North Peninsula State Park

Advisory Group Draft
Unit Management Plan

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Recreation and Parks
December 2017

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INTRODUCTION

North Peninsula State Park (North Peninsula) is located in Volusia County (see Vicinity Map). Access to the park is from Interstate 95, exit 284 (State Road 100) east to A1A, south to the park (see Reference Map). The Vicinity Map also reflects significant land and water resources existing near the park.

North Peninsula was initially acquired on April 2, 1984 using funds from the Conservation and Recreation Lands Program (CARL). Currently, the park comprises 557.54 acres. The Board of Trustees of the Internal Improvement Trust Fund (Trustees) hold fee simple title to the park and on December 12, 1985, the Trustees leased (Lease Number 3241) the property to DRP under a 50-year lease. The current lease will expire on December 11, 2035.

North Peninsula is designated single-use to provide public outdoor recreation and other park-related uses. There are no legislative or executive directives that constrain the use of this property (see Addendum 1).

Purpose and Significance of the Park

The purpose of North Peninsula State Park is to provide exceptional resource-based public outdoor recreation opportunities to Florida residents and visitors for a fast-growing region while ensuring the conservation and protection of valuable natural resources, including imperiled species and unique ecosystems.

Park Significance

- North Peninsula State Park protects critical habitat for endangered species including the Florida scrub jay (*Aphelocoma coerulescens*), Florida manatee (*Trichechus manatus*), North Atlantic right whale (*Eubalaena glacialis*), and gopher tortoise (*Gopherus polyphemus*).

- The park protects a portion of a barrier island between the Intracoastal Waterway and the Atlantic Ocean. The park also protects a variety of important natural community types, including salt marsh, maritime hammock, beach dune, and coastal strand.

- North Peninsula State Park is a popular destination for residents and visitors to enjoy a beautiful beach with ample fishing opportunities, and many other resource-based recreational activities including swimming, wildlife viewing, hiking, surfing and paddling.

- The park has a long, rich history dating back to the prehistoric Native Americans occupation beginning during the Archaic period (8500 B.C. – 1000 B.C.) and continuing into the St. Johns period (700 B.C. – A.D. 1500). Historic period sites include quarries.

North Peninsula 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.

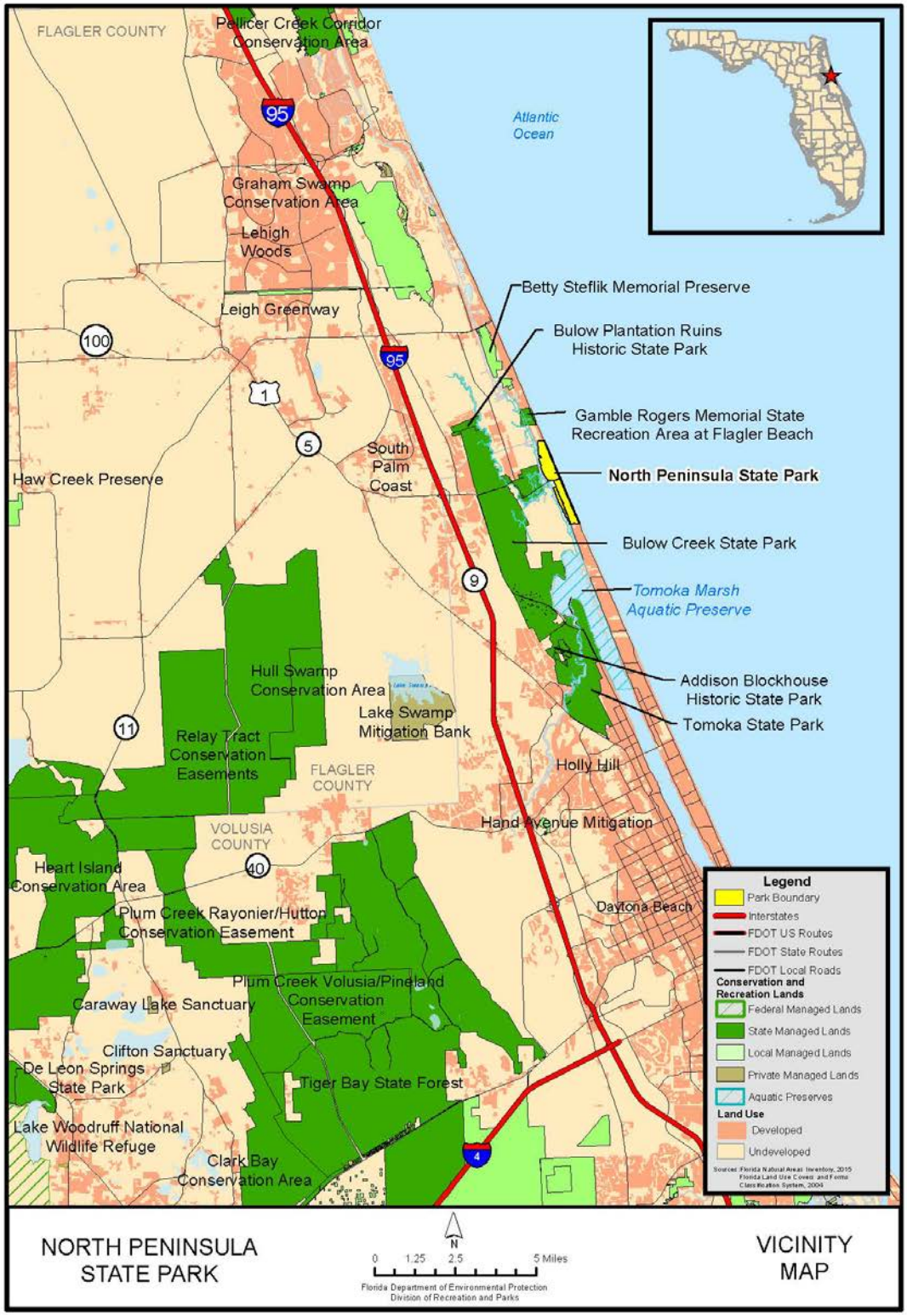
Purpose and Scope of the Plan

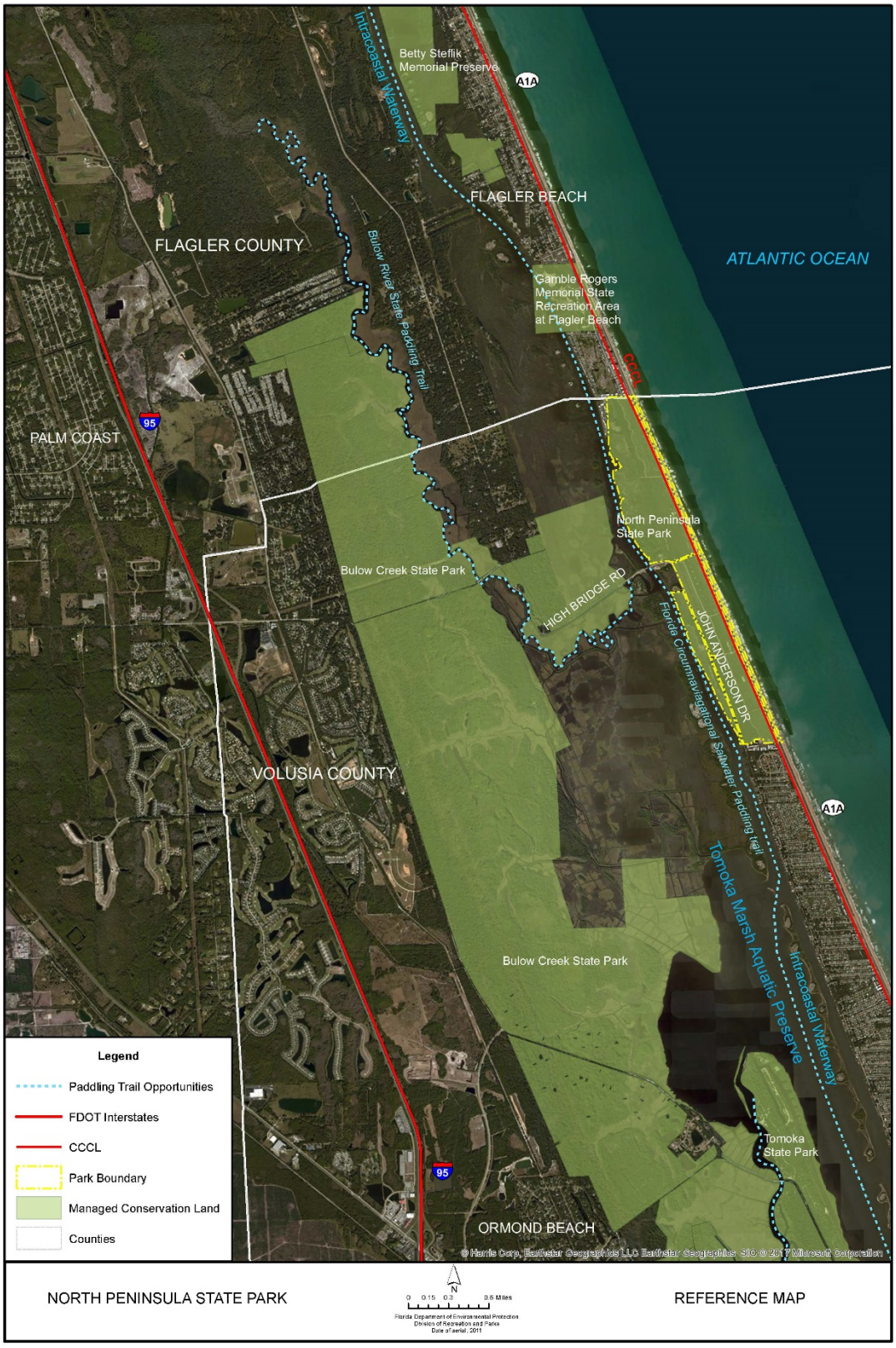
This plan serves as the basic statement of policy and direction for the management of North Peninsula State Park as a unit of Florida's state park system. It identifies the goals, objectives, actions and criteria or standards that guide each aspect of park administration, and sets forth the specific 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 2006 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.

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, and current public uses and existing development, measurable objectives are set to achieve the desired allocation of the physical space of the park. These objectives identify use areas and propose the types of facilities and programs as well as 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)


FLAGLER COUNTY
Pellicer Creek Corridor Conservation Area
Atlantic Ocean
Graham Swamp Conservation Area
Lehigh Woods
Leigh Greenway
Betty Steflik Memorial Preserve
Bulow Plantation Ruins Historic State Park
Gamble Rogers Memorial State Recreation Area at Flagler Beach
North Peninsula State Park
Bulow Creek State Park
Tomoka Marsh Aquatic Preserve
Addison Blockhouse Historic State Park
Tomoka State Park
Holly Hill
Daytona Beach
Hand Avenue Mitigation
South Palm Coast
Haw Creek Preserve
Hull Swamp Conservation Area
Lake Swamp Mitigation Bank
Relay Tract Conservation Easements
FLAGLER COUNTY
VOLUSIA COUNTY
Heart Island Conservation Area
Plum Creek Rayonier/Hutton Conservation Easement
Plum Creek Volusia/Pineland Conservation Easement
Caraway Lake Sanctuary
Clifton Sanctuary
De Leon Springs State Park
Tiger Bay State Forest
Lake Woodruff National Wildlife Refuge
Clark Bay Conservation Area
95
100
1
5
9
11
40
4
Legend
Park Boundary
Interstates
FDOT US Routes
FDOT State Routes
FDOT Local Roads
Conservation and Recreation Lands
Federal Managed Lands
State Managed Lands
Local Managed Lands
Private Managed Lands
Aquatic Preserves
Land Use
Developed
Undeveloped
NORTH PENINSULA STATE PARK
N
0 1.25 2.5 5 Miles
Florida Department of Environmental Protection
Division of Recreation and Parks
VICINITY MAP


Intracoastal Waterway
Betty Steffik Memorial Preserve
A1A
FLAGLER BEACH
FLAGLER COUNTY
ATLANTIC OCEAN
Bulow River State Paddling Trail
Gamble Rogers Memorial State Recreation Area at Flagler Beach
CCCL
95
PALM COAST
North Peninsula State Park
Bulow Creek State Park
HIGH BRIDGE RD
JOHN ANDERSON DR
Florida Circumnavigational Saltwater Paddling Trail
VOLUSIA COUNTY
A1A
Tomoka Marsh Aquatic Preserve
Intracoastal Waterway
Bulow Creek State Park
Tomoka State Park
95
ORMOND BEACH
Legend
Paddling Trail Opportunities
FDOT Interstates
CCCL
Park Boundary
Managed Conservation Land
Counties
© Harris Corp, Earthstar Geographics LLC Earthstar Geographics SIO © 2017 Microsoft Corporation
NORTH PENINSULA STATE PARK
N
0 0.15 0.3 0.6 Miles
Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial, 2011
REFERENCE MAP

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 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.

DRP may provide the services and facilities outlined in this plan either with its own funds and staff or through an outsourcing contract. Private contractors may provide assistance with natural resource management and restoration activities or a concessionaire may provide services to park visitors in order to enhance the visitor experience. For example, a concessionaire could be authorized to sell merchandise and food and to rent recreational equipment for use in the park. A concessionaire may also be authorized to provide specialized services, such as interpretive tours, or overnight accommodations when the required capital investment exceeds that which DRP can elect to incur. Decisions regarding outsourcing, contracting with the private sector, the use of concessionaires, etc. are made on a case-by-case basis in accordance with the policies set forth in DRP's Operations Manual (OM).

Management Program Overview

Management Authority and Responsibility

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

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

The 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 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 DRP’s long-term intent in managing the state park:

- Provide administrative support for all park functions.
- Protect water quality and quantity in the park, restore hydrology to the extent feasible and maintain the restored condition.
- Restore and maintain the natural communities/habitats of the park.
- Maintain, improve or restore imperiled species populations and habitats in the park.
- Remove exotic and invasive plants and animals from the park and conduct needed maintenance-control.
- Protect, preserve and maintain the cultural resources of the park.
- Provide public access and recreational opportunities in the park.
- 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 DRP with wildlife management programs, including imperiled species management. The Florida Department of State (FDOS), Division of Historical Resources (DHR) assists staff to ensure protection of archaeological and historical sites. The Florida Department of Environmental Protection (DEP), Florida Coastal Office (FCO) aids staff in aquatic preserves management programs. The DEP, Bureau of Beaches and Coastal Systems aids staff in planning and construction activities seaward of the Coastal Construction Control Line (CCCL). In addition, the Bureau of Beaches and Coastal Systems aid the staff in the development of erosion control projects.

Public Participation

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 [INSERT Dates], respectively. Meeting notices were published in the Florida Administrative Register, [INSERT publication date, VOL/ISSUE], included on the Department Internet Calendar, posted in clear view at the park, and promoted locally. The purpose of the Advisory Group meeting is to

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

Other Designations

North Peninsula is not within an Area of Critical State Concern as defined in Section 380.05, Florida Statutes, and it is not presently under study for such designation. The park is a component of the Florida Greenways and Trails System, administered by the Department's Office of Greenways and Trails.

All waters within the park have been designated as Outstanding Florida Waters, pursuant to Chapter 62-302, Florida Administrative Code. Surface waters in this park are also classified as Class III waters by the Department. This park is adjacent to Tomoka Marsh Aquatic Preserve as designated under 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. Management measures expressed in this plan are consistent with the DRP's overall mission in natural systems 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 the 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.

Table 1. North Peninsula State Park Management Zones			
Management Zone	**Acreage**	**Managed with Prescribed Fire**	**Contains Known Cultural Resources**
NP-01	45.43	Y	Y
NP-02	65.87	Y	Y
NP-03	16.32	Y	N
NP-04a	29.48	Y	N
NP-04b	35.60	Y	N
NP-05	16.86	Y	N
NP-06	31.12	Y	N
NP-07	17.94	Y	N
NP-08	20.99	Y	Y
NP-09	65.27	N	Y
NP-10	54.18	N	N
NP-11	8.56	N	Y
NP-12	148.47	N	Y

Resource Description and Assessment

Natural Resources

Topography

North Peninsula State Park is located on the Atlantic coast of Florida on a barrier island which is bounded on the east by the Atlantic Ocean and on the west by the Intracoastal Waterway (Halifax River). Elevations at the unit range from about 24 feet above mean sea level down to sea level along the coast (see Topographic Map).

This unit is found within the Eastern Flatwoods District (Brooks 1981a). Within this district the unit is found in the St. Augustine-Edgewater Ridge subdivision of the Central Atlantic Coastal Strip physiographic division. This coastal strip was created or modified by shoreline processes during the Late Pleistocene when sea levels where at about 18 feet (6 to 8 feet above its present level). Specifically, the subdivision is characterized by a coquina ridge that extends from Anastasia Island southward to Cape Canaveral (Brooks 1981a).

Geology

This unit is underlain by one geologic deposit which consists of undifferentiated sand, shell, clay, marl, and peat that was laid down during the Holocene mostly less than 4,500 years before the present (Brooks 1981b).


NP-01
NP-03
NP-12
NP-02
NP-11
NP-04B
NP-08
NP-04A
NP-05
NP-10
NP-09
NP-06
NP-07
bing
NORTH PENINSULA STATE PARK
N
0 500 1,000 2,000 Feet
Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial: 2011
MANAGEMENT ZONES MAP


Lowest Point : -1.467 ft (sea level)
Highest Point : 26.247 ft
bing
NORTH PENINSULA STATE PARK
N
0 490 980 1,960 Feet
Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial: 2011
TOPOGRAPHIC MAP

Soils

The Natural Resources Conservation Service (formerly the U.S. Soil Conservation Service) identified five soil types in North Peninsula State Park in the Soil Survey of Volusia County. The locations of these soil types within the unit are shown on the Soils Map. Addendum 4 contains detailed descriptions of the soil types within this unit.

Limited soil erosion is currently known to occur at North Peninsula State Park. There are areas where foot trails to the beach have increased erosion potential. Beach walkovers should be constructed and foot trails should be planted and restored to prevent erosion. Interpretive measures, such as signage, should be used to discourage walking on the dunes. Management activities at the unit will follow generally accepted best management practices to prevent soil erosion and conserve soil and water resources on site.

Minerals

No deposits of commercially valuable minerals are evident.

Hydrology

North Peninsula State Park is located within the Upper East Coast Basin, which is comprised of a strip of coastal ridge extending from Jacksonville south to New Smyrna Beach and a narrow lagoon system (the Intracoastal Waterway) that separates the Atlantic Ocean from the mainland (Hand et al. 1996). The Intracoastal Waterway, which is referred to as the Halifax River along this section, forms the western border of much of the unit.

Two aquifers are found in the region of this unit (Hyde 1965). The Floridan aquifer along the east coast is highly mineralized and is thus not an important water source in this area; in addition, recharge to the Floridan aquifer in this area is minimal (Fernald and Patton 1984). The shallow aquifer, which is non-artesian, is the major water source for this part of the State. It consists primarily of Pleistocene and recent deposits of sand and shell, but in some areas it extends down to Miocene or Pliocene deposits. This shallow aquifer recharges mainly from local rainfall.

There are mosquito control ditches located in the estuarine tidal marsh community north and south of Highbridge Road along the Intracoastal Waterway; many of the mosquito control ditches have been removed as part of marsh restoration efforts.

Natural Communities

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

species management, imperiled species management [and population restoration] 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 dependant 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 that link natural communities across the landscape.

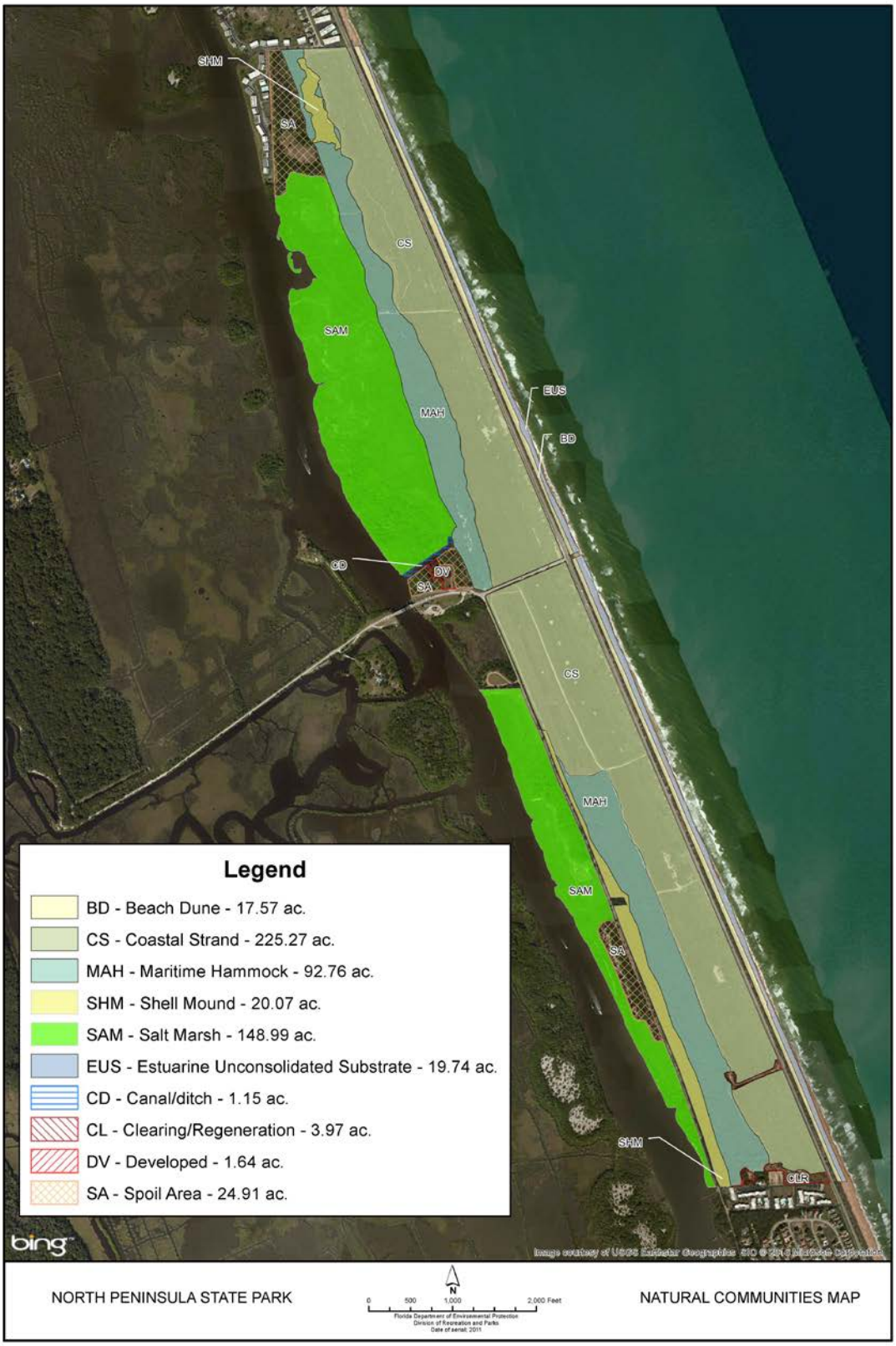
The park contains 6 distinct natural communities as well as altered landcover types (see Natural Communities Map). A list of known plants and animals occurring in the park is contained in Addendum 5.

Beach Dune

Desired Future Condition: A coastal mound or ridge 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 saltmeadow cordgrass (*Spartina patens*). Other typical species may include sea rocket (*Cakile* spp.), railroad vine (*Ipomea pes-caprae*), seashore paspalum (*Paspalum vaginatum*), beach morning glory (*Ipomea imperati*), and beach sunflower (*Helianthus debilis* ssp. *debilis*). Beach dune is ranked by the Florida Natural Areas Inventory (FNAI) as G3, S2 indicating that it is either very rare and local throughout its range, found locally in a restricted range, or vulnerable to extinction from other factors; in addition, it is imperiled in Florida because of rarity or because of vulnerability to extinction due to some natural or man-made factor.

Description and Assessment: The beach dune is located exclusively in the eastern portion of the park, on the east side of State Road A1A. This community is located within management zones NP-03 and NP-08. This community is considered to be in good condition. The construction of State Road A1A on the ecotone between the beach dune and coastal strand communities resulted in direct habitat loss to both of


Legend
9 - Beaches
12 - Canaveral sand, 0 to 5 percent slopes
31 - Palm Beach gravelly sand, 0 to 8 percent slopes
39 - Udarents, smoothed
41 - Palm Beach-Paola association, 2 to 8 percent slopes
67 - Turnbull muck
68 - Turnbull variant sand
99 - Water
39
31
12
67
68
9
99
41
bing
NORTH PENINSULA STATE PARK
N
0 500 1,000 2,000 Feet
SOILS MAP


SHM
SA
CS
SAM
MAH
EUS
BD
CD
DV
SA
CS
MAH
SAM
SA
SHM
CLR
Legend
BD - Beach Dune - 17.57 ac.
CS - Coastal Strand - 225.27 ac.
MAH - Maritime Hammock - 92.76 ac.
SHM - Shell Mound - 20.07 ac.
SAM - Salt Marsh - 148.99 ac.
EUS - Estuarine Unconsolidated Substrate - 19.74 ac.
CD - Canal/ditch - 1.15 ac.
CL - Clearing/Regeneration - 3.97 ac.
DV - Developed - 1.64 ac.
SA - Spoil Area - 24.91 ac.
bing
NORTH PENINSULA STATE PARK
N
0 500 1,000 2,000 Feet
NATURAL COMMUNITIES MAP

these communities. The presence of the road also results in roadkills of numerous wildlife species, such as gopher tortoises (*Gopherus polyphemus*) and eastern spotted skunks (*Spilogale putorius*). The primary dune at this unit rises 10-15 feet above MSL and is characterized by a steep foredune that slopes down to a flat terrace that terminates in a low scarp 3-4 feet above the beach. The vegetative cover of the crest and foredune of this community are largely undisturbed except for occasional pedestrian paths. The dominant vegetation on the foredune is sea oats. Other plants include beach croton (*Croton punctatus*), prickly-pear cactus (*Opuntia stricta*), saw palmetto (*Serenoa repens*), firewheel (*Gaillardia pulchella*), and railroad vine (*Ipomoea pes-caprae*). As is typical for this type of habitat, nearshore sand and primary dune sand are extremely mobile. High-energy waves striking the shoreline, north to south littoral drift, and wind movement of dry sand along beachfront and dune profiles all contribute to this effect. Overall, the rates of sand accretion and loss in this community are approximately equal over the course of the year; as a result, this section of coast is relatively stable. The past construction of a pedestrian dune crossover should further protect this area from physical impacts and thereby promote natural accretion processes.

General Management Measures: As mentioned above, the beach dune is in good condition. Periodic surveys to detect and remove any new exotic plant species will continue. If necessary, enforcement of individuals crossing over to the beach outside designated walkways should also occur.

Coastal Strand

Desired Future Condition: Characterized by stabilized, wind-deposited coastal dunes that are thickly vegetated with evergreen salt-tolerant shrubs. This is a community that generally lies between the beach dune and maritime hammock, scrub or tidal swamp. Coastal strand dunes contain deep, well-drained sands that are generally quite stable but become susceptible to severe damage if the vegetation is significantly disturbed. Temperate plant species dominate including saw palmetto (*Serenoa repens*), dwarfed cabbage palms (*Sabal palmetto*), tough bully (*Sideroxylon tenax*), yaupon, holly (*Ilex vomitoria*), Hercules' club (*Zanthoxylum clava-herculis*), and dwarfed, shrubby forms of red bay (*Persea borbonia*) and live oak (*Quercus virginiana*). Smooth-domed canopies develop as the taller vegetation is "pruned" by the windblown salt spray that kills the outer buds. This process is not as prevalent on the west coast of Florida or on the lee-side of islands due to prevailing easterly winds. Significant debate exists on the relative occurrence of natural fires compared to inland pyric communities. The DRP Fire Management Standard estimates that the appropriate fire return interval to be between four and 15 years. However, variability outside this range may occur based on site-specific conditions and management goals. Coastal strand is ranked by FNAI as G3, S2 indicating that it is either very rare and local throughout its range, found locally in a restricted range, or vulnerable to extinction from other factors; in addition, it is imperiled in Florida because of rarity or because of vulnerability to extinction due to some natural or man-made factor.

Description and Assessment: The coastal strand is located exclusively on the eastern portion of the park, west of State Road A1A. This community is located

within management zones NP-01, NP-02, NP-04A, NP-04B, NP-05, NP-06, and NP-07. Historically the coastal strand extended further to the east but was truncated with the development of State Road A1A. This community is considered to be in good condition. This community, which has a dense midstory of sand live oak (*Quercus geminata*), saw palmetto, tough bully (*Sideroxylon tenax*), and snowberry (*Chiococca alba*), supports at least 3 families of Florida scrub-jays (*Aphelocoma coerulescens*). Over time, gaps in the vegetation of this community began to close in, rendering portions of the community increasingly unsuitable for scrub-jays. The majority of the coastal strand community has been prescribed burned and/or mowed since the last unit management plan. Highbridge Road fragments the community into two blocks, and serves as the catalyst for roadkills as wildlife attempt to reach other areas of the park.

Scattered small infestations of Brazilian pepper and cogongrass (*Imperata cylindrica*) have been found within this community, and are being treated on an ongoing basis. Rose Natalgrass (*Melinis repens*) and Durban crowfootgrass (*Dactyloctenium aegyptium*) are thriving along the firebreaks and will require ongoing treatment. At least one dumpsite is located in NP-06; it contains miscellaneous debris, including carpeting.

General Management Measures: As mentioned above, the coastal strand is in good condition. An exotic plant removal project was funded by the Florida Fish and Wildlife Conservation Commission's Upland Invasive Plant Management Program (FFWCC UIPM) in fiscal year 2014-2015 and targeted invasive grasses on the perimeter of the coastal strand community. The remaining infestations of exotic vegetation should be removed, and prescribed burning should be continued. Removal of the debris from the dumpsite should be pursued.

Maritime Hammock

Desired Future Condition: A coastal evergreen hardwood forest occurring in narrow bands along stabilized coastal dunes. Canopy species will typically consist of live oak (*Quercus virginiana*), red bay (*Persea borbonia*), and cabbage palm (*Sabal palmetto*). The canopy is typically dense and often salt-spray pruned. Understory species may consist of yaupon holly (*Ilex vomitoria*), saw palmetto (*Serenoa repens*), and/or wax myrtle (*Myrica cerifera*). Very sparse or absent herbaceous groundcover will exist. Maritime hammock is ranked by FNAI as G3, S2 indicating that it is either very rare and local throughout its range, found locally in a restricted range, or vulnerable to extinction from other factors; in addition, it is imperiled in Florida because of rarity or because of vulnerability to extinction due to some natural or man-made factor.

Description and Assessment: The maritime hammock community of the park is in good to excellent condition. This community is composed of an overstory of live oak (*Q. virginiana*), southern magnolia (*Magnolia grandiflora*), silkbay (*Persea humilis*), and red cedar (*Juniperus virginiana*), and a midstory of tallowwood (*Ximenia americana*), yaupon (*Ilex vomitoria*), American holly (*I. opaca*), tough bully, and Hercules-club (*Zanthoxylum clava-herculis*). The ground layer is sparse, with coontie (*Zamia pumila*), foxtail (*Setaria* sp.), and woodsgrass (*Oplismenis hirtellus*)

represented. In areas where ground disturbance occurs, Brazilian pepper is present. Remnants of a spoil deposition site occurs on the northwest portion of the park, east of a residential community; it is undergoing succession back to the surrounding maritime hammock community. The ground layer is composed of an abundance of native plants, including various asters, prickly-pear cactus, sand cordgrass, hairawn muhly (*Muhlenbergia capillaris*), and broomsedge (*Andropogon* spp.); trees and shrubs, such as saw palmetto, cabbage palm (*Sabal palmetto*), and wax myrtle (*Myrica cerifera*) are becoming re-established from the adjacent community. As noted above for the coastal strand community, Highbridge Road also fragments the maritime hammock and is a location for wildlife roadkill.

General Management Measures: An exotic plant removal project funded by the FFWCC UIPM targeting Brazilian pepper and other FLEPPC Category I and II species was funded in fiscal year 2013-2014; an additional project has been funded for fiscal year 2015-2016. Monitoring and treatment of exotic plants will continue for this community.

Shell Mound

Desired Future Condition: Small hills composed entirely of shells (clams, oysters, whelks) discarded by generations of Native Americans which support an assemblage of calciphilic plant species. A rich calcareous soil developed on the deposited shells which supports a diverse hardwood forest on undisturbed mounds. Central Florida mounds are often characterized by tropical species occurring north of their normal range. Shell mound is ranked by FNAI as G2, S2 indicating that it is imperiled globally because of rarity or because of vulnerability to extinction due to some natural or man-made factor; in addition, it is imperiled in Florida because of rarity or because of vulnerability to extinction due to some natural or man-made factor.

Description and Assessment: Occurrences of shell mounds are found in NP-04A, NP-09, and NP-12. With the exception of having a greater density of red cedar and epiphytes (e.g., bromeliads (*Tillandsia* spp.)), the vegetation of this community is virtually indistinguishable from maritime hammock. The community is in fair to good condition.

General Management Measures: Monitoring and treatment of exotic plants will continue in this community.

Salt Marsh

Desired Future Condition: Salt marsh is a largely herbaceous community that occurs in the portion of the coastal zone affected by tides and seawater and protected from large waves. Salt marsh typically will have distinct zones of vegetation based on water depth and tidal fluctuations. Saltmarsh cordgrass (*Spartina alterniflora*) will dominate the seaward edge-the areas most frequently inundated by tides. Needle rush (*Juncus roemerianus*) will dominate the higher, less frequently flooded areas. Other characteristic species include Carolina sea lavender (*Limonium carolinianum*), perennial saltmarsh aster (*Symphyotrichum tenuifolium*), wand loosestrife (*Lythrum lineare*), marsh fimbry (*Fimbristylis spadicea*), and shoreline seapurslane

(*Sesuvium portulacastrum*). A landward border of salt-tolerant shrubs including groundsel tree (*Baccharis halimifolia*), saltwater falsewillow (*Baccharis angustifolia*), marshelder (*Iva frutescens*), and Christmasberry (*Lycium carolinianum*) may exist. Soil salinity and flooding will be the two major environmental factors that influence salt marsh vegetation. While there is little data on natural fire frequency in salt marshes, fire probably will occur sporadically and with a mosaic pattern, given the patchiness of the fuels intermixed with creeks, salt flats, etc. Salt marsh is ranked by FNAI as G5, S4 indicating that it is demonstrably secure globally and apparently secure in Florida, although it may be rare in parts of the range.

Description and Assessment: Salt marsh can be found in NP-10 and NP-12. This community is tidally inundated and supports plant species such as saltmarsh cordgrass, saltgrass (*Distichlis spicata*), needle rush, black mangrove (*Avicennia germinans*), bushy seaside oxeye (*Borrichia frutescens*), and perennial glasswort (*Salicornia virginica*). Since 2009, district and park staff as well as staff from other public agencies (such as St. Johns River Water Management District) have been focused on salt marsh restoration activities at North Peninsula. The areas targeted for restoration were identified on historic aerials and maps as salt marshes; the majority of the salt marsh community was utilized for spoil deposition sites during dredging projects for the Intracoastal Waterway. By the end of 2016, approximately 94 acres of salt marsh had been restored at the park, and the majority of the community was in some phase of restoration.

General Management Measures: Restoration of the salt marsh community should continue; it will be necessary to monitor for and treat exotic plants along the perimeter of the restoration areas.

Marine Unconsolidated Substrate

Desired Future Condition: Marine unconsolidated substrate will consist of expansive unvegetated, open areas of mineral based substrate composed of shell, coralgal, marl, mud, and/or sand (sand beaches). Desired conditions include preventing soil compaction, dredging activities, and disturbances such as the accumulation of pollutants.

Description and Assessment: Marine unconsolidated substrate can be found east of State Road A1A, in NP-03 and NP-08. This community is tidally inundated on a daily basis, and is largely devoid of plant species. It is utilized by shorebirds for resting, loafing, and feeding; sea turtle nesting is documented yearly for both zones.

General Management Measures: This community is currently in its desired future condition.

Altered Landcover Types

Canal/Ditch

Desired Future Condition: The ditches will have exotic plant infestations removed along their edges.

Description and Assessment: Isolated mosquito control ditches are present on the west side of NP-11 and the north side of NP-12. The mosquito ditches that run through the maritime hammock community of NP-11 are lined with mangroves, while the ditch in the maritime hammock of NP-12 is lined with live oak, red cedar, and other midstory species.

General Management Measures: Staff will continue to conduct exotic plant removal along the ditches located in the maritime hammock.

Spoil Area

Desired Future Condition: The spoil areas should be investigated for opportunities to restore them back to their original condition, to the greatest extent possible.

Description and Assessment: Several acres of spoil can be found in NP-10 as well as NP-12. In NP-10 the east side of the spoil area is dominated by maritime hammock species such as live oak and red cedar; in areas without a closed canopy exotic plant species such as rose Natalgrass, simpleleaf chastetree (*Vitex trifolia*), torpedograss (*Panicum repens*), and cogongrass (*Imperata cylindrica*) have become established.

The spoil area in NP-12 is undergoing succession back to the surrounding maritime hammock community. The ground layer is composed of an abundance of native plants, including various asters, prickly-pear cactus, sand cordgrass, hairawn muhly (*Muhlenbergia capillaris*), and broomsedge (*Andropogon* spp.); trees and shrubs, such as saw palmetto, cabbage palm, and wax myrtle are becoming re-established from the adjacent community. Maritime hammock species such as red cedar and live oak dominate the edges of this area, with occasional exotic species such as Brazilian pepper and Chinese tallowtree (*Triadica sebifera*) present.

General Management Measures: Staff will continue to monitor the areas and control exotic plant species.

Developed Areas

Description and Assessment: There is a stabilized parking area on the east side of State Road A1A in management zone NP-03; there is also a stabilized parking area north of Highbridge Road, on the south side of NP-11.

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

General Management Measures: Staff will continue to control invasive exotic plant species in developed areas of the park.

Utility Corridor

Description and Assessment: Utility corridors are located in four areas of the park. One forms the boundary between NP-01 and NP-02, one is located along the west side of State Road A1A (adjacent to NP-01, NP-02, NP-04B, NP-05, NP-06, and NP-07), one is located on the north side of Highbridge Road (adjacent to NP-02 and NP-11) and one is located along the east side of John Anderson Highway (adjacent to NP-04A and NP-09).

General Management Measures: Staff will continue to monitor the area and treat exotic plant species as they are detected.

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.

North Peninsula State Park is involved in the statewide marine turtle-monitoring program. Three species of marine turtles-loggerhead (*Caretta caretta*), green (*Chelonia mydas*) and leatherback (*Dermochelys coriacea*)-use the beach within the park for nesting. During the nesting season, park staff conduct daily surveys of the beach recording the previous night's activities including number of crawls, false crawls, species identification, and number of nests. The data collected from the park are used by state and federal agencies to formulate policy on nesting marine turtles.

The population of nesting marine turtles is stable but tends to follow statewide trends. For example, if the population of nesting loggerhead turtles is in decline around the state, this trend is also reflected in the regional population nesting at the park. Since 2009, 1028 sea turtle nests have been documented and monitored by park staff; this total includes 914 loggerheads, 108 greens, and six leatherbacks.

The major threats to nesting marine turtles, their nests, and turtle hatchlings are predation from natural and introduced predators. At North Peninsula, loss of nests and/or hatchlings has occurred due to erosion from storms and predation from ghost crabs (*Ocypode quadrata*), fire ants (*Solenopsis* sp.), raccoons (*Procyon lotor*), domestic dogs (*Canis familiaris*), and coyote (*Canis latrans*). Any lighting that is currently in or will be added to the park will be "turtle-friendly" as recommended by the FWC Marine Turtle Lighting guidelines to avoid the possibility of disorientation events.

The gopher tortoise population at the park is stable and has no major threats other than roadkill on SR A1A and Highbridge Road. Management activities such as prescribed burning and exotic species removal will be beneficial to the continued persistence of gopher tortoises at North Peninsula.

The imperiled plant species at North Peninsula is located primarily in the maritime hammock community, where the population is stable. The major threat to this plant species comes from exotic plant infestations reducing the amount of suitable habitat that the species depend on. Ongoing exotic removal by both park staff and contractors continue to reduce this threat.

Florida manatee are occasionally seen in the Intracoastal Waterway and other waters associated with the park. The population tends to follow regional and local trends. The major threat to manatees is collisions with boats. Signage for boaters (such as those designating no-wake zones) are posted and maintained by Florida Fish and Wildlife Conservation Commission.

Many of the imperiled bird species are not residents of the park but have been observed using the natural resources of the park. The park will continue to implement a natural systems management approach that involves managing the resources as a complete system. This strategy will provide for the resources needed to assist in the recovery and stabilization of the imperiled bird species that use the park.

While not on the list, the pallid beach mouse (*Peromyscus polionotus decoloratus*) is most notable because of its presumed extinction. The historic range of this subspecies included North Peninsula State Park and Gamble Rogers Memorial State Recreation Area at Flagler Beach. Surveys for this small mammal were conducted between 1959 and 1979, with exhaustive searches performed in the 1970s (Humphrey 1992). Based on these surveys, Humphrey and Barbour (1981) declared the pallid beach mouse to be extinct. Although the cause of extinction is not documented, habitat loss, predation from feral or domestic house cats, and competition from house mice (*Mus musculus*) directly contribution to the extinction of this small mammal (Humphrey 1992).

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

Table 2. Imperiled Species Inventory						
Common and Scientific Name	**Imperiled Species Status**				**Management Actions**	**Monitoring Level**
	FWC	**USFWS**	**FDACS**	**FNAI**		
PLANTS						
Spiked crested coralroot *Hexalectris spicata*			LE		2,10	Tier 2
REPTILES						
Loggerhead sea turtle *Caretta caretta*	LT	LT		G3,S3	8,10,13	Tier 3
Green sea turtle *Chelonia mydas*	LE	LE		G3,S2S3	8,10,13	Tier 3
Leatherback sea turtle *Dermochelys coriacea*	LE	LE		G2,S2	8,10,13	Tier 3
Gopher tortoise *Gopherus polyphemus*	LT	C		G3,S3	1,2,6,8,10,13	Tier 1,Tier 2
BIRDS						
Florida scrub-jay *Aphelocoma coerulescens*	LT	LT		G2,S2	1,2,3,6,7,8,10,13	Tier 3, Tier 4
Red Egret *Egretta rufescens*	NT			G4/S2		
Snowy Egret *Egretta thula*	SSC			G5/S3		

Table 2. Imperiled Species Inventory						
Common and Scientific Name	**Imperiled Species Status**				**Management Actions**	**Monitoring Level**
	FWC	**USFWS**	**FDACS**	**FNAI**		
Wood stork *Mycteria americana*	LT	LT		G4,S2	2,4,8,10,13	Tier 1
Brown pelican *Pelecanus occidentalis*	SSC			G4,S3	2,8,10,13	Tier 1
Black Skimmer *Rhynchops niger*	SSC			G5, S3	10, 13	Tier 3
Least tern *Sternula antillarum*	LT			G4,S3	8,10,13	Tier 2
MAMMALS						
North Atlantic Right Whale *Eubalaena glacialis glacialis*	EN	EN				Tier 1
Florida manatee *Trichechus manatus*	LE	LE		G2,S2	10,13	Tier 1

Management Actions:

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

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.

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

Exotic and Nuisance Species

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

Exotic plant removal efforts by park and district staff and volunteers as well as contractual labor are ongoing at North Peninsula. Exotic removal projects with contractual labor took place in fiscal years 13-14, 14-15, and 15-16, targeting nearly all the exotic plant species included in Table 3; those species not included in those projects have been treated by park and/or district staff and volunteers. Since fiscal year 08-09, over 259 acres of exotic plant species have been treated at North Peninsula. Periodic surveys are conducted by park and district staff to identify and treat new and existing infestations of exotic plants.

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 greatest ecological damage.

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

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.

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 2017). The table also identifies relative distribution for each species and the management zones in which they are known to occur. An explanation of the codes is provided following the table. For an inventory of all exotic species found within the park, see Addendum 5.

Table 3. Inventory of FLEPPC Category I and II Exotic Plant Species			
Common and Scientific Name	**FLEPPC Category**	**Distribution**	**Management Zone (s)**
PLANTS			
Sisel Hemp *Agave sisalana*	II	1	NP-03, 08
Sprenger's asparagus-fern *Asparagus aethiopicus*	I	2	NP-07, NP-09
Durban crowfootgrass *Dactyloctenium aegyptium*	II	3	NP-01, NP-02, NP-04A, NP-6, NP-07, NP-09
Cogongrass *Imperata cylindrica*	I		
		5	NP-06
Lantana *Lantana camara*	I	3	NP-01, 02, 04A&B,05-07
Rose Natalgrass *Melinis repens*	I	2	NP-01, NP-02
		3	NP-06, NP-07, NP-09
Tuberous sword fern *Nephrolepis cordifolia*	I	2	NP-09
Torpedo grass *Panicum repens*	I	4	NP-11
Castor Bean *Ricinus communis*	II	2	NP-09, 10, 12
Brazilian pepper *Schinus terebinthifolius*	I	2	NP-02, NP-04a, NP-07, NP-09, NP-11, NP-12
		3	NP-10
Wedelia *Sphagneticola trilobata*	II	2	NP-09, NP-12
Chinese tallow tree *Triadica sebifera*	I	2	NP-12
Simpleleaf chastetree *Vitex trifolia*	II	2	NP-10

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.

Special Natural Features

The coastal strand habitat at the park supports at least three families of Florida scrub jays. This federally threatened species is being relegated to increasingly reduced patches of habitat throughout its range, and especially in northeast Florida. Population monitoring, in conjunction with habitat management, needs to continue at North Peninsula to document and protect the survival of scrub jays at the park.

The park has been listed as a site on the Great Florida Birding Trail.

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 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.

An archaeological predictive model has been completed for the park (Collins et al. 2010). The model predicts areas of high, medium, and low probability of historical and/or cultural resources. This model was created for terrestrial site sensitivity only, although off-shore and near-shore modeling for the occurrence of historic shipwrecks is possible with different developed matrix values and corresponding data such as bathymetry and other remote sensing data. Two-thirds of the park falls in a high to medium sensitivity area. The terrestrial site model, when verified using the Florida Master Site File site location data, captured 7 of the 8 recorded sites known at the time in the designated high and medium sensitivity areas. The model also correctly indicated 87% of known sites in a mapping that covered 74.4% of the model area.

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: The Florida Master Site File currently lists nine recorded archaeological sites within North Peninsula State Park: VO00065, VO00256, VO07182, VO07315, VO07451, VO07454, VO07456, VO07457, and VO07458. Northeast Florida has a rich cultural prehistory and history. North Peninsula State Park falls within the East

and Central Lake Archaeological Region (Milanich and Fairbanks 1980). The area around the park was occupied and utilized by Native Americans during the full sequence of Pre-Columbian cultural periods, beginning with the Paleo-Indian and continuing through the Archaic, Mount Taylor, Orange, Transitional, and St. Johns Period. Some of the sites within the park are of prehistoric origin (middens) and some are of more recent (20th century) origin (e.g., quarries and debris piles). While not a recorded site within North Peninsula, State Road A1A was designated as a Florida State Scenic Highway in 2000 and a National Scenic Byway in 2002.

Condition Assessment: All of the sites within the park are in fair to poor condition, due primarily to human impacts such as adjacent residential development and road development. Several sites (VO00065, VO00256, and VO07458) have been damaged by road and building construction, while most of the other sites show evidence of looting.

General Management Measures: In order to ensure that the cultural sites within the park are preserved in good condition in perpetuity, protected from physical threats and interpreted to the public, regular site inspections will be continued. Where and when necessary, stabilization techniques such as backfilling and removal of large trees may be utilized. An increased presence by law enforcement personnel should be requested if active looting is discovered.

Historic Structures

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

Description: There are no known historic structures or landscapes located at North Peninsula State Park.

Collections

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

Description: There have been no collection of artifacts housed at North Peninsula State Park.

General Management Measures: A Scope of Collections Statement has not been developed for the park. As the DRP Operations Manual requires that each park adopt a Scope of Collections Statement, this document needs to be developed as a guide for any future collections within North Peninsula State Park.

Detailed management goals, objectives and actions for the management of cultural resources in this park are discussed in the Cultural Resource Management Program section of this component. Table 4 contains the name, reference number, culture or

period, and brief description of all the cultural sites within the park that are listed in the Florida Master Site File. The table also summarizes each site's level of significance, existing condition and recommended management treatment. An explanation of the codes is provided following the table.

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

Site Name and FMSF #	Culture/Period	Description	Significance	Condition	Treatment
VO00065 Halifax River 2	Pre-Historic	Archaeological Site	NS	P	P
VO00256 Halifax Creek Midden	Pre-Historic	Archaeological Site	NE	P	P
VO07182 Dune Rubble	Historic	Archaeological Site	NE	P	P
VO07315 Gamble Boiler	Historic	Archaeological Site	NE	F	P
VO07451 Debris Pile	Historic	Archaeological Site	NE	P	P
VO07454 Quarry 1	Historic	Archaeological Site	NE	F	P
VO07456 Quarry 2	Historic	Archaeological Site	NE	F	P
VO07457 Cedar Spot	Pre-Historic	Archaeological Site	NE	F	P
VO07458 High Bridge	Pre-Historic	Archaeological Site	NE	P	P

Significance:

NRL	National Register listed
NR eligible	National Register
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 North Peninsula State Park Please refer to the Implementation Schedule and Cost Estimates in the Implementation Component of this plan for a consolidated spreadsheet of the recommended actions, measures of progress, target year for completion and estimated costs to fulfill the management goals and objectives of this park.

While, 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 Sections 253.034 and 259.037, Florida Statutes.

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

Natural Resource Management

Hydrological Management

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

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

Objective A: Conduct/obtain an assessment of the park's hydrological restoration needs.

Park staff will continue to monitor the hydrological functions within the park and assess the park's natural communities for future restoration needs. Park staff will continue to work cooperatively with staff from St. Johns River Water Management District and will explore funding opportunities to further study the area's hydrology to identify best management practices for the park's hydrological resources.

Objective B: Restore natural hydrological conditions and functions to approximately 20 acres of salt marsh natural community.

Park staff will continue to work with staff from St. Johns River Water Management District and other entities to identify areas of the salt marsh community that can be restored and facilitate restoration projects to accomplish this objective.

Natural Communities Management

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

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 the FFS.

Objective A: Within 10 years, have 150 acres of the park maintained within the optimum fire return interval.

Action 1 Develop/update annual burn plan

Action 2 Manage fire dependent communities by burning between 39.3-91.7 acres annually.

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

Table 5. Prescribed Fire Management

Natural Community	Acres	Optimal Fire Return Interval (Years)
Coastal Strand	233.6	3-7
Annual Target Acreage	33.4-77.9	

Prescribed fire is planned for each burn zone on the appropriate interval. The park's burn plan is updated annually because fire management is a dynamic process. To provide adaptive responses to changing conditions, fire management requires careful planning based on annual and very specific burn objectives. Each annual burn plan is developed to support and implement the broader objectives and actions outlined in this ten-year management plan.

The only fire-dependent community at North Peninsula State Park is the coastal strand, located in NP-01, NP-02, NP-04A, NP-04B, NP-05, NP-06, NP-07, and NP-09. Prescribed burns and/or mechanical treatment has occurred in the past five years in most of these zones. Firebreaks around each zone are adequate to allow for the safe and effective use of prescribed fire and will be maintained yearly if not more frequently.

Prescribed fire is the primary tool to manage the coastal strand community for fire-dependent wildlife, especially gopher tortoises and Florida scrub jays. Both species benefit from and are dependent upon a frequent fire return interval. In both cases, fire can create openings in the vegetation where food plants can grow (in the case of gopher tortoises) and Florida scrub jays can cache acorns and find insects to consume. Frequent fire also reduces the structure of the vegetation to a height preferred for nesting, roosting, and home range defense for scrub jays.

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, 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 Community Restoration: In some cases, the reintroduction and maintenance of natural processes is not enough to reach the desired future conditions for natural communities 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 may 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 community 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, and small-scale vegetation management.

Following are the natural community/habitat restoration and maintenance actions recommended to create the desired future conditions in the salt marsh community (see Desired Future Conditions Map).

Objective B: Conduct habitat/natural community restoration activities on 20 acres of salt marsh natural community

Action 1 Develop/update site specific restoration plan
Action 2 Implement restoration plan

Since 2009, staff from within the park as well as other public agencies (such as St. Johns River Water Management District) have been focused on salt marsh restoration activities at North Peninsula. The areas targeted for restoration were identified on historic aerials and maps as salt marshes within NP-10 and NP-12; the majority of the salt marsh within these zones was utilized for spoil deposition sites during dredging projects for the Intracoastal Waterway. By the end of 2015, 60 acres of salt marsh have been restored at the park, and the majority of the community will be in some phase of restoration. As additional phases of salt marsh restoration are considered, site-specific restoration plans will be developed and updated, then implemented.

Natural Community 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. Currently there are no natural community improvement projects planned at the park.

Imperiled Species Management

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

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

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

Ongoing inventory and monitoring of imperiled species in the state park system is necessary to meet 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 A: Develop / Update baseline imperiled species occurrence inventory lists for plants and animals.

Action 1 Update the species list for the park.

DRP staff will continue to update the imperiled species inventory list for the park. Partnerships with other agencies, organizations, and academic institutions to assist in the inventory will be developed when possible.

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

Action 1 Implement monitoring protocols for four imperiled animal species.

North Peninsula State Park is an active participant in the statewide marine turtle monitoring program. Monitoring protocols have been established by FWC. Three species of marine turtles-loggerhead, green, and leatherbacks-use the beach for nesting. The park serves as a state index and survey beach for nesting marine turtles. During the nesting season, park staff conduct daily surveys of the beach recording the previous night's activities including number of crawls, false crawls, species identification, and number of nests. In addition to the daily surveys, park staff also participate in the state's marine turtle stranding and salvage program that collects data on stranded, injured, or dead marine turtles. The data collected from the park are used by state and federal agencies to formulate policy on nesting marine turtles. Monitoring of the Florida scrub-jay population will continue.

Objective C: Monitor and document one selected imperiled plant species in the park.

Action 1 Implement monitoring protocols for one imperiled plant species.

One plant species, green ladies'-tresses (*Spiranthes polyantha*), will continue to be monitored and additional occurrences will be documented. District and park staff have monitored this species for years using a monitoring plan created by District biological staff.

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 A: Annually treat 16 acres of exotic plant species in the park.

Action 1 Annually develop/update exotic plant management work plan.

Action 2 Implement annual work plan by treating 16 acres in the park, annually, and continuing maintenance and follow-up treatments, as needed.

Park staff will conduct exotic removal treatments at the park for all Category I and II invasive exotics, as well as exotic species identified that are currently not listed under the FLEPPC listing. The goal will be to treat exotic species that either have resprouted or have recruited into natural communities following previous exotic removal treatments. All communities, including ruderal and developed, will be targeted. Continuous monitoring and maintenance activities to control re-growth and new infestations will be implemented by park staff. Vegetative surveys will continue to be conducted to ascertain the presence of new exotic species.

Objective B: Implement control measures on two nuisance and exotic animal species in the park.

Action 1 Implement control measures on two nuisance and exotic animal species in the park, with continued follow-up as necessary.

Control measures will focus on maintaining predation levels on marine turtle nests at or below those levels established by the FWC for State Index Nesting Beaches. Raccoons (*Procyon lotor*) and feral hogs (*Sus scrofa*) are the primary predators that may be removed from the beach as needed. Feral hogs and nine-banded armadillos (*Dasypus novemcinctus*), while infrequent, cause great damage to natural and cultural resources and should be removed whenever encountered.

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 will implement the following goals, objectives and actions, as funding becomes available, to preserve the cultural resources found in North Peninsula 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 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 A: Assess and evaluate 9 of 9 recorded cultural resources in the park.

Action 1 Complete 9 assessments/evaluations of archaeological sites.

All recorded cultural sites should be assessed and evaluated at least once a year. During each evaluation, the entire site should be examined and threats such as erosion, pedestrian or bicycle damage, looting, damage from construction (e.g., firebreak construction), animal damage, plant or root damage or other factors that may cause deterioration of the site. As part of the assessments, the need for preservation and stabilization projects should be evaluated and determined.

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

Action 1 Ensure all known sites are recorded or updated in the Florida Master Site File.
Action 2 Develop a Scope of Collections Statement.
Action 3 Conduct oral history interviews.

As more information about cultural sites within the park is gathered, evaluations will need to be updated in the FMSF. Management should develop and implement a routine monitoring program that enables personnel to report on the location and condition of the recorded the parks' prehistoric and historic cultural resources. Any additional artifacts found should be recorded and updated in the FMSF as needed. Efforts should be made to conduct oral history interviews for the park and surrounding areas to help further guide cultural management decisions.

Objective C: Bring one of nine recorded cultural resources into good condition.

Action 1 Design and implement regular monitoring programs for nine cultural sites
Action 2 Create and implement a cyclical maintenance program for each cultural resource.

It would be possible to bring one cultural site-VO07454 (Quarry 1) into good condition; park staff should consult with district and BNCR staff on the appropriate techniques to utilize. Staff should continue to perform assessments and evaluations at least yearly and let management know if a maintenance program is needed for the individual sites. Sites should be prioritized based on their condition and the efficacy of restoration, rehabilitation, stabilization, or preservation activities. For many of the sites, prevention of looting and backfilling of looted locations may be the only activities needed.

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. Beach and inlet management practices affect beaches for long distances on either side of a particular project. DRP staff needs to be aware of and participate in the planning, design and implementation of these projects to ensure that park resources and recreational use are adequately considered and protected.

North Peninsula has three miles of beach within the park. Erosion is not a significant issue along the beach within the park, and no critically eroded areas are currently designated. No prior beach renourishment projects have taken place, and there are none planned. There are three imperiled species of marine turtles that use the beach for nesting. The park serves as a state index and survey beach for nesting marine turtles. Park staff conduct daily surveys during nesting season and these data are used by state and federal agencies to implement sea turtle protocols. There are rare but occasional issues with public parking along State Road A1A outside of the designated parking area; this leads to impacts to dune vegetation and erosion in the beach dune community. Enforcement of these no parking areas should continue to curb this activity. Public access to the beach is at a designated walkway leading to the beach from the parking area.

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.

An arthropod control plan has been established for this park.

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.

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 considered recommendations of the land management review team and updated this plan accordingly.

This park has not been subjected to a land management review.

LAND USE COMPONENT

Introduction

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

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

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

North Peninsula is located within Volusia County, about 16 miles north of Daytona Beach and 40 miles south of St. Augustine in the northeast part of the state.

According to the U.S. Census Data (2015), approximately 15% of residents in Volusia County identify as black, Hispanic or Latino, or another minority group. 42% of residents in Volusia County can be described as youth or seniors (U.S. Census 2010). 62% of the population in Volusia County are of working age (16 to 65) (U.S. Census Bureau 2010). Volusia County’s per capita personal income was $36,052 in 2014 (U.S. Bureau of Economic Analysis 2014).

The table below identifies significant resource-based recreation opportunities within 15 miles of North Peninsula State Park.

Table 6. Resource-Based Recreational Opportunities Near North Peninsula State Park

Name	Biking	Hiking	Swim / Beach Access	Boating / Paddling	Fishing	Wildlife Viewing	Picnicking	Overnight Stay	Hunting	Equestrian Facilities
Gamble Rogers Memorial State Recreation Area at Flagler Beach (FDEP)	✓	✓	✓	✓	✓	✓	✓	✓		
Graham Swamp Conservation Area (SJRWMD)	✓	✓			✓	✓				
Leigh Greenway Rail Trail (Flagler County)	✓	✓								
Betty Steflik Memorial Preserve (Flagler County)	✓	✓			✓	✓	✓			
Bulow Plantation Ruins Historic State Park (FDEP)	✓	✓				✓				
Bulow Creek State Park (FDEP)	✓	✓		✓		✓	✓			
Tomoka Marsh Aquatic Preserve (FDEP)				✓	✓	✓				
Addison Blockhouse Historic State Park (FDEP)		✓				✓	✓			
Tomoka State Park (FDEP)	✓	✓		✓	✓	✓	✓	✓		
Haw Creek Preserve (Flagler County)			✓	✓	✓	✓	✓	✓		
Heart Island Conservation Area (SJRWMD)	✓	✓			✓	✓		✓	✓	✓
De Leon Springs State Park (FDEP)	✓	✓	✓	✓	✓	✓	✓			
Pellicer Creek Conservation Area (SJRWMD)	✓	✓			✓	✓				✓
Lake Woodruff National Wildlife Refuge (USFWS)	✓	✓		✓	✓	✓			✓	✓
Clark Bay Conservation Area (SJRWMD)	✓	✓				✓			✓	✓
Tiger Bay State Forest (FFS)	✓	✓		✓	✓	✓	✓		✓	✓

The park is located in the Central East Vacation Region, which includes Brevard, Indian River, Martin, Okeechobee, St. Lucie, and Volusia counties (Visit Florida 2014). According to the 2014 Florida Visitor Survey, approximately 7.5% of domestic visitors to Florida visited this region. Roughly 92% visitors to the region traveled to the Central East for leisure purposes. The top activities for domestic visitors were beach/waterfront, visiting friends or relatives and culinary experiences. Spring was the most popular travel season, but visitation was very similar in the summer months. Most visitors traveled by non-air (77%), reporting an average of 4.1 nights and spending an average of $141 per person per day (Visit Florida 2014).

Florida's Statewide Comprehensive Outdoor Recreation Plan (SCORP) indicates that participation rates in this region for saltwater and freshwater beach activities, saltwater (boat and non-boat) fishing, saltwater and freshwater boat ramp use, freshwater boat fishing, visiting archaeological and historic sites, wildlife viewing, nature study, bicycle riding, hiking, horseback riding, picnicking, and RV camping are higher than the state average with demand for additional facilities increasing through 2020 (FDEP 2013).

Existing Use of Adjacent Lands

North Peninsula State Park is in Volusia County but the north boundary of the park is the county line between Flagler and Volusia. The existing land uses in Flagler County on the north boundary of the park include medium density residential, recreation, single family residential, and planned unit development. To the west of the park in Volusia County there are several different land uses including resource corridor, and residential planned unit development (this classification has been repealed). The southern boundary of the park is neighbored by a planned unit development zoning classification. Most of the uses of adjacent lands are compatible with uses of the park and natural resource protection.

Planned Use of Adjacent Lands

Future land use north of the park boundary in Flagler County includes medium density residential, a golf course, high density development, and commercial uses. The adjacent land in Volusia county include uses such as conservation, environmental systems corridor, and urban high intensity. These are the same designations found within park boundaries and are mostly compatible with park purpose and function. These uses should not threaten natural resource protection.

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.

Recreational Resource Elements

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

Land Area

North Peninsula is home to a variety of natural communities and diverse terrain. This provides unique opportunities for visitors for hiking, biking, and wildlife viewing.

Water Area

North Peninsula is situated between the Atlantic Ocean and the Intracoastal Waterway. The Intracoastal Waterway provides different fishing and wildlife viewing experiences than the beach and allows for visitors to experience multiple ecosystems close together.

Shoreline

North Peninsula State Park has more than three miles of beautiful beaches for visitors to enjoy. With only one public access point along this stretch of beach, the area is relatively untouched providing for relaxing beach experiences. Swimming and fishing are popular activities supported by the beach. The shores of the Intracoastal are also prime places to stop and picnic in the shade.

Natural Scenery

The natural scenery of the park provides for beautiful hiking, biking, and picnicking opportunities. The coastal strand trail through the north end of the park gives visitors the opportunity to view and interpret multiple rare and protected species which call the park home. The park has been listed as a site on the Great Florida Birding Trail.

Significant Habitat

Several portions of the park have undergone or are currently undergoing marsh restoration projects. These projects provide interpretive opportunities for visitors to see the process needed to restore environmental lands that have been damaged in the past. Additionally, once these projects are completed

visitors experience a healthy, functional salt marsh community. North Peninsula also provides habitat for the federally threatened Florida scrub-jay.

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

There are no previous uses associated with North Peninsula State 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.

The future land use designation for North Peninsula State Park is conservation with a small section designated for environmental systems corridor, and an even smaller section on the extreme southern end of the park for urban high intensity. Similarly, most of the park is zoned for conservation with the environmental systems corridor parcel zoned for resource corridor and the urban high intensity parcel is zoned for planned unit development. These uses are generally consistent with the purpose of the park with the exception of the small area for urban high intensity.

Current Recreational Use and Visitor Programs

North Peninsula currently has limited recreational activities available. The park has one beach access point on the north end of the park and a day use area at Smith Creek Landing. Smith Creek Landing offers hiking, fishing, wildlife viewing, canoeing, kayaking, and is a popular stop for cyclists. Due to the nature of the park, there are very limited recreational opportunities and access is limited.

North Peninsula State Park recorded 158,402 visitors in FY 2014/2015. By DRP estimates, the FY 2014/2015 visitors contributed $13,389,753 million in direct economic impact, the equivalent of adding 214 jobs to the local economy (FDEP 2015).

Other Uses

North Peninsula State Park has no other uses.

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 North Peninsula all wetlands and floodplain as well as beach dune, coastal strand, maritime hammock, shell mound, salt marsh, marine unconsolidated substrate, and known imperiled species habitat have been designated as protected zones. The park's current protected zone is delineated on the Conceptual Land Use Plan.

Existing Facilities

North Peninsula has limited facilities and access for recreational activities. The park contains no support facilities. (see Base Map)

Recreation Facilities

Smith Creek Landing Area
Restroom
Picnic Tables
Bike Station
Fishing Platform
Parking (15)

Beach Access Area
Dune Crossover
Parking (8)

Conceptual Land Use Plan

The following narrative represents the current conceptual land use proposal for this park. The conceptual land use plan is the long-term, optimal development plan for the park, based on current conditions and knowledge of the park's resources, landscape and social setting (see Conceptual Land Use Plan). The conceptual land use plan is modified or amended, as new information becomes available regarding the park's natural and cultural resources or trends in recreational uses, in order to adapt to changing conditions. Additionally, the acquisition of new parkland may provide opportunities for alternative or expanded land uses. The DRP develops a detailed development plan for the park and a site plan for specific facilities based on this conceptual land use plan, as funding becomes available.

During the development of the conceptual land use plan, the DRP assessed the potential impact of proposed uses or development on the park resources and applied that analysis to determine the future physical plan of the park as well as the scale and character of proposed development. Potential resource impacts are also 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 investigated in greater detail. Municipal sewer connections, advanced wastewater treatment or best available technology systems are applied for on-site sewage disposal. Creation of impervious surfaces is minimized to the greatest extent feasible in order to limit the need for stormwater management systems, and all facilities are designed and constructed using best management practices to limit and avoid resource impacts. Federal, state and local permit and regulatory requirements are addressed during facility development. This includes the design of all new park facilities consistent with the universal access requirements of the Americans with Disabilities Act (ADA). After new facilities are constructed, 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. [New and/or improved] activities and programs are also recommended and discussed below.

***Objective: Maintain the park's current recreational carrying capacity of 5,144 users per day*.**
The current facilities are sufficient and appropriate to maintain the current recreational carrying capacity of North Peninsula State Park and should continue. Improvements to existing facilities will improve visitor experiences.


INSET
DOCK
SMITH CREEK
COASTAL STRAND TRAIL
PICNIC AREA
FOOTBRIDGE
TRAILHEAD
RESTROOM
PARKING LOT
bing
COASTAL STRAND TRAIL
OCEAN SHORE BLVD
HIKING TRAIL
BOARDWALK
INSET
PARK ENTRANCE
PARKING LOTS
HIGH BRIDGE RD
ATLANTIC OCEAN
BULOW CREEK
INTRACOASTAL WATERWAY
HALIFAX CREEK
JOHN ANDERSON DR
A1A
Legend
Park Boundary
US Highway
County Road
Park Road Paved
Park Road Stabilized
Park Road Unstabilized
Hiking Trail
Walkways
Structures
Parking Lots
bing
Image courtesy of USGS Earthstar Geographics, SIO © 2016 Microsoft Corporation
NORTH PENINSULA STATE PARK
N
0 500 1,000 2,000 Feet
Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial: 2011
BASE MAP


Smith Creek Landing
Install Potable Water
Construct Raised Volunteer Site
or Employee Residence
Construct Canoe/Kayak Launch
Repair Northern Dune Crossover
Northern Access Area
Construct Parking Area
Construct A1A Crosswalk
Construct Paved Multi-Use Path between
Smith Creek Landing and A1A
HIGH BRIDGE RD
JOHN ANDERSON DR
OCEAN SHORE BLVD
A1A
Legend
Proposed Facilities
Park Boundary
Southern Access Area
Construct Parking Lot
Construct A1A Crosswalk
Construct Dune Crossover
NORTH PENINSULA STATE PARK
N
0 0.0475 0.095 0.19 Miles
Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial: 2011
CONCEPTUAL LAND USE PLAN

Objective: Expand the park's recreational carrying capacity by 4956 users per day.
The proposed facilities for the park will expand visitor access and provide for new resource-based recreational activities not currently offered at the park such as paddling as well as additional beach access.

Objective: Continue to provide the current repertoire of 2 interpretive, educational and recreational programs on a regular basis.
North Peninsula hosts a couple of interpretive and educational programs including guided walks focused on a theme such as shore birds, or plants held 2-3 times per year. The park has also hosted Plant This Not That which is a grant funded special event educating people on the identification of common exotic (non-native) plants, and the harm they cause the environment, as well as friendly native alternatives, including native butterfly plants.

Objective: Develop 1 new interpretive, educational and recreational programs.
With the extensive salt marsh restoration efforts, an educational program proposed is a CSO/FROGRS sponsored salt marsh restoration kayak tour at Smith Creek.

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, to improve the protection of park resources, and to streamline the efficiency of park operations. The following is a summary of improved and/or new facilities needed to implement the conceptual land use plan for North Peninsula 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 2 existing facilities.

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

DRP). The following discussion of other recommended improvements and repairs are organized by use area within the park.

Smith Creek Landing

North Peninsula has no permanent staff presence in the park. It is proposed to construct a raised volunteer site or employee residence at Smith Creek Landing to improve safety and assist in park operations. The residence site should be in the southwest corner of the Smith Creek Landing and somewhat disguised behind the tree line for increased privacy and cost reductions (no privacy fence needed). Additionally, potable water should be installed to the use area for the benefit of visitors. Currently, there is no water fountain or other source of drinking water in the use area. Lastly, a canoe/kayak launch should be constructed at the use area. A county park across High Bridge Road hosts canoe and kayak launches, as well as rentals but this is incorporated into a larger boat ramp and safety is a concern. A small launch at Smith Creek Landing will provide a safe, less crowded place for visitors to access the Intracoastal Waterway and the paddling trails.

Northern Access Area

The dune crossover has experienced heavy wear and tear and should be repaired to mitigate erosion and other detrimental effects from the beach access point. For the safety of visitors and natural community protection, a parking area should be constructed in this area. Currently, people park along High Bridge Rd and A1A shoulders. This could damage the natural communities along the roads and is an unsafe practice for visitors. Along with the parking area, a crosswalk for A1A is needed. Lastly, to connect the two use areas, Smith Creek Landing and the beach access point, a paved, multi0use path should be constructed along High Bridge Road. This area is popular for cyclists and this will further increases safety for those trying to travel between access points and the Ormond Scenic Loop and Trail.

Objective: Construct 1 new facilities.

A southern access point has been proposed all the southern boundary of the park. This will allow for more visitor access to the beach and expand recreational opportunities. A parking lot across A1A in the existing disturbed area is proposed along with a crosswalk over A1A and a dune crossover.

Facilities Development

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

Recreation Facilities
Smith Creek Landing
Potable Water
Canoe/Kayak Launch

Northern Access Area
A1A Crosswalk
Parking Area
Multi-Use path connecting to Smith Creek Landing
Dune crossover repairs

Southern Access Area
A1A Crosswalk
Parking Area
Dune crossover repairs

Support Facilities
Smith Creek Landing
Raised Volunteer Site or Employee Residence

Recreational Carrying Capacity

Carrying capacity is an estimate of the number of users a recreation resource or facility can accommodate and still provide a high quality recreational experience and preserve the natural values of the site. The carrying capacity of a unit is determined by identifying the land and water requirements for each recreation activity at the unit, and then applying these requirements to the unit's land and water base. Next, guidelines are applied which estimate the physical capacity of the unit's natural communities to withstand recreational uses without significant degradation. This analysis identifies a range within which the carrying capacity most appropriate to the specific activity, the activity site and the unit's classification is selected (see Table 7).

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 increase the unit's carrying capacity as shown in Table 7.

Table 7. Recreational Carrying Capacity						
	Existing		Proposed		Estimated	
Activity / Facility	One Time	Daily	One Time	Daily	One Time	Daily
Trails						
Shared Use	0	0	8	32	8	32
Nature Trail	80	320			80	320
Picnicking	8	16			8	16
Beach						
Swimming	2204	4408	2402	4804	4606	9212
Surfing	66	132			66	132
Fishing						
Shoreline	132	264			132	264
Jetty	2	4			2	4
Boating						
Paddling	0	0	120	120	120	120
TOTAL	**2492**	**5144**	**2530**	**4956**	**5022**	**10100**
*Existing capacity revised from approved plan according to DRP guidelines.						

Optimum Boundary

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

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

A small inholding parcel along John Anderson Road is desired to continue restoration efforts for the marshes. Additionally, the area south of Smith Creek Landing is desired to include more recreational opportunities such as boating and possible concessionaire use from taking over the county park, but also for marsh restoration efforts to return as much of the spoiled area as possible to healthy salt marsh communities.


HIGH BRIDGE RD
OCEAN SHORE BLVD
JOHN ANDERSON DR
A1A
Legend
Park Boundary
Optimum Boundary
bing
NORTH PENINSULA STATE PARK
N
0 500 1,000 2,000 Feet
Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial: 2011
OPTIMUM BOUNDARY MAP

IMPLEMENTATION COMPONENT

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

MANAGEMENT PROGRESS

Since the approval of the last management plan for North Peninsula State Park in 2006, 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

- Continued partnership with Florida Communities Trust on 27-acre land parcel
- Established *Attendance Reporting Plan* based on approved FPS estimated visitation methodologies
- During the last ten years, park volunteers contributed 5223 hours of volunteer service.
- The park formed a Citizen Support Organization "Friends of Gamble Rogers State Park" (FROGRS) in May 2012. This group supports both Gamble Rogers Memorial SRA and North Peninsula State Parks
- FROGRS has received three Florida Exotic Pest Plant Council grants to fund an annual "Plant this, Not That" invasive exotic plant family awareness day at the park.
- FROGRS also supports educational programs about the park's saltmarsh restoration program slated for completion in September 2016.

Resource Management

Natural Resources

- Since the last unit management plan, prescribed fire has been applied to 129 acres of coastal strand community.
- More than 226 acres of invasive exotic plants were treated between fiscal years 2008-2009 and 2014-2015.
- Between fiscal years 2008-2009 and 2014-2015, 56 feral hogs and 25 nine-banded armadillos were removed.
- Park staff continue to be involved in the statewide marine turtle-monitoring program. Since 2009, 579 nests have been documented and monitored with staff effort covering 825 days.

- FSJ monitoring
- Monitoring of an endangered orchid species within the park is ongoing.
- More than 117 acres of mechanical treatment for fuel hazard reduction prior to prescribed burning was performed between fiscal years 2008-2009 and 2014-2015
- Between fiscal year 2009-2010 and 2014-2015, sixty acres of saltwater marsh restoration has been accomplished along the intercoastal waterway.
- In 2010, in partnership with SJRWMD & FWC, 33 acres of dragline impacted saltmarsh was restored.
- A shorebird survey of beachfront and Intracoastal Waterway properties began in April 2012 and continues.
- Volunteers conduct monthly beach cleanups
- Local Audubon members conducted Shorebird surveys and bird surveys of the saltmarsh restoration areas from 2007 through current
- In 2008 a saltmarsh restoration project began on 100 acres of dredge filled spoil along the intracoastal waterway.
- Conducted Annual Jay Watch surveys documenting Florida Scrub Jay population at the site

Cultural Resources

- Staff continue to conduct assessments and evaluations of all known cultural sites within the park.

Recreation and Visitor Services

- In fiscal years 2013-2014 & 2014-2015, the park presented a “Plant This Not That” education day at Smith Creek Landing about invasive nonnative plants. Funding for this program was through FLPPC grants provided to Friends of Gamble Rogers State Park.
- The park provided a “Florida Scrub Jay walk” annually from 2010 through 2015 for Florida’s Birding and Photo Fest.
- In fiscal year 2013-2014, the park’s CSO, Friends of Gamble Rogers State Park, partnered with Ocean Books & Art to present “Protect Oceans, Protect Life Lecture Series.”
- Conducted on and off-site tours/programs on restoration of historic saltmarsh, and held volunteer planting work days in the restoration areas.
- Installed free standing, mechanical bike repair station at Smith Creek Landing.
- Initiated an annual “Ride for the Wild Side” fundraiser in 2015

Park Facilities

- An accessible picnic slab and table was installed at Smith Creek Landing use area.
- Beach flag warning system was installed at the beach parking area on A1A
- Installed three interpretive kiosks, five park benches, and interpretive trail labels along the Coastal Strand Nature trail using volunteer assistance.
- Redecked fishing platform and footbridges at Smith Creek Landing

- Installed sign at Smith Creek Landing recognizing Dr. Zachariah P. Zachariah for selling 54 acres of beachfront property to the state for establishment of NPSP
- Installed Thermal Protective Coating to metal roof on restroom at Smith Creek Landing
- Installed tile floors at Smith Creek Landing restrooms
- Dayton Beach Bicycle Club donated and installed a bicycle service station and bike rack at Smith Creek Landing

MANAGEMENT PLAN IMPLEMENTATION

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

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

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

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	**$0**
Objective B	**Expand administrative support as new lands are acquired, new facilities are developed, or as other needs arise.**	Administrative support expanded	C	**$0**
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)**
Objective A	**Conduct/obtain an assessment of the park's hydrological needs.**	Assessment conducted	ST or LT	**$7,000**
Objective B	**Restore natural hydrological conditions and function to approximately 20 acres of salt marsh natural community.**	# Acres restored or with restoration underway	UFN	**$250,000**
Goal III: Restore and maintain the natural communities/habitats of the park.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
Objective A	**Within 10 years have 150 acres of the park maintained within optimal fire return interval.**	# Acres within fire return interval target	LT	**$20,000**
Action 1	Develop/update annual burn plan.	Plan updated	C	$1,000
Action 2	Manage fire dependent communities for ecosystem function, structure and processes by burning between 39.3 - 91.7 acres annually, as identified by the annual burn plan.	Average # acres burned annually	C	$19,000
Objective B	**Conduct habitat/natural community restoration activities on 20 acres of salt marsh natural community.**	# Acres restored or with restoration underway	ST or LT	**$250,000**
Action 1	Develop/update site specific restoration plan	Plan developed/updated	ST	$1,000
Action 2	Implement restoration plan	# Acres with restoration underway	LT	$249,000

* 2015 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

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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	**$2,000**
Objective B	**Monitor and document 4 selected imperiled animal species in the park.**	# Species monitored	C	**$4,000**
Action 1	Implement monitoring protocols for 4 imperiled animal species including Florida scrub-jay and sea turtles (loggerhead, green, and leatherback)	# Species monitored	C	$4,000
Objective C	**Monitor and document 1 selected imperiled plant species in the park.**	# Species monitored	C	**$1,000**
Action 1	Implement monitoring protocols for 1 imperiled plant species-green ladies-tresses.	# Species monitored	C	$1,000
Goal V: Remove exotic and invasive plants and animals from the park and conduct needed maintenance-control.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
Objective A	**Annually treat 16 acres of exotic plant species in the park.**	# Acres treated	C	**$10,000**
Action 1	Annually update exotic plant management work plan.	Plan developed/updated	C	$1,000
Action 2	Implement annual work plan by treating 16 acres in park, annually, and continuing maintenance and follow-up treatments, as needed.	Plan implemented		$9,000
Objective B	**Implement control measures on 2 exotic and nuisance animal species in the park.**	# Species for which control measures	C	**$1,000**
Goal VI: Protect, preserve and maintain the cultural resources of the park.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
Objective A	**Assess and evaluate 9 of 9 recorded cultural resources in the park.**	Documentation complete	LT	**$500**
Action 1	Complete 9 assessments/evaluations of archaeological sites. Prioritize preservation and stabilization	Assessments complete	LT, ST	$500
Objective B	**Compile reliable documentation for all recorded historic and archaeological sites.**	Documentation complete	LT	**$10,500**
Action 1	Ensure all known sites are recorded or updated in the Florida Master Site File.	# Sites recorded or	ST	$500

* 2015 Dollars
ST = actions within 2 years
LT = actions within 10 years
C = long term or short term actions that are continuous or cyclical
UFN = currently unfunded need

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

Action 2	Conduct Level 1 archaeological survey for 1 priority area identified by the archaeological predictive model.	Survey completed	LT	$10,000
Objective C	**Bring 1 of 9 recorded cultural resources into good condition.**	# Sites in good condition	LT	**$7,000**
Action 1	Design and implement regular monitoring programs for 9 cultural sites.	# Sites monitored	C	$1,000
Action 2	Create and implement a cyclical maintenance program for each cultural resource.	Programs implemented	C	$1,000
Action 3	Bring 1 of 9 recorded cultural resources into good condition.	Projects completed	LT, ST	**$5,000**
Goal VII: Provide public access and recreational opportunities in the park.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
Objective A	**Maintain the park's current recreational carrying capacity of 5,144 users per day.**	# Recreation/visitor	C	**$56,000**
Objective B	**Expand the park's recreational carrying capacity by 4,956 users per day.**	# Recreation/visitor	ST or LT	**$109,953**
Objective C	**Continue to provide the current repertoire of 2 interpretive, educational and recreational programs on a regular basis.**	# Interpretive/education programs	C	**$10,000**
Objective D	**Develop 1 new interpretive, educational and recreational programs.**	# Interpretive/education programs	ST or LT	**$7,000**
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	**$14,000**
Objective B	**Continue to implement the park's transition plan to ensure facilities are accessible in accordance with the American with Disabilities Act of 1990.**	Plan implemented	ST or LT	**$3,000**
Objective C	**Improve and/or repair 2 existing facilities as identified in the Land Use Component.**	# Facilities/Miles of Trail/Miles of Road	LT	**$343,570**
Objective D	Construct **1 new facilites as identified in the Land Use Component.**	# Facilities/Miles of Trail/Miles of Road	LT	**$103,275**

* 2015 Dollars
ST = actions within 2 years
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C = long term or short term actions that are continuous or cyclical
UFN = currently unfunded need

NOTE: THE DIVISION'S ABILITY TO COMPLETE THE OBJECTIVES OUTLINED BY THE MANAGEMENT PLAN IS CONTINGENT ON THE AVAILABILITY OF FUNDING AND OTHER RESOURCES FOR THESE PURPOSES.				
Objective E	**Expand maintenance activities as existing facilities are improved and new facilities are developed.**	Facilities maintained	C	**$27,488**

* 2015 Dollars
ST = actions within 2 years
LT = actions within 10 years
C = long term or short term actions that are continuous or cyclical
UFN = currently unfunded need

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

Summary of Estimated Costs

Management Categories		Total Estimated Manpower and Expense Cost* (10-years)
Resource Management		**$563,000**
Administration and Support		**$0**
Capital Improvements		**$474,333**
Recreation Visitor Services		**$17,000**
Law Enforcement Activities	Note: Law enforcement activities in Florida State Parks are conducted by the FWC Division of Law Enforcement and by local law enforcement agencies.	

* 2015 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

LAND ACQUISITION HISTORY REPORT

Park Name	North Peninsula State Park
Date Updated	8/16/2016
County	Volusia County, Florida
Trustees Lease Number	Lease No. 3421
Current Park Size	557.54 acres
Purpose of Acquisition	The state of Florida acquired North Peninsula State Park to protect unique and irresponsible resources and provide compatible recreation.

Acquisition History

Parcel Name or Parcel DM-ID	Date Acquired	Initial Seller	Initial Purchaser	Size in acres	Instrument Type
MDID 4148	4/27/1984	Ocean Mile, LTD.	The Board of Trustees of the Internal Improvement Trust Fund of the State of Florida (Trustees)	196.59	Warranty Deed
MDID 442	9/9/1993	James R. Schneider and his wife Lucile G. Schneider	Trustees	84.41	Warranty Deed
MDID 4150	9/13/1984	Zachariah P. Zachariiah	Trustees	55.627	Warranty Deed
MDID 11855	11/9/1989	Zachariah P. Zachariiah	Trustees	48.797	Indenture
MDID360525	3/3/1988	Volusia County, Florida	Trustees	33.583	County Deed
MDID 4145	10/9/1985	North Peninsula, Inc.	Trustees	33.094	Warranty Deed
MDID 4144	10/25/1985	Harry E. Ward, Jr.	Trustees	13.342	Warranty Deed
MDID 441	5/16/1984	Richard E. Caton	Trustees	12.038	Warranty Deed
MDID 342669	4/27/2006	Volusia County, Florida	Trustees	11.797	County Deed
MDID 344656	9/29/1988	Julian Lopez	Trustees	10.858	Warranty Deed
MDID 4138	1/27/1977	Hobbs & Associates, Inc.	Trustees	10.017	Warranty Deed

Management Lease

Parcel Name or Lease Number	Date Leased	Initial Lessor	Initial Lessee	Current Term	Expiration Date
Trustees (Main) Lease, Lease No. 3241	12/12/1985	The Board of Trustees of the Internal Improvement Trust Fund of the State of Florida	State of Florida Department of Natural Resources for the use and benefit of the Division of Recreation and Parks,	50 years	12/11/2035
Volusia County Parcel	9/9/2005	Volusia County, Florida	State of Florida Department of Environmental Protection, Division of Recreation and Parks	Coterminous with Lease No. 3241	12/11/2035

Outstanding Issue	Type of Instrument	Brief Description of the Outstanding Issue	Term of the Outstanding Issue
Lease Termination	Lease Agreement	*If subject property is not used for the purpose consistent with what is provided in the lease agreement, the county may terminate the lease and the lessee will surrender the property to the county.*	Perpetuity

Addendum 2—Advisory Group Members and Report

List

Report

Addendum 3—References Cited

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Addendum 4—Soil Descriptions

Beaches (9) - This map unit consists of narrow strips that are adjacent to the Atlantic Ocean. Seawater regularly washes over a larger part of the beaches at high tide. These areas are fine to coarse sand mixed with multicolored shells and shell fragments. Beaches generally have sparse vegetation that is fragile and easily destroyed.

Canaveral Sand, 0 to 5 percent slopes (12) - This soil type occurs on low coastal sand dunes and in the bottoms of troughs between the dunes. It is moderately well drained to somewhat poorly drained and nearly level to gently sloping. The water table is between depths of 10 and 40 inches for periods of 2 to 4 months. In dry seasons, it is below 60 inches. In low areas bordering the Halifax River, the height of the water table depends partially on tidal fluctuations. Permeability is very rapid and the available water capacity is very low. Natural fertility and organic matter content are low.

Most areas receive salt spray from the ocean. If the area is cleared of natural vegetation and left unprotected, wind erosion will be severe. The natural vegetation is the saw palmetto - scrub oak type. Undisturbed areas are important to many kinds of coastal wildlife and as a greenbelt bordering the beaches.

Palm Beach - Paola association, 2 to 8 percent slopes (41) - This map unit consists of well drained to excessively drained sandy soils found on sand dunes bordering the beaches on the Atlantic Coast. The Palm Beach soils, about 55% of the unit, are on the primary dunes and the ocean side of the secondary dunes. The Paola soils, about 35 % of the unit, are on the back dunes. The remaining 10 % are included areas of Canaveral soils and similar soils in narrow troughs between the dunes. Permeability is very rapid and available water capacity is very low. The organic content and natural fertility are low.

This unit receives salt spray from the ocean. The natural vegetation on the Palm Beach soil near the beach includes sea oats, beach morning glory, and sandspur. Higher on the primary dune is a thick growth of saw palmetto mixed with prickly pear, tough bully, snowberry, and other salt -tolerant plants. The Paola soil supports a matted thicket of sand live oak, saw palmetto, red cedar and cactus. The dunes are a natural defense against storms and floods and they should not be disturbed.

Turnbull muck (67) - This is a is very poorly drained soil type that is found in tidal marsh areas. These soils do not occur in a regular and repeating pattern. They are frequently flooded by tidal water. These soils are continuously saturated and the permeability is slow.

The natural vegetation usually consists of needlerush, seashore salt grass, smooth cordgrass, bushy seaweed, marshhay cordgrass, glasswort, and bigleaf swampweed. The native vegetation and fauna are important links in the food chain for many sport and commercial finfish and shellfish. Many

species of ducks, wading birds, and shorebirds use this map unit for food, shelter, and nesting.

Turnbull Variant sand (68) - This soil consists of mixed sandy and shelly material dredged from the Intracoastal Waterway and placed in narrow strips along the waterway. The underlying material is organic layers and layers of clayey and sandy estuarine deposits. Areas are mostly in tidal marshes associated with the Intracoastal. The water table is at 40 inches, or at the base of overburden. The available water capacity is very low and permeability is rapid throughout the overburden. Natural fertility and organic matter content are very low.

The amount of plant cover established depends upon the time since the dredged material was deposited. Common plants are prickly pear, red cedar, wax myrtle, cabbage palm, and where the overburden is thin, glasswort, pickerelweed, *Spartina*, and *Juncus*.

Addendum 5—Plant and Animal List

Common Name	*Scientific Name*	Primary Habitat Codes (for imperiled species)
LICHENS		
Christmas lichen	*Cryptothecia rubrocincta*	
Old-man's-beard	*Usnea* sp.	
PTERIDOPHYTES		
Golden polypody	*Phlebodium aureum*	
Resurrection fern	*Pleopeltis polypodioides*	
Bracken fern	*Pteridium aquilinum*	
Shoestring fern	*Vittaria lineata*	
GYMNOSPERMS		
Red cedar	*Juniperus virginiana*	
Sand pine	*Pinus clausa*	
Slash pine	*Pinus elliottii*	
Florida arrowroot; coontie	*Zamia pumila*	
ANGIOSPERMS		
MONOCOTS		
Sisal hemp*	*Agave sisalana*	
Aloe*	*Aloe vera*	
Bluestem	*Andropogon* sp.	
Splitbeard bluestem	*Andropogon ternarius*	
Broomsedge bluestem	*Andropogon virginicus* var. *virginicus*	
Common asparagus-fern*	*Asparagus setaceus*	
Indian shot*	*Canna indica*	
Coastal sandspur	*Cenchrus spinifex*	
Woodoats	*Chasmanthium* sp.	
Spring coralroot	*Corallorhiza wisteriana*	
Seven sisters; string-lily	*Crinum americanum*	
Bermudagrass*	*Cynodon dactylon*	
Durban crowfootgrass*	*Dactyloctenium aegyptium*	
Witchgrass	*Dichanthelium* sp.	
White yam*	*Dioscorea alata*	
Saltgrass	*Distichlis spicata*	
Green-fly orchid	*Epidendrum conopseum*	
Spiked crested coralroot	*Hexalectris spicata*	MAH
Cogongrass*	*Imperata cylindrica*	
Needle rush; needlegrass rush	*Juncus roemerianus*	
Rose Natalgrass*	*Melinis repens*	
Muhly grass	*Muhlenbergia capillaris*	
Woodsgrass; basketgrass	*Oplismenus hirtellus*	
Sandyfield beaksedge	*Rhynchospora megalocarpa*	
Beaksedge	*Rhynchospora* sp.	

*** Non-Native Species**

Common Name	*Scientific Name*	Primary Habitat Codes (for imperiled species)
Cabbage palm	*Sabal palmetto*	
Saw palmetto	*Serenoa repens*	
Bristlegrass; foxtail	*Setaria* sp.	
Saw greenbrier	*Smilax bona-nox*	
Greenbrier	*Smilax* sp.	
Saltmarsh cordgrass; smooth cordgrass	*Spartina alterniflora* var. *glabra*	
Marshhay cordgrass	*Spartina patens*	
Florida Keys ladiestresses	*Spiranthes polyantha*	
St. Augustinegrass*	*Stenotaphrum secundum*	
Spanish moss	*Tillandsia usneioides*	
Giant airplant	*Tillandsia utriculata*	
Bluejacket; Ohio spiderwort	*Tradescantia ohiensis*	
Seaoats	*Uniola paniculata*	
Spanish bayonet; aloe yucca*	*Yucca aloifolia*	
DICOTS		
False indigo	*Amorpha fruticosa*	
Pepper vine	*Ampelopsis arborea*	
Pawpaw	*Asimina* sp.	
Common pawpaw	*Asimina triloba*	
Saltwater falsewillow	*Baccharis angustifolia*	
Groundsel tree; sea myrtle	*Baccharis halimifolia*	
Saltwort; turtleweed	*Batis maritima*	
Common beggarticks	*Bidens alba*	
Bushy seaside oxeye	*Borrichia frutescens*	
American searocket	*Cakile edentula*	
Florida sandreed	*Calamovila curtissii*	
American beautyberry	*Callicarpa americana*	
Indian shot*	*Canna indica*	
Pignut hickory	*Carya glabra*	
Cassia*	*Cassia* sp.	
Partridge pea	*Chamaecrista fasciculata*	
Snowberry; milkberry	*Chiococca alba*	
Yellow thistle	*Cirsium horridulum*	
Tread-softly	*Cnidoscolus stimulosus*	
Dwarf Canadian horseweed	*Conyza canadensis* var. *pusilla*	
Gulf croton; beach tea	*Croton punctatus*	
Green-fly orchid	*Epidendrum conopseum*	
Coralbean; Cherokee bean	*Erythrina herbacea*	
Thoroughwort	*Eupatorium* sp.	
Lesser Florida spurge	*Euphorbia polyphylla*	
Firewheel	*Gaillardia pulchella*	
Milkpea	*Galactia* sp.	
Coastal bedstraw	*Galium hispidulum*	
Bedstraw	*Galium* sp.	
Yellow jessamine	*Gelsemium sempervirens*	

Common Name	*Scientific Name*	Primary Habitat Codes (for imperiled species)
Innocence; roundleaf bluet	*Hedyotis procumbens*	
Pinebarren frostweed	*Helianthemum corymbosum*	
East coast dune sunflower	*Helianthus debilis* ssp. *debilis*	
Camphorweed	*Heterotheca subaxillaris*	
Marshpennywort	*Hydrocotyle* sp.	
St. John's-wort	*Hypericum* sp.	
Scrub holly	*Ilex opaca* var. *arenicola*	
Yaupon	*Ilex vomitoria*	
Moonflowers	*Ipomoea alba*	
Beach morning glory	*Ipomoea imperati*	
Railroad vine	*Ipomoea pes-caprae*	
Bigleaf sumpweed	*Iva frutescens*	
Seacoast marshelder	*Iva imbricate*	
Chandelier plant*	*Kalanchoe delagoensis*	
Lantana*	*Lantana camara*	
Gopher apple	*Licania michauxii*	
Rusty staggerbush	*Lyonia ferruginea*	
Southern magnolia	*Magnolia grandiflora*	
Black medick*	*Medicago lupulina*	
White sweetclover*	*Melilotus alba*	
Climbing hempvine	*Mikania scandens*	
Florida sensitive brier	*Mimosa quadrivalvis* var. *floridana*	
Powderpuff	*Mimosa strigillosa*	
Carolina bristlemallow	*Modiola caroliniana*	
Spotted beebalm	*Monarda punctata*	
Wax myrtle	*Myrica cerifera*	
Seabeach eveningprimrose	*Oenothera humifusa*	
Eveningprimrose	*Oenothera* sp.	
Cockspur pricklypear	*Opuntia pusilla*	
Erect pricklypear	*Opuntia stricta*	
Common yellow woodsorrel	*Oxalis corniculata*	
American nailwort	*Paronychia americana*	
Virginia creeper	*Parthenocissus quinquefolia*	
Purple passionflower	*Passiflora incarnata*	
Red bay	*Persea borbonia* var. *borbonia*	
Silk bay; scrub bay	*Persea borbonia* var. *humilis*	
Turkey tangle fogfruit	*Phyla nodiflora*	
Leafflower	*Phyllanthus* sp.	
Groundcherry	*Physalis* sp.	
American pokeweed	*Phytolacca americana*	
Narrowleaf silkgrass	*Pityopsis graminifolia*	
Paintedleaf	*Poinsettia cyathophora*	
Procession flower	*Polygala incarnata*	
Rustweed	*Polypremum procumbens*	
Carolina laurelcherry	*Prunus caroliniana*	
Chapman's oak	*Quercus chapmanii*	
Sand live oak	*Quercus geminata*	

Common Name	*Scientific Name*	Primary Habitat Codes (for imperiled species)
Laurel oak	*Quercus laurifolia*	
Myrtle oak	*Quercus myrtifolia*	
Virginia live oak	*Quercus virginiana*	
Winged sumac	*Rhus copallinum*	
Castorbean*	*Ricinus communis*	
Annual glasswort	*Salicornia bigelovii*	
Perennial glasswort	*Salicornia perennis*	
Pineland pimpernel	*Samolus valerandi* ssp. *parviflorus*	
Popcorntree; Chinese tallowtree*	*Sapium sebiferum*	
Brazilian pepper*	*Schinus terebinthifolius*	
Tough bully	*Sideroxylon tenax*	
Seaside goldenrod	*Solidago sempervirens*	
Sowthistle	*Sonchus* sp.	
Creeping oxeye*	*Sphagneticola trilobata*	
Sea blite; annual seepweed	*Suaeda linearis*	
Eastern poison ivy	*Toxicodendron radicans*	
Forked bluecurls	*Trichostema dichotomum*	
Highbush blueberry	*Vaccinium corymbosum*	
Shiny blueberry	*Vaccinium myrsinites*	
Sandpaper vervain	*Verbena scabra*	
White crownbeard	*Verbesina virginica*	
Simpleleaf chastetree*	*Vitex trifolia*	
Summer grape	*Vitis aestivalis*	
Catbird grape	*Vitis palmata*	
Muscadine	*Vitis rotundifolia*	
Grape	*Vitis* sp.	
Creeping oxeye*	*Wedelia trilobata*	
Tallow wood; hog plum	*Ximenia americana*	
Hercules'-club	*Zanthoxylum clava-herculis*	

Taxonomy follows Wunderlin and Hansen (2011).

*** Non-Native Species**

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

INVERTEBRATES

Gulf fritillary	*Agraulis vanilla nigrior*
White peacock	*Anartia jatrophae*
Great southern white	*Ascia monuste*
Eastern pygmy-blue	*Brephidium isophthalma*
Blue crab	*Callinectes sapidus*
Red-banded hairstreak	*Calycopis cecrops*
Southern skipperling	*Copaeodes minimus*
Monarch; milkweed butterfly	*Danaus plexippus*
Horace's duskywing	*Erynnis horatius*
Juvenal's duskywing	*Erynnis juvenalis*
Zaracco duskywing	*Erynnis zarucco*
Little yellow butterfly	*Eurema lisa*
Oak hairstreak	*Fixenia favonius*
Southern hairstreak	*Fixenia favonius favonius*
Zebra heliconian	*Heliconius charitonius*
Zebra longwing	*Heliconius charitonius tuckeri*
Ceraunus blue	*Hemiargus ceraunus antibubastus*
Fiery skipper	*Hylephila phyleus*
Common buckeye	*Junonia coenia*
Mangrove buckeye	*Junonia evarete*
Viceroy	*Limenitis archippus floridensis*
Florida crowned conk	*Melongena corona*
Dainty sulphur	*Nathalis iole*
Golden orb spider	*Nephila davipes*
Grass shrimp	*Palaemontes pugio*
Salt marsh skipper	*Panoquina panoquin*
Palamedes swallowtail	*Pailio palamedes*
Giant swallowtail	*Papolio crespontes*
Brown shrimp	*Penaeus aztecus*
White shrimp	*Penaeus setiferus*
Couldless sulphur butterfly	*Phoebis sennae eubule*
Phaon crescent butterfly	*Phyciodes phaon*
Whirlabout	*Polites vibex*
Coontie worm	*Seirarctia echo*
Gray hairstreak	*Strymon melinus melinus*
Sand fiddler	*Uca pugilator*
Long-tailed skipper	*Urbanus proteus*
Red admiral butterfly	*Vanessa atalanta rubria*

FISH

Lined sole	*Achirus lineatus*
Striped anchovy	*Anchoa hepsetus*
Bay anchovy	*Anchoa mitchilli*
Sheepshead	*Archosargus probatocephalus*

*** Non-Native Species**

Common Name	*Scientific Name*	Primary Habitat Codes (for imperiled species)
Sea catfish	*Arius felis*	
Gafftopsail catfish	*Bagre marinus*	
Silver perch	*Bairdiella chrysoura*	
Frillfin goby	*Bathygobius soporator*	
Atlantic menhaden	*Brevoortia tyrannus*	
Crevalle jack	*Caranx hippos*	
Black sea bass	*Centropristis striata*	
Basking shark	*Cetorhinus maximus*	
Atlantic spadefish	*Chaetodipterus faber*	
Florida blenny	*Chasmodes saburrae*	
Striped burrfish	*Chilomycterus schoepfi*	
Bay whiff	*Citharichthys spilopterus*	
Spotted seatrout	*Cynoscion nebulosus*	
Weakfish	*Cynoscion regalis*	
Sheepshead minnow	*Cyprinodon variegatus variegatus*	
Atlantic stingray	*Dasyatis sabina*	
Irish pompano	*Diapterus auratus*	
Ladyfish	*Elops saurus*	
Silver jenny	*Eucinostomus gula*	
Tidewater mojarra	*Eucinostomus harengulus*	
Mojarra	*Eucinostomus spp.*	
Gulf killifish	*Fundulus grandis*	
Striped/longnose killifish	*Fundulus majalis*	
Darter goby	*Gobionellus boleosoma*	
Highfin goby	*Gobionellus oceanicus*	
Naked goby	*Gobiosoma bosc*	
Code goby	*Gobiosoma robustum*	
Brooke silverside	*Labidesthes sicculus*	
Pinfish	*Lagodon rhomboides*	
Spot	*Leiostomus xanthurus*	
Gray snapper	*Lutjanus griseus*	
Lane snapper	*Lutjanus synagris*	
Silverside	*Menidia spp.*	
Whiting, southern kingfish	*Menticirrhus americanus*	
Clown goby	*Microgobius gulosus*	
Atlantic croaker	*Micropogonias undulatus*	
Planehead filefish	*Monacanthus hispidus*	
Striped mullet	*Mugil cephalus*	
White mullet	*Mugil curema*	
Mullet	*Mugil* spp.	
Leatherjack	*Oligoplites saurus*	
Oyster toadfish	*Opsanus tau*	
Pigfish	*Orthopristis chrysoptera*	
Gulf flounder	*Paralichthys albigutta*	
Southern flounder	*Paralichthys lethostigma*	
Blackdrum	*Pogonias cromis*	
Leopard searobin	*Prionotus scitulus*	

*** Non-Native Species**

Common Name	*Scientific Name*	Primary Habitat Codes (for imperiled species)
Bighead searobin	*Prionotus tribulus*	
Red drum	*Sciaenops ocellatus*	
Lookdown	*Selene vomer*	
Southern puffer	*Sphoeroides nephelus*	
Star drum	*Stellifer lanceolatus*	
Atlantic needlefish	*Strongylura marina*	
Redfin needlefish	*Strongylura notata*	
Timucu	*Strongylura timucu*	
Blackcheek tonguefish	*Symphurus plagiusa*	
Chain pipefish	*Syngnathus louisianae*	
Gulf pipefish	*Syngnathus scovelli*	
Inshore lizardfish	*Synodus foetens*	
Florida pompano	*Trachinotus carolinus*	
Permit	*Trachinotus falcatus*	

AMPHIBIANS

Frogs and Toads

Southern toad	*Bufo terrestris*	
Squirrel treefrog	*Hyla squirella*	

REPTILES

Brown anole*	*Anolis sagrei sagrei*	
Six-lined racer	*Aspidoscelis sexlineatus sexlineatus*	
Loggerhead sea turtle	*Caretta caretta*	
Green sea turtle	*Chelonia mydas*	
Six-lined racerunner	*Cnemidophorus sexlineatus sexlineatus*	
Eastern diamondback rattlesnake	*Crotalus adamanteus*	
Leatherback turtle	*Dermochelys coriacea coriacea*	
Yellow rat snake	*Elaphe obsoleta quadrivittata*	
Broad-headed skink	*Eumeces laticeps*	
Gopher tortoise	*Gopherus polyphemus*	
Eastern coachwhip	*Masticophis flagellum flagellum*	
Florida worm lizard	*Rhineura floridana*	
Eastern garter snake	*Thamnophis sirtalis sirtalis*	

BIRDS

Red-winged Blackbird	*Agelaius phoeniceus*	
American Black Duck	*Anas rubripes*	
Florida Scrub-jay	*Aphelocoma coerulescens*	
Ruby-throated Hummingbird	*Archilochus colubris*	
Great Egret	*Adrea alba*	
Great Blue Heron	*Ardea herodias*	
Ruddy Turnstone	*Arenaria interpres*	

*** Non-Native Species**

Common Name	*Scientific Name*	Primary Habitat Codes (for imperiled species)
Tufted Titmouse	*Baeolophus bicolor*	
Cedar Waxwing	*Bombycilla cedrorum*	
Red-tailed Hawk	*Buteo jamaicensis*	
Red-shouldered Hawk	*Buteo lineatus*	
Sanderling	*Calidris alba*	
Red Knot	*Calidris canutus*	
Western Sandpiper	*Calidris mauri*	
Northern Cardinal	*Cardinalis cardinalis*	
Turkey Vulture	*Cathartes aura*	
Veery	*Catharus fuscenscens*	
Willet	*Catoptrophorus semipalmatus*	
Chimney Swift	*Chaetura pelagica*	
Killdeer	*Charadrius vociferus*	
Wilsons plover	*Charadrius wilsonia*	
Northern Harrier	*Circus cyaneus*	
Northern Bobwhite	*Colinus virginianus*	
Rock Pigeon*	*Columba livia*	
Common Ground-dove	*Columbina passerina*	
Black Vulture	*Coragyps atratus*	
Fish Crow	*Corvus ossifragus*	
Blue Jay	*Cyanocitta cristata*	
Yellow-rumped warbler	*Dendroica coronate*	
Prairie Warbler	*Dendroica discolor*	
Palm Warbler	*Dendroica palmarum*	
Gray Catbird	*Dumetella carolinensis*	
Little Blue Heron	*Egretta caerulea*	
Reddish Egret	*Egretta refescens*	
Snowy Egret	*Egretta thula*	
Tri-colored Heron	*Egretta tricolor*	
Swallow-tailed Kite	*Elanoides forficatus*	
White Ibis	*Eudocimus albus*	
Peregrine Falcon	*Falco peregrinus*	
American Kestrel	*Falco sparverius*	
Common Loon	*Gavia immer*	
Common Yellowthroat	*Geothlypis trichas*	
Bald Eagle	*Haliaeetus leucocephalus*	
Barn Swallow	*Hirundo rustica*	
Caspian Tern	*Hyprogne caspia*	
Baltimore Oriole	*Icterus galbula*	
Loggerhead Shrike	*Lanius ludovicianus*	
Herring Gull	*Larus argentatus*	
Ring-billed Gull	*Larus delawarensis*	
Lesser Black-backed Gull	*Larus fuscus*	
Glaucous Gull	*Larus hyperboreus*	
Great Black-backed Gull	*Larus marinus*	
Bonaparte's Gull	*Larus philadelphia*	
Laughing Gull	*Leucophaeus atricilla*	

*** Non-Native Species**

North Peninsula State Park Animals

Common Name	*Scientific Name*	Primary Habitat Codes (for imperiled species)
Short-billed Dowitcher	*Limnodromus griseus*	
Belted Kingfisher	*Megaceryle alcyon*	
Eastern Screech-Owl	*Megascops asio*	
Red-bellied woodpecker	*Melanerpes carolinus*	
Black Scoter	*Melanitta americana*	
Northern Mockingbird	*Mimus polyglottos*	
Northern Gannet	*Morus bassanus*	
Wood Stork	*Mycteria americana*	
Great Crested Flycatcher	*Myiarchus crinitus*	
Yellow-crowned Night-Heron	*Nyctanassa violaceus*	
Black-crowned Night-Heron	*Nycticorax nycticorax*	
Osprey	*Pandion haliaetus*	
Northern Parula	*Parula americana*	
Savannah Sparrow	*Passerculus sandwichensis*	
Painted Bunting	*Passerina ciris*	
American White Pelican	*Pelecanus erythrorhynchos*	
Brown Pelican	*Pelecanus occidentalis*	
Double-crested Cormorant	*Phalacrocorax auritus*	
Downy Woodpecker	*Picoides pubescens*	
Eastern Towhee	*Pipilo erythropthalmus*	
Glossy Ibis	*Plegadis falcinellus*	
Black-bellied Plover	*Pluvialis squatarola*	
Horned Grebe	*Podiceps auritus*	
Blue-Gray Gnatcatcher	*Polioptila caerulea*	
Purple Martin	*Progne subis*	
Clapper Rail	*Rallus longirostris*	
Ruby-crowned Kinglet	*Regulus calendula*	
Eastern Phoebe	*Sayornis phoebe*	
Eastern Bluebird	*Sialia sialis*	
White-breasted Nuthatch	*Sitta carolinensis*	
Yellow-bellied sapsucker	*Sphyrapicus varius*	
Field Sparrow	*Spizella pusilla*	
Forster's Tern	*Sterna forsteri*	
Sandwich Tern	*Sterna sandvicensis*	
Least Tern	*Sternula antillarum*	
Eurasian Collared-Dove*	*Streptopelia decaocto*	
European Starling*	*Sturnus vulgaris*	
Tree Swallow	*Tachycineta bicolor*	
Royal Tern	*Thalasseus maximus*	
Carolina Wren	*Thryothorus ludovicianus*	
Brown Thrasher	*Toxostoma rufum*	
Willet	*Tringa semipalmata*	
House Wren	*Troglodytes aedon*	
American Robin	*Turdus migratorius*	
White-eyed vireo	*Vireo griseus*	
Red-eyed vireo	*Vireo olivaceus*	
Blue-headed vireo	*Vireo solitarius*	

*** Non-Native Species**

Common Name	*Scientific Name*	Primary Habitat Codes (for imperiled species)
White-winged Dove	*Zenaida asiatica*	
Mourning Dove	*Zenaida macroura*	
White-throated sparrow	*Zonotrichia albicollis*	

MAMMALS

North Atlantic right whale	*Balaena glacialis glacialis*	
Nine-banded armadillo*	*Dasypus novemcinctus*	
Virginia opossum	*Didelphis virginiana*	
Feral cat*	*Felis catus*	
Bobcat	*Felis rufus*	
Golden mouse	*Ochrotomys nuttali*	
White-tailed deer	*Odocoileus virginianus*	
Cotton mouse	*Peromyscus gossypinus*	
Raccoon	*Procyon lotor*	
Gray squirrel	*Sciurus carolinensis*	
Hispid cotton rat	*Sigmodon hispidus*	
Eastern spotted skunk	*Spilogale putorius*	
Wild pig*	*Sus scrofa*	
Marsh rabbit	*Sylvilagus palustris*	
West Indian manatee	*Trichechus manatus*	
Florida manatee	*Trichechus manatus latirostris*	
Atlantic bottle-nosed dolphin	*Tursiops truncatus*	
Gray fox	*Urocyon cinereoargenteus*	

*** Non-Native Species**

Terrestrial

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

Palustrine

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

Lacustrine

43 Clastic Upland Lake

44 Coastal Dune Lake

43. Coastal Rockland Lake
44. Flatwood/Prairie Lake

Lacustrine--Continued

45. Marsh Lake
46. River Floodplain Lake
47. Sandhill Upland Lake
48. Sinkhole Lake
49. Swamp Lake

Riverine

50. Alluvial Stream
51. Blackwater Stream
52. Seepage Stream
53. Spring-Run Stream

Estuarine

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

Marine

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

Subterranean

77. Aquatic Cave
78. Terrestral Cave

Miscellaneous

79. Ruderal
80. Developed

MTC Many Types Of Communities
OF Overflying

Addendum 7—Cultural Information

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

A. General Discussion

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

B. Agency Responsibilities

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

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

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

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

C. Statutory Authority

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

D. Management Implementation

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

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

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

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

E. Minimum Review Documentation Requirements

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

* * *

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

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

Phone: (850) 245-6425

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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

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

f) a property achieving significance within the past 50 years, if it is of exceptional importance.

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

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

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

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