## FERNANDINA PLAZA HISTORIC STATE PARK

#### **UNIT MANAGEMENT PLAN**

#### **APPROVED**

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

March 10, 2004



### Department of Environmental Protection

Jeb Bush Governor Marjorie Stoneman Douglas Building 3900 Commonwealth Boulevard, MS 140 Tallahassee, Florida 32399-3000 David B. Struhs Secretary

March 10, 2004

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

Re: Fernandina Plaza Historic State Park

Lease Number: #3620

Dear Ms. White:

The Division of State Lands has completed the review of Fernandina Plaza Historic State Park Land Management Plan and find that it fulfills all the requirements of Rule 18-2.021, F.A.C., and ss. 253.034 and 259.032, F.S. Therefore, on March 10, 2004, the Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund approves this plan. The plan's ten-year update will be due in January 2014.

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

Sincerely,

Delmas T. Barber

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

"More Protection, Less Process"

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#### INTRODUCTION

Fernandina Plaza Historic State Park is located in Nassau County on Amelia Island, northeast of the City of Jacksonville (see Vicinity Map). Access to the park is from White Street in the town of Old Fernandina. White Street is reached via 14th Street north from Highway A1A (State Road 200). The vicinity map also reflects significant land and water resources existing near the park.

Fernandina Plaza Historic State Park was acquired in 1941, and was funded using "old money." Currently the park contains approximately 0.8 acre and public outdoor recreation and conservation is the designated single use of the park. There are no legislative or executive directives that constrain the use of this park (see Addendum 1).

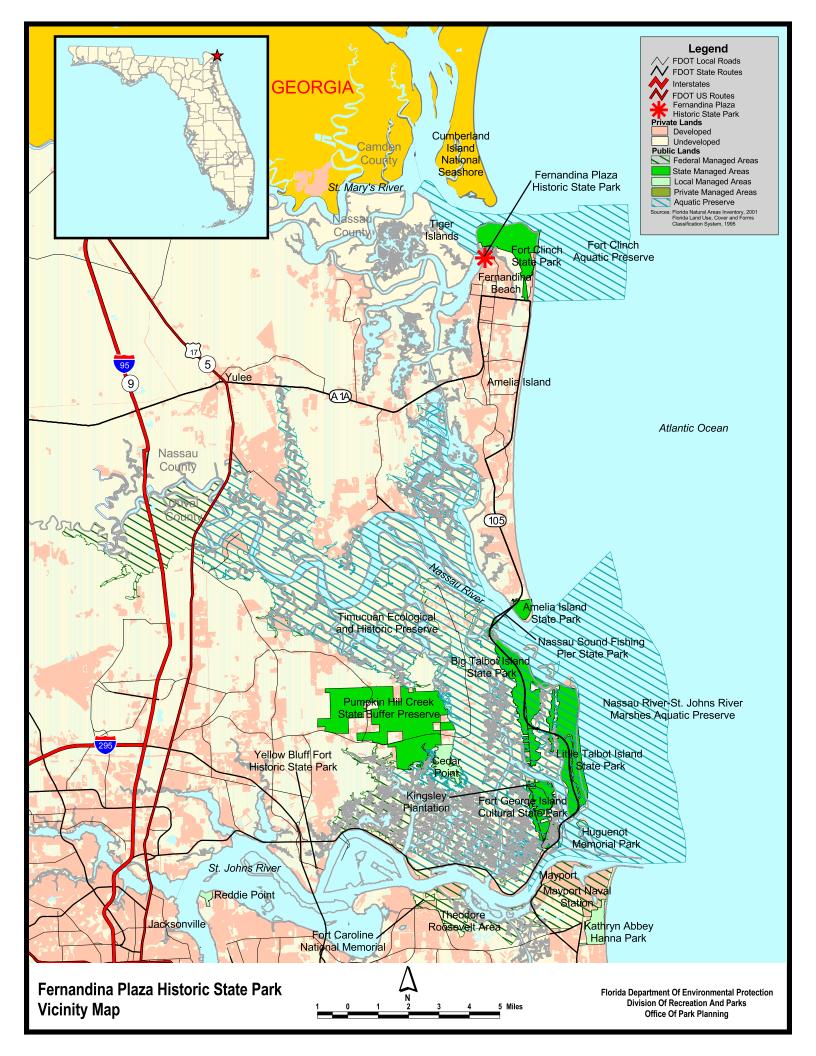
#### PURPOSE AND SCOPE OF THE PLAN

This plan serves as the basic statement of policy and direction for the management of Fernandina Plaza Historic State Park as a unit of Florida's state park system. It identifies the objectives, criteria and standards that guide each aspect of park administration, and sets forth the specific measures that will be implemented to meet management objectives. The plan is intended to meet the requirements of Sections 253.034 and 259.032, Florida Statutes, Chapter 18-2, Florida Administrative Code, and intended to be consistent with the State Lands Management Plan. With approval, this management plan will replace the January 28, 1998 approved plan. All development and resource alteration encompassed in this plan is subject to the granting of appropriate permits; easements, licenses, and other required legal instruments. Approval of the management plan does not constitute an exemption from complying with the appropriate local, state or federal agencies. This plan is also intended to meet the requirements for beach and shore preservation, as defined in Chapter 161, Florida Statutes and Chapters 62B-33, 62B-36 and 62R-49, Florida Administrative Code.

The plan consists of two interrelated components. Each component corresponds to a particular aspect of the administration of the park. The resource management component provides a detailed inventory and assessment of the natural and cultural resources of the park. Resource management problems and needs are identified, and specific management objectives are established for each resource type. This component provides guidance on the application of such measures as prescribed burning, exotic species removal, and restoration of natural conditions.

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

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



consistent with this plan or the management purposes of the park and should be discouraged.

The potential for generating revenue to enhance management was also analyzed. Visitor fees and charges are the principal source of revenue generated by the park. It was determined that multiple-use management activities would not be appropriate as a means of generating revenues for land management. Instead, techniques such as entrance fees, concessions and similar measures will be employed on a case-by-case basis as a means of supplementing park management funding.

#### MANAGEMENT PROGRAM OVERVIEW

#### **Management Authority and Responsibility**

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

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

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

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

In the management of Fernandina Plaza Historic State Park, protection and preservation of cultural resources is all-important. Resource considerations are given priority over user considerations and development is restricted to the minimum necessary for ensuring its protection and maintenance, limited access, user safety and convenience, and appropriate interpretation. Permitted uses are primarily of a passive nature, related to the aesthetic and educational enjoyment of cultural resources. Program emphasis is placed on interpretation of the cultural attributes of the park.

#### Park Goals and Objectives

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

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

#### **Cultural and Natural Resources**

- 1. Conduct historical analyses to ascertain locations and chronology of cultural features in the Town Lot before 1821.
- 2. Protect existing archaeological sites and their associated assemblage of artifacts from vandalism, erosion and other forms of encroachment.
- 3. Develop areas of the park with due consideration of the location of historic cultural features, and in accordance with Secretary of the Interior's Standards for the Treatment of Historic Properties.
  - **A.** Design and develop a designated parking area to limit vehicular impacts to sensitive cultural features.
  - **B.** Design and construct interpretive facilities in a manner that minimizes ground disturbance.
- **4.** Coordinate ground-disturbing activities in the park with the Department of State, Division of Historic Resources.
- **5.** Monitor the shoreline erosion on the adjacent parcel to determine whether its progression threatens the archaeological sites within the park.
- **6.** Control invasive exotic plants through mowing or herbicide treatments.

#### Recreation

- 7. Continue to provide quality, resource-based, outdoor recreational and interpretive programs and facilities at the park.
  - **A.** Continue to implement a program of regular safety and maintenance checks of park grounds.
- 8. Seek funding to expand recreational and interpretive opportunities through the improvement of programs and the development of new use areas and facilities, as outlined in this management plan.
  - **A.** Develop stand-alone interpretive facilities designed to educate visitors about the significance of the Town Lot and Fort San Carlos in the context of the history of the area.

#### Park Administration/Operations

- 9. Establish a continuation budget for this park unit.
- **10.** Involve the public in active maintenance of the park and attempt to foster a sense of public stewardship.

#### **Management Coordination**

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

The Department of Agriculture and Consumer Services, Division of Forestry (DOF), assists Division staff in the development of wildfire emergency plans and provides the authorization required for prescribed burning. The Florida Fish and Wildlife Conservation Commission (FFWCC), assists staff in the enforcement of state laws pertaining to wildlife, freshwater fish and other aquatic life existing within park boundaries. In addition, the FFWCC aids the Division with wildlife management programs, including the development and management of Watchable Wildlife programs. The Department of State, Division of Historical Resources (DHR) assists staff to assure protection of archaeological and historical sites. The Department of Environmental Protection (DEP), Office of Coastal and Aquatic Managed Areas (CAMA) aids staff in aquatic preserves management programs. The DEP, Bureau of Beaches and Wetland Resources aids staff in planning and construction activities seaward of the Coastal Construction Line. In addition, the Bureau of Beaches and Wetland Resources aid the staff in the development of erosion control projects. Emphasis is placed on protection of existing resources as well as the promotion of compatible outdoor recreational uses.

#### **Other Designations**

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

There are no surface waters located within the park boundaries. This unit is adjacent to Fort Clinch State Park Aquatic Preserve, which is designated as an aquatic preserve under provision of the Florida Aquatic Preserve Act of 1975 (section 258.35, Florida Statutes).

#### RESOURCE MANAGEMENT COMPONENT

#### INTRODUCTION

The Division of Recreation and Parks has implemented resource management programs for preserving for all time the representative examples of natural and cultural resources of statewide significance under its administration. This component of the unit plan describes the natural and cultural resources of the park and identifies the methods that will be used to manage them. The stated management measures in this plan are consistent with the Department's overall mission in ecosystem management. Cited references are contained in Addendum 2.

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

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

Because park units are often components of larger ecosystems, their proper management is often affected by conditions and occurrences beyond park boundaries. Ecosystem management is implemented through a resource management evaluation program (to assess resource conditions, evaluate management activities, and refine management actions), review of local comprehensive plans, and review of permit applications for park/ecosystem impacts.

#### RESOURCE DESCRIPTION AND ASSESSMENT

#### **Natural Resources**

#### **Topography**

Fernandina Plaza Historic State Park is located in the northwestern portion of Amelia Island within the historic town of Old Fernandina. Amelia Island itself lies within the Coastal Lowlands physiographic zone, and more specifically within the Atlantic Coast Lowlands, Atlantic Coastal Ridge, Lagoons and Barrier Chain (Puri and Vernon, 1959). The island, which is 13.5 miles long and up to three miles wide, is oriented parallel to the mainland. The Atlantic Ocean bounds Amelia Island on the east, and an extensive salt marsh system lies to the west. Fernandina Plaza Historic State Park occurs at an elevation of approximately three meters above sea level; the terrain is essentially flat. The original topography has undoubtedly changed as a result of human occupation and the construction of Fort San Carlos.

#### **Geology**

The geomorphology of Fernandina Plaza is similar to that of Fort Clinch State Park, which is located approximately half a mile to the north and east. Pleistocene deposits make up the core of Amelia Island (Silver Bluff formation formed 35,000 years BP), and younger Holocene deposits overlie them (Henry 1971). Both these recent sediments are composed of undifferentiated surface materials containing fine-grained sands with clay lenses and shell

layers interspersed. Underlying the recent sediments is the Hawthorn Group of middle Miocene age. Beds of sand and clay are dominant in the Hawthorn Group, except near the base of the formation where hard beds of sand and carbonate occur. Underlying the Hawthorn group is the Ocala group, consisting of relatively pure white limestone of Eocene age (Watts 1991).

#### **Soils**

The soils of Fernandina Plaza Historic State Park are Entisols in the psamment suborder. The only soil type is Kershaw fine sand (see Soil Map). This is a gently sloping, excessively drained, acid soil common on ridges and isolated knolls. The water table is typically at a depth of greater than 72 inches (Watts 1991). See Addendum 3 for a complete soil description. No significant soil erosion currently occurs on site, however riverbank erosion does occur on the adjacent parcel. If this continues, the shoreline may eventually recede to the park boundary. 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 known commercial minerals within this unit.

#### **Hvdrology**

There are no surface water features at the site. The western property line, however, lies within 10 meters of the Amelia River. Soil erosion into the Amelia River occurs from the property immediately adjacent to the river. Within the park, soil erosion and runoff is not yet a problem because of site characteristics that facilitate water absorption (level topography, porous soils, and complete vegetative cover). Increased usage of the site, and continued erosion of the shoreline on the adjacent property could result in erosion within the park.

There are no groundwater concerns at this site.

#### **Natural Communities**

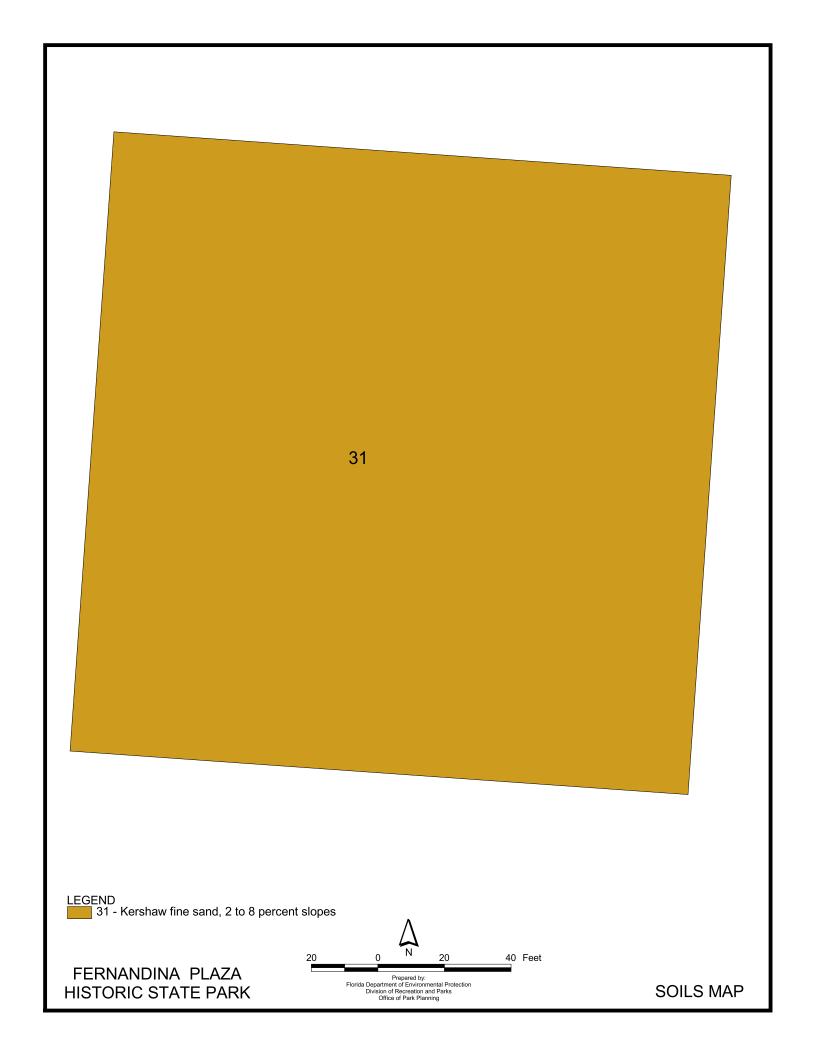
The system of classifying natural communities employed in this plan was developed by the Florida Natural Areas Inventory (FNAI) <u>FNAI Descriptions</u>. The premise of this system is that physical factors, such as climate, geology, soil, hydrology and fire frequency generally determine the species composition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

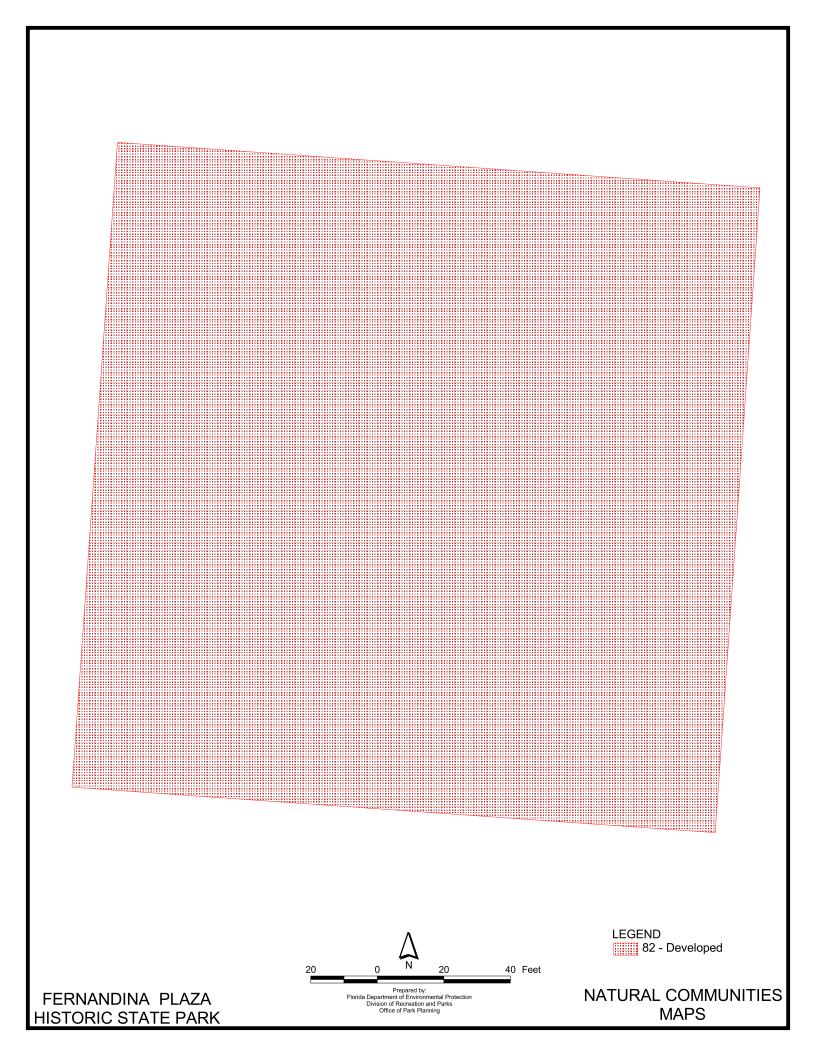
The park contains no distinct natural communities; a developed area occupies the entire site. The narrative below provides a park specific assessment of the existing developed area. A list of plants and animals occurring in the unit is contained in Addendum 4.

**Developed.** The developed area contains turf grass lawn and a State of Florida Historic Marker.

#### **Designated Species**

Designated species are those that are listed by the Florida Natural Areas Inventory (FNAI), U.S. Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation





Commission (FFWCC), and the Florida Department of Agriculture and Consumer Services (FDA) as endangered, threatened or of special concern.

There are no records of designated species at this site.

#### **Special Natural Features**

This unit contains no special natural features.

#### **Cultural Resources**

Evaluating the condition of cultural resources is accomplished using a three part evaluative scale, expressed as good, fair, poor. These terms describe the present state of affairs, rather than comparing what exists against the ideal, a newly constructed component. Good describes a condition of structural stability and physical wholeness, where no obvious deterioration other than normal occurs. Fair describes a condition in which there is a discernible decline in condition between inspections, and the wholeness or physical integrity is and continues to be threatened by factors other than normal wear. A fair judgment is cause for concern. Poor 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 to reestablish physical stability.

The Florida Master Site File (FMSF) lists two sites within the unit.

The cultural resources of Fernandina Plaza are recorded in the Florida Master Site File (FMSF) as Na10, Fernandina Town Lot or Fort San Carlos. The Town Lot is cited as a contributing property in the National Register of Historic Places' 1990 listing for the Old Town Fernandina Historic Site. The park contains the largest known (and surmised) undeveloped portion of the site of Spanish municipal and military activity dating from the late 1780s, when the government acquired it in a land exchange. Archaeological investigations, which began in the early 1950s, revealed intermittent occupation and use of the park area for as long as 4,000 years, beginning with the Orange Period (2000 BC - 500 BC) and continuing to this day. Archaeologists of the 1950s first believed the site to have been an extensive village, as they found and recorded Na10a, a shell and sand midden, on the northern edge of the Town Lot site. However more recent studies, which interpret the origins of the "midden" as the result of earth moving during construction activities, have prompted reconsideration of the aboriginal activities at the site as intermittent rather than constant. Consequently, the shell pile recorded as Na10a has become an interesting footnote about modern interpreters and Spanish construction activity.

The Town Lot was first defined in 1769, when a town site which included the lot was mapped; however, as late as 1777, there seems to have been no suggestion of town development. The place had stood uninhabited, except for encampments of English colonial invaders, since the Moore raids of 1702. Earlier observers had mentioned a settlement of "heathen Yamassee Indians" around 1675. That settlement had diversified and expanded until Moore's raid effectively ended it. All inhabitants were enslaved, killed, or driven away. When Ogelthorpe's Georgians paused on their way to besiege St. Augustine (1745-1746), they found the island deserted. Maria Mattair owned the Town Lot and surroundings from 1784 until 1788, when the Spanish colonial government assumed possession after a land exchange.

The Town Lot or Plaza was an essential element of the Spanish colonial town plan. Government offices were designed to face the Plaza, and in the case of this coastal village, the Plaza could be fortified as a defensive work. In 1801, an army encampment was recorded in the Plaza. A fort, including a battery of three cannon, was established from 1801 to 1814. The Florida Patriots captured the fort in 1812, but the Spanish government retook it and established Fort San Carlos on the site. Gregor MacGregor captured the fort in 1817; then, after a few days' return to government forces, Luis Aury took Fort San Carlos in September of the same year. The Town Lot subsequently faded into obscurity, although the military is known to have used it during the Civil War (1861-1865) and the Spanish American War (1898). The site has diminished somewhat; it originally extended to the edge of the Amelia River, but erosion has reduced its area. Today, most of the Town Lot is contained within Fernandina Plaza Historic State Park, an unfenced grassy area, marked by a State of Florida Historic Marker.

While no significant erosion threatens the cultural resources within the park unit, existing shoreline erosion compromises the portion of the Town Lot site on the adjacent, undeveloped waterfront property. If this erosion continues unchecked, the shoreline may recede within the park boundary, at which time erosion control measures must be taken to protect the park's archaeological sites.

#### RESOURCE MANAGEMENT PROGRAM

#### **Special Management Considerations**

#### **Timber Management Analysis**

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

A timber management analysis was not conducted for this park. The 0.8-acre park does not support timber growth.

#### **Additional Considerations**

There are no special management considerations for natural resources at this site.

#### **Management Needs and Problems**

The Town Lot, Na10, is in fair condition. Although extensive archaeological sampling and investigation have occurred since 1950, excavations and holes were refilled, and the resultant grassy surface is largely undisturbed by looting or pot holing. Vehicular access is unrestricted and occasionally the park has been used as a parking lot. This gives rise to concerns about the long-term effects of vehicle use on an unevenly graded archaeological resource. A receding shoreline on the adjacent undeveloped parcel may threaten the archaeological sites within the park, if the erosion continues unchecked. Implementation of a simple shoreline monitoring schedule will help define the progression of the erosion. If the erosion is determined to be a threat to the park's cultural resources, an erosion management plan may be designed and implemented.

While preservation and interpretation of a significant cultural resource are the reasons for the existence of Fernandina Plaza Historic State Park, the park remains essentially undeveloped. This unfortunately downgrades the importance of the resources as archaeological resources, and further diminishes their meaning for the area. It also demeans the significance of this footprint of late Second Spanish Period Florida. As the National Register nomination notes, the Old Town Fernandina Historic Site constitutes a major portion of the last planned Spanish town in (eastern) North America. The Town Lot is an essentially unchanged element in that plan and contributes to our understanding of it. As a contributing property in the National Register district, it affords the possibility of important and productive research and study.

#### **Management Objectives**

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

- 1. Conduct historical analyses to ascertain locations and chronology of cultural features in the Town Lot before 1821.
- 2. Protect existing archaeological sites and their associated assemblage of artifacts from vandalism, erosion and other forms of encroachment.
- 3. Develop areas of the park with due consideration of the location of historic cultural features, and in accordance with Secretary of the Interior's Standards for the Treatment of Historic Properties.
  - A. Design and develop a designated parking area to limit vehicular impacts to sensitive cultural features.
  - **B.** Design and construct interpretive facilities in a manner that minimizes ground disturbance.
- **4.** Coordinate ground disturbing activities in the park with the Department of State, Division of Historic Resources.
- 5. Monitor the shoreline erosion on the adjacent parcel to determine whether its progression threatens the archaeological sites within the park.
- **6.** Control invasive exotic plants through mowing or herbicide treatments.

#### **Management Measures for Natural Resources**

#### **Hvdrology**

No specific hydrological management is necessary; however, management will comply with best management practices to prevent soil erosion and to protect the nearby Amelia River.

#### **Prescribed Burning**

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

Since there is no fire-dependent habitat, this site does not receive any prescribed fire

treatments.

#### **Designated Species Protection**

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

No management of designated species is necessary at this park.

#### **Exotic Species Control**

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

All plant species recorded thus far at Fernandina Plaza are exotics. The two species that authorities consider as invasive, lantana and paper mulberry, should be controlled through mowing or the application of appropriate herbicides. Regular mowing of the exotic turf grasses is essential to prevent erosion and consequential damage to cultural resources.

#### **Problem Species**

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

No problem species are present at the park.

#### **Management Measures for Cultural Resources**

The management of cultural resources is often complicated because these resources are irreplaceable and extremely vulnerable to disturbances. The advice of historical and archaeological experts is required in this effort. Approval from Department of State, Division of Historical Resources (DHR) must be obtained before taking any actions, such as development or site improvements that could affect or disturb the cultural resources on state lands (see DHR Cultural Management Statement).

Actions that require permits or approval from DHR include development, site excavations or surveys, disturbances of sites or structures, disturbances of the substrate, and any other actions that may affect the integrity of the cultural resources. These actions could damage evidence that would someday be useful to researchers attempting to interpret the past.

Because of the known archaeological and historical resources in the vicinity, management measures for cultural resources at Fernandina Plaza include conducting extensive historical investigation of the cultural features of the Town Lot prior to 1821. This involves a review of the archaeological field work conducted at the site since the 1950s. Park areas will be managed to prevent additional disturbances to the site from vehicular traffic. The shoreline of the adjacent parcel will be monitored annually to determine the progression of erosion, and

whether it threatens archaeological resources within the park. Ground disturbing activities will be conducted only in accordance with DHR guidelines.

#### Research Needs

#### **Natural Resources**

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

There are no research needs for natural resources at this site.

#### **Cultural Resources**

Cultural resource research at Fernandina Plaza Historic State Park should consist of three components:

- 1. Design research: Extensive historical research on locations of cultural features present in the Town Lot during the period before American acquisition (1821) should be encouraged.
- 2. Research about human activities in the past: Further research to support person-to-person, first person, and participatory interpretive activities should be encouraged.
- 3. Research about subsurface cultural elements: Extensive, well-prepared, professionally supervised anthropological research, including archaeology projects, should be encouraged. This work should include summarizing previous excavations and planning and undertaking future ground-disturbing research, in compliance with Chapter 267, Florida Statutes.

#### **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 contained in Addendum 5. Cost estimates for conducting priority management activities are based on the most cost effective methods and recommendations currently available (see Addendum 5).

#### **Land Management Review**

Section 259.036, Florida Statutes, established land management review teams to determine whether conservation, preservation, and recreation lands titled in the name of the Board of Trustees of the Internal Improvement Trust Fund (board) are being managed for the purposes for which they were acquired and in accordance with a land management plan adopted pursuant to s. 259.032, the board of trustees, acting through the Department of Environmental Protection (department). The managing agency shall consider the findings and recommendations of the land management review team in finalizing the required update of its management plan.

Fernandina Plaza Historic State Park was not subject to a land management review.

#### LAND USE COMPONENT

#### INTRODUCTION

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

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

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

#### EXTERNAL CONDITIONS

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

Fernandina Plaza Historic State Park is located within Nassau County, about 2 miles northwest of Fernandina Beach in the northeast corner of the state. The populations of Nassau County and adjacent Duval County have grown 17 percent since 1990, and are projected to grow an additional 14 percent by 2010 (BEBR, University of Florida, 2002). As of 2000, 22 percent of residents in these counties were in the 0-14 age group, 45 percent in the 15-44 age group, 22 percent in the 45-64 age group, and 11 percent were aged 65 and over, which indicates a younger community than the state average for these groupings (BEBR, University of Florida, 2002). Nearly 1,003,000 Floridians reside within 50 miles of the park, which includes the cities of Fernandina Beach, Jacksonville, Jacksonville Beach, Green Cove Springs, Orange Park, Macclenny, Baldwin, Atlantic Beach, Neptune Beach, and Callahan (Census, 2000).

Fernandina Plaza Historic State Park does not keep records of visitation statistics. Therefore, by DRP estimates, visitors contributed \$0 in direct economic impact and the equivalent of 0 jobs to the local economy (Florida Department of Environmental Protection, 2003).

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

Fernandina Plaza Historic State Park is located on the northwest side of Amelia Island, near the Amelia River. The Old Town Fernandina Historic District, just north of the present city of Fernandina Beach, surrounds the site. To the north lies Fort Clinch State Park, situated at a strategic location at the entrance into the St. Marys River. West of the historic site, across the Amelia River, is the undeveloped Little Tiger Island. The majority of this property is low with a few scattered higher areas and contains significant archaeological and historical resources.

Fort Clinch State Park provides recreational opportunities for fishing, bicycling, camping, picnicking, hiking, and beach enjoyment. Other Florida State Parks within a short drive include Amelia Island State Park, Nassau Sound Fishing Pier State Park, Big Talbot Island State Park, Little Talbot Island State Park, Fort George Island State Park, and Yellow Bluff Fort Historic State Park. Across the Cumberland Sound lies Cumberland Island National Seashore and is only accessed by ferry. Nearby Fernandina Beach is a popular place for its beach, kayaking, fishing, horseback riding, nature tours, golf, and tennis.

#### Planned Use of Adjacent Lands

The Park is located in Old Town Fernandina, a high-density residential historic preservation district. The property is surrounded by old homes, some of which are in disrepair (Nassau, 1990). Recently, new residents have been purchasing and restoring many of these Victorian homes in hopes of revitalizing this historic district. Local tourism operators anticipate an increased interest from visitors in Old Town Fernandina in the next few years. Adjacent to the residential area is an industrial zone, but industrial use is limited to the frontage along 2<sup>nd</sup> Street. Nearby wetlands are designated for conservation and state land designated for recreation. Furthermore, the state park service is pursuing acquisition of the Little Tiger Islands, which is just offshore of Fernandina Plaza. However, the property between the Plaza and the river is owned by Seaboard Coastline, a railroad company who also has port rights. Amelia Island in its entirety, however, is experiencing rapid growth in resident and tourist populations. The expansion of Fernandina Beach, and large golf and beach resorts, have made the area a national and international destination for tourists and new residents.

#### PROPERTY ANALYSIS

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

#### **Recreation Resource Elements**

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

#### **Land Area**

Fernandina Plaza Historic State Park contains about 0.8 acres, located in the Old Town Fernandina Historic District. The site boundary is essentially square, being 186 feet long on

each side. There are currently no structures or facilities on the site, and the area is maintained as a mowed lawn.

#### **Natural Scenery**

The Park provides an unobstructed, elevated view of the Amelia River and Cumberland Sound. The undeveloped condition of Little Tiger Island contributes to the excellent natural view.

#### **Archaeological and Historical Features**

The historic site marks the location of Fort San Carlos, constructed in 1816 to protect Spanish interest in Northern Florida, as well as the Town Lot or Plaza. In the years following the Fort's construction, Fernandina was captured and recaptured by a succession of renegades and privateers. U.S. troops occupied the town until 1821 when Florida was ceded to the U.S. The construction of Fort Clinch in 1847 led to the abandonment of Fort San Carlos. In 1853 the town of Fernandina moved further south, due to the construction of a railroad line and subsequent tourism boom. The original town plan and regular street grid, planned by the Spanish, remain. Fernandina is the third oldest city in Florida. An historic site sign, with a brief description of Fort San Carlos, is located on the northeast corner of the property. Archaeologists estimate that two-thirds of the area has disappeared through erosion.

This site also was part of a larger area occupied by native Americans for thousands of years. The St. Johns People dwelled here from as early as 1000 B.C. and their Timucuan descendants occupied the area for about 2,000 years. A more detailed description of the site's cultural resources is included in the Resource Management Component of this plan.

#### **Assessment of Use**

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

#### **Past Uses**

The property was previously owned by the Federal government as part of the Fort Clinch Military Reservation.

#### **Recreational Uses**

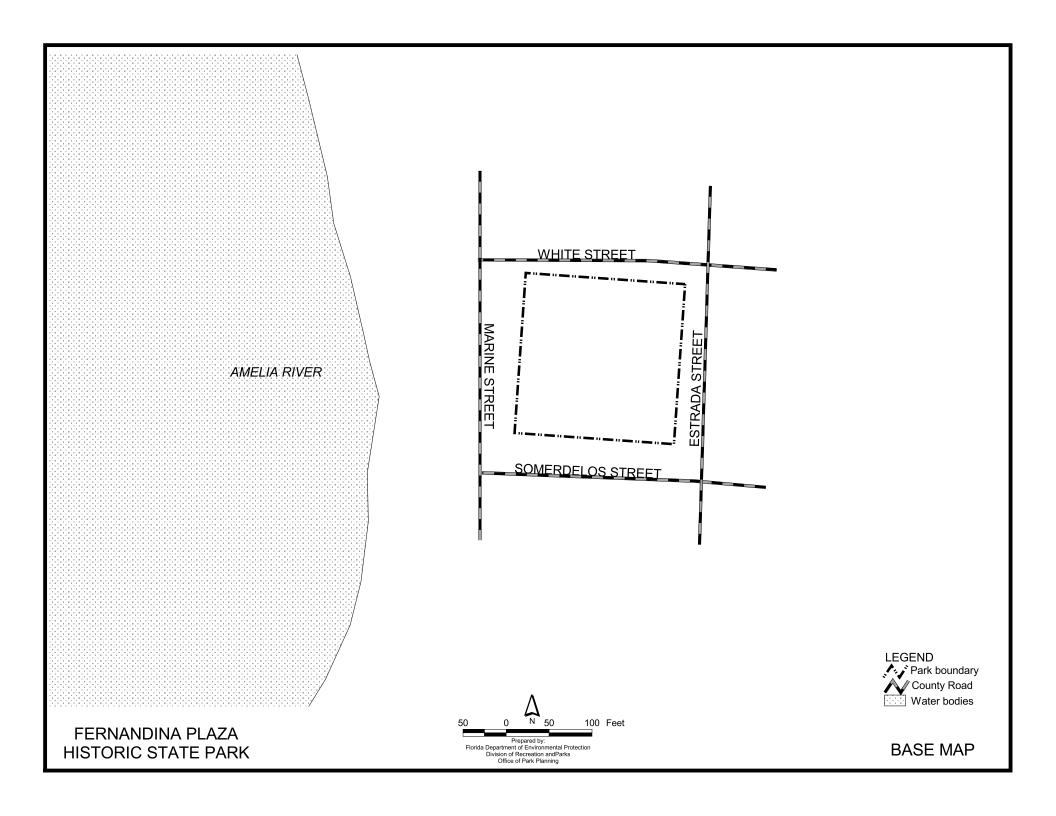
There are no currently approved public recreational uses of the site. The property's lawn area is sometimes used by local residents for informal play, picnicking, and watching fireworks on July 4<sup>th</sup>.

#### **Other Uses**

The site is occasionally used as a staging area for walking tours of the surrounding historic district.

#### **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 Fernandina Plaza Historic State Park, the entire property has been designated as a protected zone due to its cultural significance.

#### **Existing Facilities**

Recreation facilities. None.

**Support facilities.** Fernandina Plaza shares support facilities located at Fort Clinch State Park.

#### **CONCEPTUAL LAND USE PLAN**

The following narrative represents the current conceptual land use proposal for this park. As new information is provided regarding the environment of the park, cultural resources, recreational use, and as new land is acquired, the conceptual land use plan may be amended to address the new conditions (see Conceptual Land Use Plan). A detailed development plan for the park and a site plan for specific facilities will be developed based on this conceptual land use plan, as funding becomes available.

During the development of the unit management plan, the Division assesses potential impacts of proposed uses on the resources of the property. Uses that could result in unacceptable impacts are not included in the conceptual land use plan. Potential impacts are more thoroughly identified and assessed through the site planning process once funding is available for the development project. At that stage, design elements, such as sewage disposal and stormwater management, and design constraints, such as designated species or cultural site locations, are more thoroughly investigated. Advanced wastewater treatment or best available technology systems are applied for on-site sewage disposal. Stormwater management systems are designed to minimize impervious surfaces to the greatest extent feasible, and all facilities are designed and constructed using best management practices to avoid impacts and to mitigate those that cannot be avoided. Federal, state and local permit and regulatory requirements are met by the final design of the projects. This includes the design of all new park facilities consistent with the universal access requirements of the Americans with Disabilities Act (ADA). After new facilities are constructed, the park staff monitors conditions to ensure that impacts remain within acceptable levels.

#### **Potential Uses and Proposed Facilities**

Fernandina Plaza Historic State Park commemorates the Spanish built Fort San Carlos. Although there is an existing historic site marker, the property has the potential for greater historic interpretation. Currently, the site has the simple appearance of a vacant lot with a great view. People who do not take time to read the historic site marker would not realize the sight had any significance. Therefore, the following park development is recommended:

#### **Recreation Facilities**

**Interpretive Display**. An open-air kiosk or interpretive panels are recommended to more fully tell the story of Fort San Carlos. Since there are no visible remains of the fort, an illustration of the fort layout would provide visitors with a greater understanding of the site's significance. The proposed interpretive displays should be designed to resist vandalism to the extent possible.

**Picnicking**. A couple of picnic tables are recommended for this site overlooking the Amelia River and the Little Tiger Islands.



#### **Support Facilities**

Fencing and Parking. A low, wooden, rail fence is recommended around the property to define the park boundary, protect unearthed historic artifacts from illegally parked cars, and indicate significance of the site. The goal is to retain the use of this space as a neighborhood open space while enhancing its appearance as an important historic site. A few parking spots are also recommended to support visitation. These park improvement projects should consider accessibility issues such as accessible parking and a barrier free route to the interpretive kiosk and picnic tables.

#### **Facilities Development**

Preliminary cost estimates for the following list of proposed facilities are provided in Addendum 5. These cost estimates are based on the most cost-effective construction standards available at this time. The preliminary estimates are provided to assist the Division in budgeting future park improvements, and may be revised as more information is collected through the planning and design processes.

#### **Recreation Facilities**

Interpretive Display/Kiosk Picnic Tables (2)

#### **Support Facilities**

Paved Parking (5 spaces) Split Rail Boundary Fence (750 ft.) Concrete Sidewalk (300 ft.)

#### **Existing Use and Optimum Carrying Capacity**

Carrying capacity is an estimate of the number of users a recreation resource or facility can accommodate and still provide a high quality recreational experience and preserve the natural values of the site. The carrying capacity of a unit is determined by identifying the land and water requirements for each recreation activity at the unit, and then applying these requirements to the unit's land and water base. Next, guidelines are applied which estimate the physical capacity of the unit's natural communities to withstand recreational uses without significant degradation. This analysis identifies a range within which the carrying capacity most appropriate to the specific activity, the activity site and the unit's classification is selected (see Table 1).

The optimum carrying capacity for this park is a preliminary estimate of the number of users the unit could accommodate after the current conceptual development program has been implemented. When developed, the proposed new facilities would approximately increase the unit's carrying capacity as shown in Table 1.

#### **Optimum Boundary**

As additional needs are identified through park use, development, research, and as adjacent land uses change on private properties, modification of the unit's optimum boundary may occur for the enhancement of natural and cultural resources, recreational values and management efficiency.

At this time, no lands are considered surplus to the needs of the park. At this time, no additional lands are identified for acquisition.

Table 1--Existing Use And Optimum Carrying Capacity

	Existing Capacity		Proposed Additional Capacity		Estimated Optimum Capacity	
Activity/Facility	One Time	Daily	One Time	Daily	One Time	Daily
Interpretive Program			10	40	10	40
Picnicking			8	16	8	16
TOTAL	0	0	18	56	18	56



#### Fernandina Plaza Historic State Park

#### **Acquisition History**

#### **Purpose of Acquisition**

The Florida Board of Forestry and Parks (FBFP), predecessor in interest to the Florida Board of Parks and Historic Memorials (FBPHM), initially acquired Fernandina Plaza Historic State Park to develop, operate and maintain the property for public purposes.

#### **Sequence of Acquisition**

On December 30, 1941, the FBFP purchased a 0.80-acre property, constituting Fernandina Plaza Historic State Park, from the United States of America for \$450.00. The purchase was funded with "old Money." Since this initial purchase, neither the FBFP nor its successor agencies have acquired any lands to add to Fernandina Plaza Historic State Park.

#### **Management Lease**

Although it is treated as an independent park in the Division of Recreation and Park's Jurisdiction Report, Fernandina Plaza Historic State Park does not have its own lease and management. It uses Fort Clinch State Park's lease, Lease No. 3260, and is managed by Fort Clinch State Park's staff.

Fernandina Plaza Historic State Park became part Fort Clinch State Park on September 16, 1949, when the FBFP deeded the property to the FBPHM. FBPHM subleased Fernandina Plaza Historic State Park to the City of Fernandina Beach in 1968. The city terminated the sublease terminated in 1973.

On September 28, 1967, the FBPHM transferred its title interest in Fort Clinch State Park, which included Fernandina Plaza Historic State Park, to the Board of Trustees of the State of Florida (Trustees). On January 23, 1968, the Trustees leased to the park the FBPHM, predecessor in interest to the Division of Recreation and Parks (DRP), under Lease No. 2324.

Lease No. 2324 is for a period of ninety-nine (99) years, which expires January 23, 2067. In 1988, the Trustees assigned a new lease number, Lease No. 3620, to Fort Clinch, which included Fernandina Plaza Historic State Park, without making any changes to the terms and conditions of Lease No. 2324.

According to Lease No. 3620, DRP manages Fernandina Plaza Historic State Park to develop, operate and maintain and use the property for outdoor recreational, park, conservation, historic and related purposes.

#### **Title Interest**

The Trustees holds fee simple title to Fernandina Plaza Historic State Park.

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

Fernandina Plaza 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, unless specifically stated otherwise in the park's unit management plan, are not consistent with purposes for which the DRP manages the property.

#### Fernandina Plaza Historic State Park

#### **Acquisition History**

#### **Outstanding Reservations**

Following is a list of outstanding rights, reservations, and encumbrances that apply to Fernandina Plaza Historic State Park.

**Instrument:** Warranty Deed

**Instrument Holder:** The United States of America

**Beginning Date:** December 30, 1941

**Ending Date:** Forever

Outstanding Rights, Uses, Etc.: According to the deed, if upon cessation of

retention and use of the property for public purposes, the title to and interest in the property

shall revert to the instrument holder.



#### Fernandina Plaza Historic State Park References Cited

- Bureau of Economic and Business Research (BEBR), University of Florida. 2002. Florida Statistical Abstract 2002. Gainesville, Florida.
- Florida Department of Environmental Protection. 2003. Florida State Park System Economic Impact Assessment for Fiscal Year 2002/2003. Tallahassee, Florida.
- Florida Natural Areas Inventory and the Florida Department of Natural Resources. 1990. Guide to the Natural Communities of Florida.
- Henry, V. J. 1971. Geological History and Development of Amelia Island, Nassau County, Florida. A Preliminary Ecological Inventory, A Report to the Amelia Island Company, Fernandina Beach. Prepared by Wallace, McHarg, Roberts and Todd, Inc. by J. McCormick and Associates
- Nassau County. 1990. Nassau County Comprehensive Plan 1990-2005. Nassau County, Florida.
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- U. S. Department of Commerce, Bureau of the Census. 2000. U. S. Census 2000.
- Watts, F. C. 1991. Soil Survey of Nassau County, Florida. United States Department of Agriculture Soil Conservation Service.

## Fernandina Plaza Historic State Park References Cited



#### Fernandina Plaza Historic State Park Soil Descriptions

(31) Kershaw fine sand, 2 to 8 percent slopes - This gently sloping or sloping, excessively drained soil on broad ridges and isolated knolls. The mapped areas range from about 3 to 50 acres. Slopes are smooth to concave.

In 98 percent of the areas mapped as Kershaw fine sand, 2 to 8 percent slopes, Kershaw and similar soils make up 92 to 100 percent of the mapped unit. Dissimilar soils make up 0 to 8 percent. They generally are in areas less than 3 acres in size.

Typically, the surface layer is very dark grayish brown fine sand about 7 inches thick. The underlying material to a depth of about 80 inches, is fine sand. It is yellowish brown in the upper part and yellow in the lower part. Some soils occurring in areas of this map unit are similar to the Kershaw soil but have a light colored subsurface layer 1 to 4 inches thick.

Included in this map unit are small areas of dissimilar soils. These are Ortega soils. They are in lower positions on the landscape than the Kershaw soil.

Permeability of this Kershaw soil is very rapid. The available water capacity is very low. The seasonal high water table is at a depth of about 72 to 80 inches or more during most of the year. The soil is very low in natural fertility.

## Fernandina Plaza Historic State Park Soil Descriptions



## **Plants**

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
	ANGIOSPERMS	
Meadow garlic	Allium sp.	
Bermudagrass *	Cynodon dactylon	
Bahiagrass *	Paspalum notatum	
Paper mulberry *	Broussonetia papyrifera	
Sugarberry	Celtis laevigata	
Shrub verbena *	Lantana camara	
Texas vervain	Verbena officinalis halei	

## Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
	BIRDS	
Chimney swift	Chaetura pelagica	OF
Rock dove *	Columba livia	82
Laughing gull	Larus atricilla	OF
Northern mockingbird	Mimus polyglottos	
Boat-tailed grackle	Quiscalus major	82
Eurasian collared-dove*	Streptopelia decaocto	
European starling *	Sturnus vulgaris	82
	MAMMALS	
Dog *	Canis familiaris	82
Feral cat *	Felis catus	82
Raccoon	Procyon lotor	82
Gray squirrel	Sciurus carolinensis	82

## **Natural Community Habitat Codes**

Terres	trial		LacustrineContinued
1	Beach Dune	46	Flatwood/Prairie Lake
2	Bluff	47	Marsh Lake
3	Coastal Berm	48	River Floodplain Lake
4	Coastal Rock Barren	49	Sandhill Upland Lake
5	Coastal Strand	50	Sinkhole Lake
6	Dry Prairie	51	Swamp Lake
7	Maritime Hammock	D'	
8	Mesic Flatwoods	<u>Riveri</u>	<u>ne</u> Alluvial Stream
9	Coastal Grasslands	52 52	
10	Pine Rockland	53	Blackwater Stream
11	Prairie Hammock	54 55	Seepage Stream
12	Rockland Hammock	55	Spring-Run Stream
13	Sandhill	Estua	<u>rine</u>
14	Scrub	56	Estuarine Composite Substrate
15	Scrubby Flatwoods	57	Estuarine Consolidated Substrate
16	Shell Mound	58	Estuarine Coral Reef
17	Sinkhole	59	Estuarine Grass Bed
18	Slope Forest	60	Estuarine Mollusk Reef
19	Upland Glade	61	Estuarine Octocoral Bed
20	Upland Hardwood Forest	62	Estuarine Sponge Bed
21	Upland Mixed Forest	63	Estuarine Tidal Marsh
22	Upland Pine Forest	64	Estuarine Tidal Swamp
23	Xeric Hammock	65	Estuarine Unconsolidated Substrate
Palustr	ina	66	Estuarine Worm Reef
24	Basin Marsh	Marin	e
25	Basin Swamp	67	Marine Algal Bed
26	Baygall	68	Marine Composite Substrate
27	Bog	69	Marine Consolidated Substrate
28	Bottomland Forest	70	Marine Coral Reef
29	Depression Marsh	71	Marine Grass Bed
30	Dome	72	Marine Mollusk Reef
31	Floodplain Forest	73	Marine Octocoral Bed
32	Floodplain Marsh	74	Marine Sponge Bed
33	Floodplain Swamp	75	Marine Tidal Marsh
34	Freshwater Tidal Swamp	<b>76</b>	Marine Tidal Swamp
35	Hydric Hammock	77	Marine Unconsolidated Substrate
36	Marl Prairie	<b>78</b>	Marine Worm Reef
37	Seepage Slope	Subta	www.non
38	Slough	<u>Subter</u> 79	<u>rranean</u> Aquatic Cave
<b>39</b>	Strand Swamp	80	Terrestral Cave
40	Swale		
41	Wet Flatwoods	81	<u>llaneous</u> Ruderal
42	Wet Prairie	82	Developed
Lacust	rine		•
43	Clastic Upland Lake	MTC	
44	Coastal Dune Lake		Of Communities
45	Coastal Rockland Lake	OF C	Overflying
			- · · · · · · · · · · · · · · · · · · ·

## **Natural Community Habitat Codes**



## Fernandina Plaza Historic State Park Priority Schedule And Cost Estimates

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

#### **Resource Management**

- 1. Conduct historical analyses to ascertain locations and chronology of cultural features in the Town Lot before 1821. **Estimated Cost: \$5,000.**
- 2. Preserve and protect existing archaeological sites. 0-10 years. Estimated Cost: \$10,000.
- 3. Continue the exotics control program within the park. Conduct follow-up treatments of exotics subsequent to their initial treatment. Continue to monitor the park for new infestations of exotic plants. 0-10 years. Includes equipment, herbicide and staff. **Estimated Cost: \$1000.**

#### **Visitor Services/Recreation**

1. Develop interpretive programming. Estimated Cost: \$5,000.

**TOTAL ESTIMATED COST:** 

\$21,000.

# Fernandina Plaza Historic State Park Priority Schedule and Cost Estimate Capital Improvements

Item	Quantity	Unit	<b>Unit Price</b>	Multiplier	Amount
Recreation Facilities					
	1- 1.000		¢20,000,00	1.00	¢20,000,00
Interpretive Display / Kios		ea.	\$20,000.00	1.00	\$20,000.00
Picnic Tables & Grilles	1.000	paır	\$500.00	1.00	\$500.00
Support Facilities					
4 In. Concrete Sidewalk	1500.000	SF	\$4.00	1.00	\$6,000.00
Parking	90.000	SY	\$30.00	1.00	\$2,700.00
Split Rail Fence	750.000	LF	\$2.00	1.00	\$1,500.00
			Sı	ıb-Total	\$30,700.00
			20 % Continge	ncy Fee	\$6,140.00
			,	Γotal	\$36,840.00

## **Additional Information**

**FNAI Descriptions** 

**DHR Cultural Management Statement** 

This summary presents the hierarchical classification and brief descriptions of 82 Natural Communities developed by Florida Natural Areas Inventory and identified as collectively constituting the original, natural biological associations of Florida.

A Natural Community is defined as a distinct and recurring assemblage of populations of plants, animals, fungi and microorganisms naturally associated with each other and their physical environment. For more complete descriptions, see Guide to the Natural Communities of Florida, available from Florida Department of Natural Resources.

The levels of the hierarchy are:

**Natural Community Category** - defined by hydrology and vegetation.

**Natural Community Groups** - defined by landform, substrate, and vegetation.

**Natural Community Type** - defined by landform and substrate; soil moisture condition; climate; fire; and characteristic vegetation.

**TERRESTRIAL COMMUNITIES** 

XERIC UPLANDS
COASTAL UPLANDS
MESIC UPLANDS
ROCKLANDS
MESIC FLATLANDS

**PALUSTRINE COMMUNITIES** 

WET FLATLANDS
SEEPAGE WETLANDS
FLOODPLAIN WETLANDS
BASIN WETLANDS

**LACUSTRINE COMMUNITIES** 

RIVERINE COMMUNITIES

**SUBTERRANEAN COMMUNITIES** 

MARINE/ESTUARINE COMMUNITIES

<u>Definitions of Terms Used in Natural Community</u> <u>Descriptions</u>

**TERRESTRIAL** - Upland habitats dominated by plants which are not adapted to anaerobic soil conditions imposed by saturation or inundation for more than 10% of the growing season.

**XERIC UPLANDS** - very dry, deep, well-drained hills of sand with xeric-adapted vegetation.

**Sandhill** - upland with deep sand substrate; xeric; temperate; frequent fire (2-5 years); longleaf pine and/or turkey oak with wiregrass understory.

**Scrub** - old dune with deep fine sand substrate; xeric; temperate or subtropical; occasional or rare fire (20 - 80 years); sand pine and/or scrub oaks and/or rosemary and lichens.

**Xeric Hammock** - upland with deep sand substrate; xeric-mesic; temperate or subtropical; rare or no fire; live oak and/or sand live oak and/or laurel oak and/or other oaks, sparkleberry, saw palmetto.

**COASTAL UPLANDS** - substrate and vegetation influenced primarily by such coastal (maritime) processes as erosion, deposition, salt spray, and storms.

**Beach Dune** - active coastal dune with sand substrate; xeric; temperate or subtropical; occasional or rare fire; sea oats and/or mixed salt-spray tolerant grasses and herbs.

**Coastal Berm** - old bar or storm debris with sand/shell substrate; xeric-mesic; subtropical or temperate; rare or no fire; buttonwood, mangroves, and/or mixed halophytic herbs and/or shrubs and trees.

Coastal Grassland - coastal flatland with sand substrate; xeric-mesic; subtropical or temperate;

occasional fire; grasses, herbs, and shrubs with or without slash pine and/or cabbage palm.

**Coastal Rock Barren** - flatland with exposed limestone substrate; xeric; subtropical; no fire; algae, mixed halophytic herbs and grasses, and/or cacti and stunted shrubs and trees.

**Coastal Strand** - stabilized coastal dune with sand substrate; xeric; subtropical or temperate; occasional or rare fire; dense saw palmetto and/or seagrape and/or mixed stunted shrubs, yucca, and cacti.

**Maritime Hammock** - stabilized coastal dune with sand substrate; xeric-mesic; subtropical or temperate; rare or no fire; mixed hardwoods and/or live oak.

**Shell Mound** - Indian midden with shell substrate; xeric-mesic; subtropical or temperate; rare or no fire; mixed hardwoods.

**MESIC UPLANDS** - dry to moist hills of sand with varying amounts of clay, silt or organic material; diverse mixture of broadleaved and needleleaved temperate woody species.

**Bluff** - steep slope with rock, sand, and/or clay substrate; hydric-xeric; temperate; sparse grasses, herbs and shrubs.

**Slope Forest** - steep slope on bluff or in sheltered ravine; sand/clay substrate; mesic-hydric; temperate; rare or no fire; magnolia, beech, spruce pine, Shumard oak, Florida maple, mixed hardwoods.

**Upland Glade** - upland with calcareous rock and/or clay substrate; hydric-xeric; temperate; sparse mixed grasses and herbs with occasional stunted trees and shrubs, e.g., eastern red cedar.

**Upland Hardwood Forest** - upland with sand/clay and/or calcareous substrate; mesic; temperate; rare or no fire; spruce pine, magnolia, beech, pignut hickory, white oak, and mixed hardwoods.

**Upland Mixed Forest** - upland with sand/clay substrate; mesic; temperate; rare or no fire; loblolly pine and/or shortleaf pine and/or laurel oak and/or magnolia and spruce pine and/or mixed hardwoods.

**Upland Pine Forest** - upland with sand/clay substrate; mesic-xeric; temperate; frequent or occasional fire; longleaf pine and/or loblolly pine and/or shortleaf pine, southern red oak, wiregrass.

**ROCKLANDS** - low, generally flat limestone outcrops with tropical vegetation; or limestone exposed through karst activities with tropical or temperate vegetation.

**Pine Rockland** - flatland with exposed limestone substrate; mesic-xeric; subtropical; frequent fire; south Florida slash pine, palms and/or hardwoods, and mixed grasses and herbs.

**Rockland Hammock** - flatland with limestone substrate; mesic; subtropical; rare or no fire; mixed tropical hardwoods, often with live oak.

**Sinkhole** - karst feature with steep limestone walls; mesic-hydric; subtropical or temperate; no fire; ferns, herbs, shrubs, and hardwoods.

**MESIC FLATLANDS** - flat, moderately well-drained sandy substrates with admixture of organic material, often with a hard pan.

**Dry Prairie** - flatland with sand substrate; mesic-xeric; subtropical or temperate; annual or frequent fire; wiregrass, saw palmetto, and mixed grasses and herbs.

**Mesic Flatwoods** - flatland with sand substrate; mesic; subtropical or temperate; frequent fire; slash pine and/or longleaf pine with saw palmetto, gallberry and/or wiregrass or cutthroat grass understory.

**Prairie Hammock** - flatland with sand/organic soil over marl or limestone substrate; mesic; subtropical; occasional or rare fire; live oak and/or cabbage palm.

**Scrubby Flatwoods** - flatland with sand substrate; xeric-mesic; subtropical or temperate; occasional fire; longleaf pine or slash pine with scrub oaks and wiregrass understory.

**PALUSTRINE** - Wetlands dominated by plants adapted to anaerobic substrate conditions imposed by substrate saturation or inundation during 10% or more of the growing season. Includes non-tidal wetlands; tidal wetlands with ocean derived salinities less than 0.5 ppt and dominance by salt-intolerant species; small (less than 8 ha), shallow (less than 2 m deep at low water) water bodies without waveformed or bedrock shoreline; and inland brackish or saline wetlands.

**WET FLATLANDS** - flat, poorly drained sand, marl or limestone substrates.

**Hydric Hammock** - lowland with sand/clay/organic soil, often over limestone; mesic-hydric; subtropical or temperate; rare or no fire; water oak, cabbage palm, red cedar, red maple, bays, hackberry, hornbeam, blackgum, needle palm, and mixed hardwoods.

**Marl Prairie** - flatland with marl over limestone substrate; seasonally inundated; tropical; frequent to no fire; sawgrass, spikerush, and/or mixed grasses, sometimes with dwarf cypress.

**Wet Flatwoods** - flatland with sand substrate; seasonally inundated; subtropical or temperate; frequent fire; vegetation characterized by slash pine or pond pine and/or cabbage palm with mixed grasses and herbs.

**Wet Prairie** - flatland with sand substrate; seasonally inundated; subtropical or temperate; annual or frequent fire; maidencane, beakrush, spikerush, wiregrass, pitcher plants, St. John's wort, mixed herbs.

**SEEPAGE WETLANDS** - sloped or flat sands or peat with high moisture levels maintained by downslope seepage; wetland and mesic woody and/or herbaceous vegetation.

**Baygall** - wetland with peat substrate at base of slope; maintained by downslope seepage, usually saturated and occasionally inundated; subtropical or temperate; rare or no fire; bays and/or dahoon holly and/or red maple and/or mixed hardwoods.

**Seepage Slope** - wetland on or at base of slope with organic/sand substrate; maintained by downslope seepage, usually saturated but rarely inundated; subtropical or temperate; frequent or occasional fire; sphagnum moss, mixed grasses and herbs or mixed hydrophytic shrubs.

**FLOODPLAIN WETLANDS** - flat, alluvial sand or peat substrates associated with flowing water courses and subjected to flooding but not permanent inundation; wetland or mesic woody and herbaceous vegetation.

**Bottomland Forest** - flatland with sand/clay/organic substrate; occasionally inundated; temperate; rare or no fire; water oak, red maple, beech, magnolia, tuliptree, sweetgum, bays, cabbage palm, and mixed hardwoods.

**Floodplain Forest** - floodplain with alluvial substrate of sand, silt, clay or organic soil; seasonally inundated; temperate; rare or no fire; diamondleaf oak, overcup oak, water oak, swamp chestnut oak, blue palmetto, cane, and mixed hardwoods.

**Floodplain Marsh** - floodplain with organic/sand/alluvial substrate; seasonally inundated; subtropical; frequent or occasional fire; maidencane, pickerelweed, sagittaria spp., buttonbush, and mixed emergents.

**Floodplain Swamp** - floodplain with organic/alluvial substrate; usually inundated; subtropical or temperate; rare or no fire; vegetation characterized by cypress, tupelo, black gum, and/or pop ash.

**Freshwater Tidal Swamp** - river mouth wetland, organic soil with extensive root mat; inundated with freshwater in response to tidal cycles; rare or no fire; cypress, bays, cabbage palm, gums and/or cedars.

**Slough** - broad, shallow channel with peat over mineral substrate; seasonally inundated, flowing water; subtropical; occasional or rare fire; pop ash and/or pond apple or water lily.

**Strand Swamp** - broad, shallow channel with peat over mineral substrate; seasonally inundated, flowing water; subtropical; occasional or rare fire; cypress and/or willow.

**Swale** - broad, shallow channel with sand/peat substrate; seasonally inundated, flowing water; subtropical or temperate; frequent or occasional fire; sawgrass, maidencane, pickerelweed, and/or mixed emergents.

**BASIN WETLANDS** - shallow, closed basin with outlet usually only in time of high water; peat or sand substrate, usually inundated; wetland woody and/or herbaceous vegetation.

**Basin Marsh** - large basin with peat substrate; seasonally inundated; temperate or subtropical; frequent fire; sawgrass and/or cattail and/or buttonbush and/or mixed emergents.

**Basin Swamp** - large basin with peat substrate; seasonally inundated, still water; subtropical or temperate; occasional or rare fire; vegetation characterized by cypress, blackgum, bays and/or mixed hardwoods.

**Bog** - wetland on deep peat substrate; moisture held by sphagnum mosses, soil usually saturated, occasionally inundated; subtropical or temperate; rare fire; sphagnum moss and titi and/or bays and/or dahoon holly, and/or mixed hydrophytic shrubs.

**Coastal Interdunal Swale** - long narrow depression wetlands in sand/peat-sand substrate; seasonally inundated, fresh to brackish, still water; temperate; rare fire; graminoids and mixed wetland forbs.

**Depression Marsh** - small rounded depression in sand substrate with peat accumulating toward center; seasonally inundated, still water; subtropical or temperate; frequent or occasional fire; maidencane, fire flag, pickerelweed, and mixed emergents, may be in concentric bands.

**Dome Swamp** - rounded depression in sand/limestone substrate with peat accumulating toward center; seasonally inundated, still water; subtropical or temperate; occasional or rare fire; cypress, blackgum, or bays, often tallest in center.

**LACUSTRINE** - Non-flowing wetlands of natural depressions lacking persistent emergent vegetation except around the perimeter.

**Clastic Upland Lake** - generally irregular basin in clay uplands; predominantly with inflows, frequently without surface outflow; clay or organic substrate; colored, acidic, soft water with low mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

**Coastal Dune Lake** - basin or lagoon influenced by recent coastal processes; predominantly sand substrate with some organic matter; salinity variable among and within lakes, and subject to saltwater intrusion and storm surges; slightly acidic, hard water with high mineral content (sodium, chloride).

**Coastal Rockland Lake** - shallow basin influence by recent coastal processes; predominantly barren oolitic or Miami limestone substrate; salinity variable among and within lakes, and subject to saltwater intrusion, storm surges and evaporation (because of shallowness); slightly alkaline, hard water with high mineral content (sodium, chloride).

**Flatwoods/Prairie Lake** - generally shallow basin in flatlands with high water table; frequently with a broad littoral zone; still water or flow-through; sand or peat substrate; variable water chemistry, but characteristically colored to clear, acidic to slightly alkaline, soft to moderately hard water with moderate mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

Marsh lake - generally shallow, open water area within wide expanses of freshwater marsh; still water

or flow-through; peat, sand or clay substrate; occurs in most physiographic regions; variable water chemistry, but characteristically highly colored, acidic, soft water with moderate mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

**River Floodplain Lake** - meander scar, backwater, or larger flow-through body within major river floodplains; sand, alluvial or organic substrate; colored, alkaline or slightly acidic, hard or moderately hard water with high mineral content (sulfate, sodium, chloride, calcium, magnesium); mesotrophic to eutrophic.

**Sandhill Upland Lake** - generally rounded solution depression in deep sandy uplands or sandy uplands shallowly underlain by limestone; predominantly without surface inflows/outflows; typically sand substrate with organic accumulations toward middle; clear, acidic moderately soft water with varying mineral content; ultra-oligotrophic to mesotrophic.

**Sinkhole Lake** - typically deep, funnel-shaped depression in limestone base; occurs in most physiographic regions; predominantly without surface inflows/outflows, but frequently with connection to the aquifer; clear, alkaline, hard water with high mineral content (calcium, bicarbonate, magnesium).

**Swamp Lake** - generally shallow, open water area within basin swamps; still water or flow-through; peat, sand or clay substrate; occurs in most physiographic regions; variable water chemistry, but characteristically highly colored, acidic, soft water with moderate mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

**RIVERINE** - Natural, flowing waters from their source to the downstream limits of tidal influence and bounded by channel banks.

**Alluvial Stream** - lower perennial or intermittent/seasonal watercourse characterized by turbid water with suspended silt, clay, sand and small gravel; generally with a distinct, sediment-derived (alluvial) floodplain and a sandy, elevated natural levee just inland from the bank.

**Blackwater Stream** - perennial or intermittent/seasonal watercourse characterized by tea-colored water with a high content of particulate and dissolved organic matter derived from drainage through swamps and marshes; generally lacking an alluvial floodplain.

**Seepage Stream** - upper perennial or intermittent/seasonal watercourse characterized by clear to lightly colored water derived from shallow groundwater seepage.

**Spring-run Stream** - perennial watercourse with deep aquifer headwaters and characterized by clear water, circumneutral pH and, frequently, a solid limestone bottom.

**SUBTERRANEAN** - Twilight, middle and deep zones of natural chambers overlain by the earth's crust and characterized by climatic stability and assemblages of trogloxenic, troglophilic, and troglobitic organisms.

**Aquatic Cave** - cavernicolous area permanently or periodically submerged; often characterized by troglobitic crustaceans and salamanders; includes high energy systems which receive large quantities of organic detritus and low energy systems.

**Terrestrial Cave** - cavernicolous area lacking standing water; often characterized by bats, such as Myotis spp., and other terrestrial vertebrates and invertebrates; includes interstitial areas above standing water such as fissures in the ceiling of caves.

**MARINE/ESTUARINE** (The distinction between the Marine and Estuarine Natural Communities is often subtle, and the natural communities types found under these two community categories have the same

descriptions. For these reasons they have been grouped together.) - Subtidal, intertidal and supratidal zones of the sea, landward to the point at which seawater becomes significantly diluted with freshwater inflow from the land.

**Consolidated Substrate** - expansive subtidal, intertidal and supratidal area composed primarily of nonliving compacted or coherent and relatively hard, naturally formed mass of mineral matter (e.g., coquina limerock and relic reefs); octocorals, sponges, stony corals, nondrift macrophytic algae, bluegreen mat-forming algae and seagrasses sparse, if present.

**Unconsolidated Substrate** - expansive subtidal, intertidal and supratidal area composed primarily of loose mineral matter (e.g., coralgal, gravel, marl, mud, sand and shell); octocorals, sponges, stony corals, nondrift macrophytic algae, blue-green mat-forming algae and seagrasses sparse, if present.

**Octocoral Bed** - expansive subtidal area occupied primarily by living sessile organisms of the Class Anthozoa, Subclass Octocorallia (e.g., soft corals, horny corals, sea fans, sea whips, and sea pens); sponges, stony corals, nondrift macrophytic algae and seagrasses spares, if present.

**Sponge Bed** - expansive subtidal area occupied primarily by living sessile organisms of the Phylum Porifera (e.g., sheepswool sponge, Florida loggerhead sponge and branching candle sponge); octocorals, stony corals, nondrift macrophytic algae and seagrasses sparse, if present.

**Coral Reef** - expansive subtidal area with elevational gradient or relief and occupied primarily by living sessile organisms of the Class Hydrozoa (e.g., fire corals and hydrocorals) and Class Anthozoa, Subclass Zoantharia (e.g., stony corals and black corals); includes deepwater bank reefs, fringing barrier reefs, outer bank reefs and patch reefs, some of which may contain distinct zones of assorted macrophytes, octocorals, & sponges.

**Mollusk Reef** - substantial subtidal or intertidal area with relief from concentrations of sessile organisms of the Phylum Mollusca, Class Bivalvia (e.g., molluscs, oysters, & worm shells); octocorals, sponges, stony corals, macrophytic algae and seagrasses sparse, if present.

**Worm Reef** - substantial subtidal or intertidal area with relief from concentrations of sessile, tubicolous organisms of the Phylum Annelida, Class Polychaeta (e.g., chaetopterids and sabellarids); octocorals, sponges, stony corals, macrophytic algae and seagrasses sparse, if present.

**Algal Bed** - expansive subtidal, intertidal or supratidal area, occupied primarily by attached thallophytic or mat-forming prokaryotic algae (e.g, halimeda, blue-green algae); octocorals, sponges, stony corals and seagrasses sparse, if present.

**Grass Bed** - expansive subtidal or intertidal area, occupied primarily by rooted vascular macrophytes, (e.g., shoal grass, halophila, widgeon grass, manatee grass and turtle grass); may include various epiphytes and epifauna; octocorals, sponges, stony corals, and attached macrophytic algae sparse, if present.

**Composite Substrate** - expansive subtidal, intertidal, or supratidal area, occupied primarily by Natural Community elements from more than one Natural Community category (e.g., Grass Bed and Algal Bed species; Octocoral and Algal Bed species); includes both patchy and evenly distributed occurrences.

**Tidal Marsh** - expansive intertidal or supratidal area occupied primarily by rooted, emergent vascular macrophytes (e.g., cord grass, needlerush, saw grass, saltwort, saltgrass and glasswort); may include various epiphytes and epifauna.

**Tidal Swamp** - expansive intertidal and supratidal area occupied primarily by woody vascular macrophytes (e.g., black mangrove, buttonwood, red mangrove, and white mangrove); may include various epiphytes and epifauna.

#### **DEFINITIONS OF TERMS Terrestrial and Palustrine Natural Communities**

#### **Physiography**

**Upland** - high area in region with significant topographic relief; generally undulating

**Lowland** - low area in region with or without significant topographic relief; generally flat to gently sloping

**Flatland** - generally level area in region without significant topographic relief; flat to gently sloping **Basin** - large, relatively level lowland with slopes confined to the perimeter or isolated interior locations **Depression** - small depression with sloping sides, deepest in center and progressively shallower towards the perimeter

**Floodplain** - lowland adjacent to a stream; topography influenced by recent fluvial processes **Bottomland** - lowland not on active floodplain; sand/clay/organic substrate

#### **Hydrology**

**occasionally inundated** - surface water present only after heavy rains and/or during flood stages **seasonally inundated** - surface water present during wet season and flood periods **usually inundated** - surface water present except during droughts

#### **Climatic Affinity of the Flora**

tropical - community generally occurs in practically frost-free areas

**subtropical** - community generally occurs in areas that experience occasional frost, but where freezing temperatures are not frequent enough to cause true winter dormancy

**temperate** - community generally occurs in areas that freeze often enough that vegetation goes into winter dormancy

#### **Fire**

annual fire - burns about every 1-2 years
frequent fire - burns about every 3-7 years
occasional fire - burns about every 8-25 years
rare fire - burns about every 26-100 years
no fire - community develops only when site goes more than 100 years without burning

#### LATIN NAMES OF PLANTS MENTIONED IN NATURAL COMMUNITY DESCRIPTIONS

anise - Illicium floridanum overcup oak - Quercus lyrata pickerel weed - Pontederia cordata or P. lanceolata bays: swamp bay -Persea palustris pignut hickory - Carya glabra gordonia - Gordonia lasianthus pop ash - Fraxinus caroliniana sweetbay - Magnolia virgiana pond apple - Annona glabra beakrush - Rhynchospora spp. pond pine - Pinus serotina beech - Fagus grandifolia pyramid magnolia - Magnolia pyramidata blackgum - Nyssa biflora railroad vine - Ipomoea pes-caprae blue palmetto - Sabal minor red cedar - Juniperus silicicola bluestem - Andropogon spp. red maple - Acer rubrum buttonbush - Cephalanthus occidentalis red oak - Quercus falcata cabbage palm - Sabal palmetto rosemary - Ceratiola ericoides cacti - Opuntia and Harrisia spp., sagittaria - Sagittaria lancifolia predominantly stricta and pentagonus sand pine - Pinus clausa cane - Arundinaria gigantea or A. tecta saw palmetto - Serenoa repens cattail - *Typha* spp. sawgrass - Cladium jamaicensis scrub oaks - Quercus geminata, Q. chapmanii, Q. cedars: myrtifolia, Q. inopina red cedar - Juniperus silicicola white cedar - Chamaecyparis thyoides or sea oats - Uniola paniculata C. henryi seagrape - Coccoloba uvifera shortleaf pine - Pinus echinata cladonia - Cladonia spp. cypress - Taxodium distichum Shumard oak - Quercus shumardii dahoon holly - *Ilex cassine* slash pine - Pinus elliottii diamondleaf oak - Quercus laurifolia sphagnum moss - Sphagnum spp. fire flag - Thalia geniculata spikerush - Eleocharis spp. Florida maple - Acer barbatum spruce pine - Pinus glabra St. John's wort - Hypericum spp. gallberry - *Ilex glabra* swamp chestnut oak - Quercus prinus gums: sweetgum - Liquidambar styraciflua tupelo - Nyssa aquatica blackgum - Nyssa biflora titi - Cyrilla racemiflora, and Cliftonia monophylla Ogeechee gum - Nyssa ogeche tuliptree - Liriodendron tulipfera hackberry - Celtis laevigata tupelo - Nvssa aquatica hornbeam - Carpinus caroliniana turkey oak - Quercus laevis laurel oak - Quercus hemisphaerica water oak - Quercus nigra live oak - Quercus virginiana waterlily - Nymphaea odorata loblolly pine - Pinus taeda white cedar - Chamaecyparis thyoides longleaf pine - *Pinus palustris* white oak - Ouercus alba

magnolia - Magnolia grandiflora

maidencane - Panicum hemitomon

needle palm - Rhapidophyllum hystrix

willow - Salix caroliniana

yucca - Yucca aloifolia

#### **A. GENERAL DISCUSSION**

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

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

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

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

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

#### **B. STATUTORY AUTHORITY**

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

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

**1.** Provide leadership in the preservation of the state's historic resources; [and]

**2.** Administer state-owned or state-controlled historic resources in a spirit of stewardship and trusteeship;...

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

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

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

- 1. Each state agency of the executive branch having direct or indirect jurisdiction over a proposed state or state-assisted undertaking shall, in accordance with state policy and prior to the approval of expenditure of any state funds on the undertaking, consider the effect of the undertaking on any historic property that is included in, or eligible for inclusion in, the <a href="National Register of Historic Places">National Register of Historic Places</a>. Each such agency shall afford the division a reasonable opportunity to comment with regard to such an undertaking.
- 2. Each state agency of the executive branch shall initiate measures in consultation with the division to assure that where, as a result of state action or assistance carried out by such agency, a historic property is to be demolished or substantially altered in a way that adversely affects the character, form, integrity, or other qualities that contribute to [the] historical, architectural, or archaeological value of the property, timely steps are taken to determine that no feasible and prudent alternative to the proposed demolition or alteration exists, and, where no such alternative is determined to exist, to assure that timely steps are taken either to avoid or mitigate the adverse effects, or to undertake an appropriate archaeological salvage excavation or other recovery action to document the property as it existed prior to demolition or alteration.
- **3.** In consultation with the division [of Historical Resources], each state agency of the executive branch shall establish a program to locate, inventory, and evaluate all historic properties under the agency's ownership or control that appear to qualify for the National Register. Each such agency shall exercise caution to assure that any such historic property is not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly.
- **4.** Each state agency of the executive branch shall assume responsibility for the preservation of historic

resources that are owned or controlled by such agency. Prior to acquiring, constructing, or leasing buildings for the purpose of carrying out agency responsibilities, the agency shall use, to the maximum extent feasible, historic properties available to the agency. Each agency shall undertake, consistent with preservation of such properties, the mission of the agency, and the professional standards established pursuant to paragraph (3)(k), any preservation actions necessary to carry out the intent of this paragraph.

- 5. Each state agency of the executive branch, in seeking to acquire additional space through new construction or lease, shall give preference to the acquisition or use of historic properties when such acquisition or use is determined to be feasible and prudent compared with available alternatives. The acquisition or use of historic properties is considered feasible and prudent if the cost of purchase or lease, the cost of rehabilitation, remodeling, or altering the building to meet compliance standards and the agency's needs, and the projected costs of maintaining the building and providing utilities and other services is less than or equal to the same costs for available alternatives. The agency shall request the division to assist in determining if the acquisition or use of a historic property is feasible and prudent. Within 60 days after making a determination that additional space is needed, the agency shall request the division to assist in identifying buildings within the appropriate geographic area that are historic properties suitable for acquisition or lease by the agency, whether or not such properties are in need of repair, alteration, or addition.
- **6.** Consistent with the agency's mission and authority, all state agencies of the executive branch shall carry out agency programs and projects, including those under which any state assistance is provided, in a manner which is generally sensitive to the preservation of historic properties and shall give consideration to programs and projects which will further the purposes of this section.

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

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

#### C. MANAGEMENT POLICY

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

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

It should be noted that while many archaeological and historical sites are already recorded within state-owned or controlled--lands, the majority of the uplands areas and nearly all of the inundated areas have not been surveyed to locate and assess the significance of such resources. The known sites are, thus,

only an incomplete sample of the actual resources - i.e., the number, density, distribution, age, character and condition of archaeological and historic sites - on these tracts. Unfortunately, the lack of specific knowledge of the actual resources prevents formulation of any sort of detailed management or use plan involving decisions about the relative historic value of individual sites. For this reason, a generalized policy of conservation is recommended until the resources have been better addressed.

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

- 1. State land managers shall coordinate all planned activities involving known archaeological or historic sites or potential site areas closely with the Division of Historical Resources in order to prevent any kind of disturbance to significant archaeological or historic sites that may exist on the tract. Under 267.061(1)(b), F.S., the Division of Historical Resources is vested with title to archaeological and historic resources abandoned on state lands and is responsible for administration and protection of such resources. The Division will cooperate with the land manager in the management of these resources. Furthermore, provisions of 267.061(2) and 267.13, F.S., combined with those in 267.061(3) and 253.034(4), F.S., require that other managing (or permitting) agencies coordinate their plans with the Division of Historical Resources at a sufficiently early stage to preclude inadvertent damage or destruction to known or potentially occurring, presently unknown archaeological and historic sites. The provisions pertaining to human burial sites must also be followed by state land managers when such remains are known or suspected to be present (see 872.02 and 872.05, F.S., and 1A-44, F.A.C.)
- 2. Since the actual resources are so poorly known, the potential impact of the managing agency's activities on historic archaeological sites may not be immediately apparent. Special field survey for such sites may be required to identify the potential endangerment as a result of particular management or permitting activities. The Division may perform surveys, as its resources permit, to aid the planning of other state agencies in their management activities, but outside archaeological consultants may have to be retained by the managing agency. This would be especially necessary in the cases of activities contemplating ground disturbance over large areas and unexpected occurrences. It should be noted, however, that in most instances Division staff's knowledge of known and expected site distribution is such that actual field surveys may not be necessary, and the project may be reviewed by submitting a project location map (preferably a 7.5 minute U.S.G.S. Quadrangle map or portion thereof) and project descriptive data, including detailed construction plans. To avoid delays, Division staff should be contacted to discuss specific project documentation review needs.
- **3.** In the case of known significant sites, which may be affected by proposed project activities, the managing agency will generally be expected to alter proposed management or development plans, as necessary, or else make special provisions to minimize or mitigate damage to such sites.
- **4.** If in the course of management activities, or as a result of development or the permitting of dredge activities (see 403.918(2)(6)a, F.S.), it is determined that valuable historic or archaeological sites will be damaged or destroyed, the Division reserves the right, pursuant to 267.061(1)(b), F.S., to require salvage measures to mitigate the destructive impact of such activities to such sites. Such salvage measures would be accomplished before the Division would grant permission for destruction of the affected site areas. The funding needed to implement salvage measures would be the responsibility of the managing agency planning the site destructive activity. Mitigation of historic structures at a minimum involves the preparation of measured drawings and documentary photographs. Mitigation of archaeological resources involves the excavation, analysis and reporting of the project findings and must be planned to occur sufficiently in advance to avoid project construction delays. If these services are to be contracted by the state agency, the selected consultant will need to obtain an Archaeological Research Permit from the Division of Historical Resources, Bureau of Archaeological Research (see 267.12, F.S. and Rules 1A-32 and 1A-46 F.A.C.).
- **5.** For the near future, excavation of non-endangered (i.e., sites not being lost to erosion or development) archaeological site is discouraged. There are many endangered sites in Florida (on

both private and public lands) in need of excavation because of the threat of development or other factors. Those within state-owned or controlled lands should be left undisturbed for the present - with particular attention devoted to preventing site looting by "treasure hunters". On the other hand, the archaeological and historic survey of these tracts is encouraged in order to build an inventory of the resources present, and to assess their scientific research potential and historic or architectural significance.

- **6.** The cooperation of land managers in reporting sites to the Division that their field personnel may discover is encouraged. The Division will help inform field personnel from other resource managing agencies about the characteristics and appearance of sites. The Division has initiated a cultural resource management training program to help accomplish this. Upon request the Division will also provide to other agencies archaeological and historical summaries of the known and potentially occurring resources so that information may be incorporated into management plans and public awareness programs (See Management Implementation).
- **7.** Any discovery of instances of looting or unauthorized destruction of sites must be reported to the agent for the Board of Trustees of the Internal Improvement Trust Fund and the Division so that appropriate action may be initiated. When human burial sites are involved, the provisions of 872.02 and 872.05, F. S. and Rule 1A-44, F.A.C., as applicable, must also be followed. Any state agent with law enforcement authority observing individuals or groups clearly and incontrovertibly vandalizing, looting or destroying archaeological or historic sites within state-owned or controlled lands without demonstrable permission from the Division will make arrests and detain those individuals or groups under the provisions of 267.13, 901.15, and 901.21, F.S., and related statutory authority pertaining to such illegal activities on state-owned or controlled lands. County Sheriffs' officers are urged to assist in efforts to stop and/or prevent site looting and destruction.

In addition to the above management policy for archaeological and historic sites on state-owned land, special attention shall be given to those properties listed in the <u>National Register of Historic Places</u> and other significant buildings. The Division recommends that the <u>Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings</u> (Revised 1990) be followed for such sites.

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

- **1.** A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
- **2.** The historic character of a property shall be retained and preserved. The removal of historic materials or alterations of features and spaces that characterize a property shall be avoided.
- **3.** Each property shall be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
- **4.** Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
- **5.** Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
- **6.** Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
- **7.** Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
- **8.** Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
- **9.** New additions, exterior alterations, or related new construction shall not destroy materials that

characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

**10.** New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired. (see <u>Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings [Revised 1990]).</u>

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

#### D. MANAGEMENT IMPLEMENTATION

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

- **1.** All land managing agencies should contact the Division and send U.S.G.S. 7.5 minute quadrangle maps outlining the boundaries of their various properties.
- **2.** The Division will in turn identify site locations on those maps and provide descriptions for known archaeological and historical sites to the managing agency.
- **3.** Further, the Division may also identify on the maps areas of high archaeological and historic site location probability within the subject tract. These are only probability zones, and sites may be found outside of these areas. Therefore, actual ground inspections of project areas may still be necessary.
- **4.** The Division will send archaeological field recording forms and historic structure field recording forms to representatives of the agency to facilitate the recording of information on such resources.
- **5.** Land managers will update information on recorded sites and properties.
- **6.** Land managers will supply the Division with new information as it becomes available on previously unrecorded sites that their staff locate. The following details the kind of information the Division wishes to obtain for any new sites or structures that the land managers may report:

#### A. Historic Sites

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

#### B. Archaeological Sites

- (1) Site location (written narrative and mapped location).
- (2) Cultural affiliation and period.
- (3) Site type (midden, burial mound, artifact scatter, building rubble, etc.).

- (4) Threats to site (deterioration, vandalism, etc.).
- **(5)** Site size (acreage, square meters, etc.).
- **(6)** Artifacts observed on ground surface (pottery, bone, glass, etc.).
- (7) Description of surrounding environment.
- **7.** No land disturbing activities should be undertaken in areas of known archaeological or historic sites or areas of high site probability without prior review by the Division early in the project planning.
- **8.** Ground disturbing activities may proceed elsewhere but land managers should stop disturbance in the immediate vicinity of artifact finds and notifies the Division if previously unknown archaeological or historic remains are uncovered. The provisions of Chapter 872, F.S., must be followed when human remains are encountered.
- **9.** Excavation and collection of archaeological and historic sites on state lands without a permit from the Division are a violation of state law and shall be reported to a law enforcement officer. The use of metal detectors to search for historic artifacts shall be prohibited on state lands except when authorized in a 1A-32, F.A.C., research permit from the Division.
- **10.** Interpretation and visitation which will increase public understanding and enjoyment of archaeological and historic sites without site destruction or vandalism is strongly encouraged.
- **11.** Development of interpretive programs including trails, signage, kiosks, and exhibits is encouraged and should be coordinated with the Division.
- **12.** Artifacts found or collected on state lands are by law the property of the Division. Land managers shall contact the Division whenever such material is found so that arrangements may be made for recording and conservation. This material, if taken to Tallahassee, can be returned for public display on a long term loan.

#### **E. ADMINISTERING AGENCY**

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

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

#### **Contact Person**

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