

# **Fort Mose Historic State Park**

## **Approved Unit Management Plan**

**STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**Division of Recreation and Parks  
April 20, 2016**







## Florida Department of Environmental Protection

Marjory Stoneman Douglas Building  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000

Rick Scott  
Governor

Carlos Lopez-Cantera  
Lt. Governor

Jonathan P. Steverson  
Secretary

April 20, 2016

Ms. Sine Murray  
Office of Park Planning  
3900 Commonwealth Blvd., M.S. 525  
Tallahassee, Florida 32399-3000

**RE: Fort Mosé Historic State Park- Lease No. 3809**

Dear Ms. Murray:

The Division of State Lands, Office of Environmental Services has received and reviewed the above mentioned Land Use Plan Amendment and find that it complies with the applicable statutes and rules. The plan amendment does not change the due date for an updated land use plan which will be due by April 20, 2026.

Acceptance of this Land Use plan does not waive the authority or jurisdiction of any governmental entity that may have an interest in this project. Implementation of any activities proposed by this plan may require a permit or other authorization from federal and state agencies having regulatory jurisdiction over those particular activities.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph Wilson".

Joseph Wilson  
Division of State Lands  
Office of Environmental Services

JW/cb



## TABLE OF CONTENTS

<b>INTRODUCTION</b>	1
<b>PURPOSE AND SIGNIFICANCE OF THE PARK</b>	1
Park Significance	1
<b>PURPOSE AND SCOPE OF THE PLAN</b>	2
<b>MANAGEMENT PROGRAM OVERVIEW</b>	8
Management Authority and Responsibility	8
Park Management Goals	8
Management Coordination	9
Public Participation	9
Other Designations	10

## RESOURCE MANAGEMENT COMPONENT

<b>INTRODUCTION</b>	11
<b>RESOURCE DESCRIPTION AND ASSESSMENT</b>	12
Natural Resources	12
Topography	12
Geology	12
Soils	12
Minerals	17
Hydrology	17
Natural Communities (FNAI)	17
Imperiled Species	23
Exotic and Nuisance Species	25
Special Natural Features	26
Cultural Resources	27
Condition Assessment	27
Level of Significance	27
Prehistoric and Historic Archaeological Sites	28
Historic Structures	31
Collections	31
<b>RESOURCE MANAGEMENT PROGRAM</b>	33
Management Goals, Objectives and Actions	33
Natural Resource Management	33
Hydrological Management	33
Natural Communities Management	34
Imperiled Species Management	35
Exotic Species Management	37
Special Management Considerations	37
Timber Management Analysis	38
Arthropod Control Plan	38
Additional Considerations	38
Cultural Resource Management	38

Cultural Resource Management.....	38
Resource Management Schedule.....	40
Land Management Review .....	40
<b>LAND USE COMPONENT</b>	
<b>INTRODUCTION.....</b>	<b>41</b>
<b>EXTERNAL CONDITIONS.....</b>	<b>41</b>
Existing Use of Adjacent Lands .....	42
Planned Use of Adjacent Lands .....	42
<b>PROPERTY ANALYSIS .....</b>	<b>43</b>
Recreation Resource Elements.....	43
Land Area .....	43
Water Area.....	43
Natural Scenery .....	44
Significant Habitat.....	44
Archaeological and Historic Features.....	44
Assessment of Use.....	44
Past Uses .....	44
Future Land Use and Zoning.....	47
Current Recreation Use and Visitor Programs.....	47
Protected Zones.....	47
Existing Facilities .....	48
Recreation Facilities.....	48
Support Facilities .....	48
<b>CONCEPTUAL LAND USE PLAN .....</b>	<b>49</b>
Potential Uses .....	49
Public Access and Recreational Opportunities.....	49
Proposed Facilities .....	53
Capital Facilities and Infrastructure .....	53
Facilities Development.....	54
Recreational Carrying Capacity .....	54
Optimum Boundary.....	55
<b>IMPLEMENTATION COMPONENT</b>	
<b>MANAGEMENT PROGRESS.....</b>	<b>59</b>
Resource Management .....	59
Natural Resources .....	59
Cultural Resources.....	59
Recreation and Visitor Services.....	59
Park Facilities .....	60
<b>MANAGEMENT PLAN IMPLEMENTATION .....</b>	<b>60</b>

## TABLES

<b>TABLE 1</b> – Fort Mosé Historic State Park Management Zones .....	12
<b>TABLE 2</b> – Imperiled Species Inventory.....	23
<b>TABLE 3</b> – Inventory of FLEPPC Category I and II Exotic Plant Species.....	25
<b>TABLE 4</b> – Cultural Sites Listed in the Florida Master Site File .....	32
<b>TABLE 5</b> – Recreational Carrying Capacity .....	55
<b>TABLE 6</b> – Implementation Schedule and Cost Estimates.....	63

## MAPS

Vicinity Map .....	3
Reference Map .....	5
Management Zones Map.....	13
Soils Map .....	15
Natural Communities Map.....	19
Base Map .....	45
Conceptual Land Use Plan.....	51
Optimum Boundary Map.....	57

## LIST OF ADDENDA

<b>ADDENDUM 1</b>	
Acquisition History.....	A 1 - 1
<b>ADDENDUM 2</b>	
Advisory Group Members and Report .....	A 2 - 1
<b>ADDENDUM 3</b>	
References Cited .....	A 3 - 1
<b>ADDENDUM 4</b>	
Soil Descriptions .....	A 4 - 1
<b>ADDENDUM 5</b>	
Plant and Animal List .....	A 5 - 1
<b>ADDENDUM 6</b>	
Imperiled Species Ranking Definitions .....	A 6 - 1
<b>ADDENDUM 7</b>	
Cultural Information .....	A 7 - 1





## **INTRODUCTION**

Fort Mosé Historic State Park is located in St. Johns County about two miles north of the Castillo de San Marcos, just north of the City Gate of St. Augustine (see Vicinity Map). Access to the park is from U.S. Highway 1, east on Saratoga Boulevard (see Reference Map). The Vicinity Map also reflects significant land and water resources existing near the park.

The initial 26.49 acre parcel of Fort Mosé Historic State Park was acquired on October 20, 1989 with funds from the Land Acquisition Trust Fund (LATF). The Board of Trustees of the Internal Improvement Trust Fund (Trustees) hold fee simple title to this property and on October 30, 1989, the Trustees leased (Lease Number 3809) the property to the DRP under a 50-year lease. The current lease will expire on October 30, 2039. On July 5, 2005, the DRP leased a 8.25-acre property from St. Johns County. The term of this lease is coterminous with the term of Lease Number 3809. Since this lease, the Trustees received a .10 acre donation from Bellsouth Communications, Inc. and added to the park. Currently, the park comprises 41.46 acres.

Fort Mosé Historic State Park 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**

Fort Mosé Historic State Park was acquired for public outdoor recreation, historical interpretation and the conservation and protection of natural and cultural resources. The primary purpose of the park is to provide the public with a place to study and observe Fort Mosé, a nationally significant historic site.

#### **Significance**

- Built in 1738 by once enslaved Africans and their Spanish allies, Fort Mosé was the first legally sanctioned free black town in what is now the United States. Listed on the National Register of Historic Places and as a National Historic Landmark, the site provides a tangible symbol of free African-American history in colonial America.
- The National Park Service has named Fort Mosé as a precursor site on the National Underground Railroad Network to Freedom. The significance of this site was the basis for the inclusion of St. Johns County as the southern terminus of the congressionally-designated Gullah/Geechee Cultural Heritage Corridor.
- Henry Flagler acquired the site in the late 1800s and dredged the area for fill to create the land where the Flagler Hotel (Flagler College) now stands. The dredging created salt marshes from the dry uplands which were once farmed by the residents of Fort Mosé.

- As part of the Great Florida Birding and Wildlife Trail, the park provides visitors with a unique opportunity to observe an established great blue heron rookery on the north island and many other species of birds that use the salt marshes and maritime hammocks for nesting, feeding, and roosting.

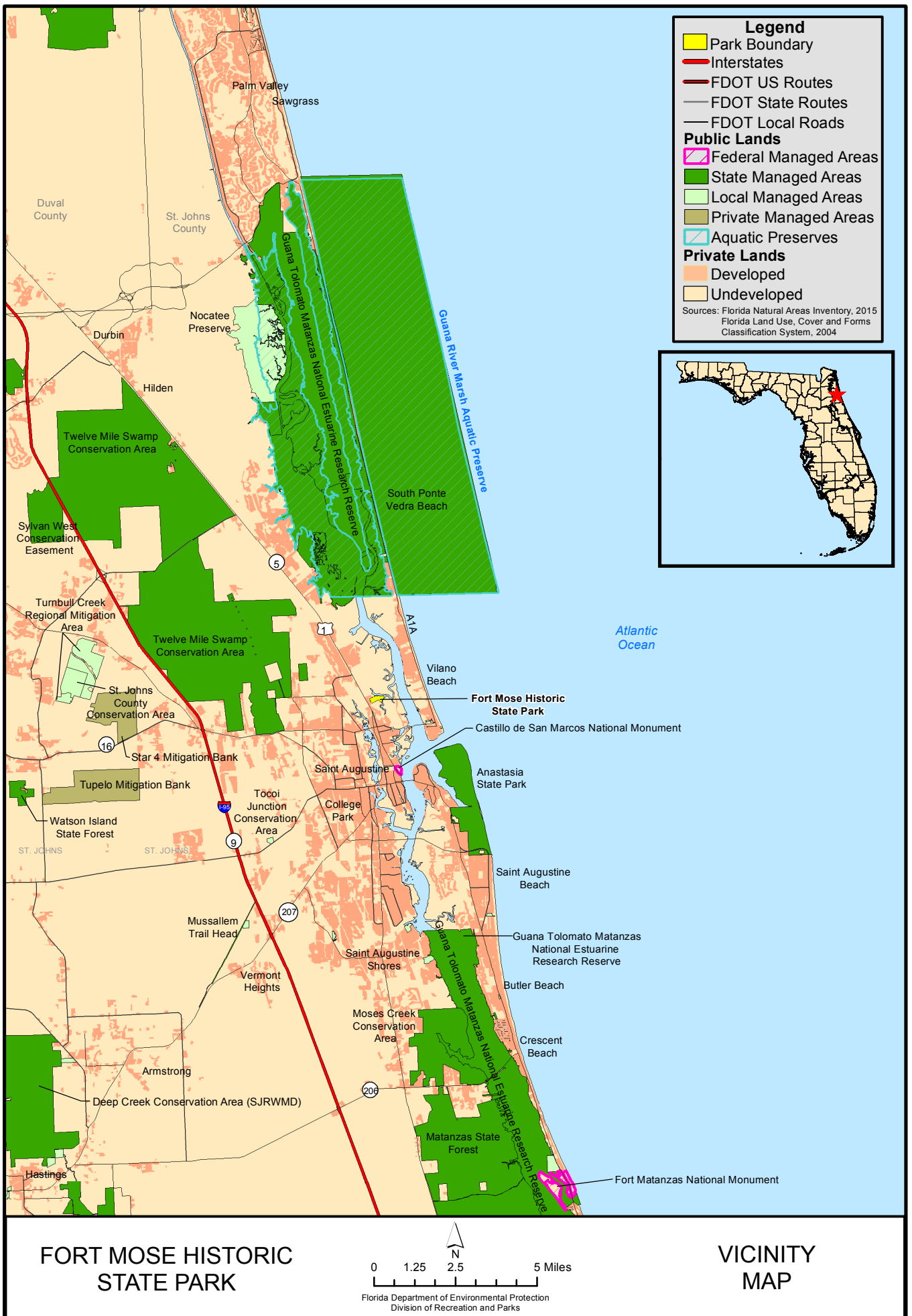
Fort Mosé Historic State Park is classified as a state park in the DRP's unit classification system. In the management of a state park, a balance is sought between the goals of maintaining and enhancing natural conditions and providing various recreational opportunities. Natural resource management activities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

### **Purpose and Scope of the Plan**

This plan serves as the basic statement of policy and direction for the management of Fort Mosé Historic 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 2005 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, 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.

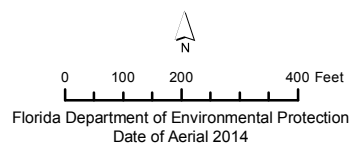








FORT MOSE HISTORIC STATE PARK



REFERENCE MAP



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

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

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

The potential for generating revenue to enhance management was also analyzed. 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 Visitor Service Provider (VSP) may provide services to park visitors in order to enhance the visitor experience. For example, a VSP could be authorized to sell merchandise and food and to rent recreational equipment for use in the park. A VSP 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 VSPs, 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. The National Park Service, Castillo de San Marcos collaborates on special events and promotes Fort Mosé at the Castillo. The National Estuarine Research Reserve (NERR) assists in matters pertaining to salt marsh habitat.

### **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 August 26 and 27, 2015, respectively. Meeting notices were published in the Florida Administrative Register, August 18, 2015 [VOL 41/160], 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**

Fort Mosé Historic State Park 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 not within or adjacent to an 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 DEP's overall mission in ecosystem management. Cited references are contained in Addendum 3.

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

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

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

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

<b>Table 1: Fort Mosé Historic State Park Management Zones</b>			
<b>Management Zone</b>	<b>Acreage</b>	<b>Managed with Prescribed Fire</b>	<b>Contains Known Cultural Resources</b>
FM 1	14.99	N	Yes
FM 2	26.36	N	Yes

## **Resource Description and Assessment**

### **Natural Resources**

#### **Topography**

This park is characterized by very low relief and lies in the Eastern Valley physiographic province (White 1970). Although Cretaceous, Tertiary, and Quaternary limestones were deposited within this province (Brooks 1981a), sand is the dominant surficial material. In a general way, the area reflects deposition of clastic sediment when sea-level was elevated. It has also been shaped by marsh-forming sediments that were deposited in the lagoon that developed behind the present barrier island and west of the Tolomato River. Within the unit, elevations range from sea level to approximately seven feet.

Some alteration of the terrain has occurred. Henry Flagler scraped the original Fort Mosé site for fill in the 1880s. Erosion is occurring along the banks of the park's three islands. On the southernmost island, erosion within three archaeological test pits is evident.

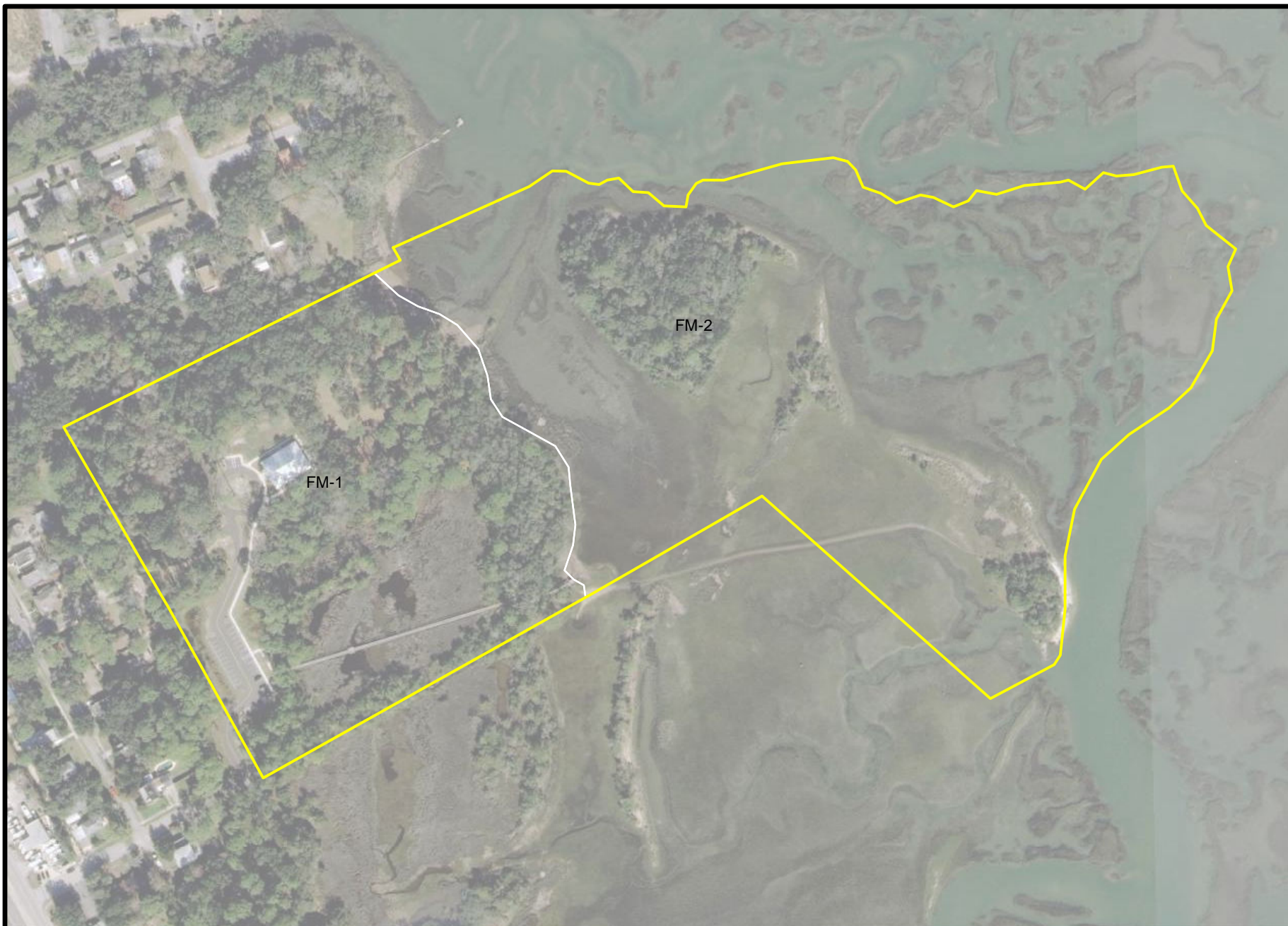
There are numerous drainage ditches with associated small banks of spoil. Most of these run east to west. The northwest corner of the parcel is a wetlands; it appears that it has been altered (scraped) over the years prior to public acquisition.

#### **Geology**

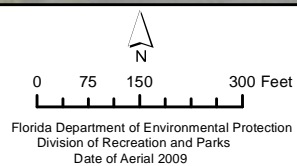
This area is underlain at the surface by Holocene sediments including quartz sands with minor amounts of organic matter and clay associated with lagoon deposits (Scott 1993). It may also contain variably lithified to unlithified shell and quartz sand of the Anastasia Formation. These sediments were deposited less than 4500 years before the present (Brooks 1981b).

#### **Soils**

The U.S. Department of Agriculture, Natural Resources Conservation Service has identified five primary soil types in Fort Mosé Historic State Park in the Soil Survey of St. Johns County (Soil Survey Staff 2012). 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.



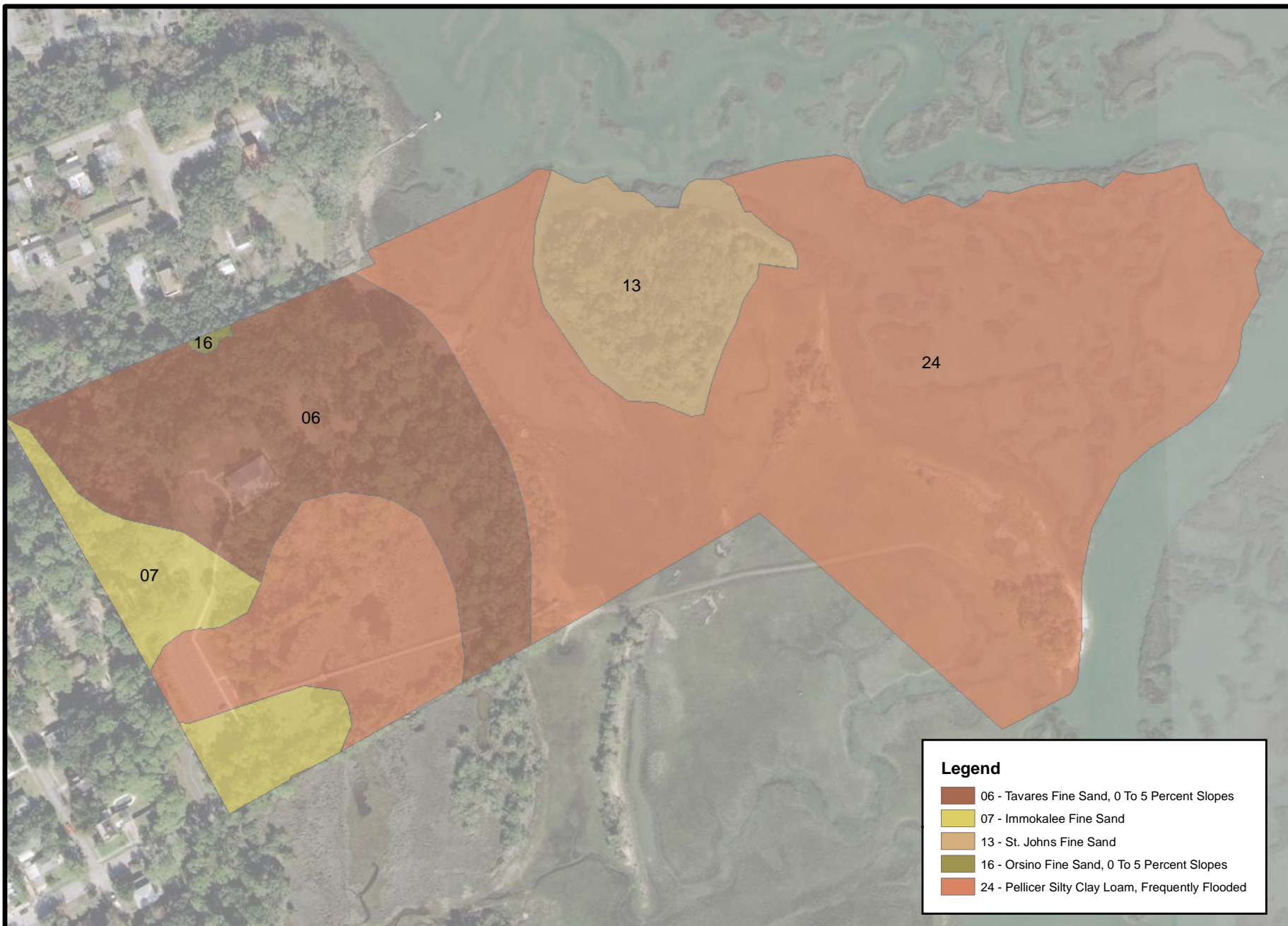
FORT MOSE HISTORIC STATE PARK



MANAGEMENT ZONES MAP



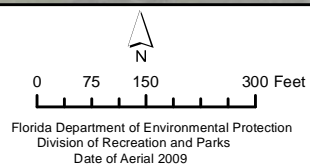




**Legend**

- 06 - Tavares Fine Sand, 0 To 5 Percent Slopes
- 07 - Immokalee Fine Sand
- 13 - St. Johns Fine Sand
- 16 - Orsino Fine Sand, 0 To 5 Percent Slopes
- 24 - Pellicer Silty Clay Loam, Frequently Flooded

FORT MOSE HISTORIC STATE PARK



SOILS MAP





Limited to moderate soil erosion is currently occurring on the three islands within the unit. Boat wakes combined with high tides have resulted in pronounced erosion around all but the northern bank of the southernmost island. In addition, soil subsidence within three archaeological test pits on this island has occurred. Management activities will follow generally accepted best management practices to prevent soil erosion and conserve soil and water resources on site.

## **Minerals**

There are no significant mineral deposits at Fort Mosé Historic State Park.

## **Hydrology**

The park lies within the Upper East Coast drainage basin, which contains approximately 730 square mile (Hand et al. 1996). This basin, which begins south of Jacksonville, extends southward to New Smyrna Beach, consists of a coastal ridge which separates the Atlantic Ocean from a narrow lagoon system and the mainland. Within this, the park is part of the Northern Coastal Basin, a planning unit designated by the St. Johns River Water Management District. Robinson Creek, which has been designated a Class III waterway, drains the area around Fort Mosé Historic State Park into the Tolomato River.

There are two aquifers in this region (Hyde 1965). The shallow aquifer is composed of Pleistocene and Recent deposits of sand and shell; it may extend downward in some areas to include Miocene or Pliocene-age deposits. This aquifer is often of limited horizontal and vertical extent and generally exists as a water table aquifer. Occasionally it is confined by clay beds that place it under artesian pressure. Recharge is by rainfall and discharge occurs through evapotranspiration and seepage to surface water bodies.

This unit is also underlain by the Floridan aquifer. In this area of the state, this aquifer contains highly mineralized water (Hyde 1965). Recharge to the Floridan aquifer near the park is minimal (Fernald and Patton 1984).

The local, surface hydrology of the site has been altered by a number of ditches with associated small spoil banks. It is assumed that they were constructed to drain the site.

## **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 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.

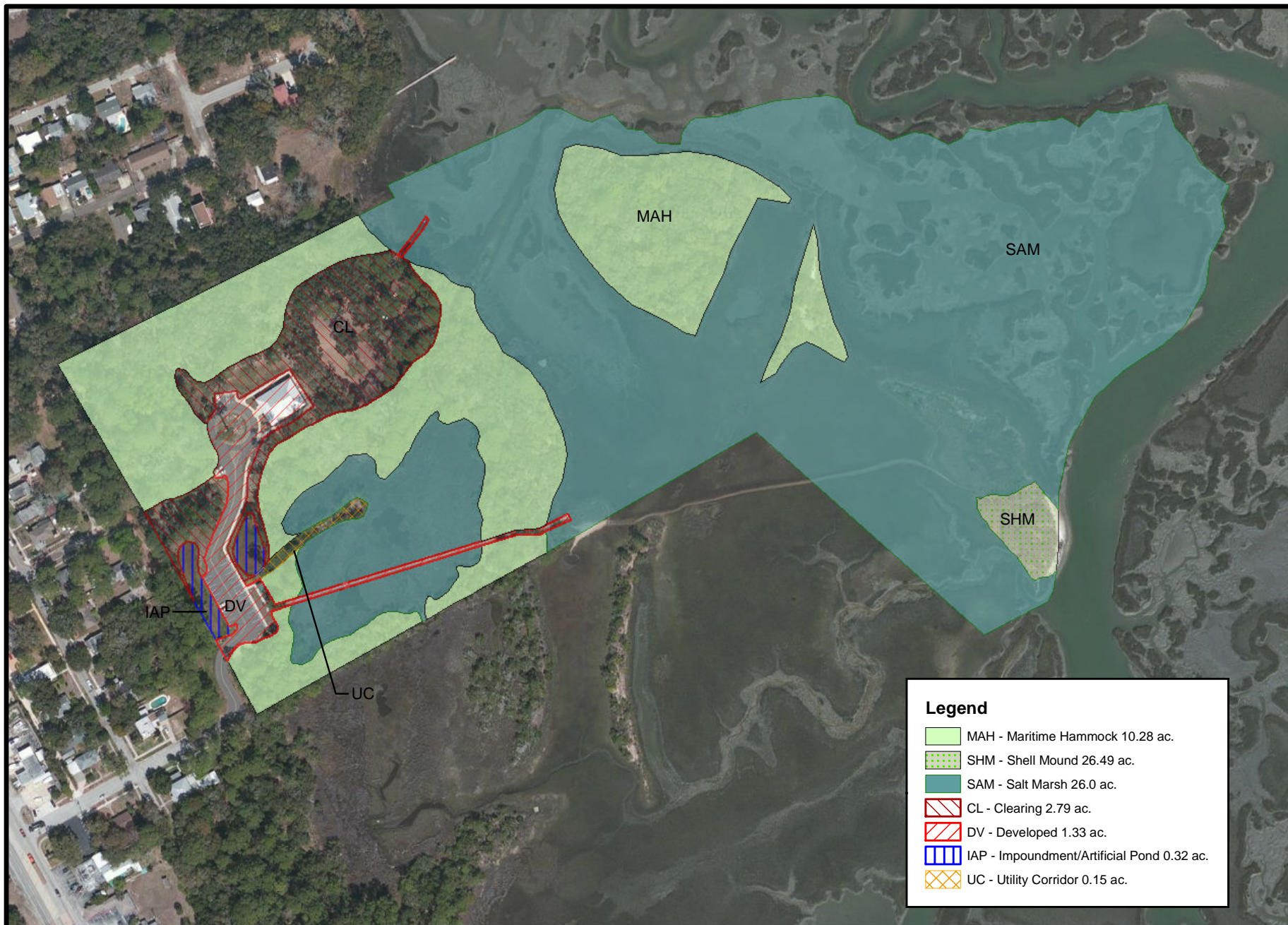
When a natural community within a park reaches the desired future condition, it is considered to be in a "maintenance condition." Required actions for sustaining a community's maintenance condition may include, maintaining optimal fire return intervals for fire dependent communities, ongoing control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

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

### 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. Variation in species composition exists along the coast as you head southward.

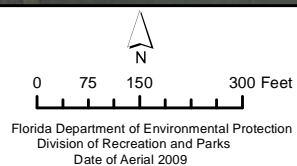
*Description and assessment:* The maritime hammock community dominates the largest island and the eastern portion of the mainland along the marsh front. The dominant plants are live oak, red bay, yaupon holly, and wax myrtle. This community has been impacted by humans, over the years, to varying degrees. Historical activities associated with Fort Mosé undoubtedly also affected this community. The northernmost island supports a wading bird rookery. Since the birds in rookeries are very sensitive to even small amounts of human disturbance, it will be important to minimize human access and recreational activities to this island. This community's condition is good.



#### Legend

- MAH - Maritime Hammock 10.28 ac.
- SHM - Shell Mound 26.49 ac.
- SAM - Salt Marsh 26.0 ac.
- CL - Clearing 2.79 ac.
- DV - Developed 1.33 ac.
- IAP - Impoundment/Artificial Pond 0.32 ac.
- UC - Utility Corridor 0.15 ac.

FORT MOSE HISTORIC STATE PARK



NATURAL COMMUNITIES MAP



*General management measures:* Survey and treatment for exotic species will continue. Occasional staff visits to the northernmost island to check for exotics will be necessary; staff should pick a route that avoids the rookery and spend minimal time on the island. It may be necessary to post signs at various points around the island to discourage the public from accessing it. There is no fire return interval assigned to this community.

### Salt Marsh

*Desired future condition:* 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 has distinct zones of vegetation based on water depth and tidal fluctuations. Saltmarsh cordgrass (*Spartina alterniflora*) dominates the seaward edge; the areas most frequently inundated by tides. Needle rush (*Juncus roemerianus*) dominates the higher, less frequently flooded areas. Other characteristic species include Carolina sea lavender (*Limonium carolinianum*), perennial saltmarsh aster (*Symphotrichum 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 are the two major environmental factors that influence salt marsh vegetation. While there is little data on natural fire frequency in salt marshes, fire probably occurred sporadically and with a mosaic pattern, given the patchiness of the fuels intermixed with creeks, salt flats, etc.

*Description and assessment:* Based on early maps and depictions of the site, a significant portion of what is now salt marsh was once a different community or suite of communities which were converted to agriculture by Ft. Mosé inhabitants. Following the removal of the soil and vegetative material by Flagler, tidal inundation and subsequent deposition of seeds and propagules led to the establishment of salt marsh over this portion of the park.

The salt marsh community ranges from intertidal borders dominated by saltmarsh cordgrass to high marsh dominated by saltgrass (*Distichlis spicata*). Numerous tidal creeks can be found throughout the marsh. In addition, one small island just north of the southernmost island and the western portion of the southernmost island are included in this community. These two islands are comprised of wind and wave-deposited sand and shell. They are dominated by herbaceous vegetation, such as Christmasberry, groundsel tree, bushy seaside oxeye (*Borrchia frutescens*), marshhay cordgrass (*Spartina patens*), and saltgrass. The condition of the community is good.

*General management measures:* This community is in a maintenance state requiring little management other than protection from visitor impacts.

## Shell Mound

*Desired future condition:* This community type is largely the result of human activities instead of natural and physical processes. Shell mounds are small hills or mounds made up almost entirely of mollusk shells discarded by Native Americans. The soils will be circumneutral to slightly alkaline, contain minimal organic material, and are very well drained. Undisturbed shell mounds can support a variety of hardwood trees and shrubs which may include live oak, cabbage palm, red cedar (*Juniperus virginiana*), soapberry (*Sapindus saponaria*), and snowberry (*Chiococca alba*). Desired future conditions include minimizing erosion, including maintaining appropriate vegetation heights to minimize toppling of large trees, and protecting sites from illegal digging.

*Description and assessment:* One island, the site of the second Fort Mosé, is partially a shell mound. There is a long cultural history at this site; it was originally recorded in the Florida Master Site File in 1951 by John M. Goggin of the University of Florida, who began an investigation of the area. Archaeological excavations have occurred sporadically between 1971 and 1988; the test pits were back-filled in the late 1990s. The dominant tree species is red cedar. Although the understory is sparse, various species, including yaupon and groundsel tree can be found. Erosion along the eastern side of the island is an ongoing problem-partially due to Robinson Creek and partially due to human use of the area. Shoreline stabilization activities have occurred in the past and are ongoing. These activities have included depositing clean oyster shells and the installation of oyster mats to stimulate oyster bed recruitment from adjacent areas. This community's condition is fair.

*General management measures:* This island has been highly impacted by past and current human activities as well as erosional processes. Given its cultural significance, it is necessary to minimize unsupervised public access to the site. This will require increased staff, and likely law enforcement, surveillance. Shoreline stabilization activities will need to be continued; this may include the continued use of clean oyster shells. If natural recruitment is low, planting of appropriate native species (e.g., a Living Shorelines project) should occur where the shoreline slope allows.

## Altered Land Cover Types

*Description and assessment:* The altered areas have been included in the community types in which they occur. These areas include clearings, an artificial (stormwater) pond, a utility corridor, a canal/ditch, and developed. The developed areas include the visitor center, boardwalks, picnic area with pavilion, main drive, and parking lots.

*Desired future condition:* The altered areas within the park will be managed to remove Florida Exotic Plant Pest Council (FLEPPC) Category I and II priority invasive exotic plant species. Other management measures may include limited restoration efforts designed to minimize the effects of the ruderal areas on adjacent

natural areas. Cost-effectiveness and consideration of other higher priority restoration projects within the park will determine the extent of restoration measures in ruderal areas. 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.

*General management measures:* Control of FLEPPC Category I and II priority invasive exotic plant species will be ongoing.

## 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.

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

<b>Table 2: Imperiled Species Inventory</b>						
<b>Common and Scientific Name</b>	<b>Imperiled Species Status</b>				<b>Management Actions</b>	<b>Monitoring Level</b>
	<b>FWC</b>	<b>USFWS</b>	<b>FDACS</b>	<b>FNAI</b>		
<b>BIRDS</b>						
Little blue heron <i>Egretta caerulea</i>	SSC	N		G5, S4	2, 10, 13	Tier 1
Snowy egret <i>Egretta thula</i>	SSC	N		G5, S3	2, 10, 13	Tier 1
Tricolored heron <i>Egretta tricolor</i>	SSC	N		G5, S4	2, 10, 13	Tier 1



Table 2: Imperiled Species Inventory						
Common and Scientific Name	Imperiled Species Status				Management Actions	Monitoring Level
	FWC	USFWS	FDACS	FNAI		
White ibis <i>Eudocimus albus</i>	SSC	N		G5, S4	2, 10, 13	Tier 1
Peregrine falcon <i>Falco peregrinus</i>	N	N		G4, S2	2, 10, 13	Tier 1
Wood stork <i>Mycteria americana</i>	FE	E		G4, S2	2, 10, 13	Tier 1
Brown pelican <i>Pelecanus occidentalis</i>	SSC	N		G4, S3	2, 10, 13	Tier 1
<b>MAMMALS</b>						
Rafinesque's big-eared bat <i>Corynorhinus rafinesquii</i>	N	N		G3G4, S2	2, 10, 13	Tier 1
Florida manatee <i>Trichechus manatus</i>	FE	E		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.

Due to years of staff and contractor treatment, the population of exotic plant species within the park is in a maintenance condition. The majority of the exotic infestations occur on the perimeter of the park, adjacent to developed and residential areas. Several times a month, staff survey and monitor the park for exotic species and treat any infestations that are encountered. In addition, the park participates in a county-wide air potato tuber removal effort every year. Since the approval of the last unit management plan, at least 94 acres of exotic plants have been treated at the park.

Table 3 contains a list of the FLEPPC Category I and II invasive, exotic plant species found within the park (FLEPPC 2013). The table also identifies relative distribution for each species and the management zones in which they are known to occur. An explanation of the codes is provided following the table. For an inventory of all exotic species found within the park, see Addendum 5.

<b>Table 3: Inventory of FLEPPC Category I and II Exotic Plant Species</b>			
<b>Common and Scientific Name</b>	<b>FLEPPC Category</b>	<b>Distribution</b>	<b>Management Zone (s)</b>
<b>PLANTS</b>			
Camphor-tree <i>Cinnamomum camphora</i>	I	2	FM-1
Air-potato <i>Dioscorea bulbifera</i>	I	4	FM-1
Japanese honeysuckle <i>Lonicera japonica</i>	I	3	FM-1
Castorbean <i>Ricinus communis</i>	II	1	FM-1
Mexican petunia <i>Ruellia simplex</i>	I	2	FM-1
Chinese tallowtree <i>Sapium sebiferum</i>	I	2	FM-1

<b>Table 3: Inventory of FLEPPC Category I and II Exotic Plant Species</b>			
<b>Common and Scientific Name</b>	<b>FLEPPC Category</b>	<b>Distribution</b>	<b>Management Zone (s)</b>
Brazilian pepper <i>Schinus terebinthifolius</i>	I	2	FM-2
Arrowleaf elephant's ear <i>Xanthosoma sagittifolium</i>	II	2	FM-1

Distribution Categories:

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

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

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

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

### **Special Natural Features**

The scenic vista from the hammock and boardwalk across the open salt marsh toward the three islands is beautiful. These views allow for a different experience from many historic sites.

There is a wading bird rookery on the northernmost island. It is possible to see large aggregations of wading birds nesting, loafing, resting, and feeding within the park. The park is also part of the Great Florida Birding and Wildlife 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 use in determining the significance of collections or archival material. Usually, significance of a collection is based on what or whom it may represent. For instance, a collection of furniture from a single family and a particular era in connection with a significant historic site would be considered

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

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

## **Prehistoric and Historic Archaeological Sites**

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

*Description:* The Florida Master Site File currently lists three recorded archaeological sites within Fort Mosé Historic State Park: SJ0040, SJ5238 and SJ5257. Fort Mosé Historic State Park falls within the East and Central Lake Archaeological Region as defined by Drs. Jerald Milanich and Charles Fairbanks. The area around Fort Mosé 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 Periods. Technological changes observed in the archaeological record and evidence of increasing populations marked each progressive period. The list of Native American cultures also includes the Seminole, although they are primarily descended from Lower Creeks who fled to north Florida from Georgia and Alabama in the 18<sup>th</sup> century (Milanich and Fairbanks 1980; Milanich 1984; Stanton 2001).

One of Florida's most interesting stories is that of Gracia Real de Santa Teresa de Mosé, or Fort Mosé, the first legally sanctioned community of free blacks within the border of what became the United States. In 1738, the Spanish governor of Florida, Manuel de Montiano, established a fortified community of freed slaves, two miles north of St. Augustine (Marron 1988, Deagan 1991, Landers 1990, Landers 1992, Landers n.d., and National Park Service 1994).

The history of Fort Mosé did not occur in a historical vacuum. Fort Mosé can only be understood within the broader context of a tripartite European colonial rivalry, which was fought out in North America and specifically in the southeast.

Juan Ponce de Leon landed in and claimed Florida and the southeast for Spain in 1513, but after several unsuccessful attempts at colonization, and the disastrous Narvaez and de Soto expeditions, the Spanish had given up on Florida. Then in 1564, the French built Fort Caroline on the mouth of the St. Johns River, to challenge Spain's claim to Florida and use the French colony as a fortified base from which to raid Spanish treasure fleets. Stung to action by the French threat, Philip II of Spain commissioned Pedro Menendez de Aviles to destroy the French colony, and

then to colonize Florida to hold the southeast for Spain. In 1565, Menendez landed on the Florida coast south of the French colony, built St. Augustine as a base from which to attack Fort Caroline and destroyed both the French fort and the expedition sent to counterattack him (Crane 1981, Deagan 1991, Landers 1990, Landers 1992, and Landers n.d.).

After several short-lived, unsuccessful attempts to colonize the Carolina coast, in 1670 the British founded Charles Town. The new settlement was on land the Spanish considered part of Florida, and they were determined to contain and weaken the new British colony by any means available. In 1693, the Spanish issued an edict that promised freedom in St. Augustine to slaves who fled from British plantations in South Carolina and Georgia. The Spanish hoped to attract enough slaves to weaken the economic base of the British colony and gain freed workers and draftees for the Spanish militia, who would strengthen the weak Spanish colony. In 1738, the Spanish governor of Florida, Manuel de Montiano, established a fortified community of freed slaves called Fort Mosé. Over 100 freed slaves lived in the new community, located two miles north of St. Augustine (Crane 1981, Deagan 1991, Landers 1990, Landers 1992, and Landers n.d.).

Destroyed in 1740 and reestablished in 1752 at a nearby site, the Fort Mosé settlement served as part of the northern defensive line protecting Spanish St. Augustine and provided a home for the freed slaves who formed the black militia. The inhabitants were mainly escaped, captured, or runaway black slaves from the British colony of South Carolina who had fled to freedom in Spanish Florida.

In 1763, the Treaty of Paris ended the French and Indian War. Under the treaty's terms, Spain ceded Florida to the British, ending the First Spanish Period. The free black inhabitants of Fort Mosé left with the Spanish for Cuba. The occupying British garrisoned Fort Mosé until they partially destroyed it in 1775. During the Second Spanish Period between 1783 and 1821, Minorcan farmers lived at the fort site. In 1812 the Florida Patriots, Anglo settlers seeking to unite Spanish Florida with the United States, briefly captured Fort Mosé. When the Spanish retook the fort, they burned it so no one could hold the fort against them again. The site was never fortified again (Marron 1988, National Park Service 1994).

By 1887, Henry Flagler had bought the property which contained the site of the first Fort Mosé and most of the second Fort Mosé. Flagler had the top several feet of topsoil removed for use as fill under the Alcazar Hotel downtown and the lowered elevation of the Fort Mosé site transformed into salt marsh (Florida Times-Union: 6 Jan. 1887, 1 Feb. 1887, and 30 Mar. 1887).

The site of Fort Mosé was originally recorded on the Florida Master Site File in 1951 by John M. Goggin of the University of Florida, who began an investigation of the area. Other archaeological work at the park includes a project by Charles Fairbanks, who first conducted limited excavations at the site in 1971 (Collins 2010). There were a series of field schools with Florida State University and later the University of Florida. These field schools involved Kathleen Deagan, who participated in the FSU and the UF projects in 1976, 1987, and 1988 (Marron 1988, Deagan 1991,

National Park Service 1994). Additionally, at least six surveys have been conducted in the park for monitoring of construction and infrastructure activities.

Because of archaeological investigations at Fort Mosé from 1971 through 1988, local and state interest led the governor of Florida to approve House Bill 1711, which authorized the Florida Department of Natural Resources (now the Florida Department of Environmental Protection) to acquire the Fort Mosé property through eminent domain. The bill was signed on July 6, 1988, with an effective date of October 1, 1988. Fort Mosé was listed as a National Historic Landmark on October 12, 1994, and dedicated in a public ceremony on February 3, 1995 (Edwards per. comm. 1994, National Park Service 1994).

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 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. When the model was verified using the Florida Master Site File's polygonal site location data, the model captured one of the three recorded site locales.

*Condition assessment:* The Fort Mosé site, SJ0040, is the site of the second fort (1752-63) and is the park's most significant cultural resource. The history of this site reaches back to prehistoric cultures and extends into the mid-19<sup>th</sup> century. It's listed on the National Register and is also listed as a National Historic Landmark. The main threats to the site are erosion, vegetation, and unauthorized visitor use. The condition assessment is good.

The Fort Mosé Museum Historic Artifact Scatter site, 8SJ5238, is a historic site that encompasses at least the second half of the 19<sup>th</sup> century to the early 20<sup>th</sup> century. The condition assessment is good.

The Fort Mosé Museum Linear Arrangement site, 8SJ5257, is the location of the North Beach Railroad bed, which connected St. Augustine with North Beach; it was used in the early 20<sup>th</sup> century to transport tourists to the beach. Its condition assessment is good for the terrestrial portion; the condition of the submerged portion is unknown.

*Level of Significance:* Fort Mosé Historic State Park has one site listed on the National Register of Historic Places and which is also a National Historic Landmark (8SJ00040). There are two additional sites (8SJ5238 and 8SJ5257) which have not been evaluated for NRHP eligibility due to insufficient information, according to the State Historic Preservation Officer.

*General management measures:* The significant archaeological sites within the park can be considered to be in their desired future condition, since they are being preserved in good condition in perpetuity, they are protected from physical threats and are being interpreted to the public.

On the second Fort Mosé site (8SJ00040), shoreline stabilization activities have occurred in the past and are utilized on an as-needed basis. These activities have included depositing clean oyster shells and the installation of oyster mats to stimulate oyster bed recruitment from adjacent areas.

## **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 or recorded historic structures recorded within the 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:* The park's visitor center houses a small museum with four display cases that contain the park's artifact collect. These items are on loan from the Florida Museum of Natural History; they are artifacts found during the excavation of the second Fort Mosé site. They serve to assist in interpreting the history of the Fort Mosé site.

Fort Mosé Historic State Park also has several natural resource items in its collection. These items are stored in the park's interpretive closet and are used in reenactments to demonstrate different aspects of daily life at Fort Mosé. They are as follows: one turtle skull, one conch shell, and three stretched skins.

There is an informal collection of glass bottles and pottery in the storage closet of the park's visitor center. These items are kept in plastic bins and are not currently utilized in interpretive programs.

*Condition Assessment:* The condition of all items in the park's collection is good. There are no issues or threats related to the condition of the park's collection that would require management action.

*Level of Significance:* There are no criteria for use in determining the significance of collections or archival material. Usually, significance of a collection is based on what or whom it may represent. The significance of the items in the park's collection lies in their association with the site and their ability to tell the story of Fort Mosé.

*General management measures:* A Scope of Collection Statement has been developed and adopted at Fort Mosé. A climate control and monitoring system is in

place, as well as pest control. Staff regularly perform housekeeping and records are kept up to date.

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.

<b>Table 4: Cultural Sites Listed in the Florida Master Site File</b>					
<b>Site Name and FMSF #</b>	<b>Culture/Period</b>	<b>Description</b>	<b>Significance</b>	<b>Condition</b>	<b>Treatment</b>
SJ0040 Fort Mosé	St. Johns Ia through mid-19 <sup>th</sup> century	Archaeological Site	NR	G	P, ST
SJ5238 Fort Mosé Museum Historic Artifact Scatter	Historic/19 <sup>th</sup> -20 <sup>th</sup> century American	Archaeological Site	NE	G	P
SJ5257 Fort Mosé Museum Linear Arrangement	Historic/19 <sup>th</sup> -20 <sup>th</sup> century American	Archaeological Site	NE	G	P

**Significance:**

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

**Condition:**

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

**Recommended Treatment:**

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



## **Resource Management Program**

### **Management Goals, Objectives and Actions**

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

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

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

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

### **Natural Resource Management**

#### **Hydrological Management**

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

The natural hydrology of most state parks has been impaired prior to acquisition to one degree or another. Florida's native habitats are precisely adapted to natural drainage patterns and seasonal water level fluctuations, and variations in these

factors frequently determine the types of natural communities that occur on a particular site. Even minor changes to natural hydrology can result in the loss of plant and animal species from a landscape. Restoring state park lands to original natural conditions often depends on returning natural hydrological processes and conditions to the park. This is done primarily by filling or plugging ditches, removing obstructions to surface water "sheet flow," installing culverts or low-water crossings on roads, and installing water control structures to manage water levels.

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

Action 1      Work with SJRWMD and other agencies to assess the park's hydrological needs

Although there are manmade ditches and topographical changes within the park's boundary, it is unknown what impacts those changes have caused and continue to cause. Staff will work with the St. Johns River Water Management District and any other agencies which may be able to provide assistance in obtaining an assessment of the park's hydrological restoration needs.

## **Natural Communities Management**

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

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

### Prescribed Fire Management

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

The Florida Natural Areas Inventory does not categorize any of the natural communities found within Fort Mosé Historic State Park as fire-dependent natural communities, nor does it assign a fire return interval to any of these communities. As a result, prescribed fire will not be used as a management tool at this park.

### Natural Communities Restoration

In some cases, the reintroduction and maintenance of natural processes is not enough to reach the natural community desired future conditions in the park, and active restoration programs are required. Restoration of altered natural

communities to healthy, fully functioning natural landscapes often requires substantial efforts that 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 communities' restoration, requiring annual restoration plans, include large mitigation projects, large-scale hardwood removal and timbering activities, roller-chopping and other large-scale vegetative modifications. The key concept is that restoration projects will go beyond management activities routinely done as standard operating procedures such as routine mowing, the reintroduction of fire as a natural process, spot treatments of exotic plants, and small-scale vegetation management.

Currently, there is not a need for natural communities restoration at this park. All natural community improvements can be accomplished with routine resource management practices.

#### Natural Communities Improvement

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

***Objective: Conduct natural community/habitat improvement activities on one acre or less of the shell mound community.***

- |          |  |
|----------|--|
| Action 1 | Deposit oyster shell and oyster mats along shoreline |
| Action 2 | Plant native species along shoreline                 |

Erosion along the eastern side of the southernmost island is an ongoing problem—partially due to Robinson Creek and partially due to human use of the area. Shoreline stabilization activities have occurred in the past and will likely need to continue. These activities have included depositing clean oyster shells along the shoreline and installing oyster mats to stimulate oyster bed recruitment from adjacent areas. If natural recruitment is low, planting of appropriate native species (e.g., a Living Shorelines project) should occur where the shoreline slope allows.

#### **Imperiled Species Management**

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

DRP strives to maintain and restore viable populations of imperiled plant and animal species primarily by implementing effective management of natural systems. Single species management is appropriate in state parks when the maintenance, recovery or restoration of a species or population is complicated due to constraints

associated with long-term restoration efforts, unnaturally high mortality or insufficient habitat. Single species management should be compatible with the maintenance and restoration of natural processes, and should not imperil other native species or seriously compromise park values.

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

Ongoing inventory and monitoring of imperiled species in the state park system is necessary to meet DRP's mission. Long-term monitoring is also essential to ensure the effectiveness of resource management programs. Monitoring efforts must be prioritized so that the data collected provides information that can be used to improve or confirm the effectiveness of management actions on conservation priorities. Monitoring intensity must at least be at a level that provides the minimum data needed to make informed decisions to meet conservation goals. Not all imperiled species require intensive monitoring efforts on a regular interval. Priority must be given to those species that can provide valuable data to guide adaptive management practices. Those species selected for specific management action and those that will provide management guidance through regular monitoring are addressed in the objectives below.

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

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

Action 1      Implement monitoring protocols for nine imperiled animal species including little blue heron, snowy egret, tri-colored heron, white ibis, wood stork, peregrine falcon, brown pelican, Rafinesque's big-eared bat and Florida manatee

District biological staff and park staff will monitor the park's population of wading bird species (little blue heron, snowy egret, tri-colored heron, white ibis, and wood stork) at the rookery site per the USFWS and/or FWC established guidelines at a Tier 1 level. The presence of any manatees observed within Robinson Creek will be documented. The DRP will continue to depend upon the partnerships with other agencies in the monitoring of any other imperiled species that have been documented at the park.

## **Exotic Species Management**

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

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

***Objective: Annually treat 0.5 acre of exotic plant species in the park.***

- |          |   |
|----------|---|
| Action 1 | Annually develop/update exotic management work plan   |
| Action 2 | Implement annual work plan by treating 0.5 acres in the park annually, and continue maintenance and follow-up treatment as needed |

The numbers of exotic plants treated per year is likely to vary depending on the status of current infestations and any new infestations that might arise during the life of this management plan. Air-potato, Mexican petunia, Japanese honeysuckle, Chinese tallowtree, Brazilian pepper, camphor-tree, arrowleaf elephant's ear, and castorbean will continue to be treated promptly. Priority should be given to FLEPPC Category I and II species when treating exotic plant species in the park.

***Objective: Practice preventative measures to avoid accidental introduction and spreading of exotic species in the park.***

- |          |   |
|----------|---|
| Action 1 | Develop and implement preventative measures |
|----------|---|

Guidelines for clean sod, fill dirt and other material, mowing, cleaning and inspecting equipment that enters the park are recommended. New infestations of exotics can be prevented by ensuring that contractors and staff clean their equipment and do not spread exotics by moving from a contaminated area within the park or outside the park without cleaning their equipment.

## **Special Management Considerations**

### **Timber Management Analysis**

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

A timber management analysis was not conducted for this park since its total 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.

### **Arthropod Control Plan**

All DRP lands are designated as “environmentally sensitive and biologically highly productive” in accordance with Ch. 388 and Ch. 388.4111 Florida Statutes. If a local mosquito control district proposes a treatment plan, DRP 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. 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 approved Arthropod Control Plan is in effect for Fort Mosé Historic State Park.

### **Additional Considerations**

The Trustees have granted management authority of certain sovereign submerged lands to DRP under Management Agreement MA 68-086 (as amended January 19, 1988). Management of Fort Mosé Historic State Park includes certain management activities within the buffer zone of sovereign submerged land along the shoreline, beginning at the mean high water or ordinary high water line, or from the edge of emergent vegetation and extending waterward for 400 feet. This area comprises the salt marsh community of the park, which does not require intense management actions to maintain. The emergent and submerged resources within the buffer zone significantly increase the species diversity within the park. Visitors are able to access this community by a boat, kayak, or canoe. Management actions occurring within the buffer zone include patrolling for unauthorized access, removal of trash, litter, and other debris, public safety activities, and resource inventories and monitoring.

### **Cultural Resource Management**

#### **Cultural Resource Management**

Cultural resources are individually unique, and collectively, very challenging for the public land manager whose goal is to preserve and protect them in perpetuity. DRP is implementing the following goals, objectives and actions, as funding becomes available, to preserve the cultural resources found in Fort Mosé Historic 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, monitoring of the project 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 DHR for consultation and DRP must demonstrate that there is no feasible alternative to removal and must provide a strategy for documentation or salvage of the resource. Florida law further requires that DRP consider the reuse of historic buildings in the park in lieu of new construction and must undertake a cost comparison of new development versus rehabilitation of a building before electing to construct a new or replacement building. This comparison must be accomplished with the assistance of DHR.

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

- |          |   |
|----------|---|
| Action 1 | Complete three assessments/evaluations of archaeological sites annually |
|----------|---|

All recorded cultural sites will be assessed and evaluated on a yearly basis, at a minimum. The assessments will include an examination of each site with attention being paid to any threats to the site's condition such as natural erosion, bicycle or pedestrian damage, looting, construction, animal damage, plant or root damage, or other factors that might cause deterioration of the site. Any preservation and stabilization identified by the assessments/evaluations will need to be prioritized.

***Objective: 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 |
|----------|--|

Information on the park's historical and cultural resources will continue to be updated in the Florida Master Site File as needed. The potential exists for other unrecorded sites; staff will continue to monitor the park for this possibility and consult with the Bureau of Natural and Cultural Resources and Division of Historic Resources staff. An archaeological resource predictive model was completed for the park in 2010; while areas of high, medium, and low sensitivity were identified, there weren't any priority areas noted where a Level 1 archaeological survey should be conducted. A Scope of Collections Statement has been developed and adopted and is available at the park.

***Objective: Maintain 3 of 3 cultural resource sites in good condition.***

- |          |  |
|----------|--|
| Action 1 | Design and implement regular monitoring programs for 3 cultural sites          |
| Action 2 | Create and implement a cyclical maintenance program for each cultural resource |

Park staff will continue to maintain the three known cultural resource sites in a good condition. This will be achieved by regular monitoring, site stabilization and protection from disturbance.

### **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.

Fort Mosé Historic State Park has not been subject to a land management review because its size is less than 160 acres.



## **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.

Fort Mosé Historic State Park is located within St. Johns County about two miles north of the center of the City of St. Augustine in the northeastern part of the state. More than 1 million people live within 50 miles of the park, which includes the cities of Jacksonville, St. Augustine, Palm Coast, Daytona Beach, Palatka, and Green Cove Springs (U.S. Census 2014).

According to U.S. Census data, approximately fifteen percent of residents in St. Johns County identify as black, Hispanic or Latino or another minority group. Almost half (49%) of residents can be described as youth or seniors. Per capita

income in the county is \$36,639 as compared to the statewide average of \$26,451 (U.S. Census 2014).

The park is located in the Northeast Vacation Region, which includes Nassau, Baker, Duval, Clay, Putnam, St. Johns, and Flagler counties (Visit Florida 2011). According to the 2011 Florida Visitor Survey, six percent of domestic visitors to Florida visited this region. Of the estimated 4.5 million domestic visitors who came to this region in 2011, approximately 82 percent traveled for leisure. Visiting the beach/waterfront, shopping and dining were the most popular activities for those visitors. Spring and summer were the most popular seasons for visitors. Most visitors traveled by ground transportation (84 percent), reporting an average stay of 3.4 nights and spending an average of \$95 per person per day (Visit Florida 2011).

There are many resource-based recreation areas within 15 miles of the park including Guana Tolomato Matanzas National Estuarine Research Reserve, Guana River Wildlife Management Area, Twelve Mile Swamp, Stokes Landing and Mosés Creek Conservation Areas, Nocatee Preserve, Anastasia State Park, Faver-Dykes State Park, Matanzas State Forest, Castillo de San Marcos National Monument, and Fort Matanzas National Monument. These lands and waters support an array of resource-based outdoor activities including swimming, fishing, surfing, canoeing/kayaking, boating, camping, picnicking, hiking, biking, horseback riding, wildlife viewing, nature study, and visiting historical sites. The park is an important destination along the Florida Greenways and Trails System "St. Augustine to Nocatee Corridor."

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

The land use immediately surrounding the park is single family residential. U.S. Highway 1 is a major north-south artery located approximately 600 feet to the west. There is a narrow strip of small commercial development along the highway. Further to the north and south are larger commercial areas and planned unit developments.

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

This area is under the jurisdiction of the City of St. Augustine. The Future Land Use of the frontage along U.S. Highway 1 is Commercial, Medium Intensity and behind this is Residential, Low Intensity. North of this neighborhood is a Planned Unit Development (PUD) known as Madeira at St. Augustine (City of St. Augustine 2011). Commercial development on this property will be located in the southwest corner along U.S. Highway 1. The zoning designations surrounding the park include Residential Single Family and Historic Preservation (St. Augustine 2014).

Residential and commercial development surrounding the park is expected to increase especially with the development of the PUD property to the north and the commercial area to the west. Impacts from this future development such as

increased local traffic and an increase in park visitation should be expected. DRP staff will continue to work with adjacent landowners, the City of St. Augustine Planning and Public Works departments, St. Johns County Planning Division, and regulatory agencies to encourage protective measures for the historic site in development plans on adjacent property.

## **Property Analysis**

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

### **Recreation Resource Elements**

This section assesses the 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**

Approximately five acres of the park's upland area is available for recreational activities. The tree-shaded grounds are appropriate for interpretive programs, picnicking, nature study and wildlife viewing. The uplands on the park's three small islands are inaccessible and not appropriate for recreational use. The small island on the southeast side is the location of the second Fort Mosé. While not physically accessible, the site can be viewed and interpreted from the park's boardwalk and scenic overlook.

#### **Water Area**

The majority of the park (approximately 30 acres) is comprised of salt marsh. This community is generally inaccessible and not conducive to water-based recreation. The park is accessible from the Northeast Florida Blueway via Robinson Creek, a tributary of the Tolomato River. Paddling access to the park's canoe/kayak landing from Robinson and Baya Creeks is limited to high tide conditions. The installation of wayfinding signs on the Blueway trail would be helpful to guide paddlers to the park.

## **Natural Scenery**

The park provides expansive views to the east over the salt marsh toward the Tolomato River and the barrier island beyond. This scenic setting is conducive to nature study, wildlife viewing and photography.

## **Significant Habitat**

The wading bird rookery on the large island is one the park's important habitats. During the nesting season, the activities of parents and young can be observed from the dock and the scenic overlook. The park's maritime hammock is important habitat for migrating songbirds and provides visitors with good opportunities for wildlife watching. The salt marsh is another significant habitat in the park. The dock and boardwalk provide access to this community and should be utilized for the placement of interpretive signage to inform visitors about the important role that marshes play in marine ecology.

## **Natural Features**

The salt marsh and maritime hammock are the most significant natural features in the park. They provide a setting for a variety of recreational activities including nature study, wildlife viewing, photography, picnicking, and the interpretation of natural and cultural resources.

## **Archaeological and Historical Features**

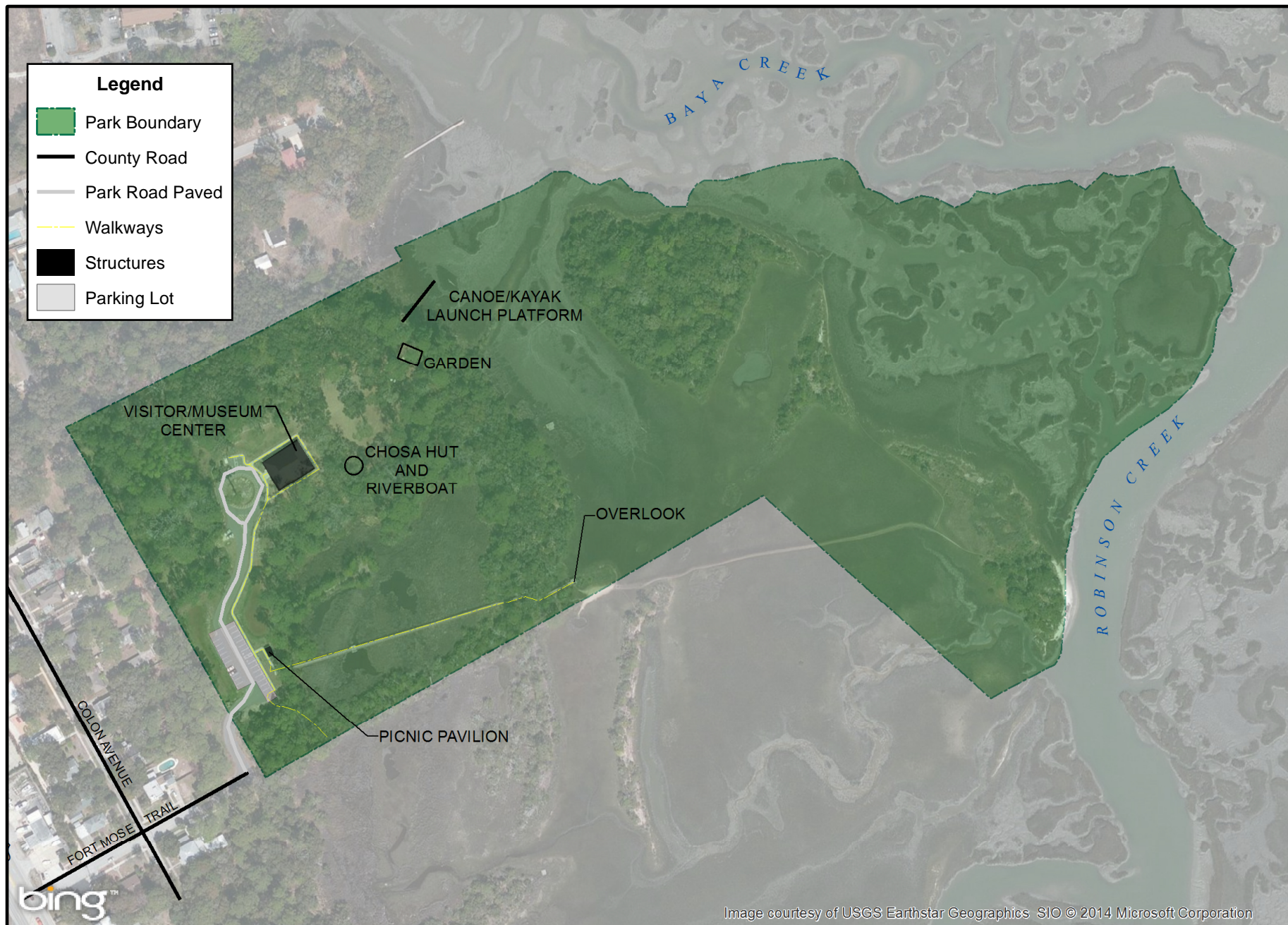
The area occupied by the park has been used by humans from prehistoric times to the present. Most significantly, it is the site of Fort Mosé, the first legally sanctioned free black town in what is now the United States. The site is a tangible symbol of the courage and determination of Africans to be free in colonial America and provides an excellent opportunity to interpret this important historical precedent.

## **Assessment of Use**

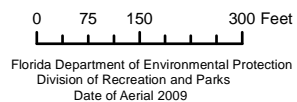
All legal boundaries, significant natural features, structures, facilities, roads and trails existing in the unit are delineated on the base map (see Base Map). Specific uses made of the unit are briefly described in the following sections.

### **Past Uses**

Past uses include prehistoric encampments, the Fort Mosé historic settlement, and a late 19<sup>th</sup> century dredging site to provide fill for the land where Flagler College now stands.



FORT MOSE HISTORIC STATE PARK



BASE MAP



## **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 for the park's upland is Public/Semi-Public and the zoning is Government Use. The intent of both of these designations is to allow uses which are particularly related to a government function. The density and intensity of use is determined by the most restrictive adjacent land use which is Open Land at two dwelling units per acre (City of St. Augustine 2014). No conflicts to park development and management are anticipated.

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

The Fort Mosé visitor center includes a museum and media room. Visitors are able to learn about the history of Fort Mosé by exploring the highly interactive, multimedia exhibits, viewing artifacts found during the excavation of the second Fort Mosé site, and watching a short video on the history of the site. Self-guided tour materials are available. Interpretive panels are installed throughout the park, depicting the story of Fort Mosé. The park has replicas of three historic items, including a chosa or cooking hut, a small historic garden and a small Spanish flat boat called a barca chata. A reenactment of the Battle of Bloody Mosé is staged annually in the park to interpret the 1740 battle in which Africans and Spanish forced the British to retreat from Spanish Florida. During the event, there are demonstrations of 18<sup>th</sup> century colonial and military life, children's activities, various exhibits, plus craft and food vendors.

A picnic pavilion and picnic tables near the visitor center are available for day use at no charge. As part of the Great Florida Birding and Wildlife Trail, the park provides an excellent opportunity for viewing a variety resident and migrating birds. Geocaching opportunities are also available in the park. Tolomato River paddlers can access the park from a canoe/kayak landing on the park's waterfront.

Fort Mosé Historic State Park recorded 51,840 visitors in FY 2014/2015. By DRP estimates, the FY 2014/2015 visitors contributed \$4.4 million in direct economic impact, the equivalent of adding 70 jobs to the local economy (FDEP 2015).

## **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 Fort Mosé Historic State Park all wetlands and floodplains as well as maritime hammock and salt marsh natural communities 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**

### **Recreation Facilities**

The visitor center contains a museum with interpretive exhibits, displays and audiovisual programs. A short interpretive trail loops around the small property to provide visitors with opportunities to learn about life during the colonial period. A 650-foot boardwalk provides visitors with access to a scenic overlook for views over the salt marsh to two small islands – one of which is the site of the second Fort Mosé. A canoe/kayak landing and 200-foot dock provides Northeast Florida Blue paddlers, via the Tolomato River and Robinson Creek, with access to the park. The dock also provides good views of a wading bird rookery on one of the islands. Visitors can picnic at a small picnic pavilion near the boardwalk or at a picnic area next to the visitor center.

### **Support Facilities**

The park has paved parking for 30 vehicles and the visitor center contains public restrooms. The parking, visitor center and restroom all meet ADA standards. A small shed is located near the visitor center.

### **Recreation Facilities**

Visitor Center and Museum  
Small picnic pavilion  
Picnic tables  
Boardwalk/scenic overlook  
Dock/canoe/kayak landing  
Outdoor interpretive kiosk and signs  
Outdoor interpretive exhibits  
(historic garden, chosa,  
barca chata)

### **Support Facilities**

Parking (30 spaces)  
Small storage shed



## **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 528 users per day.***

The park will continue to provide opportunities for resource interpretation, nature observation, hiking, and picnicking. Interpretive exhibits and programs will continue to be offered at the visitor center/museum.

***Objective: Expand the park's recreational carrying capacity by 224 users per day.***

The visitation has substantially increased since the completion of the visitor center/museum in 2008. The majority of visitors come to learn about the historical significance of this site and the people who lived here in the 18<sup>th</sup> century colonial period. While the indoor museum, with its state-of-the-art exhibits and display, is an effective tool, the expansion of the outdoor interpretive area is recommended. The addition of outdoor exhibits, displays, and learning spaces will improve the park's educational function by creating a more comprehensive interpretive setting. Picnicking opportunities will be added to accommodate the expected increase in visitation. The DRP will coordinate with local and state agencies to explore the feasibility of installing additional wayfinding signs and developing a new entrance route on US 1 to enhance the park's visibility for area travelers.

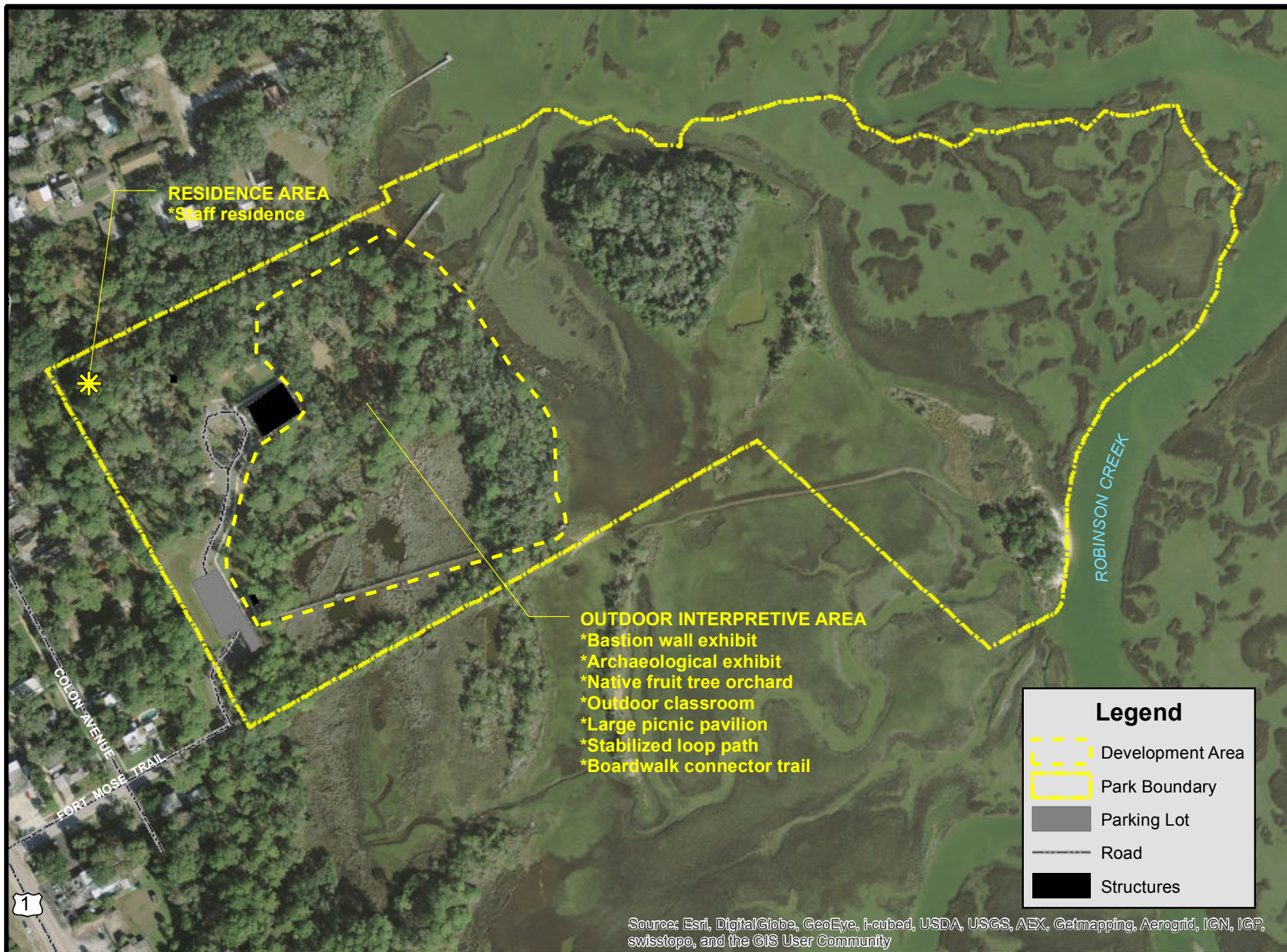
***Objective: Continue to provide the current repertoire of 7 interpretive, educational and recreational programs on a regular basis.***

Five ranger-guided tours are available on request. The "Explore the Estuary" tour interprets the ecology of the salt marsh. "Alien Invaders from Beyond" teaches visitors about the threats to our native habitats posed by invasive exotic plants. The Archaeology and You Series ("Talking Trash" and "Edible Archaeology") teach archaeological concepts to children. "Exploring Mosé" teaches visitors about the rich history and historical significance of Fort Mosé. The tour includes a walk on the grounds a visit to the museum to experience multimedia exhibits and artifact display.

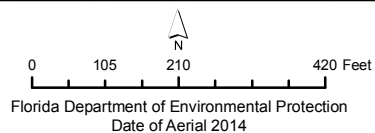
"Flight to Freedom" is an annual living history event conducted for school groups from around the state. The reenactment of the "Battle of Bloody Mosé" is an annual event to interpret the 1740 battle in which Africans and Spanish forced the British to retreat from Spanish Florida. During the event there are demonstrations of 18<sup>th</sup> century colonial and military life, children's activities, various exhibits, plus craft and food vendors.

***Objective: Develop 1 new interpretive, educational and recreational program.***

A self-guided interpretive loop trail with outdoor exhibits and displays is proposed for the north side of the visitor center and museum. The project will feature the reconstruction an interpretation of a section of wood and earthen



FORT MOSE HISTORIC STATE PARK



CONCEPTUAL LAND USE PLAN



bastion wall of the first Fort Mosé. Archaeological exhibits and an outdoor classroom are also proposed for this area.

## **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 facilities needed to implement the conceptual land use plan for Fort Mosé Historic State Park.

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

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

***Objective: Improve/repair 1 existing facility and 1,500 feet of trail.***

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.

**Outdoor Interpretive Area:** The visitor experience will be enhanced by expanding the outdoor interpretive area. The project will feature the reconstruction and interpretation of a section of wood and earthen bastion wall of the first Fort Mosé which was built in 1738 and later destroyed during the 1740 British attack on St. Augustine. The bastion wall will be surrounded by a dry moat which was originally planted with prickly pear and Spanish bayonet to deter attacks. The recreated bastion wall will also have interactive archaeological interpretative displays and exhibits. A native fruit tree orchard and outdoor classroom are also proposed for the area.

The stabilized interpretive loop path will be linked to the boardwalk and scenic overlook with a short connector trail through the maritime hammock along the edge of the salt marsh.

***Objective: Construct 1 new facility.***

**Residence Area:** It is recommended that a staff residence be provided on site to enhance and support the maintenance and security of park facilities. The residence area will be limited to no more than half an acre in size. A small shop may be constructed in the residence area if necessary. If possible, access to the residence will be provided from Ria Vista Avenue at the northwest corner of the park.

**Facilities Development**

Preliminary cost estimates for these recommended facilities and improvements are provided in the Ten-Year Implementation Schedule and Cost Estimates (Table 6) located in the Implementation Component of this plan. These cost estimates are based on the most cost-effective construction standards available at this time. The preliminary estimates are provided to assist 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:

**Outdoor Interpretive Area**

Bastion wall exhibit  
Archaeological exhibit  
Native fruit tree orchard  
Outdoor classroom  
Large picnic pavilion  
Other exhibits and displays as needed  
Stabilized loop path (1000 ft.)  
Boardwalk connector trail (500 ft.)

**Residence Area**

Staff residence (1)

**Recreational Carrying Capacity**

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

The recreational carrying capacity for this park is a preliminary estimate of the number of users the unit could accommodate after the current conceptual development program has been implemented. When developed, the proposed



new facilities would approximately increase the unit's carrying capacity as shown in Table 6.

<b>Table 5. Recreational Carrying Capacity</b>						
	<b>Existing Capacity*</b>		<b>Proposed Additional Capacity</b>		<b>Estimated Recreational Capacity</b>	
<b>Activity/Facility</b>	<b>One Time</b>	<b>Daily</b>	<b>One Time</b>	<b>Daily</b>	<b>One Time</b>	<b>Daily</b>
Interpretive trail	20	80	40	160	60	240
Picnicking	24	48	32	64	56	112
Visitor Center	100	400			100	400
<b>TOTAL</b>	<b>144</b>	<b>528</b>	<b>72</b>	<b>224</b>	<b>216</b>	<b>752</b>
*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.

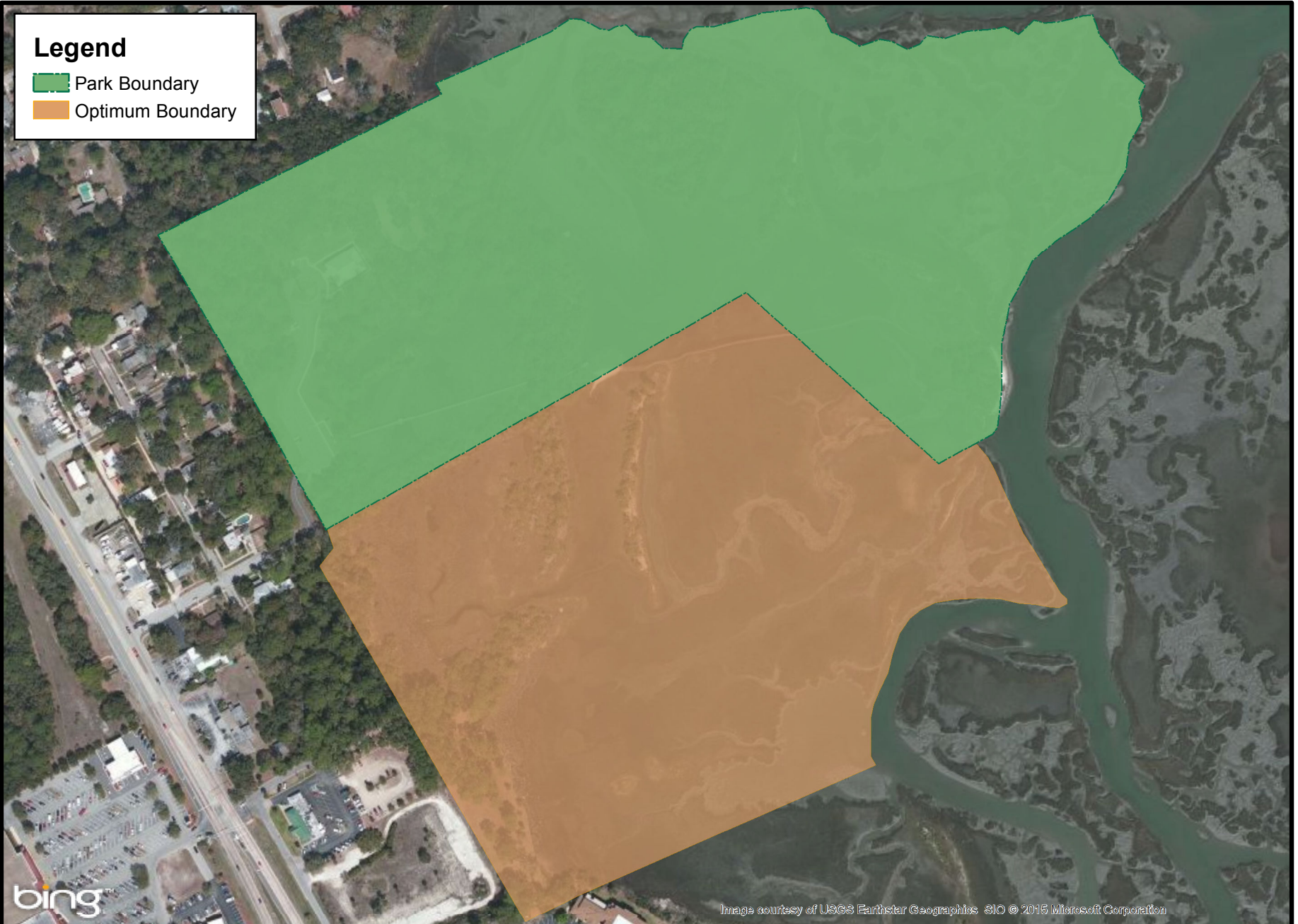
Two parcels on the south side of the park are proposed for the optimum boundary. Composed primarily of salt marsh, interspersed with a few small islands, the addition of these tracts would help to preserve and protect the park's historic setting and scenic views. Also, these properties may contain

cultural resources that could provide important information about the history of the park.

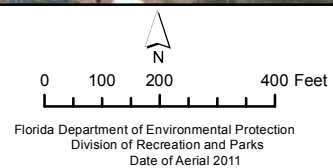


## Legend

-  Park Boundary
-  Optimum Boundary



FORT MOSE HISTORIC  
STATE PARK



OPTIMUM BOUNDARY



## **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 Fort Mosé Historic State Park in 2005, 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.

### **Resource Management**

#### **Natural Resources**

- Treated .4 acres of exotic plants in FY 2013-2014.
- Served as a site for the annual Air Potato Rodeo.
- Recipient site for an air potato leaf beetle release.
- Continued monthly bird surveys.
- Participated in the AZA's FrogWatch.
- Partnered with UCF on a stabilization project for 53 meters of highly eroded shoreline on the southeastern island.

#### **Cultural Resources**

- Surveyed each recorded cultural resource site at least quarterly.

### **Recreation and Visitor Services**

- Developed and implemented a rookery interpretive program.
- Developed and presented a "Life in the Marsh"-marsh walk program.
- Developed and presented a "Birding for Kids" program.
- Presented an ECOcamp (Ecological, cultural and outdoors) program.
- Developed a park-specific salt marsh plant guide for distribution.
- Developed and presented a program on the "Bats of Fort Mosé".
- Participated in Fort Mosé Reads! Annual Literacy Month Event.

- Developed and presented the “History of Fort Mosé” program on a weekly basis.
- Developed and presented the Fort Mosé Scavenger Hunt to school groups by request.
- Developed and presented the monthly Last Saturday Living History Program.
- Developed and presented the annual Battle of Bloody Mosé.
- Developed and presented the annual Flight to Freedom.

### **Park Facilities**

- Constructed a visitor center and museum (35,000 sq. ft.) with state-of-the-art exhibits and displays.
- Installed outdoor interpretive exhibits including a cooking hut (chosa), Spanish flat boat (barca chata), and historic garden.
- Constructed a canoe/kayak landing for paddling access from the Northeast Florida Blueway trail.

### **Management Plan Implementation**

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

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

Statewide priorities for all aspects of land management are evaluated each year as part of the process for developing the DRP’s annual legislative budget requests. When preparing these annual requests, the DRP considers the needs and priorities of the entire state park system and the projected availability of funding from all

sources during the upcoming fiscal year. In addition to annual legislative appropriations, the DRP pursues supplemental sources of funds and staff resources wherever possible, including grants, volunteers and partnerships with other entities. The DRP's ability to accomplish the specific actions identified in the plan will be determined largely by the availability of funds and staff for these purposes, which may vary from year to year. Consequently, the target schedules and estimated costs identified in Table 6 may need to be adjusted during the ten-year management planning cycle.



Table 6  
Fort Mose Historic State Park Ten-Year Implementation Schedule and Cost Estimates  
Sheet 1 of 3

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

Goal I: Provide administrative support for all park functions.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Continue day-to-day administrative support at current levels.	Administrative support ongoing	C	\$33,000
Objective B	Expand administrative support as new lands are acquired, new facilities are developed, or as other needs arise.	Administrative support expanded	UFN	\$14,000
Goal II: Protect water quality and quantity in the park, restore hydrology to the extent feasible, and maintain the restored condition.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Conduct/obtain an assessment of the park's hydrological needs.	Assessment conducted	LT	\$3,200
Action 1	Work with SJRWMD and other agencies to assess the park's hydrological restoration needs.	Assessment obtained	ST	\$3,200
Goal III: Restore and maintain the natural communities/habitats of the park.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Conduct habitat/natural community improvement activities on 1 acre of shell mound community.	# Acres improved or with improvements underway	UFN	\$16,000
Action 1	Deposit oyster shells and oyster mats along the shoreline.	# Acres improved	UFN	\$12,000
Action 2	Plant native species along shoreline.	# acres planted	UFN	\$4,000
Goal IV: Maintain, improve or restore imperiled species populations and habitats in the park.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Update baseline imperiled species occurrence inventory lists for plants and animals, as needed.	List Updated	C	\$1,600
Objective B	Monitor and document 9 selected imperiled animal species in the park.	# Species monitored	C	\$3,500
Action 1	Implement monitoring protocols for six selected animal species including little blue heron, snowy egret, tri-colored heron, white ibis, wood stork, brown pelican, peregrine falcon, Rafinesque's big-eared bat and Florida manatee.	# Species monitored	C	\$3,500
Goal V: Remove exotic and invasive plants and animals from the park and conduct needed maintenance-control.		Measure	Planning Period	Estimated Manpower and Expense Cost* (10-years)
Objective A	Annually treat 0.5 acres of exotic plant species in the park.	# Acres treated	C	\$1,850
Action 1	Annually develop/update exotic plant management work plan.	Plan developed/updated	C	\$1,600
Action 2	Implement annual work plan by treating 0.5 acres in park, annually, and continuing maintenance and follow-up treatments, as needed.	Plan implemented	C	\$250
Objective B	Practice preventative measures to avoid accidental introduction and spreading of exotic species in the park.	# Measures implemented	C	\$100

\* 2014 Dollars  
ST = actions within 2 years  
LT = actions within 10 years  
C = long term or short term actions that are continuous or cyclical  
UFN = currently unfunded need





Table 6  
Fort Mose Historic State Park Ten-Year Implementation Schedule and Cost Estimates  
Sheet 2 of 3

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

Goal 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 3 of 3 recorded cultural resources in the park.	Documentation complete	C	\$250
Action 1	Complete 3 assessments/evaluations of archaeological sites. Prioritize preservation and stabilization projects.	Assessments complete	LT	\$250
Objective B	Compile reliable documentation for all recorded historic and archaeological sites.	Documentation complete	LT	\$600
Action 1	Ensure all known sites are recorded or updated in the Florida Master Site File.	# Sites recorded or updated	ST	\$600
Objective C	Maintain 3 of 3 recorded cultural resources in good condition.	# Sites in good condition	LT	\$1,900
Action 1	Design and implement regular monitoring programs for 3 cultural sites	# Sites monitored	C	\$400
Action 2	Create and implement a cyclical maintenance program for each cultural resource.	Programs implemented	UFN	\$1,500
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 528 users per day.	# Recreation/visitor	C	\$166,000
Objective B	Expand the park's recreational carrying capacity by 244 users per day.	# Recreation/visitor	UFN	\$70,000
Objective C	Continue to provide the current repertoire of 7 interpretive, educational and recreational programs on a regular basis.	# Interpretive/education programs	C	\$70,000
Objective D	Develop 1 new interpretive, educational and recreational programs.	# Interpretive/education programs	UFN	\$15,000
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	\$67,000
Objective B	Continue to implement the park's transition plan to ensure facilities are accessible in accordance with the American with Disabilities Act of 1990.	Plan implemented	LT	\$100,000
Objective C	Improve and/or repair 1 existing facility, 1,500 feet of trail as identified in the Land Use Component.	# Facilities/Miles of Trail/Miles of Road	UFN	\$630,000
Objective D	Construct 1 new facility as identified in the Land Use Component.	# Facilities/Miles of Trail/Miles of Road	UFN	\$270,000
Objective E	Expand maintenance activities as existing facilities are improved and new facilities are developed.	Facilities maintained	UFN	\$50,000

\* 2014 Dollars  
ST = actions within 2 years  
LT = actions within 10 years  
C = long term or short term actions that are continuous or cyclical  
UFN = currently unfunded need



Table 6  
Fort Mose Historic State Park Ten-Year Implementation Schedule and Cost Estimates  
Sheet 3 of 3

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

Summary of Estimated Costs		
Management Categories		Total Estimated Manpower and Expense Cost* (10-years)
Resource Management		\$29,000
Administration and Support		\$47,000
Capital Improvements		\$1,000,000
Recreation Visitor Services		\$438,000
Law Enforcement Activities <sup>1</sup>		
	1Law enforcement activities in Florida State Parks are conducted by the FWC Division of Law Enforcement and by local law enforcement agencies.	

\* 2014 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**



## **Fort Mose Historic State Park Acquisition History**

---

### **Purpose of Acquisition:**

The Board of Trustees of the Internal Improvement Trust Fund of the State of Florida (Trustees) acquired Fort Mose Historic State Park for the conservation and protection of natural and historical resources and it uses the property for compatible resource-based public outdoor recreation, conservation, historical interpretation and related purposes.

### **Sequence of Acquisition:**

On October 20, 1989, the Trustees obtained title to a 26.49-acre property constituting the initial area of Fort Mose Historic State Park. The Trustees acquired the property from F. E. Williams through the exercise of the power of eminent domain. The Trustees paid F. E. Williams good faith estimate value of \$100,587 for the property; this payment was funded through the Land Acquisition Trust Fund (LATF) program. On December 17, 1998, the Trustees purchased a 6.62-acre property under the Preservation 2000 Additions and Inholdings (P2000/A&I) program and added this newly purchased property to Fort Mose Historic State Park.

On July 8, 2005, the State of Florida Department of Environmental Protection, Division of Recreation and Parks (DRP) leased a 8.25-acre property from St. Johns County to manage this property as part of Fort Mose Historic State Park. Since this lease, the Trustees has received a donation of approximately .10-acre property from Bellsouth Communications, Inc. and added the property to Fort Mose Historic State Park.

The 1989 and 2000 purchases, the 2005 lease from St. Johns County, and the 0.10-acre-donation constitute the current area of Fort Mose Historic State Park, which is 41.46 acres.

### **Title Interest:**

The Trustees and St. Johns County hold fee simple title to portions of Fort Mose Historic State Park.

### **Lease Agreement:**

On October 30, 1989, the Trustees leased Fort Mose Historic State Park to DRP under Lease No. 3809. Lease No. 3809 is a 50-year term lease, and it will expire on October 30, 2039.

On July 5, 2005, DRP leased a 8.25-acre property from St. Johns County. The term of this lease is coterminous with the term of Lease No. 3089; and this lease expires when Lease No. 3089 expires.

### **Special Conditions on Use:**

Fort Mose Historic State Park is designated single-use to provide resource-based public outdoor recreation and other park related uses. Uses such as water resource development projects, water supply projects, storm-water management projects, and linear facilities and sustainable agriculture and forestry are not consistent with the purpose for which DRP manages Fort Mose Historic State Park, and they are not allowed in the park. However, if these activities are reviewed and approved in the park's Unit Management Plan, they are allowed in the park.



## **Addendum 2—Advisory Group Members and Report**



**Anastasia State Park  
Advisory Group Members and Report**

---

**Local Government Officials**

The Honorable Nancy Shaver  
Mayor, City of St. Augustine

The Honorable Andrea Samuels,  
Mayor  
City of St. Augustine Beach

The Honorable Rachael Bennett, Chair  
St. Johns County Board of  
County Commissioners

**Agency Representatives**

Warren Poplin, Park Manager

Gary Raulerson, Assistant Manager  
Guana Tolomato Matanzas National  
Estuarine Research Reserve

Jimmy Conner, District Wildlife  
Biologist  
Florida Fish and Wildlife Conservation  
Commission

J.B. Miller, Senior Land Resource  
Planner  
St. John's River Water Management  
District

Mike Wisenbaker, Archaeology  
Supervisor  
Bureau of Archaeological Research  
Florida Division of Historical Resources

Craig Hartwig, Chair  
St. Johns Soil and Water  
Conservation District

**Tourist Development Council**

Glenn Hastings, Executive Director  
St. Johns County Tourist  
Development Council

**Environmental Representatives**

Chris Farrell, Northeast Florida Policy  
Associate  
Audubon Florida

Paul Hayden, Chair  
Surfrider Foundation, First Coast  
Chapter

Alex Farr, President  
Florida Native Plant Society  
Sea Oats Chapter

**Cultural Resource Representatives**

Robert Storey  
The St. Augustine Historical Society

**User Groups**

Jon DePreter, Regular Park User

Davis Walker, President  
Florida Living History, Inc.

David Hernandez, President  
St. Augustine Kayak Anglers

**Citizen Support Organization**

Greg Adams, President  
Friends of Anastasia

Charles Ellis, President  
Fort Mosé Historical Society

**Adjacent Landowners**

Maurice F. Lucas

Michael "Mick" Gurick

## **Anastasia State Park Advisory Group Members and Report**

---

The Advisory Group meeting for Anastasia State Park and Fort Mose Historic State Park was held at the Fort Mose Historic State Park visitor center on August 27, 2015. Max Royle represented Mayor Andrea Samuels, Jan Brewer represented Commissioner Rachael Bennett, and Hugh Lewis represented Mick Gurick. Mayor Nancy Shaver, Gary Raulerson, Mike Wisenbaker, Craig Hartwig, and Davis Walker were unable to attend. All other Advisory Group members were in attendance. Mike Wisenbaker and Chris Farrell submitted written comments. Attending staff were Larry Fooks, Robert Yero, Alice Bard, Warren Poplin, Vicki Tiseth, Sine Murray, Jason Mahon, and David Copps.

Mr. Copps began the meeting by explaining the purpose of the Advisory Group, reviewing the meeting agenda, and summarizing the comments from public workshop that was held the previous evening. Mr. Copps then asked each member of the Advisory Group to express his or her comments on the draft plan.

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

**Jon DePreter** (Recreational User) asked that the park consider the possibility of providing hiking trails on Anastasia State Park's (ASP) Conch Island. He stated that he would like to see some of the beach areas at the northern tip of Conch Island managed to maintain the natural contours of sloughs and swales rather than flattening them out during the beach re-nourishment projects. These areas provide good fish habitat and contribute to a more interesting beach experience. Mr. DePreter said that the proposed northernmost beach access boardwalk is not necessary and would not be worth the construction costs. He recommended removing this facility from the plan. Mr. DePreter asked about the status beach renourishment at ASP. Alice Bard described upcoming projects proposed for 2016.

**Jan Brewer** (representing the St. Johns County Board of County Commissioners) recommended the installation of better wayfinding signs on U.S. 1 so visitors can more easily locate the turn to Fort Mose Historic State Park (FMHSP). She also recommended that the location of the original Fort Mose should be delineated on the ground. Alice Bard said that archaeological studies have not yet identified the location of the original fort. For ASP, Ms. Brewer recommended that the resource management component of the management plan provide more discussion about population trends of the Anastasia Island beach mouse. She asked if trail development on Conch Island would impact the beach mouse. Alice Bard replied that it would not impact the mouse in the proposed area.

**J.B. Miller** (St. Johns River Water Management District) recommended that the proposed campground expansion at ASP be sensitively sited within the successional maritime hammock to avoid the high quality areas. He stated that ASP was designated an Important Bird Area not only for shorebird nesting significance but for the very large numbers of birds that use the beach area for resting/loafing. He recommended that the resource management component of the plan be revised to better describe this phenomenon. Mr. Miller described Salt Run as good habitat for juvenile green sea turtles and recommended that this be mentioned in the resource

## **Anastasia State Park Advisory Group Members and Report**

---

management section of the plan. He stated support for developing a loop trail on Conch Island's mosquito control service roads. Mr. Miller said that the proposed extension of the northernmost beach access boardwalk is not necessary and recommended removing this proposed facility from the plan. He stated concern that there is not enough room to expand the proposed Salt Run parking area as described in the plan. Mr. Miller said that the use of the accent mark in the word Mosé is incorrect and recommended its removal.

**Chris Farrell** (Audubon Florida) recommended the addition of better wayfinding signs on U.S. 1 to help visitors locate the turn for FMHSP. He stated his support for the development of a loop trail at FMHSP so long as the connector piece through the strip of maritime hammock doesn't negatively impact that habitat. Mr. Farrell described the importance of maritime hammock for migrating neotropical songbirds and stated his opposition to the campground expansion proposed for ASP. He said that even successional hammock provides important habitat and should be left to mature. Mr. Farrell stated that the parking improvements proposed for Salt Run should be carefully implemented. He described the open areas along the main park drive as important gopher tortoise habitat and urged better roadside management and signage to reduce road kills. Warren Poplin said that the park has added signs and implemented roadside mowing strategies to increase tortoise awareness and visibility for motorists. Mr. Farrell said that the proposed beach access facilities are not necessary and should be removed from the plan.

**David Hernandez** (St. Augustine Kayak Anglers) described his organization's paddling and fishing program for wounded war veterans call "Honoring the Brave." He said that the Salt Run Day Use area is a very desirable location for hosting events for groups of veterans. Mr. Hernandez stated that he would like to see improved infrastructure at Salt Run to better accommodate this important user group including improved parking, improved restrooms, and the provision of showers.

**Paul Hayden** (Surfrider Foundation, First Coast Chapter) said that ASP doesn't need the proposed boardwalk extensions and recommended their removal from the plan. He noted the congested parking situation at the Salt Run Day Use Area and suggested a shuttle service from the main beach parking area to Salt Run as a possible solution to the problem. Mr. Hayden expressed his opposition to the campground expansion. Warren Poplin explained that the proposed campground expansion is intended to accommodate larger RVs so that the integrity of the existing camping areas can be protected. Mr. Hayden recommended that the impacts of trail development on the north end be fully considered before providing new trails in that area.

**Mel Lucas** (adjacent landowner) stated that Lew Boulevard residents like having ASP as a neighbor. He said that the residents would like for the park to establish a pedestrian entrance where Lew Boulevard terminates at the park boundary and asked that this facility be considered for the plan update. Mr. Lucas noted that traffic problems may arise at the Surf Station intersection if the proposed

## **Anastasia State Park Advisory Group Members and Report**

---

campground expansion is developed due to the larger RVs that will be attracted to the park. If this occurs, he recommended that the Florida Park Service work with local government to have a traffic signal installed.

**Jimmy Connor** (Florida Fish and Wildlife Conservation Commission) noted the importance of the beach and dunes at ASP in providing critical habitat for the beach mouse and nesting least terns. He stated that the proposed addition of beach access facilities could cause negative impacts to critical habitat and recommended that these facilities be removed from the plan.

**Alex Farr** (Florida Native Plant Society, Sea Oats Chapter) stated that the entry experience at FMHSP does not feel safe. She recommended more staffing to provide a welcoming environment. Warren Poplin said that the proposed volunteer campsite and staff residence at FMHSP should address this issue by providing more of a staff presence. Ms. Farr stated her objection to the proposed beach access boardwalks at ASP and recommended their removal from the plan. She stated that the park should consider banning plastic bottles and Styrofoam containers to reduce the amount of litter at ASP. She recommended the addition of more signage to improve fishing line disposal. Ms. Farr said that wheelchair access to the ASP beach needs to be improved. Warren Poplin said that four beach wheel chairs are available on a first come first serve basis. She said that the shuttle service proposed by Mr. Hayden, which would take visitors to the Salt Run Day Use Area from the beach area parking lot, should be ADA accessible.

**Glenn Hasting** (St. Johns County Tourist Development) said that area visitors are looking to connect with local stories. He stated that the parks need to share their stories more effectively with improved interpretive facilities at both parks. He said that interpretation should connect the dots by highlighting the relationships with other historic sites in the area. Mr. Hastings said that building respect for the historic character of cultural sites can be achieved by engaging visitors with good storytelling. He stated that he does not agree with more commercialization in the parks and recommended that they should be kept as primitive as possible. Mr. Hastings said FMHSP should consider offering a living history exhibit along the lines of the cow camp at Lake Kissimmee State Park.

**Max Royal** (representing the City of St. Augustine Beach) stated that he had no comments.

**Greg Adams** (Friends of Anastasia) said that volunteers are always needed for park improvement activities and asked those attending the advisory group meeting to help get the word out. He stated that he is in favor of no development on Conch Island at ASP as is proposed in the current, approved plan. Mr. Adams supports the construction of the proposed beach access boardwalks at ASP to accommodate older and infirmed visitors. He said more staffing and better staff pay is needed for the parks to combat the high turnover rate.

## **Anastasia State Park Advisory Group Members and Report**

---

**Charles Ellis** (Fort Mose Historical Society) said that FMHSP is a jewel of historical information but relatively few know about it. He stated that the greatest challenge for the park is to increase visitation through greater visibility. He recommended that the park install better wayfinding signage on US 1 and consider developing a new entrance road to the park to take advantage of a stop light and public right-of-way next to Schooner's Restaurant on U.S. 1. Mr. Ellis stated support for an increase in the number of days that special events are provided in the park. He recommended the addition of a gift shop in the visitor center and three more chosa exhibits in the outdoor interpretive area. Mr. Ellis is concerned about the staff turnover rate and supports more staffing at the park to keep it open seven days a week. He recommended that the canoe/kayak landing be extended further out to provide better access from the Tolomato River. The landing is currently useable only during high tide.

**Robert Storey** (St. Augustine Historical Society) recommended that the parks should make an extra effort to understand the needs of their visitors so that park improvements can be tailored to those needs. He recommended the addition of more wayfinding signs on US 1 to better guide visitors to FMHSP. He stated that the improved relationship with Cuba will significantly increase tourism. He recommended that historical relationship between Cuba and St. Augustine be promoted to increase visitation to FMHSP. Mr. Storey said visitation to the parks could be increased by creating and distributing marketing publications to area restaurants and attractions. He explained that increased visitation will require the provision of additional facilities. He said that the public should be made aware of the history of the area and the artifacts that have been found in the parks to build understanding and appreciation. Mr. Storey said he doesn't support the construction of additional beach access boardwalks at ASP and recommended that they be removed from the plan. He recommended the installation signs to warn visitors of biting insects (no-seeums). He suggested that the parks should consider providing opportunities for visitors to make monetary contributions to implement park projects. Mr. Storey recommended constructing a replica of the fort somewhere on the property to provide visitors with a tangible, physical experience. He said visitors won't really care if it is in the exact location of the original fort.

**Warren Poplin** (Anastasia State Park/Fort Mose Historic State Park) agreed that better wayfinding signage is needed on US 1 to guide visitors to FMHSP. Mr. Ellis recommended signage on Interstate 95 to promote FMHSP. Mr. Adams recommended smart phone-coded park promotional publications be placed in I-95 rest stops and promotional paper place mats for distribution to area restaurants. Mr. Hayden said that the promotional activities used by the Lost Colony in North Carolina should be emulated to create interest for FMHSP. Mr. Miller mentioned that the Visit Florida website has much good information about FMHSP. Mr. Hastings said the St. Johns County Tourist Development Council could collaborate with FMHSP on marketing and promotional efforts.

**Hugh Lewis** (adjacent landowner) said that he is often asked by park visitors about the location of Fort Mose. He said that the construction of the bastion wall will

## **Anastasia State Park Advisory Group Members and Report**

---

help satisfy visitors' curiosity by providing a tangible experience. Mr. Lewis expressed concern about the impacts to the neighborhood from all proposed improvements and asked the timeline for development. Mr. Poplin said that construction is dependent on funding allocations and the timeline for that is not known at this time. Mr. Lewis asked how the optimum boundary map relates to Mr. Ellis' suggestion of providing a new park entrance from the public right-of-way next to Schooners restaurant on US 1. Sine Murray explained the land acquisition process and that land is purchased only from willing sellers. She said if a new entrance was approved, all property involved in the development of such a facility would have to be delineated on the optimum boundary map.

### **Summary of Public Comments**

**Eric Powell** stated that ASP north end (Conch Island) trails would not be appealing to the general public. He recommended against developing a loop trail in this area. Mr. Powell stated his opposition to the proposed beach access boardwalk extensions at ASP. He recommended removing these facilities from the plan update. Mr. Powell described the need for better interpretation of the Spanish Quarry area and recommended the installation of better signs. He described the fence between the Spanish Quarry and the St. Johns County property as a wildlife hazard and recommended its removal. Mr. Powell noted the abundance of lantana along the Spanish Quarry trails and recommended treatment. He recommended that interpretation at ASP be expanded to tell the story of Salt Run as the original inlet.

### **Summary of Written Comments**

**Mike Wisenbaker** (Division of Historical Resources) provided documentation of archaeological sites in both parks. He provided Florida Master Site File information for ASP showing ten archaeological and historical surveys and ten recorded archaeological sites. For Fort Mose the site file indicates nine archaeological and historical surveys as well as six recorded archaeological sites within the park. He asked that the Division of Recreation and Parks (DRP) compare their records with DHR records and work with DHR to resolve any differences. He recommended that the parks monitor their archaeological sites on an annual basis. Mr. Wisenbaker encouraged the parks to send as many staff as possible to archaeological resource monitoring (ARM) training. He encouraged DRP to interpret as many archaeological sites as possible within state parks. The written comments are attached.

**Chris Farrell** (Audubon Florida) stated that Audubon Florida supports the management goals listed on pages 8 and 9 of the draft management plan which recognize conservation and restoration as fundamental aspects of park management. He recommended that boardwalk construction be eliminated from the plan as it does not increase user access but does impact Anastasia Island beach mouse habitat. He also recommended the elimination of additional camping areas from the plan to preserve wildlife habitat. He said that camping demand beyond what the park currently offers should be directed to nearby private camping facilities. The written comments are attached.



## **Anastasia State Park Advisory Group Members and Report**

---

### **Staff Recommendations**

Suggestions received from the Advisory Group meeting resulted in the following modifications to the draft management plan:

- The proposed northernmost beach access boardwalk at ASP will be removed from the land use component of the plan.
- Language will be added to the ASP resource management component to describe population trends of the Anastasia Island beach mouse.
- Language will be added to the ASP resource management component to describe the very large numbers of shorebirds that use the beach for resting and loafing and the fact that Salt Run provides good habitat for juvenile green sea turtles.
- Language will be added to the FMHSP plan stating that the DRP will coordinate with local and state agencies to explore the feasibility of installing additional wayfinding signs and developing a new entrance route on US 1 to enhance the parks visibility for area travelers.

Several Advisory Group members recommended the development of a loop trail system on Conch Island at ASP. The decision was made not to develop trails in this area due to operational and safety concerns.

One Advisory Group member stated that the accent mark in Mosé is incorrect and recommended its removal from the text. The DRP will review the proper use of the accent mark and modify the text if warranted.

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

With these modifications, DRP staff recommends approval of the proposed management plan for Anastasia State Park and Fort Mose Historic State Park.

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

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

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

**Anastasia State Park  
Advisory Group Members and Report**

---

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

### **Addendum 3—References Cited**



## **Fort Mose Historic State Park References Cited**

---

- Brooks, H.K. 1981a. Physiographic Divisions of Florida. FL. Coop. Ext. Serv., Inst. Food Agric. Sci., Univ. of Florida. Gainesville, FL. 12 pp.
- Brooks, H.K. 1981b. Geologic Map of Florida. FL. Coop. Ext. Serv., Inst. Food Agric. Sci., Univ. of Florida. Gainesville, FL.
- City of St. Augustine. 2011. City of St. Augustine 2030 Comprehensive Plan 2011. St. Augustine, Florida.
- City of St. Augustine. 2014. City of St. Augustine Code of Ordinances. St. Augustine, Florida.
- Collins, L.D., T.F. Doering, and S. Fernandez. 2010. Archaeological Resource Sensitivity Modeling in Florida State Parks District 3: the East and Central Florida Region. University of South Florida Alliance for Integrated Spatial Technologies. DEP Contract No. RP700. 361 pp.
- Crane, V.W. 1981. The Southern Frontier, 1670-1732. W.W. Norton & Company, Inc. New York, NY. 365 pp.
- Deagan, K. 1991. Fort Mosé, America's First Free Black Community. Spanish Pathways in Florida 1492-1992. Pp. 188-202.
- Edwards, N. 1994. Pers. comm. Florida Department of Environmental Protection, Division of Recreation and Parks, District 3 Office.
- Fernald, E.A. and D.J. Patton. 1984. Water Resources Atlas of Florida. Institute of Science FL.
- Florida Department of Environmental Protection (FDEP). 2015. Florida State Park System Economic Impact Assessment for Fiscal Year 2014/2015. Tallahassee, Florida.
- Hand, J., J. Col, and L. Lord. 1996. Northeast Florida District Water Quality 1996 305(b) Technical Appendix. DEP Bureau of Surface Water Management, Tallahassee, FL. 95 pp.
- Hyde, L.W. 1965. Principal Aquifers in Florida. Map Series No. 16. U.S. Geological Survey in cooperation with Bureau of Geology, FL Dept. of Natural Resources, Tallahassee, FL.
- Landers, J. 1990. African Presence in Early Spanish Colonization. Columbian Consequences, Volume 2, Archaeological and Historical Perspectives on the Spanish Borderlands East. Pp. 315-327.
- Landers, J. 1992. Gracia Real de Santa Teresa de Mosé: A Free Black Town in Spanish Colonial Florida. *American Historical Review* 95(1): 9-30.

## Fort Mose Historic State Park References Cited

---

- Landers, J. n.d. Historical Report on Gracia Real de Santa Teresa de Mosé. Manuscript on file with the Florida Museum of Natural History, University of Florida, Gainesville, FL.
- Marron, J. 1988. Preliminary Report on Excavations at the site of Fort Mosé, 1987. Manuscript on file with the Florida Museum of Natural History, University of Florida, Gainesville, FL.
- Milanich, J.T. 1994. Archaeology of Precolumbian Florida. University Press of Florida. Gainesville, FL. 476 pp.
- Milanich, J.T. and C.H. Fairbanks. 1980. Florida Archaeology. Academic Press, Inc. New York, NY. 290 pp.
- National Park Service. 1994. Site Investigation: Fort Mosé (Gracia Real de Santa Teresa de Mosé), A Free Black Town in Spanish Colonial Florida.
- Scott, T. Geologic Map of St. Johns County. Florida Geological Survey Open File Map Series No. 68.
- Soil Survey Staff, Natural Resources Conservation Service, U.S. Department of Agriculture. Web Soil survey. Available online at <http://websoilsurvey.nrcs.usda.gov/>. Accessed 5/2/12.
- Stanton, W. 2001. Memo on file. Florida Department of Environmental Protection. Tallahassee, FL.
- White, W.A. 1970. The Geomorphology of the Florida Peninsula. Florida Geological Survey.

## **Addendum 4—Soil Descriptions**





## Fort Mose Historic State Park Soils Descriptions

---

**6 – Tavares Fine Sand, 0-5% Slopes** - this soil is moderately well-drained, nearly level to gently sloping soil on narrow to broad low ridges and knolls. The seasonal high water table is between depths of 40 and 80 inches for 6 to 8 months during most years, but it recedes to a depth greater than 80 inches during periods of low rainfall. Permeability is very rapid throughout. Available water capacity is very low or low.

**7 – Immokalee Fine Sand** – this is a poorly drained, nearly level soil on broad flats and low knolls in flatwoods. The seasonal high water table is at a depth of less than 10 inches for about two months of the year. Available water capacity is low in the surface layer, very low in the subsurface layer, and moderate in the subsoil.

**13 - St. Johns Fine Sand** – this is a poorly drained, nearly level soil in broad flatwoods and landscapes adjacent to drainageways. The seasonal high water table is at a depth of 0 to 15 inches for two to six months and at 15 to 30 inches during periods of lower rainfall in most years under natural conditions.

**16 – Orsino Fine Sand, 0 to 5% Slopes** – this is a moderately well-drained, nearly level to gently sloping soil on low ridges and knolls and on slopes adjacent to soils on higher positions. The seasonal high water table is at a depth of 40 to 60 inches for more than six months during most years, but it recedes to a depth of more than 60 inches during periods of low rainfall. Permeability is very rapid, and available water capacity is low.

**24 – Pellicer Silty Clay Loam, Frequently Flooded** – this is a very poorly drained, nearly level soil that is in low tidal marshes along stream estuaries along the Atlantic coast. The soil is flooded twice daily by normal high tides; the water table fluctuates with the tide. Permeability is slow in the surface layer and very slow in the upper part of the substratum. Available water capacity is high in the surface layer and moderate in the substratum.

## Fort Mose Historic State Park Soils Descriptions

---

## **Addendum 5—Plant and Animal List**



## Fort Mose Historic State Park Plants and Animals

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
<b>PTERIDOPHYTES</b>		
Giant leather fern.....	<i>Acrostichum danaeifolium</i>	
Cinnamon fern.....	<i>Osmunda cinnamomea</i>	
Golden polypody .....	<i>Phlebodium aureum</i>	
Resurrection fern .....	<i>Pleopeltis polypodioides</i> var. <i>michauxiana</i>	
Tailed bracken .....	<i>Pteridium aquilinum</i> ssp. <i>pseudocaudatum</i>	
Netted chain fern .....	<i>Woodwardia areolata</i>	
Chain fern.....	<i>Woodwardia</i> sp.	
Virginia chain fern.....	<i>Woodwardia virginica</i>	
<b>GYMNOSPERMS</b>		
Red cedar .....	<i>Juniperus virginiana</i>	
Slash pine .....	<i>Pinus elliotii</i>	
Florida arrowroot; coontie .....	<i>Zamia pumila</i>	
<b>ANGIOSPERMS</b>		
<b>MONOCOTS</b>		
Purple bluestem.....	<i>Andropogon glomeratus</i> var. <i>glaucopsis</i>	
Bushy bluestem .....	<i>Andropogon glomeratus</i> var. <i>pumilus</i>	
Bluestem .....	<i>Andropogon</i> sp.	
Dayflower .....	<i>Commelina</i> sp.	
Flatsedge .....	<i>Cyperus</i> sp.	
Witchgrass .....	<i>Dicanthelium</i> sp.	
Air-potato .....	<i>Dioscorea bulbifera</i> *	
Saltgrass .....	<i>Distichlis spicata</i>	
Needle rush.....	<i>Juncus roemerianus</i>	
Muhlygrass.....	<i>Muhlenbergia capillaris</i>	
Gulf hairawn muhly .....	<i>Muhlenbergia capillaries</i> var. <i>filipes</i>	
Woodsgrass; Basketgrass .....	<i>Oplismenus hirtellus</i>	
Panicgrass.....	<i>Panicum</i> sp.	
Starrush whitetop .....	<i>Rhynchospora colorata</i>	
Beaksedge .....	<i>Rhynchospora</i> sp.	
Cabbage palm .....	<i>Sabal palmetto</i>	
Saw palmetto .....	<i>Serenoa repens</i>	
Coastal bristlegrass .....	<i>Setaria corrugata</i>	
Bristlegrass; Foxtail.....	<i>Setaria geniculata</i>	
Saw greenbrier .....	<i>Smilax bona-nox</i>	
Laurel greenbrier .....	<i>Smilax laurifolia</i>	
Greenbrier .....	<i>Smilax</i> sp.	
Saltmarsh cordgrass.....	<i>Spartina alterniflora</i> var. <i>glabra</i>	
Sand cordgrass.....	<i>Spartina bakeri</i>	
Saltmeadow cordgrass.....	<i>Spartina patens</i>	
St. Augustinegrass .....	<i>Stenotaphrum secundatum</i>	
Spanish moss .....	<i>Tillandsia usneoides</i>	

\* Non-native Species

## Fort Mose Historic State Park Plants and Animals

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Bluejacker; Ohio spiderwort .....	<i>Tradescantia ohiensis</i>	
Spanish bayonette .....	<i>Yucca aloifolia</i>	
DICOTS		
Red maple.....	<i>Acer rubrum</i>	
False foxglove .....	<i>Agalinis</i> sp.	
Pepper vine .....	<i>Ampelopsis arborea</i>	
Pawpaw .....	<i>Asimina</i> sp.	
Climbing aster .....	<i>Aster carolinianus</i>	
Black mangrove .....	<i>Avicennia germinans</i>	
Silverling .....	<i>Baccharis glomeruliflora</i>	
Groundsel tree.....	<i>Baccharis halimifolia</i>	
Lemon bacopa .....	<i>Bacopa caroliniana</i>	
Saltwort .....	<i>Batis maritima</i>	
Beggarticks .....	<i>Bidens alba</i> var. <i>radiata</i>	
Bushy seaside oxeye .....	<i>Borrchia frutescens</i>	
American beautyberry .....	<i>Callicarpa americana</i>	
Camellia species .....	<i>Camellia</i> sp. *	
Pignut hickory .....	<i>Carya glabra</i>	
Sugarberry; Hackberry .....	<i>Celtis laevigata</i>	
Partridge pea.....	<i>Chamaecrista fasciculata</i>	
Eyebane .....	<i>Chamaesyce nutans</i>	
Camphortree .....	<i>Cinnamomum camphora</i> *	
Sorrelvine .....	<i>Cissus trifoliata</i>	
Tread-softly.....	<i>Cnidoscolus stimulosus</i>	
Ticktrefoil.....	<i>Desmodium</i> sp.	
Elephantsfoot .....	<i>Elephantopus</i> sp.	
Green-fly orchid.....	<i>Epidendrum conopseum</i>	
Coralbean .....	<i>Erythrina herbacea</i>	
Elliott's milkpea .....	<i>Galactia elliotii</i>	
Bedstraw .....	<i>Galium</i> sp.	
Stiff marsh bedstraw .....	<i>Galium tinctorium</i>	
Marshpennywort .....	<i>Hydrocotyle</i> sp.	
American holly .....	<i>Ilex opaca</i> var. <i>opaca</i>	
Yaupon .....	<i>Ilex vomitoria</i>	
Anil de pasto .....	<i>Indigofera suffruticosa</i> *	
Morningglory .....	<i>Ipomoea trichocarpa</i>	
Bigleaf sumpweed .....	<i>Iva frutescens</i>	
Lantana .....	<i>Lantana camara</i> *	
Virginia pepperweed .....	<i>Lepidium virginicum</i>	
Gayfeather .....	<i>Liatris</i> sp.	
Carolina sealavender .....	<i>Limonium carolinianum</i>	
Japanese honeysuckle .....	<i>Lonicera japonica</i> *	
Christmasberry .....	<i>Lycium carolinianum</i>	
Southern magnolia .....	<i>Magnolia grandiflora</i>	
Climbing hempvine.....	<i>Mikania scandens</i>	

\* Non-native Species

# Fort Mose Historic State Park Plants and Animals

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Wax myrtle .....	<i>Myrica cerifera</i>	
Cockspur pricklypear .....	<i>Opuntia pusilla</i>	
Pricklypear .....	<i>Opuntia</i> sp.	
Erect pricklypear .....	<i>Opuntia stricta</i>	
Virginia creeper .....	<i>Parthenocissus quinquefolia</i>	
Red bay .....	<i>Persea borbonia</i> var. <i>borbonia</i>	
Leafflower .....	<i>Phyllanthus</i> sp.	
American pokeweed .....	<i>Phytolacca americana</i>	
Sweetscent .....	<i>Pluchea odorata</i>	
Paintedleaf .....	<i>Poinsettia cyathophora</i>	
Candyroot .....	<i>Polygala nana</i>	
Knotweed.....	<i>Polygonum</i> sp.	
Black cherry .....	<i>Prunus serotina</i> var. <i>serotina</i>	
Sand live oak.....	<i>Quercus geminata</i>	
Laurel oak .....	<i>Quercus laurifolia</i>	
Myrtle oak.....	<i>Quercus myrtifolia</i>	
Live oak .....	<i>Quercus virginiana</i>	
Winged sumac .....	<i>Rhus copallinum</i>	
Winged sumac .....	<i>Rhus copallinum</i>	
Castorbean .....	<i>Ricinus communis</i>	
Sawtooth blackberry.....	<i>Rubus argutus</i>	
Britton's wild petunia .....	<i>Ruellia simplex</i> *	
Largeflower rosegentian.....	<i>Sabatia grandiflora</i>	
Annual glasswort .....	<i>Salicornia bigelovii</i>	
Perennial glasswort .....	<i>Salicornia perennis</i>	
Lyreleaf sage.....	<i>Salvia lyrata</i>	
Elderberry .....	<i>Sambucus canadensis</i>	
Popcorn tree; Chinese tallowtree	<i>Sapium sebiferum</i> *	
Inkberry .....	<i>Scaevola</i> sp.	
Brazilian-pepper .....	<i>Schinus terebinthifolius</i> *	
Helmet skullcap .....	<i>Scutellaria integrifolia</i>	
Sicklepod .....	<i>Senna obtusifolia</i> *	
Rattlebox .....	<i>Sesbania punicea</i> *	
Bladderpod.....	<i>Sesbania vesicaria</i>	
Shoreline seapurslane.....	<i>Sesuvium portulacastrum</i>	
Tough bully .....	<i>Sideroxylon tenax</i>	
Narrowleaf blueeyed grass .....	<i>Sisyrinchium angustifolium</i>	
Seaside goldenrod.....	<i>Solidago sempervirens</i>	
Ladiestresses.....	<i>Spiranthes</i> sp.	
Poison ivy .....	<i>Toxicodendron radicans</i>	
Highbush blueberry .....	<i>Vaccinium corymbosum</i>	
Shiny blueberry .....	<i>Vaccinium myrsinites</i>	
White crownbeard .....	<i>Verbesina virginica</i>	
Giant ironweed .....	<i>Vernonia gigantea</i>	
Early blue violet .....	<i>Viola palmata</i>	
Grape .....	<i>Vitis munsoniana</i>	

\* Non-native Species

## Fort Mose Historic State Park Plants and Animals

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Muscadine grape.....	<i>Vitis rotundifolia</i>	
Arrowleaf elephant's ear .....	<i>Xanthosoma sagittifolium</i> *	
Hercules'-club.....	<i>Zanthoxylum clava-herculis</i>	

\* Non-native Species



## Fort Mose Historic State Park Plants and Animals

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

### GASTROPODS

Eastern mudsnail ..... *Ilyanassa obsoleta*

### BIVALVES

Eastern oyster ..... *Crassostrea virginica*

### CRUSTACEANS

Heavy marsh crab ..... *Sesarma reticulatum*

Atlantic sand fiddler ..... *Uca pugilator*

Atlantic marsh fiddler ..... *Uca pugnax*

### DAMSELFLIES

Variable dancer ..... *Argia fumipennis*

### FLIES AND MOSQUITOES

Common house fly ..... *Musca domestica*

Love bug..... *Plecia nearctica*\*

### BUTTERFLIES AND MOTHS

Butterflies and skippers

Great southern white ..... *Ascia monuste*

Queen ..... *Danaus gilippus berenice*

American lady ..... *Vanessa virginiensis*

### ANTS, BEES AND WASPS

Honey bee ..... *Apis mellifera*\*

Paper wasp ..... *Polistes* sp.

Red imported fire ant ..... *Solenopsis invicta*\*

### SPIDERS

Crab-like spiny orb-weaver ..... *Gasteracantha elipsoides*

Southern black widow ..... *Latrodectus mactans*

Carolina wolf spider..... *Lycosa carolinensis*

Golden silk orbweaver ..... *Nephila clavipes*

### BONY FISHES

\* Non-native Species

## Fort Mose Historic State Park Plants and Animals

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Snook.....	<i>Centropomus undecimalis</i>	
Mojarra.....	<i>Eucinostomus</i> sp.	
Gulf killifish .....	<i>Fundulus grandis</i>	
Mosquitofish .....	<i>Gambusia holbrooki</i>	
Sailfin molly .....	<i>Poecilia latipinna</i>	
Striped mullet .....	<i>Mugil cephalus</i>	

### AMPHIBIANS

#### Frogs and Toads

Green treefrog.....	<i>Hyla cinerea</i>	
Squirrel treefrog .....	<i>Hyla squirella</i>	
Eastern spadefoot toad .....	<i>Scaphiopus holbrooki</i>	

### REPTILES

#### Turtles and tortoises

Florida snapping turtle .....	<i>Chelydra serpentina</i>	
Carolina diamondback terrapin .	<i>Malaclemys terrapin centrata</i>	
Florida box turtle .....	<i>Terrapene carolina bauri</i>	

#### Lizards

Green anole .....	<i>Anolis carolinensis</i>	
Brown anole .....	<i>Anolis sagrei</i> *	
Southeastern five-lined skink ...	<i>Eumeces inexpectatus</i>	
Broad-headed skink .....	<i>Plestiodon laticeps</i>	

#### Snakes

Corn snake.....	<i>Elaphe guttata guttata</i>	
Yellow rat snake .....	<i>Elaphe obsoleta quadrivittata</i>	
Southern black racer .....	<i>Coluber constrictor priapus</i>	
Pine woods snake.....	<i>Rhadinaea flavilata</i>	

### BIRDS

#### Ducks

Blue-winged teal.....	<i>Anas discors</i>	
Mottled duck .....	<i>Anas fulvigula</i>	
Hooded merganser .....	<i>Lophodytes cucullatus</i>	

#### Loons

Common loon .....	<i>Gavia immer</i>	
-------------------	--------------------	--

#### Storks

Wood stork .....	<i>Mycteria americana</i>	MH
------------------	---------------------------	----

\* Non-native Species

## Fort Mose Historic State Park Plants and Animals

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
<b>Cormorants</b>		
Double-crested cormorant.....	<i>Phalacrocorax auritus</i>	
<b>Anhingas</b>		
Anhinga .....	<i>Anhinga anhinga</i>	
<b>Pelicans</b>		
American pelican .....	<i>Pelecanus erythrorhynchos</i>	
Brown pelican .....	<i>Pelecanus occidentalis</i>	OF
<b>Bitterns and Herons</b>		
Great egret .....	<i>Ardea alba</i>	
Great blue heron.....	<i>Ardea herodias herodias</i>	
Cattle egret.....	<i>Bubulcus ibis*</i>	
Green heron .....	<i>Butorides virescens</i>	
Little blue heron.....	<i>Egretta caerulea</i>	MH
Snowy egret.....	<i>Egretta thula</i>	MH
Tricolored heron.....	<i>Egretta tricolor</i>	MH
Yellow-crowned night-heron ....	<i>Nyctanassa violacea</i>	

\* Non-native Species

## Fort Mose Historic State Park Plants and Animals

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
<b>Ibises and Spoonbills</b>		
Roseate Spoonbill .....	<i>Ajaia ajaja</i>	
White ibis.....	<i>Eudocimus albus</i>	SM
Glossy ibis.....	<i>Plegadis falcinellus</i>	
<b>Vultures</b>		
Turkey vulture .....	<i>Cathartes aura</i>	
Black vulture .....	<i>Coragyps atratus</i>	
<b>Ospreys</b>		
Osprey .....	<i>Pandion haliaetus</i>	
<b>Hawks, Eagles and Kites</b>		
Cooper's hawk .....	<i>Accipiter cooperii</i>	
Sharp-shinned hawk.....	<i>Accipiter striatus</i>	
Red-tailed hawk.....	<i>Buteo jamaicensis</i>	
Red-shouldered hawk .....	<i>Buteo lineatus</i>	
Northern harrier.....	<i>Circus cyaneus</i>	
Bald eagle .....	<i>Haliaeetus leucocephalus</i>	
<b>Falcons</b>		
Peregrine falcon.....	<i>Falco peregrinus</i>	MH
American kestrel .....	<i>Falco sparverius</i>	
<b>Rails</b>		
Clapper rail .....	<i>Rallus longirostris</i>	
<b>Plovers</b>		
Semipalmated plover .....	<i>Charadrius semipalmatus</i>	
Black-bellied plover .....	<i>Pluvialis squatarola</i>	
<b>Oystercatchers</b>		
American oystercatcher .....	<i>Haematopus palliatus</i>	
<b>Sandpipers</b>		
Spotted sandpiper .....	<i>Actitis macularius</i>	
Western sandpiper .....	<i>Calidris mauri</i>	
Least sandpiper .....	<i>Calidris minutilla</i>	
Semipalmated sandpiper .....	<i>Calidris pusilla</i>	
Lesser yellowlegs .....	<i>Tringa flavipes</i>	
Willet .....	<i>Tringa semipalmata</i>	
<b>Gulls and Terns</b>		
Laughing gull .....	<i>Leucophaeus atricilla</i>	
Herring gull .....	<i>Larus argentatus</i>	
Ring-billed gull .....	<i>Larus delawarensis</i>	

## Fort Mose Historic State Park Plants and Animals

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Forster's tern.....	<i>Sterna forsteri</i>	
Royal tern .....	<i>Thalasseus maximus</i>	
<b>Doves</b>		
Rock pigeon .....	<i>Columba livia</i> *	
Common ground-dove .....	<i>Columbina passerina</i>	
Eurasian collared-dove .....	<i>Streptopelia decaocto</i> *	
Mourning dove.....	<i>Zenaida macroura</i>	
<b>Parakeets</b>		
Monk parakeet.....	<i>Myiopsitta monachus</i> *	
Black-hooded parakeet .....	<i>Nandayus nenday</i> *	
<b>Owls</b>		
Great horned owl .....	<i>Bubo virginianus</i>	
Eastern screech-owl .....	<i>Megascops asio</i>	
<b>Swifts</b>		
Chimney swift.....	<i>Chaetura pelagica</i>	
<b>Hummingbirds</b>		
Ruby-throated hummingbird.....	<i>Archilochus colubris</i>	
<b>Kingfishers</b>		
Belted kingfisher .....	<i>Megaceryle alcyon</i>	
<b>Woodpeckers</b>		
Northern flicker.....	<i>Colaptes auratus</i>	
Pileated woodpecker.....	<i>Dryocopus pileatus</i>	
Red-bellied woodpecker .....	<i>Melanerpes carolinus</i>	
Red-headed woodpecker .....	<i>Melanerpes erythrocephalus</i>	
Downy woodpecker .....	<i>Picoides pubescens</i>	
<b>Flycatchers and Kingbirds</b>		
Great-crested flycatcher .....	<i>Myiarchus crinitus</i>	
Eastern phoebe .....	<i>Sayornis phoebe</i>	
Gray kingbird .....	<i>Tyrannus dominicensis</i>	
Eastern kingbird .....	<i>Tyrannus tyrannus</i>	
<b>Vireos</b>		
White-eyed vireo .....	<i>Vireo griseus</i>	
Red-eyed vireo .....	<i>Vireo olivaceus</i>	
Blue-headed vireo.....	<i>Vireo solitarius</i>	
<b>Jays and Crows</b>		
American crow.....	<i>Corvus brachyrhynchos</i>	

\* Non-native Species

## Fort Mose Historic State Park Plants and Animals

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Fish crow .....	<i>Corvus ossifragus</i>	
Blue jay .....	<i>Cyanocitta cristata</i>	
<b>Swallows and Martins</b>		
Barn swallow .....	<i>Hirundo rustica</i>	
Northern rough-winged swallow .....	<i>Stelgidopteryx serripennis</i>	
Tree swallow .....	<i>Tachycineta bicolor</i>	
<b>Chickadees and Titmice</b>		
Tufted titmouse .....	<i>Baeolophus bicolor</i>	
Carolina chickadee .....	<i>Poecile carolinensis</i>	
<b>Wrens</b>		
Marsh wren .....	<i>Cistothorus palustris</i>	
Carolina wren .....	<i>Thryothorus ludovicianus</i>	
House wren .....	<i>Troglodytes aedon</i>	
<b>Kinglets</b>		
Ruby-crowned kinglet .....	<i>Regulus calendula</i>	
<b>Gnatcatchers</b>		
Blue-gray gnatcatcher .....	<i>Polioptila caerulea</i>	
<b>Bluebirds and Robins</b>		
Eastern bluebird .....	<i>Sialia sialis</i>	
American robin .....	<i>Turdus migratorius</i>	
<b>Thrashers</b>		
Gray catbird .....	<i>Dumetella carolinensis</i>	
Northern mockingbird .....	<i>Mimus polyglottos</i>	
Brown thrasher .....	<i>Toxostoma rufum</i>	
<b>Starlings</b>		
European starling .....	<i>Sturnus vulgaris</i> *	
<b>Waxwings</b>		
Cedar waxwing .....	<i>Bombycilla cedrorum</i>	
<b>Warblers</b>		
Yellow-rumped warbler .....	<i>Dendroica coronata</i>	
Prairie warbler .....	<i>Dendroica discolor</i>	
Yellow-throated warbler .....	<i>Dendroica dominica</i>	
Palm warbler .....	<i>Dendroica palmarum</i>	
Pine warbler .....	<i>Dendroica pinus</i>	
Common yellowthroat .....	<i>Geothlypis trichas</i>	
Worm-eating warbler .....	<i>Helmitheros vermivorus</i>	

\* Non-native Species

## Fort Mose Historic State Park Plants and Animals

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Black-and-white warbler .....	<i>Mniotilta varia</i>	
Northern parula .....	<i>Parula americana</i>	
American redstart .....	<i>Setophaga ruticilla</i>	
<b>Sparrows</b>		
Swamp sparrow .....	<i>Melospiza georgiana</i>	
Savannah sparrow .....	<i>Passerculus sandwichensis</i>	
<b>Cardinals and Buntings</b>		
Northern cardinal .....	<i>Cardinalis cardinalis</i>	
Indigo bunting .....	<i>Passerina cyanea</i>	
<b>Meadowlarks, Blackbirds and Orioles</b>		
Red-winged blackbird .....	<i>Agelaius phoeniceus</i>	
Boat-tailed grackle .....	<i>Quiscalus major</i>	
Common grackle .....	<i>Quiscalus quiscula</i>	
<b>Finches</b>		
House finch .....	<i>Carpodacus mexicanus</i>	
<b>MAMMALS</b>		
<b>Didelphids</b>		
Virginia opossum .....	<i>Didelphis virginiana</i>	
<b>Moles</b>		
Eastern mole .....	<i>Scalopus aquaticus</i>	
<b>Bats</b>		
Rafinesque's big-eared bat .....	<i>Corynorhinus rafinesquii</i>	MH
<b>Edentates</b>		
Nine-banded armadillo.....	<i>Dasypus novemcinctus*</i>	
<b>Lagomorphs</b>		
Marsh rabbit .....	<i>Sylvilagus palustris</i>	
<b>Rodents</b>		
Eastern gray squirrel .....	<i>Sciurus carolinensis</i>	
<b>Carnivores</b>		
Raccoon.....	<i>Procyon lotor</i>	
<b>Sirens</b>		
Florida manatee.....	<i>Trichechus manatus</i>	OW

\* Non-native Species

Fort Mose Historic State Park Plants and Animals

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
<b>Deer</b>		
White-tailed deer .....	<i>Odocoileus virgininus</i>	MH

\* Non-native Species



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



## Imperiled Species Ranking Definitions

---

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

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

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

### **FNAI GLOBAL RANK DEFINITIONS**

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

## Imperiled Species Ranking Definitions

---

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

## LEGAL STATUS

### **FEDERAL**

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

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

## **Imperiled Species Ranking Definitions**

---

- PT ..... Proposed for listing as Threatened Species.
- C ..... Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants. Defined as those species for which the USFWS currently has on file sufficient information on biological vulnerability and threats to support proposing to list the species as endangered or threatened.
- E(S/A) ..... Endangered due to similarity of appearance.
- T(S/A) ..... Threatened due to similarity of appearance.
- EXPE, XE..... Experimental essential population. A species listed as experimental and essential.
- EXPN, XN.... Experimental non-essential population. A species listed as experimental and non-essential. Experimental, nonessential populations of endangered species are treated as threatened species on public land, for consultation purposes.

### **STATE**

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

- FE ..... Federally-designated Endangered
- FT ..... Federally-designated Threatened
- FXN..... Federally-designated Threatened Nonessential Experimental Population
- FT(S/A) ..... Federally-designated Threatened species due to similarity of appearance
- ST..... Listed as Threatened Species by the FWC. Defined as a species, subspecies, or isolated population, which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat, is decreasing in area at a rapid rate and therefore is destined or very likely to become an endangered species within the near future.
- SSC..... Listed as Species of Special Concern by the FWC. Defined as a population which warrants special protection, recognition or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance or substantial human exploitation that, in the near future, may result in its becoming a threatened species.

## Imperiled Species Ranking Definitions

---

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

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

## **Addendum 7—Cultural Information**





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

#### **A. General Discussion**

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

#### **B. Agency Responsibilities**

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

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

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

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

#### **C. Statutory Authority**

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

#### **D. Management Implementation**

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

## **Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties (revised March 2013)**

---

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](http://www.flheritage.com/preservation/compliance/docs/minimum_review_documentation_requirements.pdf) .

\* \* \*

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

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

Phone: (850) 245-6425

Toll Free: (800) 847-7278

Fax: (850) 245-6435

## Eligibility Criteria for National Register of Historic Places

---

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

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

## **Eligibility Criteria for National Register of Historic Places**

---

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

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

---

**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.

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

---