peninsular scrub communities, should not be applied here. Researchers (Drewa et al. 2008; Parker et al. 2001) have suggested that stand replacing fire may not have been the driving natural process in these coastal panhandle scrub communities. Use of stand replacing fire in these communities might further degrade wildlife refugia following tropical storms by exposing these sensitive areas to greater wind and water erosion, and creating larger gaps between already fragmented coastal scrub along the well-developed coast. Mechanical clearing followed by prescribed fire has been used to manage scrub communities in peninsular Florida in order to mimic the stand replacing fire regime appropriate to scrub in that region. Similar techniques should not be used in the park as evidence shows that stand replacing fire was rare in these communities.

Access to coastal oak scrub should be controlled through designated at-grade footpaths. Paths or walkways through this community should be minimized as they serve as corridors that allow coastal winds and salt spray to penetrate into the scrub creating soil erosion and mortality of trees, thus resulting in further fragmentation. Additional accesses or development should avoid coastal scrub where possible to prevent impacts and keep it in good condition. Motor vehicle use in this area should be prohibited. Exotic animals and plants should be controlled, including feral cats, coyotes (*Canis latrans*), red foxes (*Vulpes vulpes*) and armadillos (*Dasypus novemcinctus*), to protect native wildlife.

## MARINE UNCONSOLIDATED SUBSTRATE

**Desired future condition:** This community should consist of expansive unvegetated, open areas of mineral-based substrate composed of quartz sand (sand beaches). Desired conditions include preventing soil compaction, dredging activities and disturbances, such as the accumulation of pollutants.

**Description and assessment:** The high dry beach and tidally washed shore combine to form the marine unconsolidated substrate. The quartz sand is an integral part of the natural dune building process and beach dynamics. In general, the smaller waves

during relatively calm marine conditions carry sand from nearshore bars onto the shore, thus serving to build the beach (accretion). Wind blown sand particles from the beach in turn build up dunes as they encounter vegetation in the beach dune community. By contrast, the larger waves associated with storms and/or strong ground swells often deplete the beach of sand, depositing it just offshore in sand bars (erosion). The beach dunes and nearshore sandbars are the sand reservoirs in this cyclical process, which depends largely on free movement of both wind blown and drifting sand particles along regionally intact beach dune and beach natural communities. Widespread coastal development in recent decades has severely limited the natural mechanisms for sand replacement, contributing, among other factors, to long-term beach erosion. Two very large-scale beach renourishment projects have been necessary along Walton County and portions of Okaloosa County beaches. In spring 2007, beaches west of the park were renourished, with replenished sands tapered to the park's western boundary. In 2008, the beaches east of the park were renourished, with replenished sands likewise tapered to the park's eastern boundary. This "passive renourishment" approach is intended to provide new sand to the park via wind and littoral drift in order to preserve, to some extent, natural sand deposition processes and the lightest possible sand grain color.

**General management measures:** Management activities for the park's marine unconsolidated substrate or beach will include protection, delineation and monitoring of shorebird nesting areas, seasonal sea turtle nesting surveys and routine trash removal. Mechanized beach cleaning for litter removal shall not be permitted along the State Park's beach. Sargassum and other tide-borne, natural materials referred to as "wrack" are indiscriminately removed by such machinery. Wrack is essential to maintaining natural processes within this beachfront, maritime environment. Many small invertebrates feed on the algae and fungi associated with decaying wrack and provide an abundant food source for shorebirds. Additionally, clumps of old wrack provide wind shadows that begin to collect wind blown sand and tumbling plant seeds. Sprouting plants grow more quickly during their vulnerable period due to nutrients provided from the decaying wrack. This process is responsible for the formation of smaller foredunes along the upper beach and has been virtually eliminated along developed coastlines by repetitive, mechanized beach cleaning. Litter and other tide-borne trash will continue to be collected by hand.

## DEVELOPED

**Desired future condition:** Developed areas at the park include recreational infrastructure, such as beach access parking areas, restroom facilities, campgrounds, playgrounds and picnic areas. Other developed areas include park administration/maintenance facilities and on-site staff residences. The future desired condition for all park buildings and visitor facilities is to be well maintained and fully serviceable.



**Description and assessment:** The park provides two large capacity beach access parking areas along with restroom facilities. The park also provides a full-service campground with direct beach access. Park administration is located within the entrance station. The staff residences and maintenance facilities are centrally located within a secure compound that includes a multi-bay shop and various storage buildings. All park facilities are in good structural condition and are well maintained.

### **Imperiled Species**

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

There are 16 species of plants and animals that can be considered imperiled based on State, Federal or FNAI listing. Significant plants, rare and largely endemic to coastal northwest Florida, occur at the park. Gulf Coast lupine and Godfrey's and Cruise's golden asters occur in the open sand dunes near the beach, as well as sandy openings within the low oak scrub. Large-leaved jointweed, a rare species due to widespread habitat loss, occurs sporadically throughout relatively open areas within the scrub community. Based on incidental observations, populations of these plants have remained constant over time.

Loggerhead (*Caretta caretta*) and green (*Chelonia mydas*) sea turtles occasionally nest along the park's beach from May through October. The park provides the only expansive dark stretch of beach in Okaloosa County east of East Pass.

A very small number of gopher tortoises (*Gopherus polyphemus*) occur within the park. While the park provides suitable habitat for these burrowing animals, the park's small size and complete isolation from other natural areas prevents recruitment aside from the occasional unregulated "drop-off."

The USFWS has designated portions of the park as Critical Habitat for the Choctawhatchee Beach Mouse (*Peromyscus polionotus allophrys*). However, despite previous survey and monitoring efforts, this species has yet to be documented within the park. The DRP will continue to work with the USFWS and the FWC on conservation efforts regarding this critically imperiled species.

Southeastern snowy plovers (*Charadrius alexandrinus*), least terns (*Sterna antillarum*) and black skimmers (*Rynchops niger*) all occur at the park. The piping plover (*Charadrius melodus*) has been occasionally observed at the park as well. The DRP did not conduct a formal survey at Henderson Beach State Park in 2009. Park staff documented no

shorebird breeding activity at the park during that year. The park has been included in regional shorebird surveys in recent years. However, Park Service biologists did not observe any nesting for snowy plovers, least terns or black skimmers at Henderson Beach during the 2010, 2011 and 2012 nesting seasons.

Symbolic fencing specifically for shorebirds has not been erected in recent years. However, potential nesting areas have been protected in a similar manner with dune protection signage. At present, Henderson Beach State Park has little suitable habitat for nesting shorebirds. There is a pronounced primary dune ridge vegetated by sea oats and scattered sand live oak. Behind this is a more stable dune field largely anchored and protected by a dense canopy of salt-pruned sand live oak. There are no substantial washover flats or dune blowouts to provide nesting habitat for breeding shorebirds. After the old Highway 98 roadbed was removed, the remaining footprint of the old roadway temporarily became a suitable nesting area for least terns. Prior to this, it is unclear whether Henderson Beach had regular breeding shorebird activity. Native vegetation has since reestablished in this area, and least terns no longer nest within the park. Least terns have instead begun nesting on gravel rooftops in the Destin area. This park also experiences very high levels of visitation during the nesting season because it is surrounded by the urbanized area of Destin, a very popular tourist destination along the Gulf of Mexico. The park's beachfront is frequently accessed from developments and condominiums at its borders, and human presence in areas where shorebirds would forage is very high.

Because nesting is currently unlikely at the park, monitoring and management of shorebirds at Henderson Beach State Park is conducted as necessary. Management effort is directed at protecting and maintaining the quality of the remaining beach dune and adjacent beachfront habitat, which may provide for breeding shorebird reestablishment in the future, if temporary hurricane blowouts or washovers were to occur. Eliminating or greatly reducing non-essential beach driving, in addition to utilizing symbolic fencing, would enhance plant and animal habitat protection. If more suitable nesting site conditions were to exist in the future, least terns or snowy plovers may make nesting attempts. At that time, care would need to be taken to guard against predation or further human disturbance that may disrupt successful nesting. Management actions to be undertaken would include regular monitoring and restricting public access to dune or other active nesting areas via signage and ropes.

Other imperiled species that utilize the park as feeding and resting habitat are snowy egrets (*Egretta thula*), Caspian terns (*Sterna caspia*), sandwich terns (*Sterna sandvicensis*) and brown pelicans (*Pelecanus occidentalis*). None of these species is known to utilize the park as nesting habitat. Although the piping plover has been observed at Henderson Beach, the park does not provide the preferred foraging habitat, chiefly tidal flats. Additionally, southeastern American kestrels (*Falco sparverius paulus*) have been observed as flyovers during the fall migration.

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

<b>Table 2: Imperiled Species Inventory</b>						
<b>Common and Scientific Name</b>	<b>Imperiled Species Status</b>				<b>Management Actions</b>	<b>Monitoring Level</b>
	<b>FWC</b>	<b>USFWS</b>	<b>FDACS</b>	<b>FNAI</b>		
<b>PLANTS</b>						
Cruise's golden aster <i>Chrysopsis gossypina</i> spp. <i>Cruiseana</i>	LE		LE	S2	9, 10	2
Godfrey's golden aster <i>Chrysopsis godfreyi</i>	LE		LE	S2	9, 10	2
Gulf Coast lupine <i>Lupinus westianus</i>	LT		LT	S3	10	2
Large-leaved jointweed <i>Polygonella macrophylla</i>	LT		LT	S3	10	2
<b>REPTILES</b>						
Loggerhead sea turtle <i>Caretta caretta</i>	LT	LT		S3	8, 10	2
Green sea turtle <i>Chelonia mydas</i>	LE	LE		S2	8, 10	2
Gopher tortoise <i>Gopherus polyphemus</i>	LT			S3	8, 10	1
<b>BIRDS</b>						
Southeastern snowy plover <i>Charadrius alexandrinus</i>	LT			S1	8, 10	1
Piping plover <i>Charadrius melodus</i>	LT	LT		S2	8, 10	1
Snowy egret <i>Egretta thula</i>	LS			S3	10	1
Southeastern American kestrel <i>Falco sparverius paulus</i>	LT			S3		1

Table 2: Imperiled Species Inventory						
Common and Scientific Name	Imperiled Species Status				Management Actions	Monitoring Level
	FWC	USFWS	FDACS	FNAI		
Brown pelican <i>Pelecanus occidentalis</i>	LS			S3	10	1
Black Skimmer <i>Rynchops niger</i>	LS			S3	10	1
Least tern <i>Sterna antillarum</i>	LT			S3	10	1
Caspian tern <i>Sterna caspia</i>				S2	10	1
Sandwich tern <i>Sterna sandvicensis</i>				S2	10	1

**Management Actions:**

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

**Monitoring Level:**

**Tier 1.** Non-Targeted Observation/Documentation: Includes documentation of species presence through casual/passive observation during routine park activities (i.e. not conducting species-specific searches). Documentation may be in the form of *Wildlife Observation Forms*, or other district specific methods used to communicate observations.

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

**Exotic Species**

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

Exotic plant occurrences and infestations have not been a wide spread problem at the park. Park staff should remain familiar with local and regional exotic plant threats, particularly along residential boundaries, and identify and remove any exotic plant species that may be introduced to the park, in conjunction with routine resource management patrols. Any removal efforts, if necessary, will be coordinated with District biological staff.

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

<b>Table 3: Inventory of FLEPPC Category I and II Exotic Plant Species</b>			
<b>Common and Scientific Name</b>	<b>FLEPPC Category</b>	<b>Distribution</b>	<b>Management Zone</b>
<b>PLANTS</b>			
Cogon grass <i>Imperata cylindrica</i>	I	2	HB-A
Asparagus fern <i>Asparagus aethiopicus</i>	I	2	HB-B
Silverthorn or Thorny Olive <i>Eleagnus pungens</i>	II	2	HB-C

### **Distribution Categories:**

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

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

In some cases, native wildlife may also pose management problems or nuisances within state parks. A nuisance animal is an individual native animal whose presence or activities create special management problems. Examples of animal species from which nuisance cases may arise include raccoons, venomous snakes and alligators that are in public areas. Nuisance animals are dealt with on a case-by-case basis.

Exotic or non-indigenous and nuisance animals are removed as necessary to protect the integrity of natural communities and native wildlife populations.

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

### **Special Natural Features**

There are no special natural features solely unique to this park.

## **Cultural Resources**

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

### **Condition Assessment**

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

### **Level of Significance**

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

There are no criteria for use in determining the significance of collections or archival material. Usually, significance of a collection is based on what or whom it may represent. For instance, a collection of furniture from a single family and a particular era

in connection with a significant historic site would be considered highly significant. In the same way, a high quality collection of artifacts from a significant archaeological site would be of important significance. A large herbarium collected from a specific park over many decades could be valuable to resource management efforts. Archival records are most significant as a research source. Any records depicting critical events in the park's history, including construction and resource management efforts, would all be significant.

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

### **Prehistoric and Historic Archaeological Sites**

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

**Description:** Currently, the park has one known cultural site. The Old U.S. Highway 98 corridor runs through the entire park from east to west, just landward of the current primary dune line. The highway was originally routed north of Choctawhatchee Bay from Ebro, Freeport, Portland and Niceville. The road was moved to a more scenic coastal route between Panama City and Ft. Walton Beach beginning in 1935, including the recorded Henderson Beach segment.

**Condition Assessment:** The majority of the asphalt and road base materials were removed in 1999 along with the adjacent overhead power lines, in the interest of natural community restoration. Approximately 750 feet of the old highway is preserved and routinely utilized as park access road leading to the west beach day use area. Where removed, the old roadway corridor is still very discernable; however, it is the park's intention to continue to allow these areas to naturally revegetate.

**Level of Significance:** The Old Highway 98 site has not been evaluated for National Register eligibility by the SHPO (State Historic Preservation Officer) or a professional consultant. However, based on initial research by BNCR Cultural Resources staff, the site should be considered ineligible for the Register due to a series of modifications which have affected the integrity of the historic road. Therefore, for the purposes of this plan, it is considered not significant.

**General management measures:** There are no plans to maintain delineation of the old roadway at any point within the park aside from the currently used 750-foot portion mentioned above.



<b>Table 4: Cultural Sites Listed in the Florida Master Site File</b>						
<b>Site Name and FMSF #</b>	<b>Culture/Period</b>	<b>Description</b>	<b>Significance</b>	<b>Condition</b>	<b>Treatment</b>	<b>Management Zone</b>
OK02898 Old Highway 98	Historic/20 <sup>th</sup> century	Resource Group (Linear Resource)	NS	G	N/A	HB-B, HB-C

**Significance:**

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

**Condition:**

G Good  
 F Fair  
 P Poor  
 NA Not accessible  
 NE Not evaluated

**Recommended Treatment:**

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

**RESOURCE MANAGEMENT PROGRAM**

**Management Goals, Objectives and Actions**

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

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

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

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

## **Natural Resource Management**

### **Hydrological Management**

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

The natural hydrology of most state parks has been impaired prior to acquisition to one degree or another. Florida's native habitats are precisely adapted to natural drainage patterns and seasonal water level fluctuations, and variations in these factors frequently determine the types of natural communities that occur on a particular site. Even minor changes to natural hydrology can result in the loss of plant and animal species from a landscape. Restoring state park lands to original natural conditions often depends on returning natural hydrological processes and conditions to the park. This is done primarily by filling or plugging ditches, removing obstructions to surface water "sheetflow," installing culverts or low-water crossings on roads, and installing water control structures to manage water levels. There are no hydrological restoration needs at this unit.

Monthly bacteriological monitoring is conducted at Henderson Beach through the Florida Department of Health, Healthy Beaches Program. If appropriate agencies or organizations were to propose and fund routine, marine water quality sampling/analysis to monitor fluctuations in nutrient loads and other environmental indicators, the park would be supportive of such efforts.

### **Natural Communities Management**

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

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

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

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

At Henderson Beach State Park, all of the park land north of the beach dune natural community is considered scrub. This area is a very small and now isolated relict of a once widespread and unique variety of scrub natural community specific to the immediate coastal areas of northwest Florida. The scrub community at Henderson Beach begins along an often-abrupt ecotone with the open beach dune natural community, and often consists of a nearly closed canopy of low, salt pruned oaks. Moving inland, the salt pruned canopy steadily rises in height creating a dramatic sculpted appearance. Moving farther inland, this "low oak scrub" begins transitioning to Choctawhatchee sand pine scrub.

Prescribed burning in northwest Florida coastal scrub, with the intent of stand replacement, has been very limited. The extent of fire's natural influence and affects in panhandle coastal scrub, particularly in the more seaward low oak scrub, is minimal. Successive research indicates that these areas are primarily shaped and perpetuated by storm events (Parker et al 2001). Any management activity that may have the adverse affect of facilitating erosion, reducing wildlife refugia habitat, and eliminating

aesthetically valuable, natural vegetation buffers may overshadow anticipated ecological benefits of successional reset.

An incremental stand replacement management approach, typical of large, expansive, peninsular scrub communities, may not be the best fit for this area due to storm influence as the primary natural process, its very small size, urban proximity, uniqueness of habitat and aesthetics.

This is a very small park in a very visible location. A great deal of consideration should be given to preserving the current visual barrier aspect of scrub areas that isolate the park's full-service campground and access road from U.S. Highway 98 and the surrounding commercial district of Destin. Buildup of hazardous understory fuel loads immediately surrounding the park's campground can be removed via hand labor and careful use of a skid steer mounted cutterhead, resulting in a very low wildfire risk buffer area with aesthetic appeal.

In order to track fire management activities, the DRP maintains a statewide burn database. The database allows staff to track various aspects of each park's fire management program including individual burn zone histories and fire return intervals, staff training and experience, backlog, if burn objectives have been met, etc. The database is also used for annual burn planning, which allows the DRP to document fire management goals and objectives on an annual basis. Each quarter the database is updated and reports are produced that track progress towards meeting annual burn objectives.

**Natural Communities Restoration:** In some cases, the reintroduction and maintenance of natural processes is not enough to reach the natural community desired future conditions in the park, and active restoration programs are required. Restoration of altered natural communities to healthy, fully functioning natural landscapes often requires substantial efforts that include mechanical treatment of vegetation or soils and reintroduction or augmentation of native plants and animals. For the purposes of this management plan, restoration is defined as the process of assisting the recovery and natural functioning of degraded natural communities to desired future condition, including the re-establishment of biodiversity, ecological processes, vegetation structure and physical characters.

Examples that would qualify as natural communities' restoration, requiring annual restoration plans, include large mitigation projects, large-scale hardwood removal and timbering activities, roller-chopping and other large-scale vegetative modifications. The key concept is that restoration projects will go beyond management activities routinely done as standard operating procedures, such as routine mowing, the reintroduction of fire as a natural process, spot treatments of exotic plants, small-scale vegetation management and so forth.

There is currently no need for large-scale natural community restoration at this park. Restoration along the front beach and adjacent beach dune communities may become necessary, at some point in the future, due to possible hurricane impacts. A plan for restoring hurricane-ravaged areas would likely focus primarily on sea oat planting, similar to the restoration efforts that occurred following the 2004-2005 hurricane seasons.

**Natural Communities Improvement:** Improvements are similar to restoration but on a smaller, less intense scale. This typically includes small-scale vegetative management activities or minor habitat manipulation. Following are the natural community/habitat improvement actions recommended at the park.

What remains of the park's small, isolated Choctawhatchee sand pine scrub continues to be influenced and perpetuated primarily by storm events. No natural community improvements are deemed necessary at this time.

### **Imperiled Species Management**

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

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

In the preparation of this management plan, DRP staff consulted with staff of FWC's Imperiled Species Management or that agency's Regional Biologist and other appropriate federal, state and local agencies for assistance in developing imperiled animal species management objectives and actions. Likewise, for imperiled plant species, DRP staff consulted with FDACS. Data collected by the USFWS, FWC, FDACS and FNAI as part of their ongoing research and monitoring programs will be reviewed by park staff periodically to inform management of decisions that may have an impact on imperiled species at the park.

Ongoing inventory and monitoring of imperiled species in the state park system is necessary to meet the DRP's mission. Long-term monitoring is also essential to ensure the effectiveness of resource management programs. Monitoring efforts must be prioritized so that the data collected provides information that can be used to improve

or confirm the effectiveness of management actions on conservation priorities. Monitoring intensity must at least be at a level that provides the minimum data needed to make informed decisions to meet conservation goals. Not all imperiled species require intensive monitoring efforts on a regular interval. Priority must be given to those species that can provide valuable data to guide adaptive management practices. Those species selected for specific management action and those that will provide management guidance through regular monitoring are addressed in the objectives below.

***Objective: Update baseline imperiled species occurrence inventory lists for plants and animals, as needed.***

Formal plant and animal surveys may be conducted for this park if partnering opportunities or funding become available. These surveys may expand or improve species occurrence and distribution data.

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

Loggerhead and occasionally green sea turtles nest along the park's beach. Park staff will conduct daily patrols, in accordance with established FWC protocol during nesting season, in order to identify and mark any sea turtle nests, in coordination with designated district biological staff.

***Objective: Monitor and document four selected imperiled plant species in the park.***

Coordinate with district biological staff to conduct a base line survey and monitoring for large-leaved jointweed, Cruise's golden aster and Godfrey's golden aster during the blooming timeframe of October – November. Conduct similar base line survey and monitoring effort for Gulf Coast lupine during its blooming timeframe of April – May. Surveys will include GPS mapping via polygons or points. The emphasis should be on recording the location and number of individuals or colonies over time. Species occurrence shapefiles will be electronically archived within the District's GIS library.

***Objective: Continue to support marine turtle recovery by minimizing sources of light pollution within the park.***

In the few areas of the park with lighting needs, the park will utilize "turtle-friendly" lighting as recommended by the FWC Marine Turtle Lighting guidelines. In addition, during the marine turtle nesting season (May 1- October 31), special events to be located on the beach will be scheduled during daylight hours, and the use of temporary lighting when necessary will be sited as to not allow lights to be visible from the beach.

## **Exotic Species Management**

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

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

*Objective: Annually survey and treat as necessary approximately 0.025 acre of exotic plant species in the park.*

Park staff will periodically monitor and if need be remove exotic plant species that may invade the park from adjacent residential and commercial properties. This equates to periodic monitoring of known, potential invasion areas along the park's east and west boundaries. Surveys shall target known threats, such as cogongrass, asparagus fern and silverthorne. Chinese tallow (*sapium sebiferum*) occurs in the Destin area. Park staff are trained in identification of this invasive species. Any exotic plant removal/treatment efforts shall be coordinated with District biological staff.

*Objective: Implement control measures on nuisance and exotic animal species in the park as necessary.*

There is currently no active shorebird nesting or extant beach mouse population that would require a vigilant non-indigenous predator removal program. However, if nuisance and/or exotic animals are discovered, then appropriate removal efforts will be coordinated with USDA via established partnership and protocols.

## **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 DRP's statutory responsibilities and an analysis of the park's resource needs and values. The long-term management goal for forest communities in the state park system is to maintain or re-establish old-growth characteristics to the degree practicable, with the exception of those communities specifically managed as early successional.

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

### **Coastal/Beach Management**

The DRP manages over 100 miles of sandy beach, which represents one-eighth of Florida's total sandy beach shoreline. Approximately one-quarter of Florida's state

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

The park contains approximately 1.25 miles of beach. The park's beach has experienced a steady influx of sand because of recent U.S. Army Corps of Engineers renourishment projects both east and west of the park. Although Henderson Beach was largely excluded from direct renourishment, the park has been the recipient of sand deposited via natural wind blown and long shore drift processes. Major dune revegetation projects following the 2004-2005 hurricane seasons have significantly helped trap wind blown sand and contributed to dune growth and recovery. At this time, no linear portion of the park's beach should be considered critically eroded.

Numerous small tar balls associated with the 2010 BP Deep Water Horizon oil spill were observed at the park in the months following the incident. BP-funded clean up crews were routinely deployed to the park during this time period.

The Trustees have granted management authority of certain sovereign submerged lands to the DRP under Management Agreement MA 68-086 (as amended January 19, 1988). Management of Henderson Beach State Park includes certain management activities within the buffer zone of sovereign submerged land along the entire beach, beginning at the mean high water or ordinary high water line, or from the edge of emergent vegetation and extending waterward for 400 feet. This area comprises the marine unconsolidated substrates of the park. The submerged resources within the buffer zone significantly increase the species diversity within the park and offers additional recreational opportunities for park visitors. Visitors are able to access this community either from the beach or from a boat. Management actions occurring within the buffer zone include patrolling for boats and watercraft too close to the park's beaches, removal of trash, litter, and other debris, public safety activities, and resource inventories and monitoring.

An artificial reef intended to enhance marine habitat has been proposed by the Okaloosa County Board of County Commissioners in coordination with the Okaloosa County Artificial Reef Program. The proposed project site falls at least partially within the Park's 400-foot management authority. Any artificial reef structures would need to be placed at adequate depths in order to avoid creating a navigational hazard, particularly during low tides.



### **Arthropod Control Plan**

All DRP lands are designated as “environmentally sensitive and biologically highly productive” in accordance with Ch. 388 and Ch. 388.4111 Florida Statutes. If a local mosquito control district proposes a treatment plan, the DRP works with the local mosquito control district to achieve consensus. By policy of DEP since 1987, aerial adulticiding is not allowed, but larviciding and ground adulticiding (truck spraying in public use areas) is typically allowed. The DRP does not authorize new physical alterations of marshes through ditching or water control structures. Mosquito control plans temporarily may be set aside under declared threats to public or animal health, or during a Governor’s Emergency Proclamation.

### **Sea Level Rise**

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

## **Cultural Resource Management**

### **Cultural Resource Management**

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

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

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

consider the reuse of historic buildings in the park in lieu of new construction and must undertake a cost comparison of new development versus rehabilitation of a building before electing to construct a new or replacement building. This comparison must be accomplished with the assistance of the DHR.

*Objective: Assess and evaluate one of one recorded cultural resources in the park.*

Currently, the park has one known cultural site. The Old U.S. Highway 98 corridor runs through the entire park from east to west, just landward of the current line of primary beach dunes. The highway was originally routed north of Choctawhatchee Bay from Ebro, Freeport, Portland and Niceville. The road was moved to a more scenic coastal route between Panama City and Ft. Walton Beach beginning in 1935, including the recorded Henderson Beach segment.

Assessments/evaluations of the known archaeological sites will be conducted. As a matter of reference, such assessments should include an examination of each site with a discussion of any threats to the site's condition such as natural erosion; pedestrian damage; looting; construction including damage from fire break construction; animal damage; plant or root damage or other factors that might cause deterioration of the site. This evaluation should attempt to compare the current condition with previous evaluations using photo points or high resolution scanning or similar techniques.

*Objective: Compile reliable documentation for all recorded historic and archaeological resources.*

The Bureau of Natural and Cultural Resources (BNCR) is currently coordinating completion of a predictive model for high, medium and low probability of locating archaeological sites within the park.

Additional research is needed in order to determine whether a presumed military bunker associated with the USAF outparcel actually occurs on park property. There is also a need to conduct oral history interviews in order to identify and record past land uses and local history associated with the park and immediate area.

If additional archaeological sites are discovered, park staff shall coordinate with the Bureau of Archaeological Resources to properly identify and record the site into the Florida Master Site File. Any recovered artifacts shall be transferred to the Bureau of Archaeological Resources for proper archival.

### **Resource Management Schedule**

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

### **Land Management Review**

Section 259.036, Florida Statutes, established land management review teams to determine whether conservation, preservation and recreation lands titled in the name of the Board of Trustees are being managed for the purposes for which they were acquired and in accordance with their approved land management plans. The managing agency shall consider the findings and recommendations of the land management review team in finalizing the required update of its management plan.

At less than 1,000 total acres, Henderson Beach State Park does not meet the size threshold for the land management review (LMR) requirement and, thus, has not been subject to an LMR.



## 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 (DRP). These responsibilities are to preserve representative examples of original natural Florida and its cultural resources, and to provide outdoor recreation opportunities for Florida's citizens and visitors.

The general planning and design process begins with an analysis of the natural and cultural resources of the unit, and then proceeds through the creation of a conceptual land use plan to guide the location and extent of future park development. Input to the plan is provided by experts in environmental sciences, cultural resources, park operation and management, and through public workshops, and user groups. With this approach, the DRP's objective is to provide quality development for resource-based recreation with a high level of sensitivity to the natural and cultural resources at each park throughout the state.

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

### EXTERNAL CONDITIONS

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

Henderson Beach State Park is one of ten barrier island state parks located on the "Emerald Coast," between Mexico Beach and Pensacola. White sand beaches, rare dune lakes, crystalline waters and moderate climate are characteristic of the region. The Emerald Coast is one of the most popular tourist destinations in Florida (Visit Florida! 2010). Of the nearly 81 million tourists who traveled to or within Florida in 2009, one in ten visited the northwest region of the state, which includes the Emerald Coast (Visit Florida! 2010). The most popular activities identified by visitors to this region are visiting the beach or waterfront and shopping (Visit Florida! 2010). During the peak tourism season from June to August, the area population nearly quadruples (Visit Florida! 2010; U.S. Census 2009).

Okaloosa County experienced significant growth in the mid-twentieth century. Its population more than doubled during the 1940s and then doubled again in the 1950s (BEBR 2009). Population growth slowed in the following decades to around 19 percent between 1990 and 2000 (BEBR 2009). During the population boom years, a great deal of development took place in the southern areas of the county, particularly along the waterfront and beaches. As development continued, it diminished coastal habitat and limited public beach access. As a result, much of the remaining undeveloped beachfront and natural areas exist on protected lands, such as in state parks.

Over the last decade, the region suffered a number of setbacks that have affected the park. Active hurricane seasons in 2004 and 2005 changed coastal habitat, damaged infrastructure and disrupted park operations. The Deepwater Horizon oil spill in 2010 caused ecological upset within the region, as well as negative impacts on tourism. Perceptions about the condition of coastal parks and other factors resulting from the spill may have negatively impacted park attendance. In addition, a depressed economic climate from 2008 through the end of the decade led to slowed development, decreased tourism and lower population growth in the area. Despite these effects, rapid growth, particularly of resort-style and tourism-related development, is expected to continue within the City of Destin and surrounding coastal areas.

Several resource-based recreation opportunities exist in the surrounding area. Three state parks, Grayton Beach, Topsail Hill Preserve and Fred Gannon Rocky Bayou, are located within 15 miles of the park boundary. Grayton Beach and Topsail Hill Preserve state parks offer day use activities and overnight accommodations, including family camping and cabins. Both parks are located on the Gulf of Mexico and provide opportunities for saltwater beach activities, picnicking, fishing, wildlife viewing and nature trails. Fred Gannon Rocky Bayou State Park is located across Choctawhatchee Bay on Rocky Bayou. It offers camping, hiking, paddling, picnicking, fishing and boating activities.

Point Washington State Forest and Gulf Islands National Seashore are located within 10 miles of the park boundary. Point Washington State Forest offers wildlife viewing opportunities and unpaved trails for hiking and biking. Gulf Islands National Seashore is comprised of several barrier islands spanning 150 miles from Mississippi's gulf coast to the Florida panhandle. The National Seashore includes many cultural and historical features, including Native American settlements and several military forts and batteries (NPS 2011). In addition to interpretive exhibits and museums, the Seashore offers a range of outdoor recreational activities that include hiking, sightseeing, wildlife viewing, standard and primitive camping, and saltwater beach activities.

Choctawhatchee National Forest and Choctawhatchee River Wildlife Management Area are also located within 15 miles of the park. They provide opportunities for primitive

camping, bank and river fishing, paddling, hiking, and wildlife viewing. Hunting in accordance with the regulations established by the Florida Fish and Wildlife Conservation Commission (FWC) and the Florida Forest Service (FFS) is also permitted within many wilderness management areas.

The park is located ten miles southeast of Eglin Air Force Base. Approximately 265,000 acres of the base are conditionally open for public recreation. Permits are required for fishing, hunting, camping and other outdoor activities. Areas of the base are subject to closure during military testing and training operations (FWC 2011).

### **Existing Use of Adjacent Lands**

The park property is bounded on the north side by U.S. Highway 98, also known as Harbor Boulevard or Emerald Coast Parkway, a six-lane divided highway that is classified as an Urban Principal Arterial. Many large-scale commercial land uses, including shopping centers, hotels, restaurants and a golf course, are located across from the park. High motor vehicle speeds and long crossing distances on U.S. Highway 98 could be perceived as unsafe conditions for pedestrians and bicyclists, potentially discouraging visitors from using travel modes other than personal automobiles to enter the park.

A small lot adjacent to the northeast boundary is designated as “General Commercial” (GC) and is currently operated as a small go-kart attraction (City of Destin 2009; City of Destin GIS Manager 2009). Parcels located east and west of the park are designated as “Crystal Beach Resort” (CBR) and “Gulf Resort Mixed-Use” (GRMU), respectively (City of Destin 2009; City of Destin GIS Manager 2009). Both districts include high-density resort and multi-family residential uses. The GRMU district also includes commercial uses, including restaurants and retail establishments. Park visitors may enjoy the range of mixed-uses located convenient to the park. However, the intensity of adjacent development isolates the park from nearby compatible uses, such as conservation lands and other parks.

There are many high-end resort and seasonal developments along the gulf coast of Okaloosa County that do not provide year-round public access to the beaches and water area. The County provides seven public beach access points along the unincorporated beaches (Okaloosa County Online). The park is one of twelve public beach access points located within the City of Destin (City of Destin).

### **Planned Use of Adjacent Lands**

An analysis of approved comprehensive plan amendments over the last decade revealed trends toward mixed-use development, multimodal transportation, and residential preservation and away from urban sprawl. One amendment created a multimodal transportation district (MMTD) and included provisions for the enhancement of bicycle and pedestrian facilities and transit services (Remedial MMTD

CPA, Ordinance 05-24-PC). The park is located within the Crystal Beach MMTD and adjacent to U.S. Highway 98, a multimodal enhancement corridor. Proposed enhancements to U.S. Highway 98 include consolidating vehicular access points and adding bus stops. Three stops are proposed adjacent to the park boundary. The Florida Greenways and Trail System (FGTS) Plan identifies a multi-use trail opportunity corridor adjacent to U.S. Highway 98. These improvements may benefit the park by reducing congestion on U.S. Highway 98 near the park entrance, encouraging visitors to arrive by walking, biking and transit, and providing connections between existing trails in the region.

Following two active hurricane seasons, an emergency amendment was adopted that lifted the ban on coastal armoring (CPA-06-E1, Ordinance 06-06-PC). The amendment allowed for the protection of upland structures through armoring and stabilization, including seawall construction. According to the ordinance, beaches scheduled for renourishment are not eligible for coastal armoring. As of 2008, 1.6 miles of beach just west of the park and 2.1 miles east of the park are designated as “critically eroded” and scheduled for renourishment (FDEP Bureau of Beaches and Coastal Systems 2008). The park should stay informed regarding shoreline armoring and renourishment projects adjacent to the park.

As discussed in the Resource Management Component, Okaloosa County is proposing an artificial reef offshore from the park. If the reef is funded and constructed, the DRP will work with the County to identify how the reef could affect the park, including the potential for expanded opportunities for concessions and kayak rentals.

## **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 located on the gulf coast panhandle and shares the region's characteristic fine-grain white sand, tall dunes and scrub vegetation. The park's land area is suitable



for development of limited day use and overnight facilities that complement saltwater beach activities and corresponding recreational uses.

Although areas of the park are well developed, in the context of the densely-developed surrounding area, the park protects significant undisturbed natural areas. As southern Okaloosa County has grown, the beach dune and scrub communities that were once abundant in this area have been greatly diminished. Today, the natural communities found at the park provide visitors with opportunities to experience native Florida and enjoy the restorative benefits that natural settings provide.

### **Water Area**

The park features just over one and one-quarter miles of access to the gulf, providing opportunities for visitors to enjoy the region's blue-green waters through swimming and water activities, such as kayaking and paddle boarding. Surf fishing is also a popular activity. Dolphins and other marine wildlife can often be observed in waters around the park. The Florida Circumnavigational Saltwater Paddling Trail traverses the park shoreline. Okaloosa County's lifeguards patrol the park waters and assist as needed.

### **Shoreline**

The park protects more than 6,650 linear feet of beach shoreline on the Gulf of Mexico, which provides the primary draw for day use visitors. The soft white-sand beach offers a range of recreational activities, including sunbathing, picnicking and wildlife observation.

### **Natural Scenery**

The juxtaposition of deep blue-green water with the bright white beach provides a spectacular visual environment for park visitors. From the boardwalks that cross the dunes, visitors can experience expansive panoramic views of the gulf. Visitors can also view the natural environment from a more intimate vantage point along the scrub trail. The macro and micro views offered in the park provide visitors with a varied experience that fosters understanding of the natural environment on multiple levels.

Several visual intrusions affect the natural scenery at the park. Nearby large condominiums, high-rise residential towers and other developments interrupt the natural view, which could make it difficult for park visitors to feel removed from the surrounding urban environment. The U.S. Air Force radar facility and remaining overhead power lines can also hinder visitors' ability to feel truly immersed in the natural setting. The presence of these visual intrusions does not detract from the restorative benefits that visitors may gain by experiencing the park's natural areas, and maintaining the natural spaces within the park remain essential to providing a high-quality visitor experience.

### **Significant Habitat**

The park provides habitat for several rare and endemic plants and animals. A number of plant and animal species, whose native habitat has been lost or diminished by development, inhabit the scrub and beach dune communities. Many species of shorebird also use the park for rest and foraging. Parklands provide visitors with an opportunity to learn about these organisms and observe them in their native habitat.

### **Natural Features**

The park's intact coastal beach habitat, which includes the marine unconsolidated substrate, beach dune and scrub communities, is a significant natural resource for the park. These dynamic interrelated communities provide opportunities to interpret coastal processes and ecosystems, such as sand movement and dune creation. The active dune community allows visitors to observe these geologic processes at work. The mature scrub community provides visitors with a representative sample of the gulf coast environment before it was developed. The dense scrub vegetation also screens use areas from noise and views of adjacent development.

### **Assessment of Use**

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

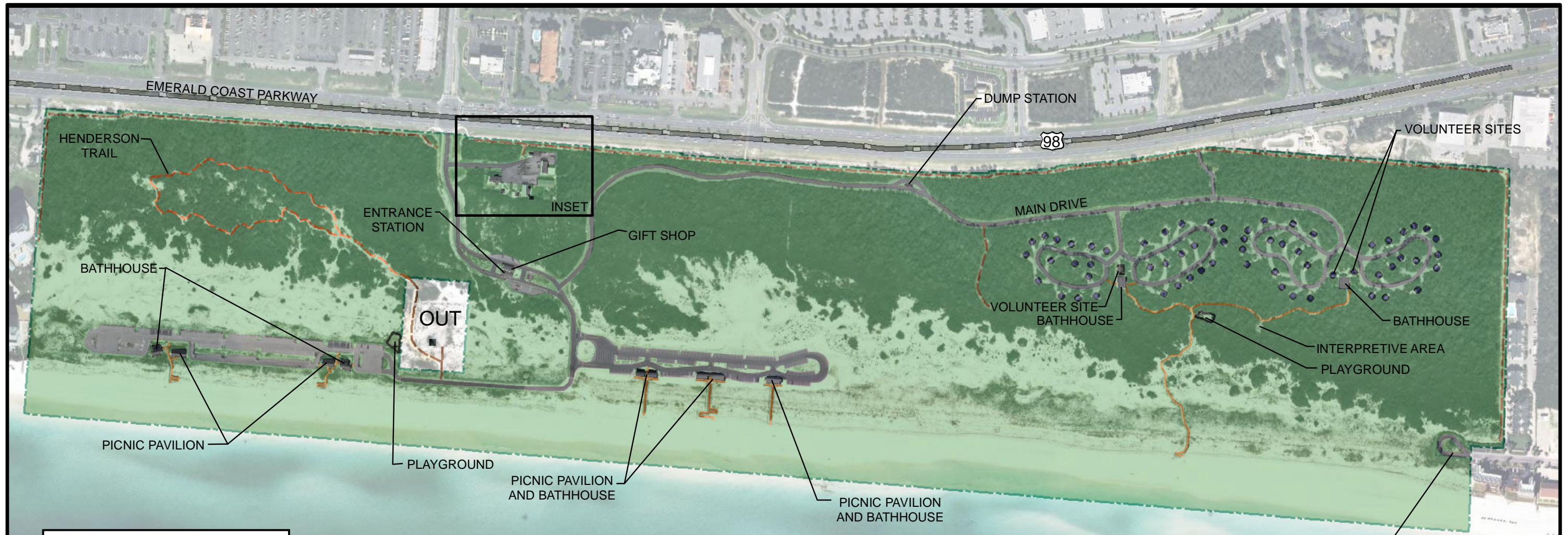
### **Past Uses**

Locals have used the park for beach recreation for many years. Recreational use of off-road vehicles is known to have taken place on the beaches and dunes, which degraded their condition. Since World War II, the U.S. Air Force has intermittently used the park property for military training purposes.

A roadway corridor, Old U.S. Highway 98, used to run through the park along the primary dune line. Before acquisition, the road was relocated to the northern park boundary, and ownership of the former road corridor and right-of-way was transferred to DEP. The park's day use beach facilities were constructed to utilize the footprint of the old highway. This allowed recreational facilities to be developed while minimizing the need for additional paved surfaces. Since the park opened, several restoration projects, such as sea oat planting and asphalt removal, have restored the dune ridge back to a more natural condition. In addition, overhead utility lines that ran alongside Old Highway 98 have been removed from the eastern portion of the park.

### **Future Land Use and Zoning**

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

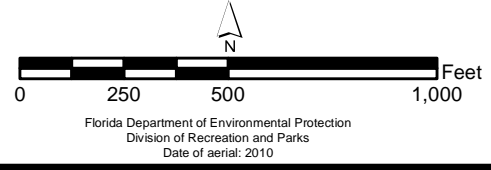


**Legend**

- Park Boundary
- US Highway
- Park Road Paved
- Park Road Stabilized
- Park Road Unstabilized
- Nature/Interpretive Trail
- Parking Lot
- Structures
- Walkways
- Camp Sites



HENDERSON BEACH STATE PARK



BASE MAP



The zoning and future land use designations for the park property are both classified as “Recreation” (REC) (City of Destin GIS Manager 2009; City of Destin 2009). The corresponding REC zoning and future land use designations describe active and passive recreational land that is used “with the intent to promote natural resource enhancement and to promote open spaces around buildings” (City of Destin 2010b, Policy 1-2.7.2). Certain accessory uses, including parking, restroom facilities, dune walkovers and walkways are permitted (City of Destin 2010a). Several land uses that are typical to state parks but not explicitly listed as permitted land uses within a REC district include campgrounds and permanent residential structures (i.e. staff housing) (City of Destin 2010b). Development of additional facilities will require coordination with local planning and zoning agencies to determine whether future projects will require a variance or other instrument prior to development.

### **Current Recreational Use and Visitor Programs**

Recreational uses available at the park include hiking, bicycling, family camping, picnicking, swimming, sunbathing, surf fishing, kayaking, paddle boarding, surfing and other beach activities. Playgrounds and interpretive exhibits are also offered for park visitors. While Destin and Okaloosa County provide general facilities for beach access, Henderson Beach State Park provides beach access within a representative sample of old Florida. The park offers to visitors a resourced-based natural experience with focused interpretive programming, which demonstrates its importance in providing opportunities for the public to enjoy these natural resources. Maintaining the park for future generations is vital to the hundreds of thousands of visitors that participate in saltwater beach activities at the park every year.

The park features several boardwalks and a hiking trail that allows visitors to enjoy the park’s natural features firsthand, while interpretive exhibits educate visitors about the park’s resources. A 60-site family camping area is located within the scrub community on the eastern side of the park. The park’s day use facilities were constructed over the footprint of the old Highway 98 corridor that ran east-west across the dune ridge. Day use facilities include picnic pavilions, bathrooms and a playground. The park also offers space for weddings, family reunions and other special events.

The park’s dune community is vulnerable to degradation by a number of factors. Foot traffic, vehicle use and storm effects can erode sand and harm the fragile vegetation that is vital to the dunes’ stability. Controlling widespread access through and over the dunes helps to minimize negative impacts.

Because foot traffic through natural dune areas can damage dune-stabilizing vegetation, disrupt wildlife habitat and exacerbate dune blowouts during storms, dune crossover points are provided to direct appropriate visitor beach access. By limiting crossing points to dune walkover facilities, park staff can minimize the area that is vulnerable to

negative visitor impacts, such as trampling of vegetation and littering. Access into the sensitive beach dune areas is limited to research and resource management activities.

Widespread driving on the beach is prohibited; however, some beach driving, such as by emergency vehicles or law enforcement, may occasionally be necessary. To minimize impacts of beach driving, beach drivers should follow the guidelines in FWC's *Best Management Practices for Operating Vehicles on the Beach* (FWC 2010).

The park offers a number of interpretive, educational and recreational programs for the enjoyment of park patrons. Programs include in-person presentations, guided walks, self-guided tours and interpretive facilities. Ranger-led programs are offered to school groups, registered campers and the general public. In-person programs have covered a wide range of topics and formats, including presentations on park ecology and wildlife, "how to" demonstrations, and organized recreational activities. The park is also an active participant in DEP's Life Labs program. A few programs are offered through cooperation with the Emerald Coast Wildlife Refuge, Northwest Florida Astronomy Association and the Niceville Public Library. Two community events sponsored by the CSO are held at the park annually: the Okaloosa Arts Alliance Family Fun Fest and the Destin Fine Arts Festival. Both events feature local and regional artwork, music and food.

According to DRP data, an average of 221,510 people visited the park each fiscal year since FY2006/07. Over the past five fiscal years, attendance at the park has generated approximately \$49.4 million for the local economy (FDEP DRP 2011). In the last year alone, park visitors contributed approximately \$8.2 million, amounting to \$541,541 in sales tax revenue and approximately 165 jobs (FDEP DRP 2011).

### **Other Uses**

A U.S. Air Force radar installation sits adjacent to the playground in the day use beach area. Although use of the facility is infrequent, 24-hour access must be maintained for military personnel.

Approximately 1,500 feet of overhead power lines remain in the western part of the park. The power lines ran alongside the Old U.S. Highway 98 corridor and are maintained by Gulf Power Corporation. The DRP should continue to coordinate with Gulf Power to move the remaining power lines underground.

### **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 scrub and beach dune communities have been designated as protected zones as delineated on the Conceptual Land Use Plan.

## **Existing Facilities**

### **Recreation Facilities**

The park's recreational facilities are contained in two primary use areas: the beach day use area and the campground. The beach day use area features picnic pavilions, dune crossovers, interpretive signage, a nature trail and playground. The campground includes family campsites, an interpretive area, beach access boardwalk, interpretive signage and a playground. Beach wheelchairs are also available at the park. A gift shop is located in the ranger station. Bicycle lanes are located on roadways throughout the park.

### **Support Facilities**

The park's support facilities are contained in four primary areas: the beach day use area, campground, entrance and shop area. The beach day use area features parking and bathhouses. The campground includes bathhouses, volunteer sites and a dump station. The entrance area includes parking and the ranger station, which includes administrative offices. The shop area includes staff residences, equipment and materials storage, a three-bay shop, pole barn and a volunteer site. An inventory of the park's recreational and support facilities is included below.

#### **Entrance**

Ranger station with administrative offices and gift shop  
Paved parking (14)

#### **Beach Day Use Area**

Picnic pavilions (6)  
Beach boardwalks (6)  
Interpretive signs (5)  
Nature trail (0.6 miles)  
Restrooms (3)  
Paved parking (461 spaces)

#### **Family Camping Area**

Family campsites (60)  
Interpretive area  
Playground  
Boardwalk  
Interpretive signs  
Bathhouse (2)  
Volunteer RV sites (3)  
Dump station

### **Shop Area**

Standard stilt residence  
Mobile home residence  
Three-bay shop  
Pole barn  
Equipment shed  
Flammable storage building  
Vehicle storage area  
Volunteer site

### **Other Facilities**

Paved park roads (1.1 miles)  
Bicycle lanes (1.9 miles)

## **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 management plan, the DRP assessed potential impacts of proposed uses or development on the park resources and applied that analysis to decisions on the future physical plan of the park as well as the scale and character of proposed development. Potential impacts are more thoroughly identified and assessed as part of the site planning process once funding is available for facility development. At that stage, design elements (such as existing topography and vegetation, sewage disposal and stormwater management) and design constraints (such as imperiled species or cultural site locations) are more thoroughly investigated. Municipal sewer connections, advanced wastewater treatment or best available technology systems are applied for on-site sewage disposal. Stormwater management systems are designed to minimize impervious surfaces to the greatest extent feasible, and all facilities are designed and constructed using best management practices to 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.

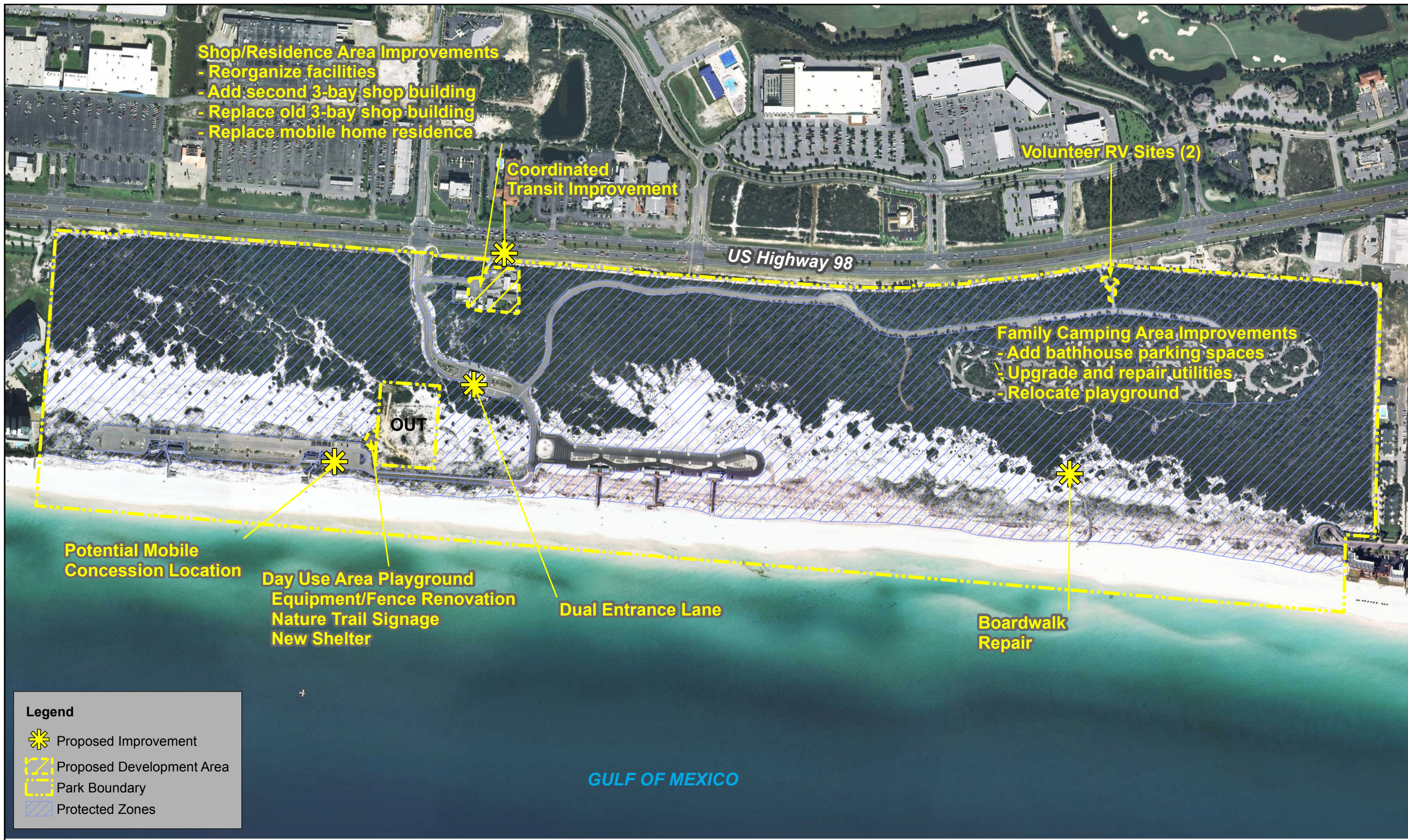
### **Potential Uses**

#### **Public Access and Recreational Opportunities**

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

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





**Shop/Residence Area Improvements**  
 - Reorganize facilities  
 - Add second 3-bay shop building  
 - Replace old 3-bay shop building  
 - Replace mobile home residence

**Coordinated Transit Improvement**

**Volunteer RV Sites (2)**

**US Highway 98**

**Family Camping Area Improvements**  
 - Add bathhouse parking spaces  
 - Upgrade and repair utilities  
 - Relocate playground

**OUT**

**Potential Mobile Concession Location**





**Day Use Area Playground Equipment/Fence Renovation Nature Trail Signage New Shelter**

**Dual Entrance Lane**

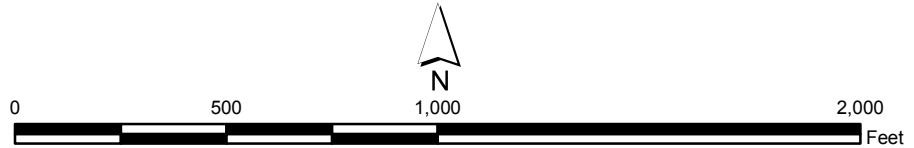
**Boardwalk Repair**

**GULF OF MEXICO**

**Legend**

-  Proposed Improvement
-  Proposed Development Area
-  Park Boundary
-  Protected Zones

**HENDERSON BEACH STATE PARK**



**CONCEPTUAL LAND USE PLAN**

Florida Department of Environmental Protection  
 Division of Recreation and Parks  
 Date of aerial: 2010



***Objective: Maintain the park's current recreational carrying capacity of 4,962 users per day.***

The park will continue to provide opportunities for hiking, bicycling, family camping, picnicking, swimming, sunbathing, surf fishing, kayaking, paddle boarding, surfing and other beach activities. The park should also continue to offer playgrounds, interpretive exhibits and special event space for the enjoyment of park visitors. The proposed improvements focus on maintaining public access to the natural and recreational resources at the park. Recommended improvements will also enhance the quality of visitor experience that the park provides. Improvements will increase the quality and efficiency of facilities; however, none of the recommended improvements will increase the recreational carrying capacity of the park.

***Objective: Continue to provide the current repertoire of 23 interpretive, educational and recreational programs on a regular basis.***

The park should continue to provide programs that interpret the park's natural resources for park visitors. Currently programs cover a wide range of concepts and themes. *Alligators & Crocodiles*, a cooperative program with a local restaurant and animal attraction, educates visitors about these species and includes a live animal presentation. Presentations, such as *Sharks, Rays & Skates*, *Crabs Crabs Crabs* and *Jellyfish! The Blobs of Summer*, educate visitors about native species that can be observed at the park and their importance in the ecosystem. *Sea Turtles*, the park's most popular program, interprets the anatomy, life and importance of sea turtles. The *Dolphins* program educates visitors about various dolphin species and their habitats and warns about the harmful effects of feeding dolphins. *Owls and Other Critters* introduces visitors to different animals that have been rehabilitated at the Emerald Coast Wildlife Refuge. *All About Florida State Parks* informs the public about area state parks and the activities that they offer. The *Rainbow Fish* and *Seashells* programs feature a reading component. Both programs are centered around a children's book that is relevant to the park and include focused educational topics, demonstrations and activities. *Don't Let Litter Happen* informs visitors about marine debris, the harmful effects of trash and the importance of recycling. *Invasive Invaders* educates visitors about invasive exotic plants and animals. Puppet shows on beach safety and park wildlife are also offered at the park and local schools.

Recreational programs offered at the park include *Sandcastles*, *Trail Walk*, *Beachcombing 101*, *Star Gazing by the Shore* and *Shore Fishing*. The *Wild Day Out* program interprets park issues with elements like children's art, touch tanks and shell identification. Insect, wildflower and plant identification are taught along the park's trails in *Bugs*, *Butterflies and Wildflowers*. The program also educates visitors about the regional monarch migration. In *Clouds*, visitors are given a cloud identification tool and educated about various cloud formations. The park also offers *Campfire Cooking*, a live how-to demonstration on campfire cuisine.

*Objective: Develop five new interpretive, educational and recreational programs.*

Currently, the park strives to provide programming year-round and plans to increase the number of winter programs. In addition, the park plans to develop and implement five new programs over the next ten years. New cooperative programs, such as those developed through partnerships with area schools, organizations and recreational groups, will be explored. The park will also continue to update older programs in order to keep content relevant and interesting for visitors. The park will coordinate with FWC and USFWS to offer educational programs to park visitor and area residents regarding the park's resources.

In order to improve recreational trail opportunities for users of varied mobility, a sign describing trail conditions should be posted at the base of the park's hiking trail. The sign will provide users with objective information about trail conditions, including length, grade, cross slope, width and surface. Trail assessment signage will be based on the DRP's standard, which is currently in development. The hiking trail was previously evaluated using the Universal Trail Assessment Process (UTAP); however, it is recommended that a new trail assessment be performed prior to installing any permanent signage.

## **Proposed Facilities**

### **Capital Facilities and Infrastructure**

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

The existing facilities of this state park are appropriate to the natural and cultural resources contained in the park and should be maintained. New construction, as discussed further below, is recommended to improve the quality and safety of the recreational opportunities that visitors enjoy while in the park, to improve the protection of park resources, and to streamline the efficiency of park operations. As recommended by the FWC Marine Turtle Lighting guidelines, all exterior lighting for current and proposed facilities will utilize "turtle-friendly" lighting. The following is a summary of improved facilities needed to implement the conceptual land use plan for Henderson Beach State Park:

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

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

*Objective: Improve/repair fifteen existing facilities and use areas.*

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

discussion of other recommended improvements and repairs is organized by use area within the park.

**Reorganize Shop Area:** The park's shop compound should be reorganized to maximize efficient use of the space and to accommodate the addition of new facilities, as described under the next objective. Existing and new facilities should be rearranged within the disturbed area without expanding into the adjacent scrub.

**Erosion Issues:** Two areas within the park, along the park drive and north of the east beach parking lot, are experiencing significant erosion. Erosion is occurring on the south side of the park drive, in between the beach parking areas. During heavy rain events, rapidly moving water erodes deep ruts into the adjacent bank. The stormwater rushes into the adjacent dune community and threatens to undermine the roadway. Repairs are needed to stop the erosion and stabilize the roadway. Erosion is also apparent just north of the new day use area, where stormwater is directed into the adjacent dune swale. Quickly moving water travels through the swale, displacing sand and exposing the boulders that are meant to stabilize the drainage feature. Further stabilization of the sand using rocks, plantings or other methods is needed. Areas adjacent to new day use structures are also prone to erosion. Unconsolidated sand that is largely unvegetated due to unregulated foot traffic, has resulted in wind erosion. These areas may benefit from targeted, high-density planting of appropriate, on-site, native vegetation, such as sea oats and beach grass (*Panicum amerum*). An engineering study is recommended to determine the best course of action to resolve these issues.

To deter further erosion, islands of native plants within and around day use facilities should be posted as off-limits to foot traffic. Convenient and appropriately marked crossing points should be established, so that visitor foot traffic is confined to designated areas.

**Family Camping Area Improvements:** The park's campground is extremely popular with visitors, staying close to full occupancy 10 months of the year. To make sure that the campground facilities are adequate to serve visitor needs, improvements to the electric and sewer utilities are recommended. The 30-amp electric utility boxes offered at each campsite have become outdated. They are prone to breakage and are often insufficient to accommodate newer recreational vehicles. The remaining 30-amp electricity hook-ups should be upgraded to 50-amp service boxes that feature "fin type" breakers. An assessment should be conducted prior to construction to determine if sewer hookups can be installed without compromising the character of the campground, such as by damaging trees or reducing vegetation. The park will also consider opportunities for optimizing the existing campground by adding campsites.

Several minor improvements are also recommended in the campground area. Walkway improvements are recommended to soften the right-angle corners around the

bathroom. These improvements will make the paths more accessible and protect the adjacent vegetation that is trampled where visitors “cut the corner” on right angle turns. The lift station facilities at the campground bathroom should be evaluated to determine needed improvements. The railing on the campground boardwalk is badly weathered and should be improved, such as with a plastic composite cap as is installed on the day use beach boardwalks. The park will consider providing a canoe/kayak storage area for paddlers camping overnight in the campground. Improved boundary fencing is needed north of the campground to discourage encroachment that has occurred adjacent to the go-kart attraction.

*Objective: Construct ten new facilities.*

**Entrance Improvements:** A second inbound lane is recommended in order to ease congestion and queuing issues at the park’s main entrance. At peak times, park traffic can back up from the ranger station into the intersection of U.S. Highway 98 and the park drive, obstructing through traffic and raising potential safety and liability issues. A second check-in lane would allow vehicles to enter the park quicker, thus alleviating vehicle stacking at the entrance. During off-peak times, when congestion is not an issue, the second entrance lane could allow staff or overnight visitors to enter using a key-code or pass. The paved bicycle and pedestrian path that runs parallel to the entrance road should be realigned to accommodate the new lane. The second entrance lane would require additional paved surface; however, due to the sandy well-drained soils found at the park, it may be beneficial to seek leniency regarding stormwater requirements. DRP staff should work with relevant agencies to employ innovative stormwater solutions and technologies, where possible.

In addition, DRP staff should coordinate with relevant agencies regarding the proposed transit improvements along the park’s northern boundary. The DRP should work with FDOT and the City of Destin to install a bus bay on the south side of U.S. 98, which would serve the stop nearest to the park entrance. This improvement will make bus transit a safe, viable, and convenient option for park visitors, while limiting potential impacts to traffic on U.S. 98.

**Shop Facilities:** New facilities are needed in the park’s shop area. Replacement of the existing three-bay shop building is recommended due to wood rot and termite issues. A second three-bay shop building is also needed to support park management activities. The state-owned mobile home residence that is located within the shop area should be replaced with a permanent stilt structure.

**Beach Day Use Area Improvements:** The playground equipment in the beach-day use area has been replaced due to degradation from salt spray and sun exposure. Special care was taken to select playground equipment that is resilient in these conditions and well-suited for the park’s particular climate. The park’s Citizen Support Organization (CSO) assisted the park with the funds for this playground. Chain-link fencing is in

place to separate the playground from the adjacent parking area. The fence is beginning to deteriorate and should be replaced as appropriate. An additional shelter in the playground area is recommended to provide shaded seating. Additional signage for the nature trail identifying native plants and other items of interest is also recommended. The CSO is working to raise funds for the additional playground shelter and trail signage. A location for a potential mobile concession was also identified on the east side of the bathhouse at the west beach day use area.

**Bathhouse Parking:** Universally-accessible parking is needed near the campground bathhouses; up to two spaces are recommended. To the extent possible, efforts should be made to utilize existing paved areas and minimize the need for additional impervious surfaces to be constructed.

**Family Camping Area Playground:** The playground equipment in the family camping area was badly deteriorated and was removed to alleviate liability and safety concerns. The family camping area playground is a popular amenity for campers and should be replaced as funding becomes available. To increase usage, safety, and visibility, the playground should be relocated near the bathhouse in the eastern campground loop. Special care should be taken to select playground equipment that is suitable for the park's climate.

**Volunteer RV Sites:** Additional host sites are needed to accommodate park volunteers. It is recommended that two sites be developed along the gravel service road that connects the campground road to U.S. Highway 98. The sites should be developed in the disturbed area on the east side of the gravel roadway. Low fencing or edging should delineate the boundary of each site in order to discourage encroachment into the surrounding scrub. Development of volunteer sites will include necessary utility improvements, such as water, sewer and electric facilities.

### **Facilities Development**

Preliminary cost estimates for these recommended facilities and improvements are provided in the Ten-Year Implementation Schedule and Cost Estimates (Table 6) located in the Implementation Component of this plan. These cost estimates are based on the most cost-effective construction standards available at this time. The preliminary estimates are provided to assist the DRP in budgeting future park improvements, and may be revised as more information is collected through the planning and design processes. New facilities and improvements to existing facilities recommended by the plan include:

**Entrance Improvements**

Dual entrance lane  
 Transit stop improvement

**Shop Area**

Reorganize shop area  
 New 3-bay shop building  
 Replace existing 3-bay shop building  
 Replace mobile home residence with permanent stilt residence

**Family Camping Area**

Replace/relocate playground  
 Bathhouse parking spaces (2)  
 Upgrade utility hookups  
 Assess lift stations  
 Volunteer RV sites (2)  
 Boundary fencing

**Beach Day Use Area**

Renovate playground (west)  
 Add shelter at playground (west)  
 Enhance nature trail signage (west)  
 Potential mobile concession site (west)  
 Assess and alleviate erosion (east)

**Recreational Carrying Capacity**

Carrying capacity is an estimate of the number of users a recreation resource or facility can accommodate and still provide a high quality recreational experience and preserve the natural values of the site. The carrying capacity of a unit is determined by identifying the land and water requirements for each recreation activity at the unit, and then applying these requirements to the unit's land and water base. Next, guidelines are applied that 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 5).

**Table 5: Recreational Carrying Capacity**

Activity/Facility	Existing Capacity*		Proposed Additional Capacity		Future Capacity	
	One Time	Daily	One Time	Daily	One Time	Daily
Camping	480	480			480	480
Nature Trail	12	48			12	48
Swimming/Picnicking	2,177	4,354			2,177	4,354
Bicycling	20	80			20	80
<b>TOTAL</b>	<b>2,689</b>	<b>4,962</b>			<b>2,689</b>	<b>4,962</b>

\*Existing capacity has been revised from approved plan to better follow DRP carrying capacity guidelines.



The recreational carrying capacity for this park is a preliminary estimate of the number of users the unit could accommodate after the current conceptual development program has been implemented. When developed, the proposed new facilities would approximately affect the unit's carrying capacity as shown in Table 5.

### **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.

Identification of lands on the optimum boundary map is solely for planning purposes and not for regulatory purposes. A property's identification on the optimum boundary map is not for use by any party or other government body to reduce or restrict the lawful right of private landowners. Identification on the map does not empower or require any government entity to impose additional or more restrictive environmental land use or zoning regulations. Identification is not to be used as the basis for permit denial or the imposition of permit conditions.

The optimum boundary map reflects lands identified for direct management by the DRP as part of the park. These parcels may include public, as well as privately owned, lands that improve the continuity of existing parklands, provide additional natural and cultural resource protection, and/or allow for future expansion of recreational activities. At this time, no lands are considered surplus to the needs of the park.



The radar installation parcel is identified within the optimum boundary. Acquisition of the parcel could allow for reduction or removal of the visual intrusion into the park's scenic resources. Acquisition of this parcel could also provide additional space for expansion of visitor facilities in the beach use area. Areas of the parcel not used for facilities development could be restored to natural habitat.

In addition, this plan recommends that the park boundary (and leased area) be extended off the south side of the park to include an additional 150 feet from the existing surveyed boundary into the Gulf of Mexico. Extending the park boundary would give the DRP the authority to manage and protect the park's coastal communities, including the listed species that occur there (including but not limited to rare plants, sea turtles, and shorebirds), in accordance with Chapter 258, Florida Statutes and Chapter 62D-2, Florida Administrative Code, for the purposes of visitor safety and resource protection.

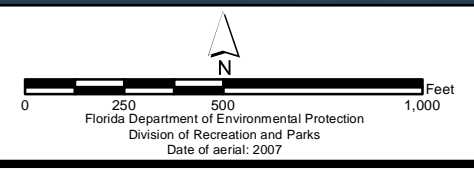




**Legend**

-  Park Boundary
-  Optimum Boundary

HENDERSON BEACH STATE PARK



OPTIMUM BOUNDARY MAP



## **IMPLEMENTATION COMPONENT**

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

### **MANAGEMENT PROGRESS**

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

#### **Park Administration and Operations**

- On average, 18,500 volunteer hours are logged at the park each year.
- The park reorganized the volunteer program by developing written commitments and position descriptions.

#### **Resource Management**

##### **Natural Resources**

- The park continued removal of exotic animals, including foxes and coyotes.
- Ten sea turtle nests were documented on the park's beaches.
- Major beach dune restoration projects were completed following back-to-back years with major, land falling hurricanes. Tens of thousands of sea oats were strategically planted along hurricane-impacted foredunes in select areas along the park's beach.
- The park continued removal of invasive plants, including Russian olive and cogon grass.
- All gopher tortoise burrows have been surveyed and mapped.
- An exotic plant flyer and plant and animal identification book were developed for the park.

##### **Cultural Resources**

- One site, the Old U.S. 98 Highway corridor, was recorded in the FMSF.

## **Recreation and Visitor Services**

- Interpretation programs and school outreach programs were increased.
- The park participated in community outreach and park protection during the Deepwater Horizon Oil Spill.
- The park hosted the annual Destin Festival of the Arts event.

### **Park Facilities**

- Several facilities were added in the beach day use area, including four picnic pavilions, one bathhouse, three dune boardwalks and a parking area. These facilities are universally accessible, and five beach wheelchairs were also acquired for use by visitors.
- The park's ranger station was rebuilt and expanded.
- New fencing was added on the park's east and west boundaries.
- Six campsites were upgraded to be universally accessible.
- An emergency fire road was constructed in the park's campground.
- Two educational kiosks were constructed for new day use area.
- The park's woodshed was rebuilt.
- All facilities are being transitioned to the DRP's new color standards.
- The park entrance road was widened to include a paved multi-use path that safely accommodates bicyclists and pedestrians.

## **MANAGEMENT PLAN IMPLEMENTATION**

This management plan is written for a timeframe of ten years, as required by Section 253.034 Florida Statutes. The Ten-Year Implementation Schedule and Cost Estimates (Table 6) summarizes the management goals, objectives and actions that are recommended for implementation over this period, and beyond. Measures are identified for assessing progress toward completing each objective and action. A time frame for completing each objective and action is provided. Preliminary cost estimates for each action are provided and the estimated total costs to complete each objective are computed. Finally, all costs are consolidated under the following five standard land management categories: Resource Management, Administration and Support, Capital Improvements, Recreation Visitor Services and Law Enforcement.

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

funds, improved understanding of the park's natural and cultural resources, and changes in statewide land management issues, priorities and policies.

Statewide priorities for all aspects of land management are evaluated each year as part of the process for developing the DRP's annual legislative budget requests. When preparing these annual requests, the DRP considers the needs and priorities of the entire state park system and the projected availability of funding from all sources during the upcoming fiscal year. In addition to annual legislative appropriations, the DRP pursues supplemental sources of funds and staff resources wherever possible, including grants, volunteers and partnerships with other entities. The DRP's ability to accomplish the specific actions identified in the plan will be determined largely by the availability of funds and staff for these purposes, which may vary from year to year. Consequently, the target schedules and estimated costs identified in Table 6 may need to be adjusted during the ten-year management planning cycle.





Table 6  
Henderson Beach State Park Ten-Year Implementation Schedule and Cost Estimates  
Sheet 1 of 3

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

Goal I: Provide administrative support for all park functions.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Continue day-to-day administrative support at current levels.	Administrative support ongoing	C	\$950,000
Objective B	Expand administrative support as new lands are acquired, new facilities are developed, or as other needs arise.	Administrative support expanded	C	\$33,000
Goal II: Protect water quality and quantity in the park, restore hydrology to the extent feasible, and maintain the restored condition.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
There are no hydrological restoration needs at this unit.				
Goal III: Restore and maintain the natural communities/habitats of the park.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
There are no natural communities/habitat restoration and maintenance needs at this unit.				
Goal IV: Maintain, improve or restore imperiled species populations and habitats in the park.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Update baseline imperiled species occurrence inventory lists for plants and animals, as needed.	List updated	C	\$1,000
Objective B	Monitor and document 2 selected imperiled animal species in the park.	# Species monitored	C	\$25,000
Action 1	Implement FFWCC monitoring protocols for 2 imperiled animal species including loggerhead and green sea turtles.	# Species monitored	C	\$25,000
Objective C	Monitor and document 4 selected imperiled plant species in the park.	# Species monitored	C	\$4,500
Action 1	Develop monitoring protocols for 4 selected imperiled plant species including large-leaved jointweed, Cruise's golden aster, Godfrey's golden aster and Gulf Coast lupine.	# Protocols developed	ST	\$500
Action 2	Implement monitoring protocols for 4 including those listed in Action 1 above.	# Species monitored	C	\$4,000
Objective D	Continue to support marine turtle recovery by minimizing sources of light pollution within the park.	# of actions implemented		\$3,000
Action 1	Utilize "turtle-friendly" lighting as recommended by the FWC Marine Turtle Lighting guidelines	# of fixtures replaced or installed	C	\$2,500
Action 2	Develop "turtle-friendly" requirements for special events	Policy developed	ST	\$500

\* 2013 Dollars  
ST = actions within 2 years  
LT = actions within 10 years  
C = long term or short term actions that are continuous or cyclical  
UFN = currently unfunded need

Table 6  
Henderson Beach State Park Ten-Year Implementation Schedule and Cost Estimates  
Sheet 2 of 3

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

Goal V: Remove exotic and invasive plants and animals from the park and conduct needed maintenance-control.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
<b>Objective A</b>	<b>Annually survey and treat as necessary approximately 0.025 acre of exotic plant species in the park, including cogongrass, asparagus fern, silverthorne, glossy privet and Chinese tallow.</b>	# Acres treated	C	\$14,200
Action 1	Annually develop/update exotic plant management work plan.	Plan developed/updated	C	\$1,600
Action 2	Implement annual work plan by treating up to 0.025 acres in the park, annually, and continuing maintenance and follow-up treatments, as needed.	Plan implemented	C	\$12,600
<b>Objective B</b>	<b>Implement control measures on nuisance and exotic animal species in the park as necessary.</b>	# Species for which control measures implemented	C	\$22,000
Goal VI: Protect, preserve and maintain the cultural resources of the park.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
<b>Objective A</b>	<b>Assess and evaluate 1 of 1 recorded cultural resources in the park.</b>	Documentation complete	LT	\$100
Action 1	Complete 1 assessments/evaluations of archaeological sites. Prioritize preservation and stabilization projects.	Assessments complete	LT	\$100
<b>Objective B</b>	<b>Compile reliable documentation for all recorded historic and archaeological sites.</b>	Documentation complete	LT	\$6,600
Action 1	Ensure all known sites are recorded or updated in the Florida Master Site File.	# Sites recorded or updated	LT	\$200
Action 2	Complete a predictive model for high, medium and low probability of locating archaeological sites within the park.	Probability Map completed	LT	\$6,000
Action 3	Conduct oral history interviews.	Interviews complete	LT	\$400
Goal VII: Provide public access and recreational opportunities in the park.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
<b>Objective A</b>	<b>Maintain the park's current recreational carrying capacity of 4,962 users per day.</b>	# Recreation/visitor	C	\$1,190,000
<b>Objective B</b>	<b>Continue to provide the current repertoire of 23 interpretive, educational and recreational programs on a regular basis.</b>	# Interpretive/education programs	C	\$164,000
<b>Objective C</b>	<b>Develop 5 new interpretive, educational and recreational programs.</b>	# Interpretive/education programs	ST or LT	\$13,100
Action 1	Develop 5 new interpretive programs.	Programs implemented	LT	\$13,100

\* 2013 Dollars  
ST = actions within 2 years  
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Table 6  
Henderson Beach State Park Ten-Year Implementation Schedule and Cost Estimates  
Sheet 3 of 3

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

Goal VIII: Develop and maintain the capital facilities and infrastructure necessary to meet the goals and objectives of this management plan.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Maintain all public and support facilities in the park.	Facilities maintained	C	\$1,190,000
Objective B	Expand maintenance activities as existing facilities are improved and new facilities are developed.	Facilities maintained	C	\$42,000
Objective C	Continue to implement the park's transition plan to ensure facilities are accessible in accordance with the American with Disabilities Act of 1990.	Plan implemented	LT	\$15,000
Objective D	Improve/repair 15 existing facilities and use areas as identified in the Land Use Component.	# Facilities/Miles of Trail/Miles of Road	LT	\$683,500
Objective E	Construct 10 new facilities as identified in the Land Use Component.	# Facilities/Miles of Trail/Miles of Road	LT	\$1,472,500
<b>Summary of Estimated Costs</b>				
		<b>Total Estimated Cost* (10-years)</b>		
<b>Management Categories</b>				
Resource Management		\$76,400		
Administration and Support		\$983,000		
Capital Improvements		\$2,171,000		
Recreation Visitor Services		\$2,599,100		
Law Enforcement Activities**		**Law enforcement activities in Florida State Parks are conducted by the DEP Division of Law Enforcement and by local law enforcement agencies.		

\* 2013 Dollars  
ST = actions within 2 years  
LT = actions within 10 years  
C = long term or short term actions that are continuous or cyclical  
UFN = currently unfunded need



## **Addendum 1 – Acquisition History**



## Henderson Beach State Park Acquisition History

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### **Purpose of Acquisition**

The Board of Trustees of the Internal Improvement Trust Fund of the State of Florida (Trustees) has acquired Henderson Beach State Park to develop, operate, and maintain this property for public outdoor recreation and other related public purposes.

### **Sequence of Acquisition**

On February 2, 1983, the Trustees obtained title to a 208.31-acre property that constituted the initial area of Henderson Beach State Park. The Trustees purchased this property from Burney M. Henderson for \$13,100,000. This purchase was funded with Save Our Coast Bond Proceeds. Since this initial purchase, Trustees acquired 13.37 acres from Okaloosa County through vacation of the portion of the Old Highway 98 that passed through the park. Presently the park comprises 221.68 acres.

### **Title Interest**

The Trustees hold fee simple title to Henderson Beach State Park.

### **Lease Agreement**

On June 6, 1983, the Trustees leased Henderson Beach State Park to the State of Florida Department of Natural Resources, predecessor in interest to the State of Florida Department of Environmental Protection, Division of Recreation and Parks (DRP), under Lease No. 3297. This lease is for a period of fifty (50) years, and it will expire on June 5, 2033.

According to Lease No. 3297, DRP manages Henderson Beach State Park to develop and manage this property for public outdoor recreation and related purposes.

### **Special Conditions on Use**

Henderson Beach State Park is designated as a single-use property to provide resource-based public outdoor recreation and other park-related uses. 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.

## Henderson Beach State Park Acquisition History

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### Outstanding Reservations

Following is a listing of encumbrances that apply to Henderson Beach State Park.

**Type of Instrument:** Sublease  
**Grantor:** DRP  
**Grantee:** Destin Water Users, Inc.  
**Beginning Date:** March 11, 2002  
**Ending Date:** Coterminous with Lease No. 3297.  
**Encumbrance:** The sublease allows Destin Water Users, Inc. to place, maintain, and operate a lift station on a portion of Henderson Beach State Park.

**Type of Instrument:** Warranty Deed  
**Grantor:** Burney M. Henderson  
**Grantee:** Trustees  
**Beginning Date:** February 2, 1983  
**Ending Date:** Forever  
**Encumbrance:** The deed states that if subject property is not used for public park and recreational purposes, it will revert back to the grantor.



**Addendum 2 – Advisory Group Members and Report**



## Henderson Beach State Park Advisory Group Members

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### **Local Government Representatives**

The Honorable Sarah Seevers, Mayor  
City of Destin  
4200 Indian Bayou Trail  
Destin, Florida 32541

The Honorable Don Amunds, Chairman  
Okaloosa County Board of  
County Commissioners  
302 N. Wilson St. - Suite 302  
Crestview, Florida 32536

### **Agency Representatives**

Daniel Laird, Manager  
Henderson Beach State Park  
17000 Emerald Coast Parkway  
Destin, Florida 32541

Jason Love, Senior Forester - OPL  
Region 1  
Florida Forest Service  
Florida Department of Agriculture and  
Consumer and Services  
Tallahassee Forestry Center  
865 Geddie Road  
Tallahassee, Florida 32304

Kristi Yanchis, Ecologist  
U. S. Fish and Wildlife Service  
1601 Balboa Avenue  
Panama City, Florida 32405

John Himes, Non-Game Biologist  
Florida Fish and Wildlife Conservation  
Commission  
3911 Highway 2321  
Panama City, Florida 32409

Gary Booker, Chair  
Yellow River Soil and Water  
Conservation District  
938 N. Ferdon Blvd.  
Crestview, Florida 32536

### **Tourist Development Council Representative**

Jim Trifilio, Coastal Management  
Coordinator  
Okaloosa County Tourist Development  
Council  
1540 Miracle Strip Parkway  
Ft. Walton Beach, Florida 32548

### **Environmental and Conservation Representatives**

Walt Spence, President  
Choctawhatchee Audubon Society  
1519 18<sup>th</sup> Street  
Niceville, Florida 32578

Julie Terrell, Director  
Choctawhatchee Basin Alliance  
Northwest Florida State College  
100 College Blvd  
Niceville, Florida 32578

### **Recreational User Representatives**

Marti Gardner, Principal  
Destin Elementary School  
630 Kelly Street  
Destin, Florida 32541

Nancy St. John  
(Regular park user)  
333 Calhoun Avenue  
Destin, Florida 32541

## Henderson Beach State Park Advisory Group Members

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### Adjacent Landowners

Shannon Howell, President  
Devcon Services Group  
Henderson Park Inn  
2700 Scenic Highway 98  
Destin, Florida 32541

### Citizen Support Organization

#### Representatives

Donna Stiles, President  
Friends of Emerald Coast State Parks  
316 Holly Street  
Destin, Florida 32541

## Henderson Beach State Park Advisory Group Staff Report

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The Advisory Group meeting to review the proposed land management plan for Henderson Beach State Park was held at the Destin Life Center on Wednesday, November 28, 2012, at 9:00 AM.

James Puckett represented Commissioner Don Amunds. Mayor Sarah Seevers and Lance Johnson represented the City of Destin. Lisa Lehnhoff represented Kristi Yanchis. Amy Raybuck represented John Himes. Gary Parson represented Walt Spence. Cindy Huggins represented Marti Gardner. Gary Booker was not in attendance. All other appointed Advisory Group members were present as well as Nancy Hussong (Okaloosa County Tourist Development Council), Scott Henson (Okaloosa County Public Works), Myra Rhodes (Friends of Emerald Coast State Parks), and Shane Bittaker (Café Honeymoon). Attending staff were Dan Laird, Sasha Craft, Tony Tindell, John McKenzie, Katie Parrish, and Jennifer Carver.

Ms. Carver began the meeting by explaining the purpose of the Advisory Group and reviewing the meeting agenda. Ms. Carver summarized public comments received during the previous evening's public workshop. Ms. Carver then asked each member of the Advisory Group to express his or her comments on the draft plan.

### **Summary of Advisory Group Comments**

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**Lisa Lehnhoff** (U.S. Fish and Wildlife Service (FWS)) asked what lights are on in the park in the evening, such as security lights for the campground or bathhouses. The FWS is concerned about lighting as it impacts sea turtles. She also asked if park staff tape off areas for birds if nests are found. Staff indicated that the high visitation and human interaction do not warrant roping off areas for breeding, but the beach dune is roped off for bird resting areas. Staff indicated that the park is valuable habitat for resting and foraging. Ms. Lehnhoff stated that the FWS will work with neighbors of the park to conduct lighting surveys and provide education regarding lighting and other issues related to sea turtles and wildlife. She indicated that the plan has a great deal of information, and the FWS understands that the park provides an opportunity for people to visit the natural Florida coastline and interact with and learn about wildlife.

**Jason Love** (Department of Agriculture and Consumer Services, Florida Forest Service (FFS)) commended the Division of Recreation and Parks (Division) on a well-written plan. He stated that there are not significant timber management needs in this 221-acre park that has mostly scrub and beach dune habitat. Mr. Love stated that FFS can provide assistance with wildfire suppression as needed in the park.

**James Puckett** (Okaloosa County) noted that the plan does not mention lifeguards, beach cleaning, or certification requirements for the playgrounds and wondered if these items should be addressed in the plan. He also asked about the park's plans to provide accessible dune walkovers and beach wheelchairs to provide access per the Americans with Disabilities Act (ADA). Mr. Puckett asked if there are certain areas at the park that

## Henderson Beach State Park Advisory Group Staff Report

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are designated for weddings. Staff indicated that there are no lifeguards in the park, but the park has an agreement with the City of Destin and Okaloosa County for their lifeguards to patrol the park waters with jet skis. Staff also explained that mechanical beach cleaning loosens sand, removes seaweed, and disturbs shorebirds. The park strives to mimic natural processes and systems management and uses volunteers to hand-clean the beach. Staff indicated that details regarding safety and park operations are covered in the Florida Park Service Operations Manual. Staff stated that four of the six dune walkovers are ADA-compliant, and the park currently has five beach wheelchairs, with two more on order. Staff stated that weddings are coordinated by the Citizen Support Organization (CSO), Friends of Emerald Coast State Parks. Mr. Puckett inquired if beach chairs and umbrellas were being considered to create future income streams. Staff indicated that the Division is looking at ways to generate revenue with the least impact to the resource, and that the majority of attendees at the public workshop the previous evening had expressed their opinion against chairs and umbrellas.

**Jim Trifilio** (Okaloosa County Tourist Development Council (TDC)) had no specific comments on the plan but stated that the TDC would like to reach out to the park to provide assistance with promotions and funding. Mr. Trifilio suggested that the park seek funding through the RESTORE Act and Natural Resource Damage Assessment (NRDA) programs to assist with resource management, monitoring, and education. The TDC would like to work closely with park to pool resources and create a regional project to benefit the area and attract visitors to the park, especially for education regarding sea turtles and lighting. The TDC supports hand-cleaning of the beach and the current recycling efforts at the park.

**Mayor Sarah Seevers** (City of Destin) stated that the City has a remarkable relationship with the park and appreciates the partnerships that promote access to the park for City residents, including resident passes. She asked that the plan include mention of the beach wheelchairs and the agreement regarding lifeguards. Mayor Seevers asked if there are green initiatives at the park, pointing out that by 2020, 75% of garbage must be recyclable. She stated that the City is using solar-powered trash compactors, and the park might consider using them as well. Mayor Seevers stated that she is adamantly against umbrellas and chairs being available at the park, as other beaches in the area have them and they “wall off” the beach. She is not totally against vending and supports the efforts of the CSO. She feels that some type of vending at the beach area as a service, such as a general store, could be useful, especially for families and others who find it difficult to leave the park to go to a store. Mayor Seevers stated that such an operation could provide financial resources to implement other programs and infrastructure, such as an accessible platform for people with disabilities (proposed by the CSO). Mayor Seevers supports beach cleaning that retains the natural vegetation and processes and has personally seen the benefits of sea oat planting in the area. She commended the Division for providing a lot of valuable information in the plan. Staff indicated that the CSO recycles aluminum at the park to raise money, and Eglin Air

## Henderson Beach State Park Advisory Group Staff Report

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Force Base picks up the rest of the park's recycling. Staff thanked Mayor Seevers for her input regarding visitor services and concessions and pointed out that visitor services are to enhance the visitor experience rather than "be" the visitor experience. Staff indicated that it is important to identify appropriate services and locate them properly and also pointed out that there is a small store at the ranger station that provides drinks and other items.

**Lance Johnson** (City of Destin Parks and Recreation) commended the Division on the plan and the inclusion of maintenance, storage and infrastructure, including volunteers in the plan. He supports the modifications to the campground area.

**Gary Parsons** (Choctawhatchee Audubon Society) stated that he lived in Destin in 1965 and led a group that attempted to enable Okaloosa County to purchase Henderson Beach in 1972 (the Save Our Sands program). He commended the Division on the plan and asked what metrics are used in terms of how many people use the park vs. potential capacity of the park for recreation. He mentioned that a concern with vendors in the park would be uncontrolled litter which might in turn create a need for mechanized beach cleanup. He also recommended that the park prohibit balloon release if it does not already do so. Mr. Parsons pointed out that kayaks are out in the gulf frequently, and he hopes that there is access to the water from the park. He mentioned that there are some very productive artificial reefs one mile off-shore that are visited by kayakers. He asked about the one-acre burn experiment mentioned in Table 6 (Goal III, Objective A), stating that he was uncertain about the goal of the experiment. Mr. Parsons also suggested adding an observation tower at the park to enhance the visitor experience. Staff indicated that no burning is planned for the park, and the objective and associated actions were mistakenly included in Table 6. Regarding recreational capacity in the park, staff mentioned that Table 5 identifies the recreational carrying capacity based on existing and proposed uses in the park but does not calculate the total capacity that could be supported at the park. Staff stated that no artificial items are allowed to be released/dropped in the park at events, including balloons and rice. Staff also mentioned they have reviewed the plans for the offshore reef. Staff pointed out that concession contracts require trash cleanup and also delineate the types of products that can be sold, allowing some discretion by the park manager.

**Cindy Huggins** (Destin Elementary School) stated that the park does a lot for schools and is invaluable for teaching the children about environmental preservation. She encouraged the park to provide programs for the students, as they are the future and need to be given opportunities to learn and experience nature. Staff mentioned the park has hosted over 3,000 students for environmental education programs, and the park programs have grown from 12 to over 100 programs in the last five years. Staff stated that part of mission of the park is to interpret the resources so people can appreciate them and understand the need to preserve those resources. Staff indicated that Henderson Beach is only natural ecosystem in the City that students can experience, and it is part of the Learning in Florida's Environment (LIFE) program.

## Henderson Beach State Park Advisory Group Staff Report

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**Julie Terrell** (Choctawhatchee Basin Alliance (CBA)) mentioned that CBA is also involved with the LIFE program. She commended the effort to update baseline information in the plan and asked if there were any efforts to collect baseline information on water quality in terms of eutrophication standards. She stated that data from monthly sampling would be useful for identifying seasonal trends in offshore water quality and would assist with management programs. CBA is willing to assist with this effort and suggested that the plan include language regarding the need and identifying options for funding. Staff indicated that some water quality sampling was conducted through the National Oceanic and Atmospheric Administration (NOAA) and that the State's Healthy Beaches program monitors for bacteria.

**Nancy St. John** (regular park user) explained that the general feeling she has observed from park visitors (residents, visitors, school groups) is a sense of relief from the intensity of other beaches in the area. She has observed that people find the park a joy and are amazed by its natural beauty. She mentioned that visitation at the park is regulated by the number of parking spaces, and because there is nothing in the plan about increased parking, the increase in visitors will need to be from walking, biking and using the bus to get to the park. She feels the bus bay will assist with transit access. Ms. St. John supports the additional inbound lane for the ranger station, as there are often many visitors entering the park at the same time for events. She pointed out that visitors who have annual passes, resident passes or are campers have to wait in the same line. She mentioned there is a great view of the park from the top of the trail. She inquired about the purpose of extending the park boundary 150 feet into the water from the current boundary. Staff explained that this change would increase the park's ability to enforce park rules, address safety issues along the beach and nearshore waters, and provide law enforcement with clear well-defined authority in that area.

**Donna Stiles** (Friends of Emerald Coast State Parks) stated that the CSO has some plans for the future that were discussed the previous evening at the public workshop. Ms. Stiles described the CSO's suggestions for the park as follows: 1) The CSO would like to build a small multi-purpose building that would be a coastal education facility. This would provide a controlled environment that could be used for school groups, special events, and park meetings. The building would be designed to be ecofriendly with geothermal heat/air and solar power. It would be designed to be appropriate in a beach setting and may include a little store in the building. No funding has been secured for the building. 2) The CSO would like to provide an observation-type platform on one of the existing walkovers. 3) The CSO would like to add a covered gazebo for parents to sit in the shade at the new playground. 4) The CSO would like to improve the signage along the nature trail and possibly add memorial benches. A written summary of these suggestions was provided and is attached to this report. Ms. Stiles stated that the CSO is always looking for new ways to make money and put it back into the park.

**Shannon Howell** (Henderson Park Inn) stated that he bought the Inn adjacent to the east end of the park eight years ago because of the park. He commended staff on the



## Henderson Beach State Park Advisory Group Staff Report

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plan and stated that he supports that plan. Mr. Howell stated that the CSO does a great job, and he feels that concessions can be done in the park if managed properly. He would like the park to stay the same as much as possible. He inquired if vendors are required to provide a certain percentage or amount of funding back into the park and mentioned that the CSO provides some concession activities already. Staff explained that the concessionaire's commission goes to the Division (the amount varies from park to park) and that concessionaires also fund capital improvements directly in the park.

**Amy Raybuck** (Florida Fish and Wildlife Conservation Commission (FWC)) stated that the plan was very thorough. She asked how often gopher tortoises are dropped off in the park and what protocols are in place to handle them. She suggested that signs regarding shorebird resting areas (not nesting) and sea turtles be placed in the park. Staff explained that there are 4-6 gopher tortoises in the park, and all are assumed to be drop-offs. One tortoise was found on the beach and was relocated near a burrow; there does not appear to be any breeding among the gopher tortoises. Staff indicated that there are interpretive kiosks at the restrooms and picnic areas, and during the winter and shorebird nesting season, additional signage is placed.

### Summary of Written Comments

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**Donna Stiles** (Friends of Emerald Coast State Parks) providing a written summary of the CSO's suggestions for the park. These suggestions are summarized above, and the handout is attached.

**Kristi Yanchis** (U.S. Fish and Wildlife Service (FWS)) provided written comments to DRP staff in addition to the comments made by Lisa Lehnhoff at the meeting. FWS offered to work with the park to identify options to encourage shorebird nesting, such as outreach programs to educate the public about predators, reduction in the amount of driving in the park, and posting of additional conservation areas. Ms. Yanchis suggested that the park consider various measures in existing and future parking areas, such as using impervious surface, providing critter-proof trash cans, allowing heavy vegetation to surround the parking area to deter people from entering where they shouldn't, and considering lighting issues. Ms. Yanchis reiterated the need to work with the park's neighbors to inform them of their lighting issues and how detrimental they can be to the turtles nesting within the park. A copy of the comments is attached.

### Summary of Public Comments

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**Shane Bittaker** (Café Honeymoon) suggested that the CSO and the park consider additional revenue streams to help keep up the park. He pointed out that the budget gets cut every year, and additional revenues can help implement the plan. Mr. Bittaker inquired how the City of Destin residents get free passes to the park, as this is a great value for the residents of Destin. He also commended the CSO on conducting 250 weddings per year and stated that there are more opportunities to create revenue to support the park. Staff clarified that the City pays a monthly fee based on the number of residents that visit each month.

## Henderson Beach State Park Advisory Group Staff Report

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**Scott Henson** (Okaloosa County) explained that the offshore reef will be located in about 35 feet of water offshore from the park. He stated that a lot of people will access the reef, and there will likely be impacts on the park from both the seaside and landside. He indicated that the reef might impact concession needs in the park, such as kayak rentals. The reef has not yet been funded, but the project has been submitted for NRDA funding.

**Myra Rhodes** (Friends of Emerald Coast State Parks) is interested in seeing the park work more with the TDC and indicated that visitors can purchase major items from Walmart across the street from the park.

### Staff Recommendations

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The staff recommends approval of the proposed management plans for Henderson Beach State Park as presented, with the following significant changes:

- Include language to clarify the agreement with the City of Destin and Okaloosa County regarding lifeguards.
- Enhance the discussion of beach cleaning to indicate the importance and benefits of hand-cleaning.
- Modify the discussion of accessibility in the plan to include beach wheelchairs and other accommodations for ADA-compliance.
- Modify Table 6 to remove the objective and actions regarding the one-acre experimental area for prescribed fire.
- Modify the Conceptual Land Use Plan to indicate the additional shelter at the playground, a location suitable for a potential mobile concession within the existing developed area at the west beach day-use area, and enhanced signage for the nature trail.
- Modify the discussion of adjacent land uses to mention the planned offshore reef and how it could affect the park.
- Enhance the language regarding educational programs to mention partnerships with FWS and FFWCC.
- Enhance the discussion of water quality to include the potential for monthly water quality sampling/monitoring to identify seasonal fluctuations in nutrient loads and other indicators.

A suggestion was made to add a multipurpose building and an accessible observation platform to the conceptual land use plan. Due to the likely impacts to the protected dune habitat and the lack of appropriate locations within currently developed areas for these facilities, these improvements have not been included in the plan.

Several Advisory Group members mentioned the possibility of establishing partnerships to promote the park and increase visitation. While the unit management plan does not generally include such recommendations, the Division has partnered with

## Henderson Beach State Park Advisory Group Staff Report

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numerous organizations throughout the State to promote state parks and jointly fund and implement many projects and programs.

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

### **Notes on Composition of the Advisory Group**

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

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

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

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## Henderson Beach State Park Advisory Group Staff Report

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### **Addendum 3 – References Cited**



## Henderson Beach State Park References Cited

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- Barraclough, J.T. and O.T. Marsh. 1962. Aquifers and quality of ground water along the Gulf Coast of western Florida. Rept. Of Invest. No. 29, Florida Geological Survey, Tallahassee, FL.
- City of Destin, Florida. No date. Beach Information: Public beach access locations. <http://www.cityofdestin.com/index.php?src=gendocs&link=BeachAccess&category=Main>. Accessed August 8, 2011.
- City of Destin, Florida. 2008. *Map 8.-5.7.Transit Stops Location Map*. Prepared by Renaissance Planning Group. 18 pp.
- City of Destin, Florida. 2009. *Map 1-1 Future Land Use 2010*. 1 pp. <http://www.cityofdestin.com/clientuploads/Documents/commdev/2009/2009LandUse.jpg>. Accessed August 9, 2011.
- City of Destin, Florida. 2010a. *Destin Comprehensive Plan: 2010 Goals, Objectives and Policies*. <http://library.municode.com/index.aspx?clientID=14161&stateID=9&statename=Florida>. Accessed through Municode.com, January 5, 2011.
- City of Destin, Florida. 2010b. City of Destin Land Development Code. <http://library.municode.com/index.aspx?clientID=13190&stateID=9&statename=Florida>. Accessed through Municode.com, August 9, 2011.
- City of Destin GIS Manager. 2009. *Zoning Map*. 1 pp. <http://www.cityofdestin.com/clientuploads/Documents/commdev/2009/09-03-LCZoning.jpg>. Accessed August 9, 2011.
- Florida Department of Environmental Protection (FDEP), Bureau of Beaches and Coastal Systems. 2008. *Strategic Beach Management Plan for the Panhandle Gulf Coast Region*. <http://www.dep.state.fl.us/beaches/publications/pdf/SBMP/Panhandle%20Gulf%20Coast%20Region.pdf>. Accessed January 10, 2011. 39 pp.
- FDEP, Division of Recreation and Parks (DRP). 2001. *Henderson Beach State Park Unit Management Plan*. Tallahassee, Florida. 86 pp.
- FDEP, DRP. 2011. FY 2010/2011 Florida State Park System Economic Impact Assessment. Tallahassee, Florida. 9 pp.
- Florida Fish and Wildlife Conservation Commission (FFWCC). 2010. *Best Management Practices for Operating Vehicles on the Beach*. [http://myfwc.com/media/153118/beach\\_drive\\_flyer\\_clr.pdf](http://myfwc.com/media/153118/beach_drive_flyer_clr.pdf). Accessed August 9, 2011.

## Henderson Beach State Park References Cited

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- FFWCC. 2011. Eglin Air Force Base Wildlife Management Area.  
<http://myfwc.com/viewing/recreation/wmas/cooperative/eglin-air-force-base>.  
Accessed September 16, 2011.
- Florida Natural Areas Inventory and the Florida Department of Natural Resources. 1990.  
*Guide to the Natural Communities of Florida*. Tallahassee, FL. 111 pp.
- National Park Service (NPS). 2011. Gulf Islands National Seashore.  
<http://www.nps.gov/guis/index.htm>. Accessed January 13, 2011
- Okaloosa County Online. No date. Public Works: Resources Division – Park List.  
[http://www.co.okaloosa.fl.us/dept\\_pw\\_resources\\_parks\\_list.html](http://www.co.okaloosa.fl.us/dept_pw_resources_parks_list.html). Accessed  
August 8, 2011.
- U.S. Department of Agriculture (USDA). 1990. Soil Survey of Okaloosa County, Florida.  
Prepared in cooperation with the Institute of Food and Agricultural Services
- U.S. Census Bureau. 2010. State and County Quickfacts: Okaloosa County, Florida.  
<http://quickfacts.census.gov/qfd/states/12/12091.html>. Accessed December 3,  
2010.
- U.S. Department of Commerce, Bureau of Economic Analysis (BEA). 2011. Regional  
Economic Accounts, Personal income and employment summary: Okaloosa  
County, Florida. <http://www.bea.gov/regional/reis/action.cfm>. Accessed May  
31, 2011.
- U.S. Department of Labor, Bureau of Labor Statistics (BLS). (2010). Labor Force Data by  
County, 2009 Annual Averages.  
<ftp://ftp.bls.gov/pub/special.requests/la/laucnty09.txt>. Accessed October 26,  
2010.
- Visit Florida!. 2010. 2009 Domestic Visitor Profile by Florida Vacation Region. 13 pp. In  
*Florida Visitor Survey/2009*.
- University of Florida, Bureau of Economic and Business Research (BEBR). 2010. *Florida  
Statistical Abstract*.
- Wiggs-Clark M. and W. Schmidt. 1982. Shallow Stratigraphy of Okaloosa County and  
Vicinity Florida. (IC67) Florida Geologic Survey.



## **Addendum 4 – Soil Descriptions**



## Henderson Beach State Park Soil Descriptions

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**(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.

## Henderson Beach State Park Soil Descriptions

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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 leaches 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 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 5 – Plant and Animal List**



## Henderson Beach State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
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### PTERIDOPHYTES

Bracken fern .....*Pteridium aquilinum* var. *pseudocaudatum*

### GYMNOSPERMS

Choctawhatchee sand pine .....*Pinus clausa* var. *immuginata*

### ANGIOSPERMS

#### MONOCOTS

Bushy beardgrass .....*Andropogon glomeratus*  
Broomsedge .....*Andropogon virginicus*  
Asparagus Fern .....*Asparagus aethiopicus*\*  
Cyperus .....*Cyperus retrorsus*  
Panicum .....*Dichanthelium dichotomum*  
Starrush.....*Dichromena colorata*  
Cogongrass.....*Imperata cylindrical*\*  
Beachgrass.....*Panicum amarum*  
Fall panicum .....*Panicum dichotomiflorum*  
Torpedo grass .....*Panicum repens*\*  
Switchgrass .....*Panicum virgatum*  
Knotgrass.....*Paspalum distichum*  
Saw palmetto .....*Serenoa repens*  
Knotroot foxtail .....*Setaria geniculata*  
Beach bluestem.....*Schizachyrium maritimum*  
Greenbrier .....*Smilax auriculata*  
Greenbrier .....*Smilax bona-nox*  
Jackson-brier .....*Smilax smallii*  
Spanish moss .....*Tillandsia usneoides*  
Sea oats .....*Uniola paniculata*  
Spanish bayonet .....*Yucca aloifolia*  
Adam's needle .....*Yucca filamentosa*

#### DICOTS

False foxglove .....*Aureolaria flava*  
Sandhill milkweed .....*Asclepias humistrata*  
Beach orach .....*Atriplex pentandra*  
Sea myrtle.....*Baccharis halimifolia*

\* Non-native Species

## Henderson Beach State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Saltwort .....	<i>Batis maritima</i>	
Yellow Buttons .....	<i>Balduina angustifolia</i>	
Sea oxeye .....	<i>Borrichia frutescens</i>	
Beautyberry .....	<i>Callicarpa americana</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> .....	BD
Godfrey's golden aster .....	<i>Chrysopsis godfreyi</i> .....	BD
Tread softly .....	<i>Cnidoscolus 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>	
Dodder.....	<i>Cuscuta pentagona</i>	
Poorjoe .....	<i>Diodia teres</i>	
Southern fleabane .....	<i>Erigeron quercifolius</i>	
Fleabane.....	<i>Erigeron strigosus</i>	
Painted poinsettia .....	<i>Euphorbia cyathophora</i>	
Greater Florida poinsettia .....	<i>Euphorbia floridiana</i>	
Goldenrod .....	<i>Euthamia minor</i>	
Creeping morning-glory .....	<i>Evolvulus sericeus</i>	
Fimbristylis .....	<i>Fimbristylis caroliniana</i>	
Froelichia .....	<i>Froelichia floridana</i>	
Firewheel.....	<i>Gaillardia pulchella</i>	
Camphor weed .....	<i>Heterotheca subaxillaris</i>	
Water pennywort .....	<i>Hydrocotyle bonariensis</i>	
Carolina holly .....	<i>Ilex ambigua</i>	
Yaupon.....	<i>Ilex vomitoria</i>	
Tievine .....	<i>Ipomoea cordatotriloba</i>	
Beach morning-glory .....	<i>Ipomoea imperati</i>	
Railroad vine.....	<i>Ipomoea pes-caprae</i>	
Beach elder .....	<i>Iva imbricate</i>	
Lantana .....	<i>Lantana camara</i>	
Peppergrass.....	<i>Lepidium virginicum</i>	
Gopher apple .....	<i>Licania michauxii</i>	



## Henderson Beach State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Gulf Coast Lupine.....	<i>Lupinus westianus</i> .....	BD
Southern magnolia .....	<i>Magnolia grandiflora</i>	
Burclover .....	<i>Medicago polymorpha</i>	
Wax myrtle .....	<i>Myrica cerifera</i>	
Seaside evening primrose .....	<i>Oenothera humifusa</i>	
Prickly-pear cactus.....	<i>Opuntia humifusa</i>	
Whitflow-wort .....	<i>Paronychia erecta</i>	
Red bay .....	<i>Persea borbonia</i>	
Frogfruit.....	<i>Phyla nodiflora</i>	
Coastal groundcherry .....	<i>Physalis angustifolia</i>	
Pokeweed .....	<i>Phytolacca Americana</i>	
Grass-leaf goldenaster .....	<i>Pityopsis graminifolia</i>	
Paleseed plantain .....	<i>Plantago virginica</i>	
Polygala .....	<i>Polygala grandiflora</i>	
Large-leaved jointweed.....	<i>Polygonella macrophylla</i> .....	SC
October flower.....	<i>Polygonella polygama</i>	
Juniper leaf.....	<i>Polypremum procumbens</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>	
Florida Pusley.....	<i>Richardia scabra</i>	
Blackberry .....	<i>Rubus spp.</i>	
Sagotia.....	<i>Sagotia triflora</i>	
Sea purslane .....	<i>Sesuvium portulacastrum</i>	
Black senna.....	<i>Seymeria cassioides</i>	
Sida .....	<i>Sida rhombifolia</i>	
Seaside goldenrod.....	<i>Solidago sempervirens</i>	
Florida betony.....	<i>Stachys floridana</i>	
Amberique bean.....	<i>Strophostyles helvola</i>	
Common spiderwort .....	<i>Tradescantia ohiensis</i>	
Poison ivy .....	<i>Toxicodendron radicans</i>	
Frost weed.....	<i>Verbesina virginica</i>	
Summer grape .....	<i>Vitis aestivalis</i>	

## Henderson Beach State Park Animals

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

Southern toad .....	Bufo terrestris .....	SC
Green treefrog.....	Hyla cinerea .....	DV

### REPTILES

#### Turtles

Atlantic loggerhead sea turtle .....	Caretta caretta caretta.....	MUS
Green sea turtle .....	Chelonia mydas mydas .....	MUS
Gopher tortoise.....	Gopherus polyphemus.....	SC

#### Lizards

Green anole .....	Anolis carolinensis carolinensis .....	SC, DV
Six-lined racerunner .....	Cnemidophorus sexlineatus .....	BD, SC
Southeastern five-lined skink .....	Eumeces inexpectatus .....	SC
Slender glass lizard .....	Ophisaurus attenuatus .....	SC
Eastern glass lizard .....	Ophisaurus ventralis .....	SC
Southern fence lizard.....	Sceloporus undulates undulatus .....	SC, DV

#### Snakes

Southern black racer .....	Coluber constrictor priapus .....	SC
Corn snake .....	Elaphe guttata guttata .....	SC
Eastern coachwhip snake.....	Masticophis flagellum flagellum.....	BD
Dusky pigmy rattlesnake.....	Sistrurus miliarius barbouri .....	SC

### BIRDS

Great Blue Heron .....	Ardea herodias .....	MUS
Great Egret .....	Ardea alba .....	MUS
Cedar Waxwing.....	Bombycilla cedrorum .....	SC
Red-tailed Hawk .....	Buteo jamaicensis .....	OF
Red-shouldered Hawk .....	Buteo lineatus .....	OF
Western sandpiper.....	Calidris mauri.....	MUS
Sanderling .....	Calidris alba .....	MUS
Semipalmated sandpiper .....	Calidris pusilla.....	MUS
Dunlin.....	Calidris alpina.....	MUS
Northern Cardinal .....	Cardinalis cardinalis.....	SC, DV
Willet.....	Catoptrophorus semipalmatus.....	MUS
Southeastern Snowy Plover.....	Charadrius alexandrinus .....	MUS
Piping plover .....	Charadrius melodus.....	MUS

\* Non-native Species

## Henderson Beach State Park Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
Semipalmated plover.....	<i>Charadrius semipalmatus</i> .....	MUS
Killdeer .....	<i>Charadrius vociferus</i> .....	DV
Common Nighthawk.....	<i>Chordeiles minor</i> .....	SC
Common Ground-Dove .....	<i>Columbina passerina</i> .....	BD
Black Vulture .....	<i>Coragyps atratus</i> .....	OF
American Crow .....	<i>Corvus brachyrhynchos</i> .....	OF
Fish Crow .....	<i>Corvus ossifragus</i> .....	OF
Blue Jay .....	<i>Cyanocitta cristata</i> .....	SC
Gray Catbird .....	<i>Dumetella carolinensis</i> .....	SC
Snowy Egret.....	<i>Egretta thula</i> .....	MUS
Southeastern American Kestrel ....	<i>Falco sparverius paulus</i> .....	OF
Common Loon.....	<i>Gavia immer</i> .....	Gulf/MUS
Loggerhead Shrike .....	<i>Lanius ludovicianus</i> .....	OF
Herring Gull.....	<i>Larus argentatus</i> .....	MUS
Laughing Gull.....	<i>Larus atricilla</i> .....	MUS
Ring-billed Gull.....	<i>Larus delawarensis</i> .....	MUS
Bonaparte's Gull.....	<i>Larus philadelphia</i> .....	Offshore
Red-breasted Merganser .....	<i>Mergus serrator</i> .....	Offshore
Northern Mockingbird.....	<i>Mimus polyglottos</i> .....	SC, DV
Brown-headed Cowbird.....	<i>Molothrus ater</i> * .....	DV
Osprey.....	<i>haliaetus</i> .....	OF
House Sparrow .....	<i>Passer domesticus</i> * .....	DV
Brown Pelican.....	<i>Pelecanus occidentalis</i> .....	BD
Carolina Chickadee.....	<i>Poecile carolinensis</i> .....	SC
Boat-tailed Grackle.....	<i>Quiscalus major</i> .....	BD
Black skimmer .....	<i>Rynchops niger</i> .....	BD
Least Tern.....	<i>Sternula antillarum</i> .....	BD, MUS
Caspian Tern.....	<i>Sterna caspia</i> .....	BD
Common Tern.....	<i>Sterna hirundo</i> .....	BD
Royal Tern.....	<i>Sterna maxima</i> .....	BD
Sandwich Tern.....	<i>Sterna sandvicensis</i> .....	BD
Tree Swallow .....	<i>Tachycineta bicolor</i> .....	OF
Brown Thrasher.....	<i>Toxostoma rufum</i> .....	SC
American Robin.....	<i>Turdus migratorius</i> .....	SC, DV
Mourning Dove .....	<i>Zenaida macroura</i> .....	DV

### MAMMALS

Coyote.....	<i>Canis latrans</i> * .....	MTC
Virginia opossum.....	<i>Didelphis virginiana</i> .....	SC

\* Non-native Species

## Henderson Beach State Park Animals

Common Name	<i>Scientific Name</i>	Primary Habitat Codes (for all species)
Domestic cat.....	<i>Felis catus</i> * .....	MTC, DV
Raccoon.....	<i>Procyon lotor</i> .....	SC
Eastern mole .....	<i>Scalopus aquaticus</i> .....	SC
Eastern gray squirrel .....	<i>Sciurus carolinensis</i> .....	SC
Hispid cotton rat .....	<i>Sigmodon hispidus</i> .....	SC
Eastern cottontail.....	<i>Sylvilagus floridanus</i> .....	SC
Gray fox .....	<i>Urocyon cinereoargenteus</i> .....	MTC

\* Non-native Species

## Natural Community Habitat Codes

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### TERRESTRIAL

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

### PALUSTRINE

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

## Natural Community Habitat Codes

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

### LACUSTRINE

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

### RIVERINE

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

### SUBTERRANEAN

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

### ESTUARINE

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

## Natural Community Habitat Codes

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Unconsolidated Substrate.....	EUS
Worm Reef .....	EWR

### MARINE

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

### ALTERED LANDCOVER TYPES

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

### MISCELLANEOUS

Many types of communities .....	MTC
Overflying .....	OF

## Natural Community Habitat Codes

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## **Addendum 6 – Imperiled Species Ranking Definitions**



## **Imperiled Species Ranking Definitions**

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

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

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

### **FNAI GLOBAL RANK DEFINITIONS**

- G1 .....Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or fabricated factor.
- G2 .....Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- G3 .....Either very rare or local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction of other factors.
- G4 .....Apparently secure globally (may be rare in parts of range)
- G5 .....Demonstrably secure globally
- GH .....Of historical occurrence throughout its range may be rediscovered (e.g., ivory-billed woodpecker)
- GX.....Believed to be extinct throughout range
- GXC.....Extirpated from the wild but still known from captivity or cultivation
- G#? .....Tentative rank (e.g.,G2?)
- G#G#.....Range of rank; insufficient data to assign specific global rank (e.g., G2G3)
- G#T# .....Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1)

## **Imperiled Species Ranking Definitions**

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

### **LEGAL STATUS**

#### **FEDERAL**

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

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

## **Imperiled Species Ranking Definitions**

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- LT.....Listed as Threatened Species. Defined as any species that is likely to become an endangered species within the near future throughout all or a significant portion of its range.
- PT.....Proposed for listing as Threatened Species.
- C .....Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants. Defined as those species for which the USFWS currently has on file sufficient information on biological vulnerability and threats to support proposing to list the species as endangered or threatened.
- E(S/A).....Endangered due to similarity of appearance.
- T(S/A).....Threatened due to similarity of appearance.

### **STATE**

#### **ANIMALS ...(Listed by the Florida Fish and Wildlife Conservation Commission - FFWCC)**

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

#### **PLANTS .....(Listed by the Florida Department of Agriculture and Consumer Services - FDACS)**

- LE.....Listed as Endangered Plants in the Preservation of Native Flora of Florida Act. Defined as species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all

## **Imperiled Species Ranking Definitions**

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species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973, as amended.

LT.....Listed as Threatened Plants in the Preservation of Native Flora of Florida Act. Defined as species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in such number as to cause them to be endangered.

## **Addendum 7 – Cultural Information**





## **Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties (revised February 2007)**

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

### **A. General Discussion**

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

### **B. Agency Responsibilities**

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

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

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

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

### **C. Statutory Authority**

Statutory Authority and more in depth information can be found in the following:

**Chapter 253, F.S.** – State Lands

**Chapter 267, F.S.** – Historical Resources

## Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties (revised February 2007)

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### Chapter 872, F.S. – Offenses Concerning Dead Bodies and Graves

Other helpful citations and references:

Chapter 1A-32, F.A.C. – Archaeological Research

Other helpful citations and references:

Chapter 1A-44, F.A.C. – Procedures for Reporting and Determining Jurisdiction Over Unmarked Human Burials

Chapter 1A-46, F.A.C. – Archaeological and Historical Report Standards and Guidelines

The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings

### D. Management Implementation

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

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

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

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

**Management Procedures for Archaeological and Historical Sites and Properties on  
State-Owned or Controlled Properties (revised February 2007)**

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**E. Minimum Review Documentation Requirements**

In order to have a proposed project reviewed by the Division, the following information, at a minimum, must be submitted for comments and recommendations.

**Project Description** - A detailed description of the proposed project including all related activities. For land clearing or ground disturbing activities, the depth and extent of the disturbance, use of heavy equipment, location of lay down yard, etc. For historic structures, specific details regarding rehabilitation, demolition, etc.

**Project Location** - The exact location of the project indicated on a USGS Quadrangle map, is preferable. A management base map may be acceptable. Aerial photos indicating the exact project area as supplemental information are helpful.

**Photographs** - Photographs of the project area are always useful. Photographs of structures are required.

**Description of Project Area** - Note the acreage of the project; describe the present condition of project area, and any past land uses or disturbances.

**Description of Structures** - Describe the condition and setting of each building within project area if approximately fifty years of age or older.

**Recorded Archaeological Sites or Historic Structures** - Provide Florida Master Site File numbers for all recorded historic resources within or adjacent to the project area. This information should be in the current management plan; however, it can be obtained by contacting the Florida Master Site File at (850) 245-6440 or Suncom 205-6440.

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

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

Phone: (850) 245-6333  
Fax: (850) 245-6438

## Eligibility Criteria for National Register of Historic Places

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

- 1) Districts, sites, buildings, structures, and objects may be considered to have significance in American history, architecture, archaeology, engineering, and/or culture if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
  - a) are associated with events that have made a significant contribution to the broad patterns of our history; and/or
  - b) are associated with the lives of persons significant in our past; and/or
  - c) embody the distinctive characteristics of type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and/or
  - d) have yielded, or may be likely to yield, information important in prehistory or history.
  
- 2) Ordinarily cemeteries, birthplaces, or graves of historical figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; properties primarily commemorative in nature; and properties that have achieved significance within the past 50 years shall not be considered eligible for the *National Register*. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:
  - a) a religious property deriving its primary significance from architectural or artistic distinction or historical importance; or
  - b) a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
  - c) a birthplace or grave of an historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or
  - d) a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, distinctive design features, or association with historic events; or

## Eligibility Criteria for National Register of Historic Places

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- e) a reconstructed building, when it is accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and no other building or structure with the same association has survived; or a property primarily commemorative in intent, if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
- f) a property achieving significance within the past 50 years, if it is of exceptional importance.

## Preservation Treatments as Defined by Secretary of Interior's Standards and Guidelines

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

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

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

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