

10/15/88

General Management Plan Amendment
Development Concept Plan
Environmental Assessment



Seminole Rest

Canaveral National Seashore
Florida




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**GENERAL MANAGEMENT PLAN AMENDMENT
DEVELOPMENT CONCEPT PLAN /
ENVIRONMENTAL ASSESSMENT**

SEMINOLE REST

Canaveral National Seashore • Florida

National Park Service • U. S. Department of the Interior



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SUMMARY

Public Law 100-564 (October 31, 1988) authorized the secretary of the interior to acquire two tracts of land, Seminole Rest and Stuckey's, and add them to Canaveral National Seashore. The act directed the secretary to protect and interpret Seminole Rest's archeological and historic resources and to establish a visitor center and administrative headquarters for the national seashore at Stuckey's. This *General Management Plan Amendment / Development Concept Plan / Environmental Assessment* focuses on Seminole Rest. The National Park Service will address Stuckey's, which is a separate site approximately 5 miles south of Seminole Rest, at another time.

This document presents four alternatives for development, visitor use, interpretation, and resource management at Seminole Rest, which is a 21-acre, detached unit of Canaveral National Seashore in the city of Oak Hill, Volusia County, Florida. The environmental impacts of the alternatives are also assessed.

The site contains two houses that are more than 100 years old and a large shell mound, which is one of the last relatively intact St. John's I-period shell mounds along the Atlantic coast. It dates to an occupation over 2,000 years ago. The site has been placed on the National Register of Historic Places.

Seminole Rest is currently closed to visitors. The two historic buildings — the Instone house and the smaller caretaker's house — are deteriorating. All four alternatives propose to preserve the houses, protect the archeological resources, and provide for public use to varying degrees. Under all alternatives the crest of the shell mound would be protected to honor the wishes of Native American groups. Alternatives 3 and 4 propose adaptive use of the houses.

Alternative 4 proposes that the National Park Service acquire the adjacent private property to

the north of the site for visitor use facilities. Such development could not be located on the site without adverse impact on the archeological resources. All four alternatives would change the boundary to connect the site to the rest of the national seashore, which lies 1,000 feet away across Mosquito Lagoon. The initial estimated development costs and number of staff assigned to the site progressively increase from alternative 1 through alternative 4.

Alternative 1 would continue the existing conditions, with only minor modifications. Although it is called the no-action alternative, some actions would be required to satisfy the letter, if not the intent, of the enabling legislation. Some work would be done to preserve the buildings. Groups would be allowed to tour the site by appointment when accompanied by a park employee, who would provide interpretation. No interpretive media or visitor use facilities would be provided.

Alternative 2 would restore the exterior of the historic buildings, but there would be no adaptive use, and they would not be open to the public. The site would be open to visitors for a limited number of scheduled hours during the week or by appointment. The driveway that crosses Snyder's Mound would be removed, and the mound would be restored to give visitors a better understanding of the prehistoric appearance of the mound. A pedestrian trail around the base of Snyder's Mound would be maintained by mowing the grass, and a parking area would be constructed on River Road. Otherwise, there would be no interpretive media or visitor use facilities. Approximately 38 acres of privately owned land adjacent to and south of Seminole Rest would be acquired for resource preservation and to serve as an undeveloped vehicle entrance site. Plans for interpretation and visitor use, along with an environmental assessment, would be done later.

Alternative 3 would provide significantly more opportunity for visitors to see the site and learn about the history and prehistory of the area. Seminole Rest would be open to the public on a daily basis. The two houses would be restored and adaptively used. The Instone house would be open to the public and would have interpretive exhibits on the first floor. The first floor of the caretaker's house would be used for park staff offices, and the site would provide a location for a ranger station. An interpretive trail with wayside exhibits would be constructed around the base of Snyder's Mound and would lead to the Instone house. A dock would be provided for tour boats operating under permit and for ranger use. Boat launching would not be allowed. Public restrooms would be provided in the Instone house, and parking would be available along River Road. Approximately 38 acres of land to the south of Seminole Rest would be acquired for resource preservation and for an undeveloped vehicle entrance to the site.

Alternative 4 is the preferred alternative. It would provide the same facilities at Seminole Rest as alternative 3, including the adaptive use of the historic houses. In addition, approximately 3.6 acres of land north of the site would be acquired for visitor use facilities. There

would be a visitor contact station with interpretive media, including an audiovisual presentation, and an outdoor interpretive demonstration area, additional parking, and a boat dock to be used for NPS interpretive tour boats, tour boats operating under permits, visitor boats from the lagoon, and ranger boats. No boat launching would be allowed. Seminole Rest would provide a location for a third ranger station for the seashore, and 38 acres of land to the south would be acquired for resource preservation and for an undeveloped vehicle entrance to the site.

Alternative 4 would be implemented in two phases. Phase I would begin as soon as funding was secured for design and construction and would include development of the site within the current NPS boundary, including the restoration and adaptive use of the two houses. The site would be open to the public on a daily basis throughout the year.

Phase II would provide additional visitor use facilities north of the current site and would begin after the acquisition of the land and after funds were made available for design and construction.

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Background and Analysis

OVERVIEW

LOCATION AND BRIEF DESCRIPTION

The Park

Canaveral National Seashore lies on the east coast of Florida about 50 miles east of Orlando and 25 miles south of Daytona Beach (see Vicinity map.) Within its nearly 60,000 acres are 25 miles of undeveloped beach, dune, marsh, and submerged lagoon habitats. The area is home to many plant and animal species, some of which are threatened or endangered. The national seashore also has a variety of cultural resources, including Turtle Mound and remnants of the town of Eldora. Together with the Merritt Island National Wildlife Refuge and the Kennedy Space Center complex, Canaveral National Seashore makes up one of the least disturbed coastal segments remaining along the nation's subtropical shoreline.

The Site

Seminole Rest, part of Canaveral National Seashore, is on the southern edge of the Golden Crescent and includes related resources.

The Golden Crescent includes a wide area along the Georgia coast and in Florida (extending roughly from Savannah to Tallahassee). The area has a rich history and prehistory with thousands of years of Native American occupation. It was the scene of many of the first North American encounters among Europeans, Africans, and native inhabitants.

Seminole Rest is on the west side of Mosquito Lagoon in the town of Oak Hill about 25 miles south of Daytona Beach and 20 miles north of Titusville (see Oak Hill Area map). It can be reached from the north or south by driving U.S. Highway 1 to the town of Oak Hill, turning east on Halifax Avenue to the intersection with River Road, then north along River Road to the

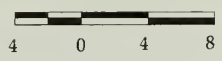
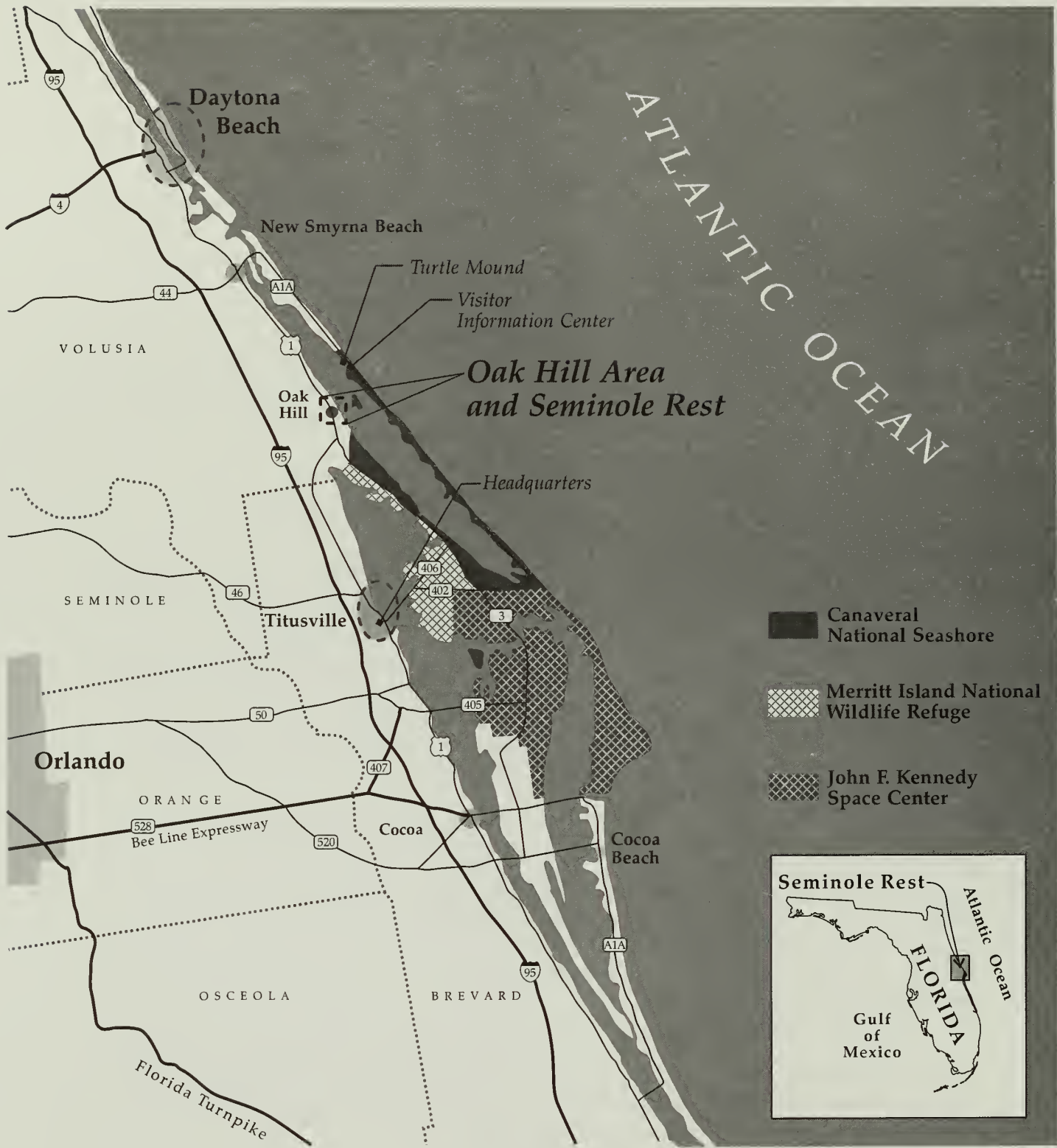
Palm Avenue entrance, which is approximately 1.5 miles from U.S. Highway 1.

The site consists of approximately 21 acres that are owned by the federal government. There are archeological and historic resources that are listed on the National Register of Historic Places on about one-third of the site. Much of the remainder of the site consists of wetlands and open water. Although Seminole Rest is part of Canaveral National Seashore, it is separated from the park by approximately 1,000 feet of Mosquito Lagoon.

ENABLING LEGISLATION

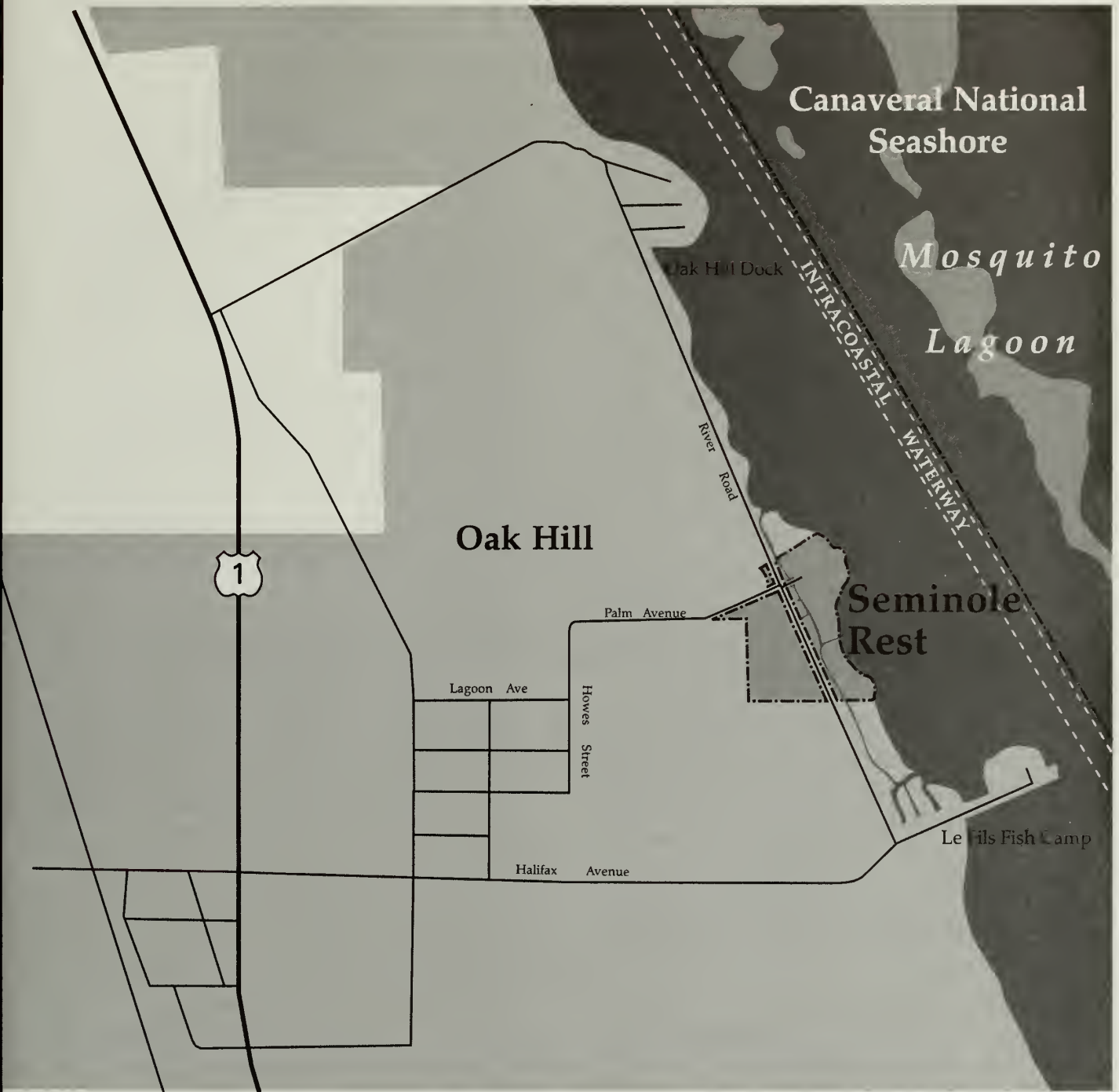
PL 100-564 (October 31, 1988) authorized the secretary of the interior to acquire two tracts of land, Seminole Rest and Stuckey's, and add them to Canaveral National Seashore. Stuckey's, which was intended as the location of the administrative headquarters for the entire national seashore, is approximately 5 miles south of Seminole Rest. The National Park Service will address Stuckey's at another time.

The act directed the secretary to acquire Seminole Rest primarily to protect and interpret the site's archeological and historic resources. The legislation is reproduced in Appendix A. The addition of Seminole Rest is consistent with the national seashore's establishing legislation (PL 93-626, January 3, 1975), which created the park "to preserve and protect the outstanding natural, scenic, scientific, ecologic, and historic values of certain lands, shoreline, and waters of the State of Florida, and to provide for public outdoor recreation use and enjoyment of the same."



Vicinity

Canaveral National Seashore • Seminole Rest
 United States Department of the Interior/ National Park Service
 DSC/Dec. '97/639/20027



Scale in Feet



--- Boundary of National Seashore

Oak Hill Area

Canaveral National Seashore • Seminole Rest

United States Department of the Interior/ National Park Service
DSC/March '98/639/20028

PURPOSE OF AND NEED FOR THE PLAN

The *Canaveral National Seashore General Management Plan* was approved in 1982. The Seminole Rest unit was not added to the seashore until 1988, so that plan provided no guidance for the management or development of the unit. As a new area of the national seashore with singular resources, Seminole Rest must be carefully managed to preserve and interpret its valuable resources. This *General Management Plan Amendment /Development Concept Plan/ Environmental Assessment* provides guidance for accomplishing that goal.

SIGNIFICANCE AND PURPOSE OF THE SITE

The cultural resources of Seminole Rest are both prehistoric and historic. One large shell mound and several smaller platform house mounds have been identified. The large mound, known as Snyder's Mound, is one of the last relatively intact St. John's I-period shell mounds remaining along the Atlantic Coast. The site is significant for the length of time that it was occupied (ca. 2000 B.C.–A.D. 1565, spanning the Orange, St. John's I, and St. John's II periods) and for the information on settlement and subsistence patterns that it contains. Two 19th century houses (the Instone house and the caretaker's house) and a metal garage surmount the large mound. A few pilings are all that remain of a boat dock, which is not historic. The houses are significant for their association with the Anglo settlement, or pioneer period, of this part of Florida during the latter half of the 19th century. The garage has no historical significance. The significance of the landscape has not yet been determined. Further research would be necessary to verify any such significance. The site was placed on the National Register of Historic Places in March 1997 in recognition of its significant prehistoric and historic resources.

As stated in the enabling legislation, Seminole Rest will be managed to protect and interpret its archeological and historic resources. The site will add a human dimension to the natural history of the national seashore and will help to explain how the natural and cultural histories of the site are intertwined. Native Americans harvested clams from the Mosquito Lagoon, and as the clams were processed, the large mound grew. The site was used seasonally, not year-round. During the historic period, fishermen, smugglers, and tourists came to settle the Oak Hill area as a result of its climate, its abundance of marine life, and its relative isolation.

VISION

Seminole Rest would become a major visitor stop within Canaveral National Seashore. Under the preferred alternative, it would function as a place both to orient the visitor generally to the resources of the national seashore and to interpret 4,000 years of human experience at the site. Boat tours of the lagoon and historic and prehistoric sites such as Eldora and Turtle Mound would begin at the site. Seminole Rest would provide a location for a ranger station that would serve Mosquito Lagoon and its islands.

INTERPRETIVE THEMES AND GOALS

Interpretation is an educational process that is designed to stimulate curiosity and convey ideas and information to people. It is part of the visitor experience. The National Park Service uses interpretive themes as a framework for development of interpretive programs. The themes presented below are statements about the significance of the resources at and near Seminole Rest and suggest what stories should be told and what visitors should be able to learn while on the site.

Seminole Rest can reveal much about the lifeways of the native people of the St. John's I period and of the historical environment of the east coast of central Florida.

The shell midden at Seminole Rest has historic ties with many other locations along the southeastern coastline.

There are different types of shell middens, and they often served more than one purpose. This is true not only for middens throughout the region but also the specific resources at Seminole Rest.

For more than 2,500 years, people have been attracted to and used the natural resources of Mosquito Lagoon.

The buildings at Seminole Rest represent the pioneer era of settlement in Florida after Reconstruction as well as the early migration patterns of winter visitors to the state in the late 1800s.

The archeological integrity of Seminole Rest is due to private efforts that saved the mound from road building projects.

The salt marsh serves as a hatchery for marine life in the lagoon and has ties with the ocean beyond.

The themes suggest what visitors to Seminole Rest should be able to see and do in relation to what they can learn about the history and prehistory of the site. They help to define the desired visitor experience.

The interpretive goals at Seminole Rest will be met if visitors to the site are able to:

see a well-preserved archeological site consisting of shell middens and mounds and learn about these resources in the context of the people who created them

see inside the mound to learn about its construction and how archeologists decipher its prehistoric secrets

contemplate, in a relatively undeveloped and quiet setting, the significance of the site and its associated native culture

appreciate and respect the cultural sensitivity of the site

place the significance of the site into broader contexts

experience a cultural landscape that dates to the early 20th century

learn about the people who lived here, why they came, how they lived, what contributions they made to the history of the area, and how they preserved this archeological treasure

learn about, see, and experience the site in ways that protect this archeological resource with minimal intrusion of additional support facilities and structures

choose from a variety of opportunities to learn about the site's history

receive clear directions for reaching the site

find accessible routes for touring the site

learn about the natural history and processes of the site and how they have supported various groups for more than 2,500 years

understand and appreciate past and present efforts to preserve the site's resources

Proposed actions in each alternative should contribute to the attainment of these goals.

MANAGEMENT OBJECTIVES

Management objectives are statements of desired conditions for visitor use and experience, interpretation, natural and cultural resources, and partnerships. They pertain to the entire national seashore, including Seminole Rest. The actions proposed in this plan must serve to fulfill one or more of the management objectives and must not conflict with them.

Visitor Use and Experience

- Provide for recreational uses in a manner that would minimize conflicting expectations among visitors and preserve the significant cultural and natural resources of Canaveral National Seashore.
- Maintain the pristine character of Klondike Beach and the limited carrying capacity of Playalinda and Apollo Beaches to provide an opportunity for visitors to experience an undeveloped barrier island in Florida.

Interpretation

- Educate the general population and visitors about the significant cultural and natural resources in the park to instill an appreciation for the resources and foster behavior that will enhance resource protection.
- Communicate an awareness, understanding, and appreciation of the processes that created the barrier island and estuarine ecosystems and of the continuing nature of those processes.

Natural and Cultural Resources

- Maintain Florida class II water quality standards in the seashore to promote biodiversity and protect the estuarine ecosystem.

- Protect all archeological sites from human damage and erosion.
- Protect the endangered and threatened species that live in the seashore.
- Protect and restore natural processes in the undeveloped areas of the park.
- Coordinate with other federal, state, and local agencies responsible for management activities in the park to ensure protection of natural habitats, cultural resources, water quality, and a healthy estuarine system.

Partnerships

- Coordinate with local entities to enhance resource preservation, protection, and interpretation and to provide visitor services.

PLANNING ISSUES AND CONCERNS

Issues and concerns affecting the development concept plan for Seminole Rest have been identified by national seashore management and staff, the planning team, relatives of former owners of the site, and input from the general public. They include:

protection of archeological resources from damage and erosion

Native American concerns about people walking on Snyder's Mound

protection of historic resources from damage and deterioration

adaptive use of the historic structures

protection of natural resources, including floodplains, wetlands, water quality, soil, wildlife, vegetation, and any species of concern (including threatened and endangered)

education of visitors about the significant cultural and natural resources of the site and surroundings and the need to treat the site with respect

provision of the needed infrastructure, including adequate interpretive facilities, potable water and wastewater treatment, and adequate parking and access for visitors

modification of the park boundary to make Seminole Rest contiguous with the rest of Canaveral National Seashore

social and economic impacts on the community and region

development costs, staffing levels, and operating expenses

conformance with the *General Management Plan for Canaveral National Seashore*

DERIVATION OF IMPACT TOPICS

To provide a focus for environmental discussions and to ensure that alternatives are compared on the basis of the most relevant issues, the impact topics presented below were selected. Their inclusion was based on federal laws, regulations, and executive orders, NPS *Management Policies*, analysis of limited or easily affected resources, and issues and concerns expressed during public scoping. A brief rationale for including particular topics follows.

Cultural Resources

The National Historic Preservation Act, the National Environmental Policy Act, NPS *Management Policies*, NPS-2 (*Planning Process Guideline*), and NPS-28 (*Cultural Resources Management Guideline*) call for the consideration of historic and archeological resources in planning proposals.

Natural Resources

Biotic Communities. The National Environmental Policy Act calls for an examination of the impacts on all components of affected ecosystems. NPS policy is to protect the natural abundance and diversity of all of the park's natural communities.

Species of Concern. The Endangered Species Act requires an examination of impacts on all federally listed threatened or endangered species. NPS policy requires examination of the impacts on listed threatened, endangered, or rare species and species of concern. Although park surveys show that there are no species of concern in the areas that would be impacted by any of the alternatives, this topic is briefly addressed in the Environmental Consequences section.

Wetlands. Executive Order 11990 (Protection of Wetlands) and the Clean Water Act require the protection of wetlands. There are wetlands in the affected area as defined by the Corps of Engineers or Environmental Protection Agency for implementation of section 404 of the Clean Water Act or by Executive Order 11990.

Water Quality. NPS *Management Policies* requires protection of water quality consistent with the Clean Water Act, section 404, which authorizes the U.S. Army Corps of Engineers to prohibit or regulate, through a permit process, discharge of dredged or fill material into waters of the United States, including wetlands. Section 401 provisions ensure that federally permitted activities that may result in discharge to state waters comply with the federal Clean Water Act, state water quality laws, and other state laws.

Floodplains. NPS *Management Policies* address the protection of floodplains. Executive Order 11988, *Floodplain Management* requires an examination of impacts on floodplains and of potential risk involved in allowing structures within floodplains.

Interpretation and Visitor Use

Providing for interpretation and visitor use is one of the fundamental purposes of the National Park Service. The alternatives in this plan would affect interpretation and visitor use and the overall visitor experience to varying degrees.

Socioeconomic Environment

The National Environmental Policy Act calls for an assessment of impacts on the human environment. The socioeconomic impacts, primarily to the local economy, are evaluated in this document.

NPS Operations

The cost estimates for implementing each alternative vary, as does the impact of each alternative on park operations, especially in terms of staffing.

Impact Topics Dismissed from Further Analysis

Air Quality. The Clean Air Act requires federal land managers to protect park air quality. NPS *Management Policies* calls for air resource management to be integrated into operations and planning and for all air pollution sources in parks to comply with all federal, state, and local air quality regulations. During construction, there may be temporarily elevated levels of particulate matter and other air pollution. However, over the long term, air quality standards would not be exceeded, so further analysis was not required.

Environmental Justice. Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse

human health or environmental effects of their programs and policies on minorities and low-income populations and communities. No alternative would have such effects as defined in the Environmental Protection Agency's *Draft Environmental Justice Guidance* (July 1996).

RESOURCE ANALYSIS

Seminole Rest is bisected north to south by River Road and a narrow, shallow borrow canal that parallels the road on the east side. The resources of significance for which the site was included in the national seashore are located on the east side of the road (see Resource Analysis map). They consist of a prehistoric mound complex, the most prominent of which is Snyder's Mound, and two historic structures — the Instone house and the caretaker's house. The landscape may be significant, but further research is needed for that determination. The garage next to the caretaker's house is not historic. Nearby in Mosquito Lagoon are pilings, which are all that remains of a boat dock (also not historic). Due to the archeological and historic sensitivity of the area, it is unsuitable for major new development. Minor construction, such that for pedestrian trails and utility lines, would be acceptable. However, disturbed areas should be used where possible, and careful monitoring during construction would be necessary in order to mitigate possible impact on significant resources.

The land south of the mound complex is predominantly wetland, with the canal paralleling the road and emergent upland next to the road. This area is essentially unsuitable for development, other than for a pedestrian boardwalk or overflow strip parking along the road.

Between the canal and the road is a strip of open land that contains significant archeological resources, especially in a small area known as Fiddle Crab Mound. An area just south of Fiddle Crab Mound has been archeologically

cleared, contains virtually no wetlands, and would be suitable for development.

West of River Road and south of Palm Avenue the land is primarily wetland and has a wide stream meandering through it parallel to the road. This area is unsuitable for development. The west side of this land graduates to upland, which is subject to flooding, and that contains another small canal. It is unsuitable for major development.

At the northwest intersection of River Road and Palm Avenue is a small area of open, disturbed upland. Although archeological testing still should be done in this area, it is thought to be suitable for development.

Alternative 4 proposes acquisition of land adjacent to and north of Seminole Rest to provide space for additional visitor use facilities. Much of this privately owned land is developed or has been otherwise disturbed. A cultural landscape evaluation is needed to determine the historical significance of this parcel and whether or not it was once part of the original cultural landscape at Seminole Rest. Until that evaluation is made, the suitability of this parcel for development will not be determined. However, subject to that evaluation and subsequent acquisition, it is presently considered a suitable location for the proposed new facilities.



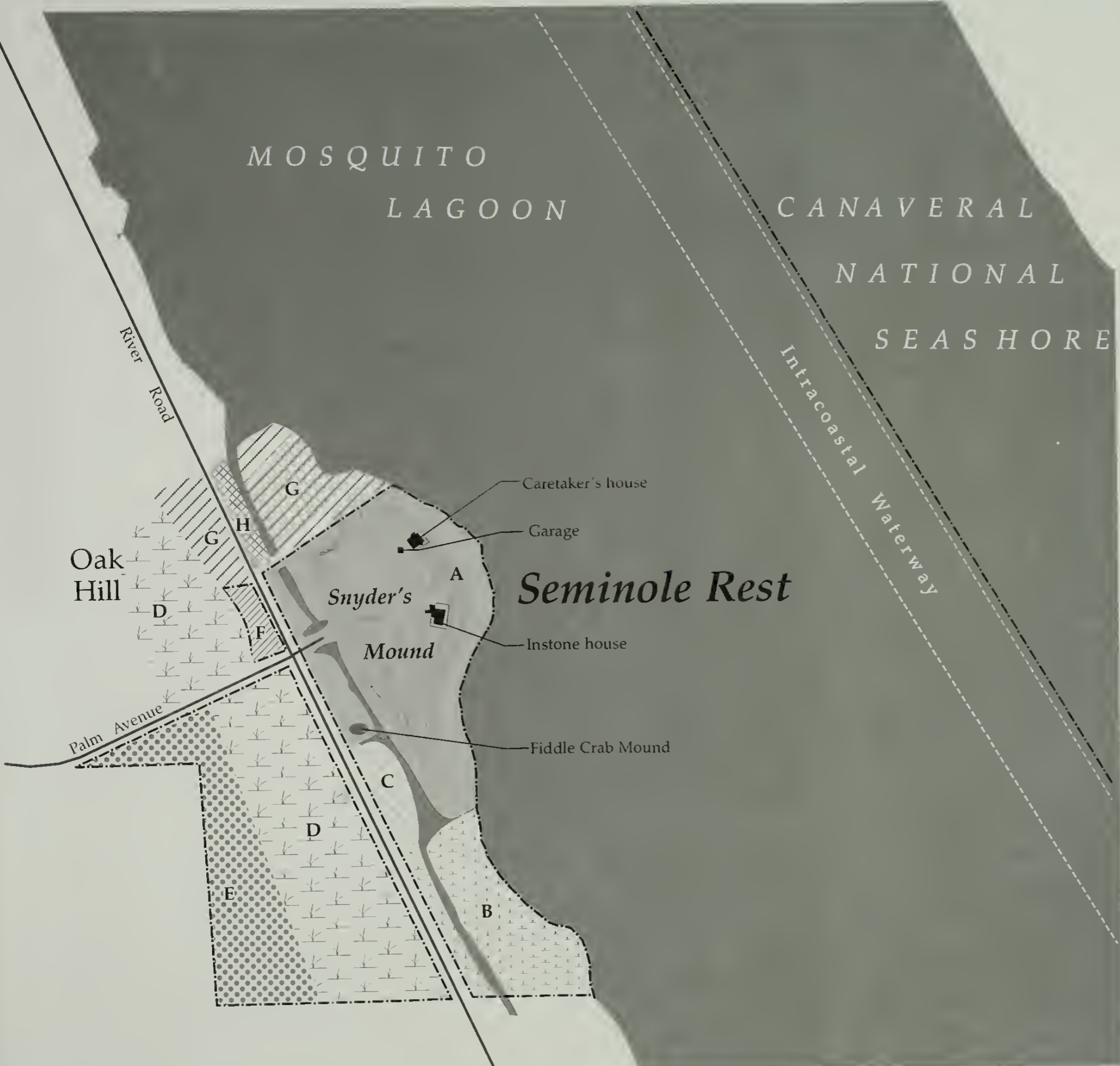
- Boundary of national seashore
- A** Archeologically/historically sensitive area (unsuitable for major development; low impact pedestrian trails off the crest of the mound would be acceptable)
- B** Predominantly wetlands with emergent uplands next to road (unsuitable for development)
- C** Archeologically cleared open upland (suitable for development)
- D** Predominantly wetlands and open water (unsuitable for development)
- E** Emergent uplands with canal (unsuitable for major development)
- F** Previously disturbed open upland (suitable for development)
- G** Privately owned developed land (suitable for development, subject to acquisition and additional evaluation)
- H** Narrow strip of land between road and canal (unsuitable for development)



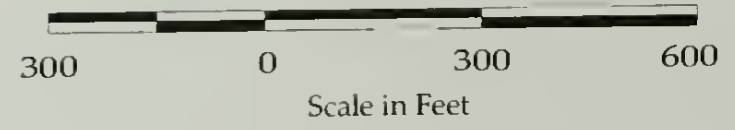
Scale in Feet



Resource Analysis



- Boundary of national seashore
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- H** Narrow strip of land between road and canal (unsuitable for development)



Resource Analysis



**Alternatives, Including
The Proposed Action**

INTRODUCTION

PARTNERSHIPS

The National Park Service would work cooperatively with the Oak Hill community, Native American groups, friends of the national seashore groups, volunteers, and other entities to meet the objectives of resource preservation, visitor use, and interpretation at Seminole Rest. Native Americans and pioneering Florida families who lived and worked at the site would be asked to assist in developing a comprehensive and accurate interpretive program that would be sensitive to the concerns of all interested parties.

The National Park Service would welcome assistance in many endeavors. These would include, but not be limited to:

- developing the interpretive program, such as conducting research into the local history of Oak Hill, leading interpretive tour groups, and working in the visitor contact station

- helping with construction projects, such as trail building

- performing maintenance, such as trail repair and debris and trash removal

- raising and lowering the flag

- providing a “park watch” presence to assist with security, such as a volunteer in uniform

- participating in fund-raising efforts to assist with the construction program and on-going resource preservation

The National Park Service would ensure that the significant archeological and historical resources were preserved, that the site was open to visitor use (the extent would depend on the alternative selected), and that a high-quality interpretive program was provided. This would result in improved property values and would

attract visitors, which would have a beneficial effect on the local economy. It would also provide a beautiful and educational resource for local residents and their friends and families to visit, and it would become a source of pride for the entire Oak Hill community.

The National Park Service would work in partnership with the local community to help to ensure that changes in surrounding land use and development in the area remain compatible with NPS resource management and visitor use goals and Oak Hill quality of life and economic goals.

In alternatives 3 and 4 of this document, the potable water and wastewater treatment would be provided for the buildings at Seminole Rest. This must be done in a way that is cost-effective and environmentally acceptable and must not endanger the water quality of the surrounding area, especially Mosquito Lagoon. The preferred option would be to tie into municipal systems. Since municipal water and wastewater lines do not currently run near Seminole Rest, the National Park Service would work in partnership with the local community to make the lines available. Providing these lines in the vicinity of River Road or Palm Avenue would also allow other residents to tie into a system that would ensure the long-term enhancement of water quality for this part of Mosquito Lagoon.

SPECIAL POPULATIONS

Provisions would be made to accommodate the needs of the special populations who visit Seminole Rest. Special populations are identified as those with sight, hearing, learning, and mobility impairments, visitors who do not speak English, and young children and the elderly.

Accommodations would be made for access to the site, as well as to most of the interpretive media. Guidelines and regulations are available

to assist the staff and facility designers. Generally, these accommodations would benefit all visitors.

PL 90-480, the Architectural Barriers Act, and the Americans with Disabilities Act of 1990 established standards for physical access. Any new facilities constructed would be designed to be accessible for visitors and employees with disabilities.

All new interpretive media would conform with the NPS June 1996 *Programmatic Accessibility Guidelines for Interpretive Media*.

VALUABLE OBJECTS WITHIN THE FLOOD PLAIN

Seminole Rest and the surrounding land are within the 100-year floodplain. Significant cultural objects and valuable museum exhibits would be on display in the visitor contact stations proposed in two of the alternatives. Therefore, a museum objects flood evacuation plan would be written to protect such objects from flood damage. In all likelihood, such flooding would be predictable as a result of a rise in sea level (and, in turn, a rise in Mosquito Lagoon) due to offshore storms. No significant or original documents would be stored within the 100-year floodplain.

CARRYING CAPACITY

The attraction of Seminole Rest is its history and prehistory and the stories they have to tell. Yet the archeological and historic resources that attract visitors are sensitive and can be adversely impacted by too much visitation. The site is also considered to be sacred to many Native Americans and must be treated with respect. The historic and prehistoric area encompasses approximately seven acres and is best appreciated while walking around the site in an uncrowded, reverent atmosphere. Therefore, there is a reasonable limit to how many people can tour the site at one time

without adversely impacting the resources or the visitor experience. Limited suitable land nearby for parking is also a factor.

Generally speaking, the maximum total number of visitors in the historic and prehistoric part of the site at any one time is 50, distributed along a proposed interpretive trail and in the Instone house. An additional 50 visitors could comfortably tour the facilities if more land is acquired. Thus, the entire site would usually be occupied by a maximum of 100 visitors at one time. This number would occasionally increase with the arrival of tour and school buses. Under the assumption that a typical tour would last about two hours, the maximum visitation would generally be about 400 people per day.

In alternative 4, which would require the most parking, space would also be needed for as many as 20 people who might be on the interpretive boat tour, park staff, and service vehicles. With an average of 2.5 visitors per vehicle, this equates to a need for approximately 56 spaces for standard-sized vehicles, designated accessible and oversized recreational vehicles. The three parking areas proposed in alternative 4 would provide the needed spaces, including space for one or two buses near the visitor contact station.

Due to the predominance of wetlands and archeological resources, suitable space for parking at Seminole Rest is very limited. Although it is not known how many visitors would come to Seminole Rest, the parking proposed in this development concept plan should be adequate. However, if the popularity of the site is such that it exceeds the availability for parking space, especially for RVs and bus tours, operational solutions might have to be implemented. These could include working with neighbors and the city of Oak Hill to identify additional parking areas near the site, designating remote areas for tour and school bus parking, and providing shuttle service to connect remote parking areas to the site.

DEFINITIONS

Rehabilitation. Repairing or altering a structure to allow compatible contemporary use while preserving those portions or features that are important to its significance.

Restoration. Returning the appearance of a historic resource to a specific time period as determined by a historic structure report or cultural landscape report.

Stabilization. Reestablishing the stability of an unsafe, damaged, or deteriorating structure while maintaining its character.

ALTERNATIVE 1: EXISTING CONDITIONS (NO ACTION)

CONCEPT

The no-action alternative represents the minimum that the National Park Service could do to meet the requirements of the authorizing legislation and NPS historic preservation policy. It is essentially an attempt to protect the site's resources from further deterioration until adequate funds and staffing become available to open the site for visitation. Although this alternative meets the letter of the law, it does not necessarily meet its spirit (see Alternative 1 map).

LAND PROTECTION

No additional upland would be acquired. However, the boundary for Seminole Rest would be modified to connect the site with the rest of the national seashore by including a section of Mosquito Lagoon, currently owned by the state of Florida, between the mainland and the Intracoastal Waterway. Approximately 35 acres of submerged land would be included. The land would continue to be owned by the state but would be dedicated to and managed by the National Park Service for conservation and preservation. Similar language concerning the retention of oil and gas rights by the state of Florida, state-authorized hunting and fishing, and other matters addressed in previous dedications of submerged land to the national seashore could be used again in this instance. This would continue to allow state agencies to exercise the same controls that are currently in place, such as those pertaining to wetlands protection and state fishing regulations. This action would constitute a minor boundary revision as described in the land protection section of alternative 4 and would require no additional legislation.

CULTURAL RESOURCES MANAGEMENT

The Seminole Rest unit has not been fully surveyed for archeological resources, and the landscape and historical resources have not been completely studied and evaluated. Identification and evaluation of all such resources in the unit is required by section 110 of the National Historic Preservation Act of 1966, as amended. Until completed, site-specific inventory and evaluation would be undertaken as needed to ensure that no resources are lost or damaged due to park actions.

Seminole Rest is listed on the National Register of Historic Places. The boundaries of the national register site are the north property boundary, River Road on the west, Mosquito Lagoon on the east, and the short canal on the south that drains from the roadside canal into Mosquito Lagoon. These boundaries would be reevaluated following complete archeological and historic inventory of the rest of the site to determine whether additional resources should be contained in the national register boundary or if noncontributing resources should be deleted.

Canaveral National Seashore management objectives would be reevaluated to ensure inclusion of cultural resource needs of Seminole Rest. The park's *Resources Management Plan* would be updated.

Any archeological and historic objects removed from the site would be curated and stored in accordance with NPS policies and guidelines. Should any of these objects fall within the purview of the Native American Graves Protection and Repatriation Act of 1990 (PL 101-601), consultation with tribal officials would be undertaken.

Although the landscape would continue to be maintained as is, park staff would continue to gather information on the history of the landscape as part of normal data gathering and oral history research. Funding for a cultural landscape report would be sought so that the park would have adequate data on the evolution and history of the landscape, and the staff would better understand how to maintain it.

Stabilization of the two houses would be undertaken in accordance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*, the NPS *Cultural Resources Management Plan* and NPS *Management Policies*, and a proposed historic structures report.

Specific guidelines would be developed to limit the use of construction vehicles on the mound to minimize erosion or damage resulting from their use.

NATURAL RESOURCES MANAGEMENT

All natural resources within the current and expanded boundary (for submerged land) at Seminole Rest would be managed in accordance with the park's *Resources Management Plan* and NPS policies and guidelines.

INTERPRETATION AND VISITOR USE

The site would remain closed to the public except for occasional guided tours. Tours would be scheduled by the park or given on request as funding and staffing allow. No park staff would be stationed at the site.

With a reservation, a group could meet a ranger at the main gate. The ranger would accompany the group around the site and provide all interpretation. When the tour ended, the ranger would accompany the group back to the gate and lock up. No new facilities would be developed, and the structures would not be open

for public access. All tours would remain off the crest of the mound to honor the wishes of Native American people.

Seminole Rest would not be highlighted in the park brochure or in other publications available onsite. An informational sign at the entrance would state that the site was closed to the public except for guided tours. A public tour schedule, if developed, would be posted as would information regarding tour requests.

Primarily for the benefit of educational groups, the park's home page on the Internet would be expanded to include information on the Timucuan culture and would list sites, such as Turtle Mound, where park visitors could learn more about early Florida natives. Information regarding Seminole Rest also could be provided, but it would clearly state that access to the site was restricted.

FACILITIES DEVELOPMENT

No new facilities would be constructed. The two historic structures, the Instone house and the caretaker's house, would be stabilized to arrest deterioration. They would be monitored to ensure their preservation but would remain unused and empty. The garage would be retained to house groundskeeping equipment. The grounds would be maintained through occasional mowing, tree pruning, and brush and trash removal as recommended by a cultural landscape report. There would be no other alterations in the historic landscape.

No parking areas would be developed. Visitors and staff would park on NPS land along the west side of River Road just north of Palm Avenue.

Restrooms and potable water would not be provided. Electricity would be provided in the houses for safety and emergencies through a connection to the powerline that runs along River Road. A high-volume water system that could use untreated brackish water would be

provided for fire protection. Utility lines would be placed underground along disturbed corridors, where possible, to minimize any impact on the mound.

PARK OPERATIONS AND STAFFING

There would be very little change in the amount of staff time spent at Seminole Rest, estimated at less than 0.5 FTE (full-time equivalent employee). One FTE is equal to one person working one full year. An interpretive ranger would occasionally conduct a group tour around the site. Law enforcement rangers would occasionally patrol the site, and maintenance would continue to consist of occasional grounds maintenance and repair of the buildings.

There would be no potable water or wastewater treatment systems to monitor or maintain. However, a new water system for fire protection of the historic structures would have to be checked periodically.

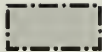



ESTIMATED DEVELOPMENT COSTS

Development costs for alternative 1 are shown in table 1. They represent class "C" estimates, which are conceptual cost estimates based on square foot costs of similar construction or identifiable unit costs of similar construction items.

TABLE 1: ESTIMATED DEVELOPMENT COSTS FOR ALTERNATIVE 1

	GROSS CONSTRUCTION COSTS	ADVANCE PLANNING COSTS	TOTAL PROJECT COSTS
Informational wayside exhibit	8,400	4,200	12,600
Stabilization of Instone house for preservation	373,600	71,300	444,900
Stabilization of caretaker's house for preservation	130,300	24,900	155,200
Electricity	26,500	5,100	31,600
Fire protection	39,200	7,500	46,700
TOTALS	\$578,000	\$113,000	\$691,000

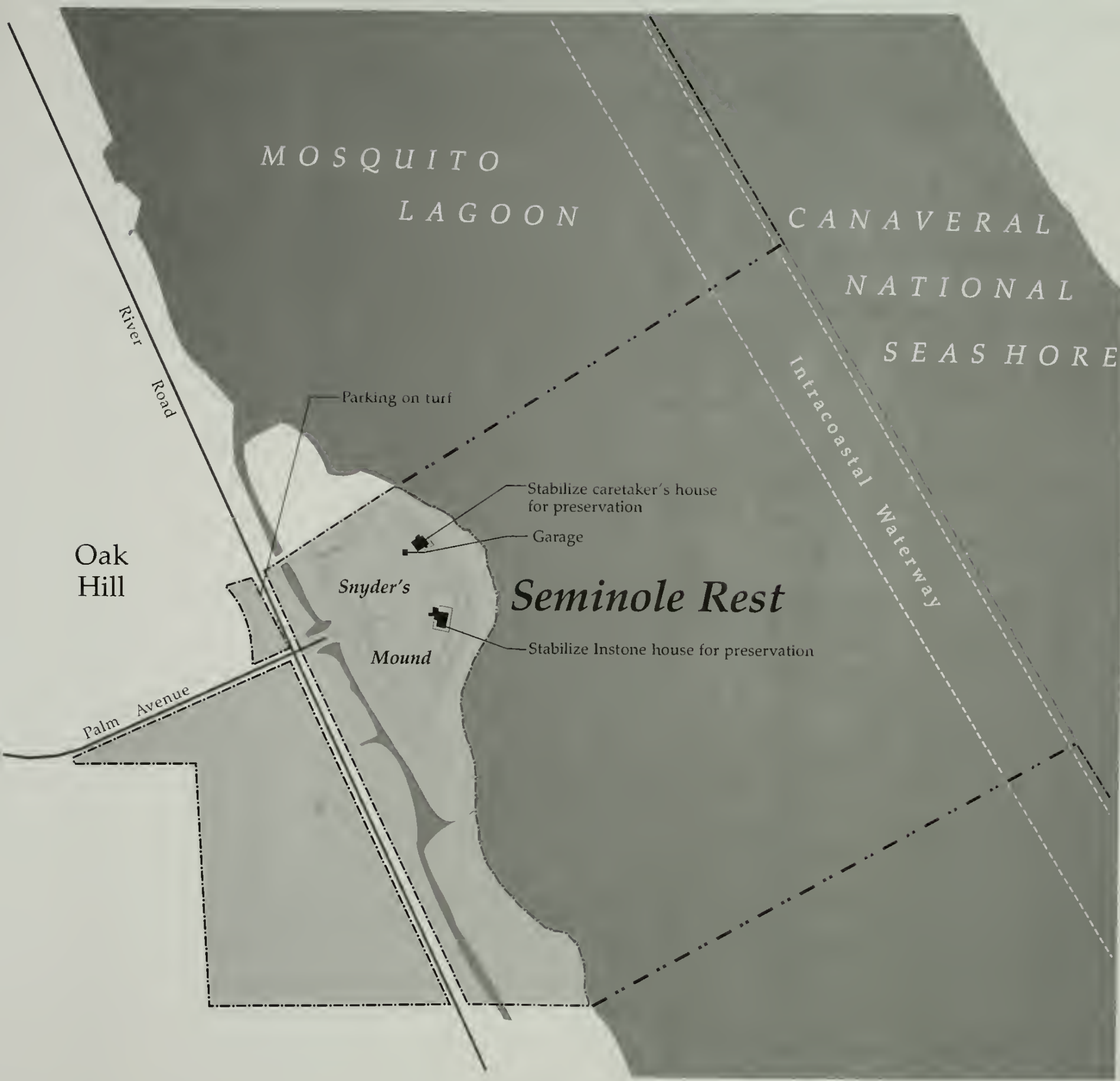


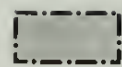

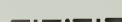

-  Seminole Rest (NPS land)
-  Boundary of national seashore
-  Boundary of national seashore to be changed
-  Proposed boundary to include part of Mosquito Lagoon to make Seminole Rest contiguous with the national seashore

VISITOR USE: Occasional group tours by request, otherwise, site closed to public.

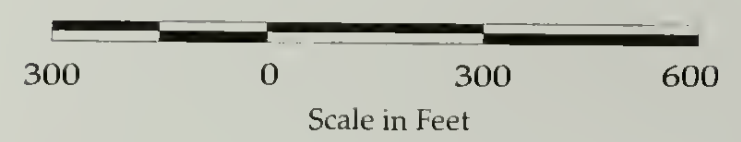


Alternative 1 Existing Conditions (No Action)



-  Seminole Rest (NPS land)
-  Boundary of national seashore
-  Boundary of national seashore to be changed
-  Proposed boundary to include part of Mosquito Lagoon to make Seminole Rest contiguous with the national seashore

VISITOR USE: Occasional group tours by request, otherwise, site closed to public.



Alternative 1
Existing Conditions
 (No Action)

ALTERNATIVE 2: PRESERVE HOUSES (NO ADAPTIVE USE)

CONCEPT

Alternative two represents the minimum that the public expects from the national seashore for Seminole Rest. It includes more interpretation and preservation of site resources than alternative 1. The site would serve as a stage set for interpretation, with structures restored on the exterior but not adaptively used. Snyder's Mound would be restored where the driveway once was, and the site would be open on a schedule for guided interpretive tours around the base of the mound (see Alternative 2 map).

LAND PROTECTION

The National Park Service would acquire approximately 38 acres of privately owned land between Seminole Rest and Halifax Avenue to the south and bordering Mosquito Lagoon (see Proposed Land Acquisition South of Seminole Rest map). The land is comprised primarily of wetlands and upland hammocks. Though divided by River Road, it is a relatively undeveloped piece of property and contains stands of mature native coastal Florida vegetation. Future studies would determine whether there are significant cultural features. In general, the National Park Service would preserve the land in its natural state; however, it could serve as the primary vehicle entrance for visitors to Seminole Rest and could also be used for environmental education. Specific visitor use, interpretation, and development of the site is beyond the scope of this development concept plan, and would be determined, along with an environmental assessment, at a later date.

The Volusia County property appraiser's office categorizes the property as tidal marsh, and the assessed value is approximately \$19,000. As part of the land acquisition process, the National Park Service would offer the landowner the fair market value, based on an appraisal of the property. Details would be addressed in a proposed land protection plan. The owner of the

property is willing to sell. Depending on the purchase price, acquisition of the land would constitute a minor boundary revision as described under Land Protection in alternative 4, and would require no additional legislation.

The boundary for Seminole Rest would be modified to connect the site, including the proposed land acquisition to the south, with the rest of the national seashore. The boundary modification would include approximately 57 acres of submerged land in Mosquito Lagoon currently owned by the state of Florida between the mainland and the Intracoastal Waterway. The land would continue to be owned by the state but would be dedicated to and managed by the National Park Service for conservation and preservation. Language similar to that used concerning the retention of oil and gas rights by the state of Florida, state authorized hunting and fishing, and other matters addressed in previous dedications of submerged land to the national seashore could be used in this instance. The state would retain jurisdiction pertaining to matters such as wetlands protection and fishing regulations. This action would constitute a minor boundary revision and would not require additional legislation.

CULTURAL RESOURCES MANAGEMENT

Seminole Rest has not been fully surveyed for archeological resources nor have all historical resources or the landscape been studied and evaluated. Identification and evaluation of all such resources in the unit is required by section 110 of the National Historic Preservation Act of 1966, as amended. Until that has been completed, site-specific inventory and evaluation would be undertaken as needed to ensure that no resources are lost or damaged due to park actions.

Seminole Rest is listed on the National Register of Historic Places. The boundaries of the national

register site are the north property boundary, River Road on the west, Mosquito Lagoon on the east, and the short canal on the south that drains from the roadside canal into Mosquito Lagoon. These boundaries would be reevaluated following complete archeological and historic inventory of the site to determine whether additional resources should be contained within the national register boundary or if noncontributing resources should be deleted.

Canaveral National Seashore management objectives would be reevaluated to ensure inclusion of the cultural resource needs of Seminole Rest. The park's *Resources Management Plan* would be updated.

Any archeological or historic objects removed from the site would be curated and stored in accordance with NPS policies and guidelines. Should any of these objects fall within the purview of the Native American Graves Protection and Repatriation Act of 1990 (PL 101-601), consultation with tribal officials would be undertaken.

Consultation would be required with archeologists and landscape architects to document the cultural landscape of Seminole Rest and to determine how best to remove the entrance road onto the mound and restore the mound contours. Such documentation, data gathered on the history of the landscape, and oral history research would provide the basis for a cultural landscape report. Funding for such a report would be sought so that the park would have adequate data on the evolution and history of the entire landscape and better understand how to maintain it.

Restoration of building exteriors would be undertaken in accordance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*, NPS *Cultural Resources Management Guidelines and Management Policies*, and a proposed historic structures report.

Specific guidelines would be developed that would limit the use of construction vehicles on

the mound to minimize erosion or damage resulting from their use.

NATURAL RESOURCES MANAGEMENT

All natural resources within the existing and expanded boundary (for submerged land and newly acquired uplands) at Seminole Rest would be managed in accordance with the park's *Resources Management Plan* and NPS policies and guidelines.

INTERPRETATION AND VISITOR USE

Visitation at the site would be limited, based on a set schedule, to a few hours or a few days per week, depending on season, demand, and availability of interpretive staff.

An informational sign at the primary parking area or at the front gate would apprise visitors of hours and other information such as tour requests. Interpretation would be by guided tour only.

Visitors would be greeted at the gate and guided around the site rather than allowed free site access. The tour route would circle the base of the mound and would be delineated primarily by mowing. To meet accessibility standards, sections of boardwalk could be necessary. Visitors would be educated about the fragility of the mound and cautioned to remain on the mowed trail or boardwalk to lessen damage. All tours would avoid the crest of the mound in accordance with the wishes of Native Americans.

On the side of the mound that faces River Road, contours would be restored so that the visitor would be better able to appreciate the size of the prehistoric mound. On the lagoon side the visitor would see the mound's relationship to Mosquito Lagoon and the later historic development at the summit. The porches might be used to provide a vantage point from which to discuss the site's history and relationship with Mosquito Lagoon, but neither historic structure would be open to the public.

After tours, visitors would be guided back to the entrance where the interpreter would greet the next tour group or return to other duties.

Visitors would receive a site bulletin summarizing the significance of Seminole Rest and listing additional sources of information about mounds and other aspects of Timucuan history and culture. Seminole Rest would also be included in a revision of the park brochure and in other informational publications.

The park's home page on the Internet would be expanded to include information on the Timucuan culture and would list sites such as Turtle Mound and Seminole Rest, where park visitors can learn more about early Florida native culture. To further broaden understanding and appreciation, this information also would be tied to related sites in the Golden Crescent.

FACILITIES DEVELOPMENT

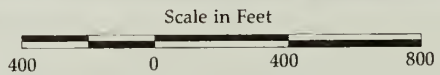
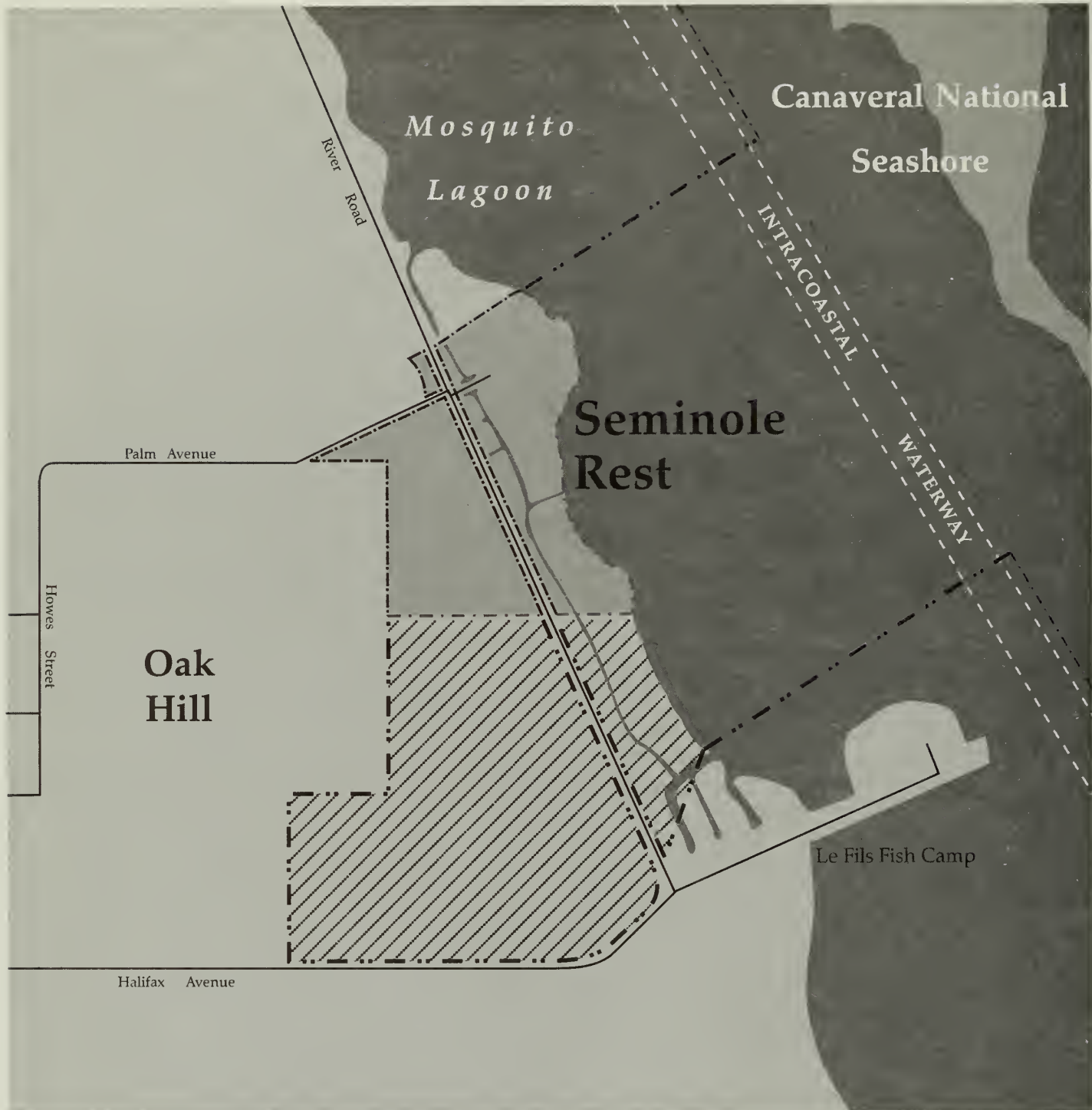
The entrance drive and above-ground utilities would be removed, and the mound would be restored. The Instone and caretaker's houses would be restored on the exterior but would remain unused. The garage would be used to house grounds maintenance equipment until a different location could be found offsite, and it would then be removed. The grounds would be mowed, and the trees would be pruned. Fencing would surround the site on the landward side. This work and any other changes to the historic landscape would be recommended by the cultural landscape report.

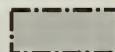

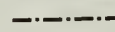


A parking area would be developed along the east side of River Road about 300 feet south of the entrance in an area that has been given initial archeological clearance. There would be approximately 12 parking spaces for visitors and staff, including designated accessible spaces, and 3 spaces for a bus and other oversized vehicles, such as trailers and recreational vehicles. A designated overflow area would be provided along the west side of River Road on NPS land just north of Palm Avenue.

Due to the limited amount of available upland within the NPS boundary and the need to avoid impacting wetlands and sensitive archeological resources, suitable parking space is extremely limited. This is especially true for oversized vehicles that require a large turning radius. The final number of parking spaces for all vehicles would be determined during the design phase of the project and would depend in part on the amount of vehicle intrusion that the National Park Service would be willing to accept on the overall scene. It is recommended that parking for buses and other oversized vehicles be designed as a roadside turnoff, parallel to River Road, in order to eliminate the need for turning at right angles into a parking area. These vehicles would be required to approach the parking area from the south. Upon departure, they would continue north along River Road back to U.S. Highway 1. This would eliminate the need to incorporate large turnarounds.

Operational measures, such as scheduling bus arrivals in advance in order to reduce congestion, could be necessary. Bus drivers could be required to leave the parking area after dropping off passengers and return to pick them up at an appointed time, rather than remaining parked onsite. This would free up an additional parking space for an RV. If buses remained onsite, drivers would be asked to turn off the engines to reduce noise and air pollution.

Restrooms and potable water would not be provided. Electricity would be provided for safety and emergencies through a powerline that runs along River Road. A high-volume water system that could use untreated brackish water would be provided for fire protection. All utilities would be placed underground. Utility lines would follow disturbed corridors where possible, so as to reduce impacts on archeological resources.



-  Seminole Rest (NPS land)
-  Proposed land acquisition
-  Boundary of national seashore
-  Boundary of national seashore to be changed
-  Proposed boundary to include proposed land acquisition and part of Mosquito Lagoon to make Seminole Rest contiguous with the national seashore

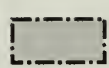



Proposed Land Acquisition South of Seminole Rest

(Alternatives 2, 3, 4)

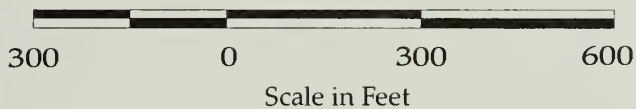
Canaveral National Seashore • Seminole Rest

United States Department of the Interior/ National Park Service
DSC/March '98/639/2036



-  Seminole Rest (NPS land)
-  Boundary of national seashore
-  Boundary of national seashore to be changed
-  Proposed boundary to include land acquisition and part of Mosquito Lagoon to make Seminole Rest contiguous with the national seashore

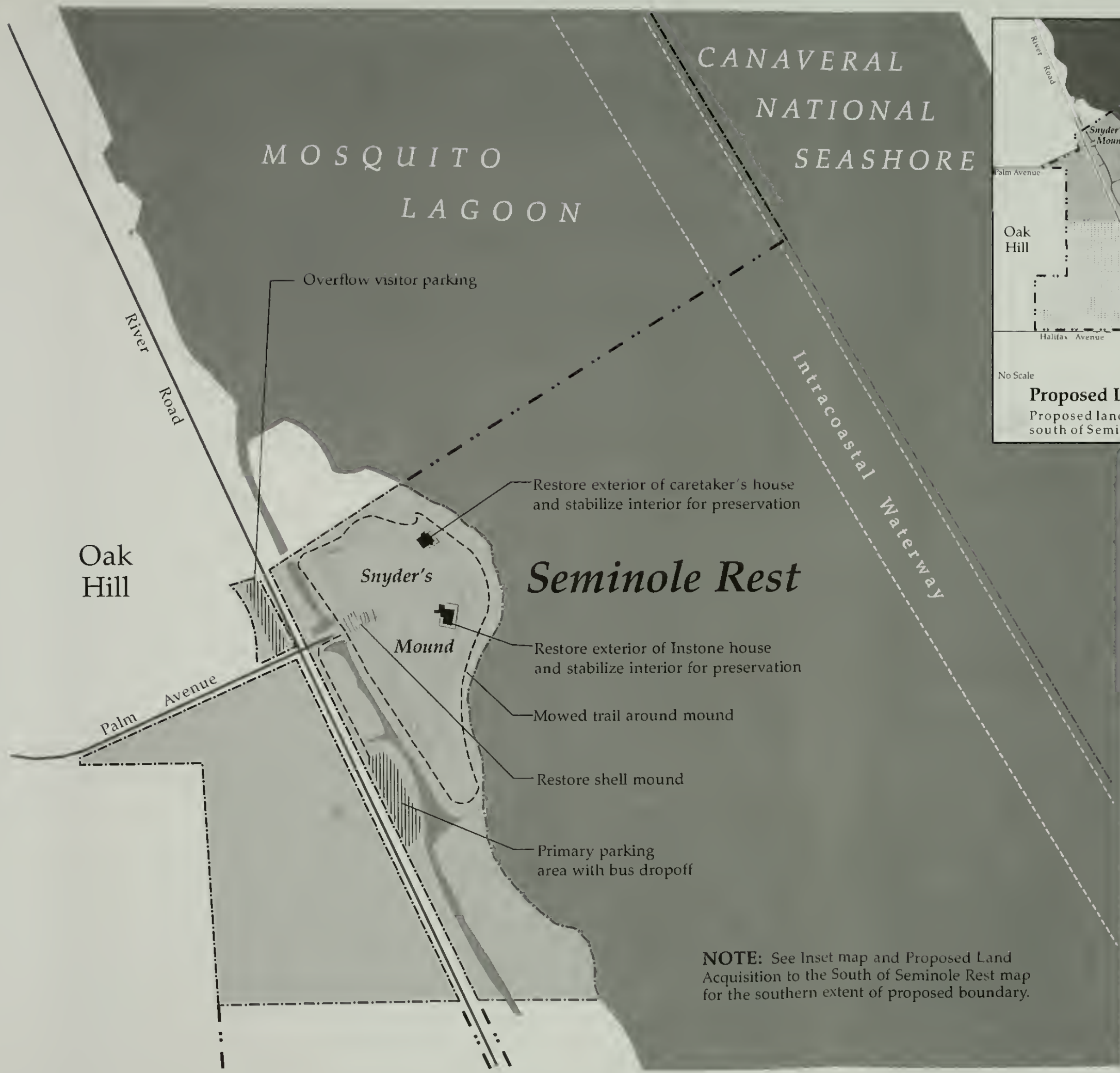
VISITOR USE: Scheduled visitor use or by appointment only, guided interpretive tours, site closed to public at all other times.


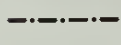




Alternative 2 Preserve Both Houses (No Adaptive Use)

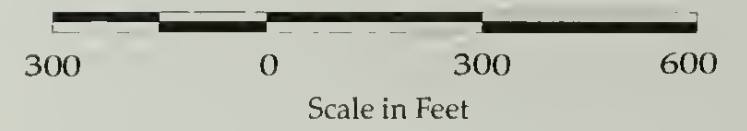
Canaveral National Seashore • Seminole Rest

United States Department of the Interior/ National Park Service
DSC/March '98/639/20031



-  Seminole Rest (NPS land)
-  Boundary of national seashore
-  Boundary of national seashore to be changed
-  Proposed boundary to include land acquisition and part of Mosquito Lagoon to make Seminole Rest contiguous with the national seashore

VISITOR USE: Scheduled visitor use or by appointment only, guided interpretive tours, site closed to public at all other times.



NOTE: See Inset map and Proposed Land Acquisition to the South of Seminole Rest map for the southern extent of proposed boundary.

Alternative 2 Preserve Both Houses (No Adaptive Use)

PARK OPERATIONS AND STAFFING

The amount of staff time devoted to Seminole Rest would probably increase by one full FTE, to 1.5 FTE. An interpretive ranger would spend more time conducting tours than in alternative 1. Law enforcement rangers would patrol the site more frequently. More maintenance would be required to carefully preserve the restored buildings and to maintain the mowed trail around the base of Snyder's Mound. The paved parking area would require occasional patching.

There would be no potable water or wastewater treatment systems to monitor or maintain. However, a new water system for fire protection of the historic structures would have to be checked periodically.

ESTIMATED DEVELOPMENT COSTS

Development costs shown in table 2 are class "C" estimates, which are conceptual and based on square foot costs of similar construction or identifiable unit costs of similar construction.

TABLE 2: ESTIMATED DEVELOPMENT COSTS FOR ALTERNATIVE 2

	GROSS CONSTRUCTION COSTS	ADVANCE PLANNING COSTS	TOTAL PROJECT COSTS
Informational wayside exhibit	8,400	4,200	12,600
Primary parking	136,800	26,100	162,900
Overflow parking	45,200	8,600	53,800
Fencing	54,200	10,400	64,600
Restoration of Instone house, no adaptive use	631,200	120,500	751,700
Restoration of caretaker's house, no adaptive use	218,400	41,700	260,100
Electricity	26,500	5,100	31,600
Fire protection	39,200	7,500	46,700
Removal of garage	3,700	700	4,400
Restoration of Snyder's Mound	26,400	5,000	31,400
Landscaping	118,200	22,500	140,700
SUBTOTALS	1,308,200	252,300	1,560,500
Cultural landscape report			50,000
Historic structures report			50,000
*TOTAL PROJECT COST			\$1,660,500

* This does not include the cost of acquiring the 38 acres to the south of Seminole Rest, which would be based on the fair market value of the property, currently assessed at \$19,000.

ALTERNATIVE 3: ADAPTIVELY USE HOUSES

CONCEPT

This alternative attempts to create a more traditional park experience within the current boundary of the site. It provides more protection for the historic and archeological resources than alternative 1 or 2 through a stronger NPS presence on the site. It upgrades interpretation with daily guided and self-guided tours, restored historic structures, and a visitor contact station with exhibits in the Instone house. Offices for park staff would be in the caretaker's house (see Alternative 3 map).

LAND PROTECTION

The National Park Service would acquire approximately 38 acres of privately owned land between Seminole Rest and Halifax Avenue to the south and bordering on Mosquito Lagoon (see Proposed Land Acquisition to the South of Seminole Rest map under alternative 2). The land is comprised primarily of wetlands and upland hammocks. Though divided by River Road, it is relatively undeveloped and contains stands of mature native coastal Florida vegetation. Future studies would determine whether there are significant cultural features. In general, the National Park Service would preserve the land in its natural state; however, it could serve as the primary vehicle entrance for visitors to Seminole Rest and could also be used for environmental education. Specific visitor use, interpretation, and development of the site is beyond the scope of this development concept plan, and would be determined, along with an environmental assessment, at a later date.

The Volusia County property appraisers office categorizes the property as a tidal marsh, and the assessed value is approximately \$19,000. The National Park Service would offer fair market value based on an appraisal. Details

would be addressed in a land protection plan. The owner of the property is willing to sell. Depending on the purchase price, acquisition of the land would constitute a minor boundary revision as described under Land Protection in alternative 4 and would require no additional legislation.

The boundary for Seminole Rest would be modified to connect the site, including the proposed land acquisition to the south, with the rest of the national seashore. The boundary modification would include approximately 57 acres of submerged land between the mainland and the Intracoastal Waterway in Mosquito Lagoon that is currently owned by the state of Florida. The land would continue to be owned by the state but would be dedicated to and managed by the National Park Service for conservation and preservation. Language similar to that used regarding the retention of oil and gas rights by the state of Florida, state-authorized hunting and fishing, and other matters addressed in previous dedications of submerged land to the national seashore could be used in this instance. The state would retain jurisdiction in matters such as wetlands protection and fishing regulations. This action would constitute a minor boundary revision and would not require additional legislation.

CULTURAL RESOURCES MANAGEMENT

The Seminole Rest unit has not been fully surveyed for archeological resources nor have all historical resources or the landscape been studied and evaluated. Identification and evaluation of all those resources is required by section 110 of the National Historic Preservation Act of 1966, as amended. Until completed, site-specific inventory and evaluation would be undertaken as needed to ensure that no resources are lost or damaged due to park actions or development.

Seminole Rest is listed on the National Register of Historic Places. The boundaries of the national register site are the north property boundary, River Road on the west, Mosquito Lagoon on the east, and the short canal on the south that drains from the roadside canal into Mosquito Lagoon. These boundaries would be reevaluated following a complete archeological and historic inventory of the site to determine whether additional resources should be within the national register boundary or if noncontributing resources should be deleted.

Canaveral National Seashore management objectives would be reevaluated to ensure inclusion of the cultural resource needs of Seminole Rest. The park's *Resources Management Plan* would be updated.

Any archeological and historic objects removed from the site would be curated and stored in accordance with NPS policies and guidelines. Should any of these objects fall within the purview of the Native American Graves Protection and Repatriation Act of 1990 (PL 101-601), consultation with tribal officials would be undertaken.

Although the landscape would continue to be maintained as is, park staff would continue to gather information on the history of the landscape as part of data gathering and oral history research. Funding for a cultural landscape report would be sought so that the park could have adequate data on the evolution and history of the landscape and, as a result, understand how to maintain it.

Restoration and adaptive use of the houses would be done in accordance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*, the *NPS Cultural Resources Management Guideline* and *Management Policies*, and a historic structures report.

Specific guidelines would be developed to limit the use of construction vehicles on the mound to minimize erosion or damage.

NATURAL RESOURCES MANAGEMENT

All natural resources within the existing and expanded boundary at Seminole Rest would be managed in accordance with the park's *Resources Management Plan*, and NPS policies and guidelines.

INTERPRETATION AND VISITOR USE

Seminole Rest would be open daily with guided and self-guided tours, a visitor contact station with exhibits, and school programs. Parking would be provided along River Road, and visitors could access the site from the lagoon by tour boats that would operate under permit. The boats would be shallow draft only to eliminate the need for dredging and would use the restored dock.

An informational wayside exhibit, possibly with a bulletin case and brochure or site bulletin dispenser, would be placed near the entrance. Visitors would be advised of operating hours, guided and unguided walking tours, site facilities, and interpretive activities and programs and could learn about the sensitive and fragile nature of the resources. Visitors would be advised to stay on designated trails. They would be educated about the site's fragility. A similar exhibit would be placed at the boat dock.

An interpretive trail system would circle the base of the mound and lead to the Instone house. A series of approximately six wayside exhibits would be installed at theme-related interpretive points along the route. To meet accessibility standards, sections of boardwalk could be necessary.

To provide additional protection for Snyder's Mound, the trail leading to the Instone house could include a boardwalk, which would encourage visitors to stay on the trail. All tours would remain off the crest of the mound in keeping with the wishes of Native American groups.

The first floor of the Instone house would be restored for adaptive use as a visitor contact station. The facility would contain restrooms, an information desk, a small cooperating association sales area, and interpretive media related to the primary themes. Specific media would focus on aspects of site archeology, the significance of the historic buildings and the families associated with them, the features that attracted people at the turn of the century, Timucuan history and culture, and the natural history of Mosquito Lagoon and how it related to prehistoric and historic lifestyles. Ranger conducted interpretive programs and activities also would begin at the visitor contact station.

Seminole Rest would be included in a revision of the park brochure and in other informational publications. The park's home page would be expanded to include information on the Timucuan culture and to list sites such as Turtle Mound and Seminole Rest, where visitors can learn more about the early Florida native culture. To broaden understanding and appreciation, this information also would be tied into related sites in the Golden Crescent.

In addition to providing educational programming through electronic sources such as the Internet, the site could be used by local and regional school groups. In addition to tours of the site, a room in the Instone house could be used for special educational activities, demonstrations, and programs.

FACILITIES DEVELOPMENT

The historic structures at Seminole Rest would be restored with an appropriate exterior appearance and would be adaptively used. The first floor of the Instone house would become a visitor contact station. The first floor of the caretaker's house would provide office space for park staff. The garage would be used to house grounds maintenance equipment until a different location could be found off site. It would then be removed. The dock would be

rebuilt to allow use by boat tours operating under permit and by park rangers. Access would be restricted to shallow-draft vessels only. No boat launching would be allowed.

The interpretive trail would be accessible to people with disabilities. The hardened surface would be a natural colored, fractured, rolled, and compacted gravel or shell material. Although most of the trail would be at grade, some sections could be constructed with a slightly elevated boardwalk in flood-prone areas or inaccessible terrain. Spur trails would connect to the caretaker's house and the Instone house.

The historic landscape would be cleaned up and maintained. The trees would be pruned, and the grass would be mowed. Fencing would be installed on the landward side. This work and other changes to the historic landscape would be considered in a cultural landscape report.

Along the east side of River Road there would be approximately 15 parking spaces for visitors and staff, including designated accessible parking. This would be 300 feet south of the entrance to the site in an area that has been given initial archeological clearance. There would also be a bus dropoff and space for three or four oversized vehicles, such as buses, trailers, and recreational vehicles. Overflow parking would be provided along the west side of River Road on NPS land just north of Palm Avenue.

Due to the limited amount of available upland within the NPS boundary and the need to avoid impacting wetlands and sensitive archeological resources, parking space is extremely limited. This is especially true for oversized vehicles, which require a large turning radius. The final number of parking spaces for all vehicles would be determined during the design phase of the project and would depend in part on the amount of vehicle intrusion that the National Park Service would be willing to accept on the overall scene.

Parking for buses and other oversized vehicles should be designed as a roadside turnoff parallel to River Road to eliminate the need for right-angle turns into a parking area. These vehicles would be required to approach the parking area from the south. Upon departure, they would continue north along River Road back to U.S. Highway 1. This would eliminate the need for large turnarounds.

It could be necessary to schedule bus arrivals in advance to reduce congestion. Bus drivers could be required to leave the parking area immediately after dropping off passengers and return for pickup at an appointed time, rather than remaining onsite. This would free up an additional parking space for an RV and eliminate noise and air pollution caused by bus idling. Bus drivers who remain onsite would be asked to turn off their engines.

Accessible public restrooms would be available in the Instone house, and accessible toilet facilities would be installed in the caretaker's house. Electrical connections would be made to the powerline that runs along River Road. A high-volume water system that could use untreated brackish water would be provided for fire protection. All utilities would be placed underground. Utility lines would follow disturbed corridors where possible to minimize impact on archeological resources.

There are no municipal potable water and wastewater treatment lines near Seminole Rest. Therefore, the National Park Service would work with the city of Oak Hill to provide these lines. Installation of a well and wastewater treatment facility on NPS land was considered. However, due to the predominance of wetlands and archeological resources, there are constraints on locations of such facilities. Preliminary studies indicate that a wastewater treatment facility incorporating elevated disposal mounds could be constructed that would meet or exceed Florida water quality standards. Further engineering studies would be needed during the design phase to confirm

this finding and to determine the best location for the facility — perhaps on the newly acquired land to the south of Seminole Rest. Further engineering studies would be required regarding the location of a suitable well, since there is a high potential for salt water intrusion in the area. The National Park Service would have to prepare additional environmental compliance documentation and would consult with the state of Florida and the Corps of Engineers to ensure that all environmental regulations and permitting requirements are met.

For comparison, estimated costs are presented for connecting to municipal lines and for installing facilities on NPS land. The former costs assume that connections would be made to municipal lines that would run all the way to Seminole Rest via Palm Avenue or River Road. They do not include contributions that the National Park Service might provide to the city of Oak Hill in a possible partnership venture to install the municipal lines.

Due to the possible adverse impact on water quality, the uncertainties of finding an adequate, high-quality water supply, and the ongoing operating costs and high initial costs of installing water and wastewater treatment facilities on NPS property, this option would be implemented only if it proves impossible to connect to municipal lines.

It will probably be some time before permanent potable water and wastewater treatment can be provided to the site. To provide essential visitor services as soon as possible, an accessible self-contained recirculating chemical toilet (as used throughout the park) would be provided temporarily near the parking area.

PARK OPERATIONS AND STAFFING

Staffing would increase to approximately 4 FTE. A ranger station (known as the water district) would be located at Seminole Rest to

complement the south district and north district ranger stations. This additional administrative presence would provide a faster response time for emergencies in Mosquito Lagoon and along the Route 3 corridor south of Oak Hill. It would also provide for more efficient and cost effective visitor and resource protection in these areas. Seminole Rest would serve as the logistical center for the increasing habitat and water quality research envisioned for Mosquito Lagoon. The lagoon is part of the Indian River Estuary, a national estuary as designated by the U.S. Environmental Protection Agency, and an Outstanding Florida Water. It contains the greatest ichthyological diversity of any North American estuary. Protection and monitoring of this resource is vital.

Office space for park staff (two law enforcement rangers and an interpreter) would be provided on the first floor of the caretaker's house. In addition, the equivalent of one full-time maintenance person would maintain the facilities that would be added.

Operations and maintenance requirements would include janitorial services and maintenance for the two historic houses, monitoring and maintenance of water and wastewater treatment systems, occasional repair of the boat dock and interpretive walkways, care for the landscape as defined in a cultural landscape report, and occasional patching of the parking area.

ESTIMATED DEVELOPMENT COSTS

Development costs are shown in table 3. They are class "C" estimates, which are conceptual and based on square foot costs of similar construction or identifiable unit costs of similar construction items.

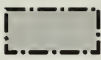

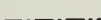

TABLE 3: ESTIMATED DEVELOPMENT COSTS FOR ALTERNATIVE 3

	GROSS CONSTRUCTION COSTS	ADVANCE PLANNING COSTS	TOTAL PROJECT COSTS
Interpretive trail around Snyder's Mound	139,900	26,700	166,600
Two informational and six interpretive wayside exhibits	50,800	48,400	99,200
Primary parking	165,700	31,600	197,300
Vault toilet	92,000	17,600	109,600
Overflow parking	45,200	8,600	53,800
Fencing	54,200	10,400	64,600
Restoration of Instone house for adaptive use	803,000	153,300	956,300
Restoration of caretaker's house for adaptive use	277,200	52,900	330,100
Electricity	26,500	5,100	31,600
Fire protection	39,200	7,500	46,700
Removal of garage	3,700	700	4,400
Indoor interpretive exhibits	250,000	156,000	406,000
Access trails	37,200	7,100	44,300
Boat dock	70,200	13,400	83,600
*Waterlines	22,600	4,300	26,900
*Wastewater lines	45,200	8,600	53,800
Removal of vault toilet	15,100	2,900	18,000
Landscaping	183,500	34,900	218,400
SUBTOTALS	2,321,200	590,000	2,911,200
Cultural landscape report			50,000
Historic structures report			50,000
**TOTAL PROJECT COST			\$3,011,200

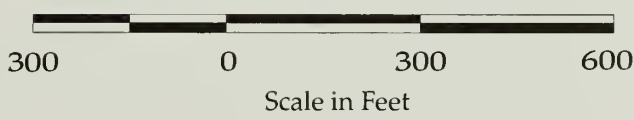
* These costs are for the preferred option of connecting to municipal water and wastewater lines, if they are extended along River Road before this development. For comparison, the estimated total project cost of constructing new water and wastewater treatment facilities on NPS land is \$1,376,900. Connecting to municipal lines would save \$1,296,200, less whatever might be contributed to help the city of Oak Hill install the municipal lines to the site.

** This does not include the cost of acquiring the 38 acres of land to the south of Seminole Rest. The current assessed value is \$19,000.



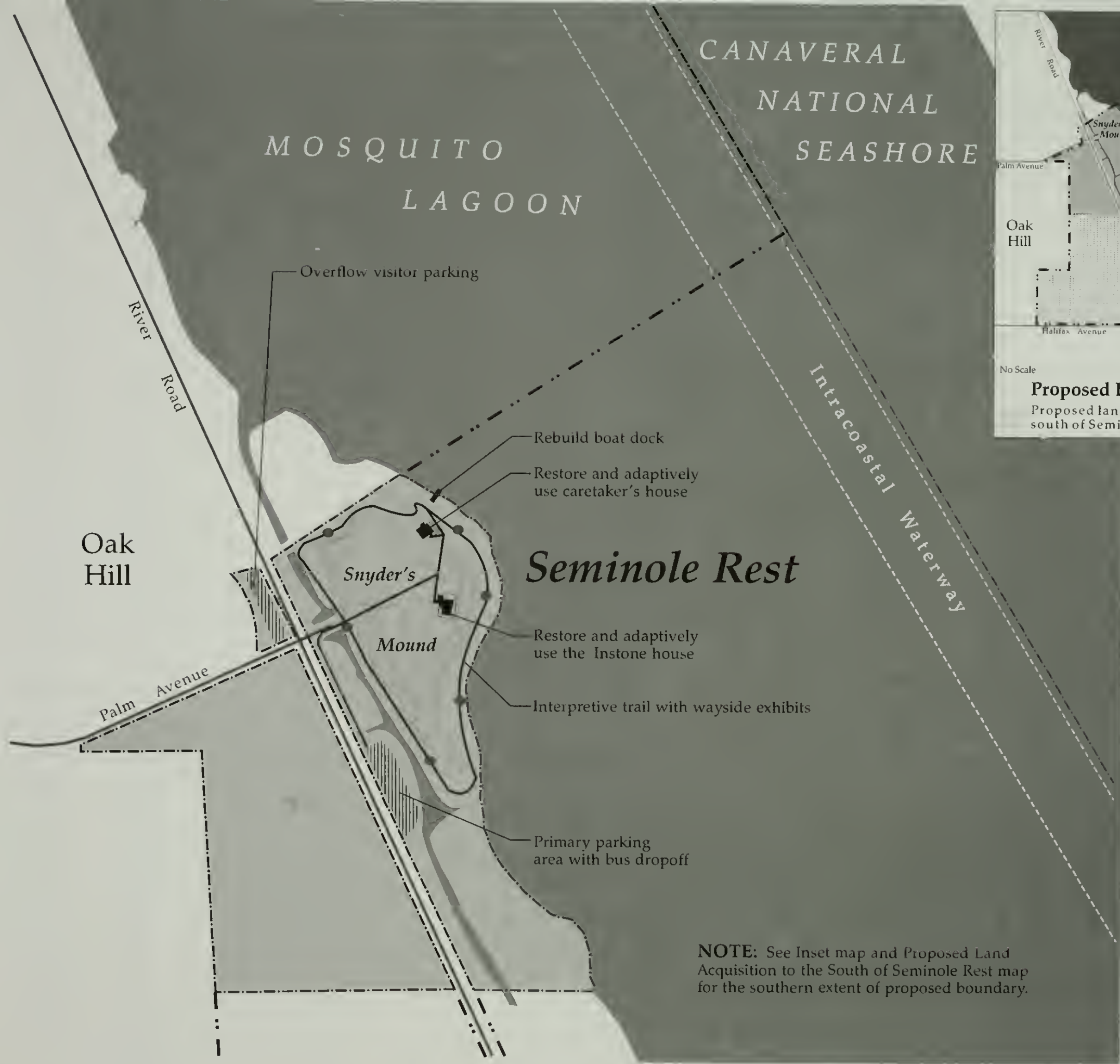
-  Seminole Rest (NPS land)
-  Boundary of national seashore
-  Boundary of national seashore to be changed
-  Proposed boundary to include land acquisition and part of Mosquito Lagoon to make Seminole Rest contiguous with the national seashore

VISITOR USE: Open daily to the general public, self-guided tours, guided interpretive tours, group tours scheduled by appointment.



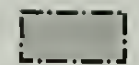

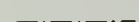

Alternative 3 Adaptively Use Houses

Canaveral National Seashore • Seminole Rest
United States Department of the Interior/ National Park Service
DSC/March, '98/639/20032

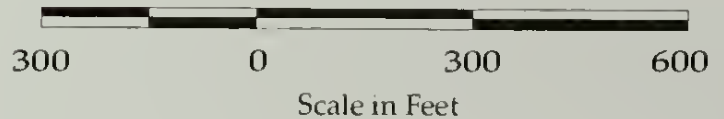


NOTE: See Inset map and Proposed Land Acquisition to the South of Seminole Rest map for the southern extent of proposed boundary.



-  Seminole Rest (NPS land)
-  Boundary of national seashore
-  Boundary of national seashore to be changed
-  Proposed boundary to include land acquisition and part of Mosquito Lagoon to make Seminole Rest contiguous with the national seashore

VISITOR USE: Open daily to the general public, self-guided tours, guided interpretive tours, group tours scheduled by appointment.



ALTERNATIVE 4: ADAPTIVELY USE HOUSES, ACQUIRE LAND FOR VISITOR FACILITIES (PROPOSED ACTION)

CONCEPT

This alternative would significantly enhance the interpretive experience and would make Seminole Rest a major attraction at Canaveral National Seashore. The site would be open on a daily basis for guided and self-guided tours, the Instone house would have interpretive facilities, and the caretaker's house would contain staff offices. The property directly north of and adjacent to Seminole Rest would be acquired to provide the initial visitor contact station, additional visitor facilities, and more comprehensive interpretive programs. Interpretation would expand to include boat tours of the lagoon and its prehistoric and historic sites (see Alternative 4 map).

Implementation would take place in two phases. Phase I would provide restoration and adaptive use of the historic structures and visitor use and interpretation on the property currently owned by the National Park Service. Phase II would provide interpretive and visitor facilities on the property to the north after it is acquired.

LAND PROTECTION

Approximately 3.6 acres of privately owned land adjacent to and north of Seminole Rest would be acquired by the National Park Service to provide visitor facilities. Volusia County assessed value of the property is \$200,000. The National Park Service would offer the landowners compensation equal to the fair market value, based on an appraisal. Details would be addressed in a land protection plan.

This land can be added to the national seashore as a minor boundary revision requiring no additional legislation if the following seven conditions are met (PL 104-333, Omnibus Parks and Public Lands Management Act of 1996, November 12, 1996, sec. 814[b]):

1. The sum of the total acreage of land, water, and interests therein to be added to the area and the total acreage to be deleted from the area is not more than 5% of the total federal acreage authorized to be included in the area and is less than 200 acres.
2. The acquisition is not a major federal action significantly affecting the quality of the human environment, as determined by the secretary of the interior.
3. The sum of the total appraised value of the land, water, and interests therein to be added to the area and the total appraised value of the land, water, and interests therein to be deleted from the area does not exceed \$750,000.
4. The proposed boundary revision is not an element of a more comprehensive boundary modification proposal.
5. The proposed boundary has been subject to a public review and comment period.
6. The director of the National Park Service obtains written consent for the boundary modification from all property owners whose land, water, or interests therein or a portion of whose land, water, or interests therein will be added to or deleted from the area by the boundary modification.
7. The land is adjacent to other federal land administered by the National Park Service.

Conditions for a minor boundary revision could probably be met with the possible exception of number 6. If written consent for the boundary revision cannot be obtained from all the property owners, legislation would be required.

The National Park Service would acquire approximately 38 acres of privately owned land between Seminole Rest and Halifax Avenue to the south and bordering on Mosquito Lagoon (see Proposed Land Acquisition to the South of Seminole Rest map, which is presented under alternative 2). The land is comprised primarily of wetlands and upland hammocks. Though divided by River Road, it is relatively undeveloped and contains stands of mature native coastal Florida vegetation. Future studies would determine whether there are significant cultural features. In general, the National Park Service would preserve the land in its natural state; however, it could serve as the primary vehicle entrance for visitors to Seminole Rest and could also be used for environmental education. Specific visitor use, interpretation, and development of the site is beyond the scope of this plan and would be determined (along with environmental compliance) at a later date.

According to the Volusia County property appraisers office, the property is categorized as tidal marsh, and the assessed value is approximately \$19,000. The National Park Service would offer the landowner the fair market value based on an appraisal of the property. Details would be addressed in a land protection plan. The owner of the property is willing to sell. Depending on the purchase price, acquisition of the land would constitute a minor boundary revision and would require no additional legislation.

The boundary for Seminole Rest would be modified to connect the site, including the proposed land acquisition to the north and south, with the rest of the national seashore. The boundary modification would include approximately 66 acres of submerged land in Mosquito Lagoon (currently owned by the state of Florida) between the mainland and the Intra-coastal Waterway. The land would continue to be owned by the state but would be dedicated to and managed by the National Park Service for conservation and preservation. Language concerning the retention of oil and gas rights by the state of Florida, state-authorized hunting and

fishing, and other matters addressed in previous dedications of submerged land to the national seashore could be used in this instance. The state would retain jurisdiction pertaining to matters such as wetlands protection and state fishing regulations. This action would constitute a minor boundary revision and would not require additional legislation.

CULTURAL RESOURCES MANAGEMENT

Neither the Seminole Rest unit nor the property to be acquired on the north have been fully surveyed for archeological resources. Historical resources and landscapes have not been adequately studied and evaluated. Identification and evaluation of all such resources in the unit is required by section 110 of the National Historic Preservation Act of 1966, as amended. Evaluation of structures and archeological resources on the newly acquired property to the north would precede the removal of structures and new construction. Specific evaluations would also be completed in areas that would undergo ground-disturbing activities such as trail construction or utilities installation. Other portions of the unit not immediately affected by development would undergo separate archeological inventory and evaluation. Once identified, resources eligible for inclusion on the National Register of Historic Places would be nominated separately or added to the current national register nomination. If significant archeological resources are found, the site plan would be reevaluated and mitigation measures would be implemented.

Seminole Rest is listed on the National Register of Historic Places. The boundaries of the national register site are the north property boundary, River Road on the west, Mosquito Lagoon on the east, and the short canal on the south that drains from the roadside canal into Mosquito Lagoon. These boundaries would be reevaluated following complete archeological and historic inventory of the rest of the site to determine whether additional resources should

be within the national register boundary or if noncontributing resources should be deleted.

Canaveral National Seashore management objectives would be reevaluated to ensure inclusion of the cultural resource needs of Seminole Rest. The *Resources Management Plan* would be updated.

Any archeological and historic objects removed from the site would be curated and stored in accordance with NPS policies and guidelines. Should any of these objects fall within the purview of the Native American Graves Protection and Repatriation Act of 1990 (PL 101-601), consultation with tribal officials would be undertaken.

Although the landscape of the Seminole Rest unit would continue to be maintained as is, park staff would continue to gather information on the history of the landscape as part of normal data gathering and oral history research. This information would form the basis for a cultural landscape report, which would provide the park with adequate data on the evolution and history of the landscape and a better understanding of how to maintain it.

Restoration and adaptive use of the houses would take place in accordance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*, the *NPS Cultural Resources Management Guideline and Management Policies*, and a historic structures report.

Specific guidelines would be developed to limit the use of construction vehicles on the mound to minimize erosion or damage.

NATURAL RESOURCES MANAGEMENT

All natural resources within the existing and expanded boundary (for submerged land and newly acquired upland) at Seminole Rest would be managed in accordance with the park's

Resources Management Plan, and NPS policies and guidelines.

INTERPRETATION AND VISITOR USE

Seminole Rest would be open to the public daily. Newly acquired land to the north of the site would be developed for a new visitor contact station, which would be the initial stop for visitors. The site would also have a shallow-draft boat dock, an outdoor interpretive area, a dropoff area for bus passengers, spaces for designated accessible parking, and parking for service vehicles.

An informational wayside exhibit, possibly with a bulletin case and brochure (site bulletin) dispenser, would be placed near the entrance to the site along the drive leading into the newly acquired land north of Seminole Rest. A similar exhibit would be placed at the boat dock. Visitors would be advised of operating hours, guided and unguided walking tours, site facilities, interpretive activities and programs, and the sensitive and fragile nature of the resources. They would be instructed to stop first at the visitor contact station, where they would pay an entrance fee and would learn more about the sensitive nature of the site and the need to treat it with respect before proceeding. They would be advised to stay on designated trails and not to disturb mound features.

The visitor contact station would contain an information and fee collection desk, restrooms, exhibits, an auditorium, cooperating association sales area, and space for staff needs and supply and equipment storage. Specific theme-related exhibit elements, some perhaps presented in a multimedia or interactive format, would focus on aspects of Timucuan history and culture and the natural history of Mosquito Lagoon and related prehistoric and historic lifestyles. An audiovisual program would be developed to depict the continuum of lifestyles from the Timucuan people to later inhabitants of the site, Oak Hill, and Volusia County.

An outdoor interpretive area would be developed near the contact station. Interpretive features might include a full-size replica of a Timucuan hut, shellfish drying rack, and canoe. Wayside exhibits would interpret the significance of these objects and structures. To reduce maintenance costs, some or all of these features could be made of synthetic materials. This area would be the focus of interpretive talks, demonstrations, programs, and special events relating to Timucuan history and culture, with special attention on the use of the site for processing shellfish. Guided tours of the mound also could begin in the area.

Interpretive boat tours of Mosquito Lagoon would begin at the new dock. The boats would be small, shallow-draft pontoon craft. The tours could include stops at Eldora and Turtle Mound. The dock also would provide access for visitors arriving by boat and for tour boats operating under permit.

A trail around the base of Snyder's Mound and associated theme-related interpretive waysides at key points would be provided as described in alternative 3. At the entrance to the mound site, signs would instruct visitors to stay on designated trails and not to disturb mound features. To meet accessibility standards, sections of boardwalk could be necessary. All tours would avoid the crest of the mound in accordance with the wishes of Native American groups.

The trail around Snyder's Mound would also lead to the Instone house. The trail could include a boardwalk that would encourage people to stay on the trail. The first floor of Instone house would be adapted for display of interpretive media. Visitors would learn about the history of the buildings and the families that lived in them and about the features of the area that attracted people at the turn of the century. Other exhibits, perhaps changeable, might interpret ongoing research efforts related to the site. Other rooms could be used for meetings, special activities, or educational programs.

Seminole Rest would be included in a revision of the park brochure and in other informational publications. The park's home page would be expanded to include information on the Timucuan culture and would list sites such as Turtle Mound and Seminole Rest, where park visitors could go to learn more about this early Florida native culture. To further broaden understanding and appreciation, this information also would be tied into related sites in the Golden Crescent.

The site could also be used by local and regional school groups. Besides touring the site, a room in the Instone house could be used for educational activities, demonstrations, and programs.

FACILITIES DEVELOPMENT

A new visitor contact station (approximately 4,600 square feet) would be constructed on the newly acquired land. The site would also contain an outdoor interpretive demonstration area, a bus dropoff, and limited nearby parking for the visitor contact station.

The boat dock on the acquired land would be replaced with a new dock for shallow-draft vessels that would be used by tour boats, ranger boats, and the public. No dredging would be undertaken, nor would boat launching be allowed.

The upland space available on the newly acquired land east of River Road is small (less than 2 acres) for the desired visitor use facilities. Efficient use of space would be an important part of the design phase of this project.

The visitor contact station would be sited to take advantage of the views across Mosquito Lagoon. The building should be situated close to the water's edge and the boat dock, perhaps with a boardwalk connecting the building to the dock. This would enhance the visitor experience and make efficient use of the space available.

The design of the building must take into account that the site is within the 100-year floodplain.

Seminole Rest is hot and humid in the summer and infested with mosquitoes. Many visitors might prefer to spend most of their time indoors, which would be a consideration during design of the visitor contact station, where air conditioning would be essential. Maximizing the benefit of coastal breezes would also be an important design consideration.

Prior to construction on the newly acquired land, structures would be removed, and the site would be prepared for new facilities. As part of the construction, landscaping would be provided to soften the visual and audible impact of vehicles on the visitor experience.

Visitors would enter the historic area and archeological site from the north along an interpretive trail that would circle Snyder's Mound and lead to the Instone house. The historic structures on the mound would be restored and their interiors adaptively used. The first floor of the caretaker's house would become office space for park staff. The first floor of the Instone house would be adapted for visitor use and interpretive exhibits. The garage would be used to house grounds maintenance equipment until a different location could be found offsite and would then be removed.

The boat dock on NPS land would be rebuilt during phase I of site development to allow use by boat tours operating under permit and by park rangers. Access would be restricted to shallow-draft vessels to eliminate the need for dredging, and no boat launching would be allowed. A decision about whether or not to retain the dock would be made after the dock on newly acquired land is constructed in phase II.

The interpretive trail would be accessible to people with disabilities and would have a hardened surface such as a natural colored, fractured, rolled, and compacted gravel or shell material. Although most of the trail would be at

grade, some sections could be constructed with a slightly elevated boardwalk in flood-prone areas or inaccessible terrain. A spur trail for staff use would lead to the caretaker's house.

The historic landscape would be cleaned up and maintained. Trees would be pruned, and grass would be mowed. Fencing would line the site on the landward side. This and other changes to the historic landscape would be recommended in a cultural landscape report.

Visitor parking would be distributed among three sites because there is limited available upland, and impacts on wetlands and sensitive archeological resources must be avoided. Most visitors and staff would park along the west side of River Road, just north of Palm Avenue, in a lot designed for approximately 30 standard vehicles.

A dropoff area for bus passengers and parking for visitors with disabilities is desirable as close as possible to the visitor contact station, which would be the first stop on a tour of the site. A bus dropoff and parking space for one or two buses would be provided east of River Road near the visitor contact station, and six to eight spaces would also be provided for designated accessible parking, and service vehicles.

Overflow parking and parking for oversized trailered and recreational vehicles would be provided approximately 300 feet south of Palm Avenue on the east side of River Road in an area that has been given initial archeological clearance.

Because of the large turning radius required for buses and RVs, parking space for oversized vehicles is extremely limited. It would be possible to design a parking and passenger dropoff area near the visitor contact station to accommodate as many as two buses and eight smaller vehicles, but the area required could take as much as 25% of the newly acquired land north of Seminole Rest and east of River Road. This area has been designated for new visitor use facilities. The final number of parking

spaces, which will be determined during the design phase of the project, will depend in large part on the amount of vehicle intrusion that the National Park Service would be willing to accept on the overall scene. Preliminary design concepts suggest that the most efficient use of space would require buses to back up as they are entering or leaving parking and dropoff spaces.

It could be necessary to schedule bus arrivals in advance to reduce congestion. Bus drivers could be required to leave the parking area immediately after dropping off passengers and could return to pick them up at an appointed time, rather than remaining parked onsite. This would permit a smaller paved parking area near the visitor contact station. If buses remain onsite while waiting for passengers, the drivers would be asked to turn off the engines to reduce noise and air pollution.

Safety is also a concern for visitors who park on the west side of River Road and cross the road to the visitor contact station. Although the current volume of traffic on River Road is relatively low, and vehicles travel at a relatively slow speed, possible increases in development would result in corresponding increases in traffic. To minimize the hazard to visitors crossing River Road, the National Park Service would work closely with officials in Volusia County and Oak Hill to post and enforce low speed limits, provide speed bumps and crosswalks, and/or install traffic signals.

Accessible public restrooms would be available in the Instone house and the visitor contact station on the newly acquired land to the north. Accessible toilet facilities would be installed in the caretaker's house. Electrical connections would be made to the powerline that runs along River Road. A high-volume water system that could use untreated brackish water would be provided for fire protection. All utilities would be placed underground. Utility lines would follow disturbed corridors where possible to minimize impacts on archeological resources.

The preferred option of providing potable water and wastewater treatment to the two historic houses and the new visitor contact station would be to connect to municipal lines. There are no such lines near Seminole Rest. The National Park Service would work with the city of Oak Hill to provide these lines.

Another option would be to install a well and wastewater treatment facilities on NPS land. However, due to the predominance of wetlands and archeological resources, there are constraints on the placement of such facilities, which could adversely impact water quality and cultural resources. Preliminary studies indicate that a wastewater treatment facility incorporating elevated disposal mounds could be constructed that would meet or exceed Florida water quality standards. Engineering studies would have to be conducted during the design phase to confirm this possibility and to determine the best location for the facility — perhaps on the newly acquired land to the south of Seminole Rest. Further engineering studies would be necessary to find a suitable location for a well, since there is a high potential for salt water intrusion in the area. If this option were selected, the National Park Service would prepare additional environmental documentation and would consult with the state of Florida and the Corps of Engineers to ensure compliance with all environmental regulations and to ensure that permitting requirements are met.

For comparison, estimated costs are presented for connecting to municipal lines and installing facilities on NPS land. The former assumes that connections would be made to municipal lines that would run all the way to Seminole Rest via Palm Avenue or River Road. They do not include contributions that the National Park Service might make to the city of Oak Hill in a partnership venture to install the lines.

Due to the possible adverse impact on water quality, the uncertainties of finding an adequate, high-quality water supply, and the ongoing operating costs and high initial costs of installing water and wastewater treatment

facilities on NPS property, the National Park Service considers this option to be a last resort, to be implemented only if it is impossible to connect to municipal lines.

It would be some time before permanent potable water and wastewater treatment is provided to the site. In the interim, to provide essential visitor services as soon as possible, an accessible self-contained recirculating chemical toilet would be provided near the parking area.

PARK OPERATIONS AND STAFFING

Staffing would increase to approximately 7 FTE. A third ranger station would be located at Seminole Rest. This would be known as the water district, which would be added to the south district and north district. This additional administrative presence would provide a faster response time for emergencies in Mosquito Lagoon and on land along the Route 3 corridor south of Oak Hill. It would also provide for more efficient and cost-effective visitor and resource protection in these areas. Seminole Rest would serve as the logistical center for the increasing habitat and water quality research envisioned for Mosquito Lagoon. The lagoon is part of the Indian River Estuary, a national estuary designated by the U.S. Environmental Protection Agency, and is an Outstanding Florida Water. It contains the greatest ichthyological diversity of any North American estuary. Protection and monitoring of this resource is vital.

Two law enforcement rangers, two interpreters, and two maintenance people would be assigned to the site. Office space would be provided on the first floor of the caretaker's house. Additional personnel would be assigned to the interpretive tour boat. With expanded facilities, the need for maintenance equipment would be great enough to require a maintenance shop nearby. There would not be enough room onsite, so a location would probably be found elsewhere in Oak Hill.

Janitorial services and maintenance would be provided for the two historic houses and the new visitor contact station on the acquired land to the north. Monitoring and maintenance would be required for the water and wastewater treatment systems. Care for the landscape would be provided as defined in a cultural landscape report. Occasional repair and maintenance would be required for exhibits in the outdoor interpretive and demonstration area, the new boat dock, pedestrian and interpretive walkways, and the parking areas.

PHASED IMPLEMENTATION OF ALTERNATIVE 4

Due to the uncertainties surrounding the acquisition of land north of Seminole Rest and the limited availability of funding for new development, alternative 4 would be implemented in two major phases.

Phase I would include the development of the NPS property, restoring and adaptively using the historic structures, and providing onsite visitor use and interpretation.

Phase II would include the acquisition and development of the land north of Seminole Rest for additional visitor use and interpretive facilities.

Phase I activities must anticipate those of phase II. It could be a long time before phase II is implemented, so phase I must provide a self-sufficient, high-quality visitor experience and ensure the protection of the resources.

Phase I of alternative 4 would be essentially the same as alternative 3 (see Alternative 3 map) and would consist of:

Use of Historic Structures

- Stabilize the houses and restore exteriors based on results of a historic structures report.

- Rehabilitate the interiors of the houses for adaptive use (interpretation and visitor use at the Instone house and offices for park staff in the caretaker's house)
- Retain the garage (nonhistoric) for grounds maintenance equipment until an alternative location is found offsite for this function, then remove the garage.

Visitor Use

- Open the site to the public on a daily basis.
- Schedule group tours by appointment.
- Make guided interpretive tours available.
- Allow self-guided tours to be the norm.

Wayside Exhibits

- Install approximately six wayside exhibits along a proposed interpretive trail around the base of Snyder's Mound.
- Install informational signs at the parking area and at the boat dock.
- Provide a site bulletin.
- Update the park brochure to identify the site.

Walkways

- Construct a walkway from the primary parking area to the interpretive trail around the base of Snyder's Mound leading to the Instone house and the caretaker's house. The entrance to the site would be via the extension of Palm Avenue across the canal.

Boat Access

- Construct a boat dock near the pilings for use by shallow-draft tour boats operating under permit and by ranger craft. No dredging would be done, and launching would not be allowed.

Parking

- Provide approximately 15 parking spaces for visitors and staff (including designated accessible parking spaces), a bus dropoff, and space for three or four oversized vehicles, as described in alternative 3 (along the east side of River Road, 300 feet south of the entrance to the site, in an area that has been given initial archeological clearance). This area would provide the space for overflow parking and oversized vehicles for phase II.
- Provide overflow parking along the west side of River Road on NPS land just north of Palm Avenue.

Utilities

- Provide an accessible self-contained recirculating chemical toilet near the bus dropoff and primary parking area. This toilet would be removed after potable water and wastewater disposal is provided for the Instone house and caretaker's house. A fee collection station and information and orientation exhibits could be located in the same area.
- Provide a water system for fire protection in the historic houses. The water does not need to be potable and could be brackish and untreated.
- Provide electricity to the houses.
- Provide potable water to the houses.
- Provide wastewater treatment for the houses.
- Place utility lines underground along disturbed corridors to minimize impacts on the mound.

Landscape

- Maintain the landscape with occasional mowing and clearing of brush and fallen tree limbs. Provide fencing or other changes to the historic landscape as recommended by a cultural landscape report.

Park Boundary

- Acquire the 38 acres of land to the south of Seminole Rest when an agreement is reached between the landowner and the National Park Service and when sufficient funds become available for purchase of the property. Implementation of phase I is not necessarily dependent on the acquisition. If the property is acquired during phase I of development, the park boundary would be modified to connect Seminole Rest and the newly acquired land to the south with the rest of the national seashore by including a section of Mosquito Lagoon between the mainland and the Intracoastal Waterway. This would include approximately 57 acres of submerged land. If the property to the south is not acquired during phase I, the boundary would be modified to connect only Seminole Rest with the rest of the national seashore and would incorporate 35 acres of submerged land.

Phase II would include actions for the newly acquired land north of Seminole Rest that would complete implementation of alternative 4. It would begin after land was acquired and funds were secured for the design and construction of facilities.

DEVELOPMENT PRIORITIES FOR PHASE I OF ALTERNATIVE 4

The request for funding to develop Seminole Rest would compete with many other projects in the national park system. Funding would probably be spread over a number of years and would initially be targeted to protect the primary resources and to ensure public access. Most of

the actions would require design work and the completion of specific studies before construction. It could be some time before potable water and wastewater treatment could be provided for the two houses.

Implementation of the major elements of phase I would occur in priority order. Total project costs, which include advance planning and design, are shown for priorities 2 through 6. The costs include landscaping associated with each construction element and two critical studies (a cultural landscape report and a historic structures report) that are needed to provide guidance for design and construction. More detailed costs for phase I are shown in table 4.

1. Provide preliminary repair and/or stabilization of the historic houses to prevent further deterioration until full restoration can be done. (Costs borne by park operating and/or cyclic maintenance funds.)
2. Produce a cultural landscape report, construct the interpretive trail around Snyder's Mound, provide informational and interpretive wayside exhibits, parking, a vault toilet, and fencing, open the site to visitors on a daily, year-round basis. (\$800,200)
3. Produce a historic structures report, restore the two historic houses based on this report, provide electricity and fire protection water systems for the two houses, remove the nonhistoric garage. (\$1,555,700)
4. Provide interpretive exhibits in the Instone house, provide access trails to the two houses, open the Instone house to visitors and the caretaker's house to park staff. (\$454,700)
5. Construct the boat dock. (\$92,000)
6. Provide potable water and wastewater disposal for the two houses, remove the vault toilet. (\$108,600)

The figure for water and wastewater reflects the estimated cost of the preferred option of

connecting to municipal water and wastewater lines if they are extended along River Road or Palm Avenue at the time of development. It does not include funding that the National Park Service might provide to assist the city of Oak Hill in installing municipal lines to the site.

The total project cost for development in phase I of alternative 4 is \$3,011,200.

ESTIMATED DEVELOPMENT COSTS

Development costs are shown in two tables: table 4 for phase I and table 5 for phase II. The costs are class “C” estimates, which are conceptual and based on square foot costs of similar construction or identifiable unit costs of similar construction.

TABLE 4: ESTIMATED DEVELOPMENT COSTS FOR ALTERNATIVE 4, PHASE I

	GROSS CONSTRUCTION COSTS	ADVANCE PLANNING COSTS	TOTAL PROJECT COSTS
Interpretive trail around Snyder's Mound	139,900	26,700	166,600
Two informational and six interpretive wayside exhibits	50,800	48,400	99,200
Primary parking	165,700	31,600	197,300
Vault toilet	92,000	17,600	109,600
Overflow parking	45,200	8,600	53,800
Fencing	54,200	10,400	64,600
Restoration of Instone house for adaptive use	803,000	153,300	956,300
Restoration of caretaker's house for adaptive use	277,200	52,900	330,100
Electricity for houses	26,500	5,100	31,600
Fire protection for houses	39,200	7,500	46,700
Removal of garage	3,700	700	4,400
Indoor interpretive exhibits	250,000	156,000	406,000
Access trails to houses	37,200	7,100	44,300
Boat dock on NPS land	70,200	13,400	83,600
*Waterlines to houses	22,600	4,300	26,900
*Wastewater lines to houses	45,200	8,600	53,800
Removal of vault toilet	15,100	2,900	18,000
Landscaping	183,500	34,900	218,400
SUBTOTALS	2,321,200	590,000	2,911,200
Cultural landscape report			50,000
Historic structures report			50,000
**TOTAL			\$3,011,200

* These costs are for the preferred option of connecting to municipal water and wastewater lines, if they are extended along River Road before this development. For comparison, the estimated total project cost of constructing new water and wastewater treatment facilities on NPS land is \$1,376,900. Connecting to municipal lines would save \$1,296,200, less whatever might be contributed to help the city of Oak Hill install the municipal lines to the site.

** This does not include the cost of acquiring the 38 acres of land to the south of Seminole Rest. The current assessed value is \$19,000.






TABLE 5: ESTIMATED DEVELOPMENT COSTS FOR ALTERNATIVE 4, PHASE II

	GROSS CONSTRUCTION COSTS	ADVANCE PLANNING COSTS	TOTAL PROJECT COSTS
Removal of structures and preparation of acquired land	132,600	25,300	157,900
Visitor contact station (4,600 square feet)	1,489,900	284,300	1,774,200
Two wayside exhibits	16,800	8,400	25,200
Indoor interpretive exhibits	188,000	32,000	220,000
Audiovisual program and equipment	257,000	24,000	281,000
Historic furnishings for outdoor demonstration area	61,000	7,500	68,500
Boat dock on acquired land	116,800	22,300	139,100
Pedestrian trails	63,300	12,100	75,400
Parking west of River Road	136,000	26,000	162,000
Parking at visitor center	117,500	22,400	139,900
Electricity for visitor center	17,000	3,200	20,200
Fire protection for visitor center	9,000	1,700	10,700
Waterline to visitor center	11,300	2,200	13,500
Wastewater line to visitor center	22,600	4,300	26,900
Landscaping	211,600	40,400	252,000
*TOTALS	2,850,400	516,100	3,366,500
**GRAND TOTAL FOR PHASES I AND II			\$6,377,700

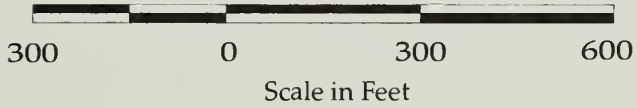
* This does not include the cost of acquiring the 3.6 acres of land to the north of Seminole Rest. That cost would be based on the fair market value. The current assessed value is \$200,000.

** This does not include the cost of acquiring the land to the north or south of Seminole Rest.

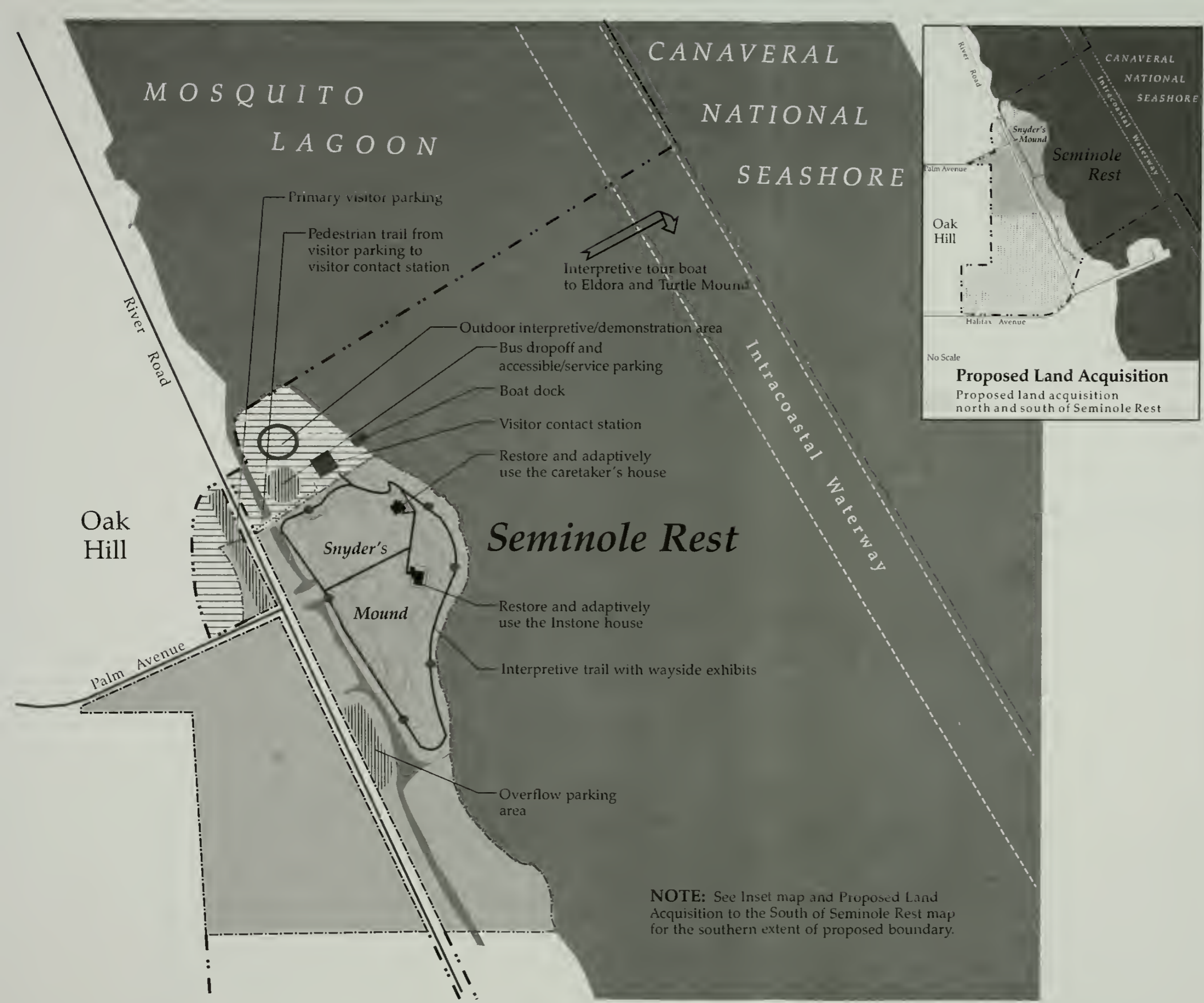


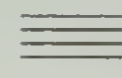
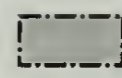



-  Proposed land acquisition for visitor use facilities and resource protection
-  Seminole Rest (NPS land)
-  Boundary of national seashore
-  Boundary of national seashore to be changed
-  Proposed boundary to include land acquisition and part of Mosquito Lagoon to make Seminole Rest contiguous with the national seashore

VISITOR USE: Open daily to the general public, self-guided tours, guided interpretive tours, group tours scheduled by appointment.

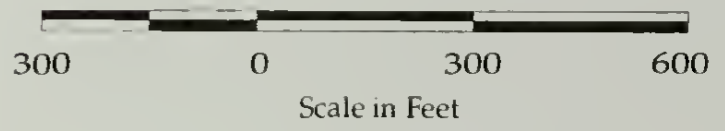


**Alternative 4
Adaptively Use Houses,
Acquire Land for
Visitor Facilities**
(Proposed Action)



-  Proposed land acquisition for visitor use facilities and resource protection
-  Seminole Rest (NPS land)
-  Boundary of national seashore
-  Boundary of national seashore to be changed
-  Proposed boundary to include land acquisition and part of Mosquito Lagoon to make Seminole Rest contiguous with the national seashore

VISITOR USE: Open daily to the general public, self-guided tours, guided interpretive tours, group tours scheduled by appointment.



Alternative 4
Adaptively Use Houses,
Acquire Land for
Visitor Facilities

(Proposed Action)
Canaveral National Seashore • Seminole Rest
United States Department of the Interior/ National Park Service
DSC/March '98/639/20033

ALTERNATIVES CONSIDERED BUT DISMISSED FROM FURTHER ANALYSIS

Additional alternatives were identified but were eliminated for a variety of reasons.

REMOVAL OF HOUSES

Prior to research into the history of Seminole Rest it was assumed that the caretaker's and Instone houses were of little historic significance and that only the prehistory of the site was important. Because the condition of the houses had deteriorated considerably since acquisition by the National Park Service, removal of the houses was considered in an alternative that would have emphasized the importance of the mound.

Research into site history resulted in the placement of Seminole Rest on the National Register of Historic Places for both prehistoric and historic significance. Removal of the houses would make interpretation of the site's history much more difficult. There is legislation that stipulates that historic as well as archeological resources shall be protected and interpreted.

HISTORIC LEASE

One means available to the National Park Service for preserving historic structures that are not the main interpretive focus of a park is to lease them for a park-related purpose. Such a lease would require that the structure be preserved to NPS historic preservation standards. Possible uses are broadly defined to allow a variety of retail, nonprofit, lodging, or restaurant uses compatible with the park mission.

This alternative was rejected for several reasons. The structures are an interpretive focus of the site and not ancillary to the park story. Their deteriorated condition would require a large up-front expenditure by the lessee that would make commercial profitability difficult and make use

by a nonprofit organization nearly impossible. The location of the houses would place a commercial use in the middle of the park's main interpretive resource. Commercial use would draw people onto the mound when the NPS goal is to limit access to forestall the erosion and the wear and tear that could be caused by visitation. Because the mound is an archeological resource that contains artifacts and contextual data that could be lost or damaged through erosion or inappropriate visitor use, such commercial use would defeat that goal.

COMMERCIAL ACTIVITIES

During the public meetings and comment period on the draft alternatives in May 1997, a number of suggestions pertained to the inclusion of activities onsite such as aquaculture (the raising of fish and shellfish for food), boatbuilding, and the development of a marina. These activities are not included in any of the alternatives because of the space limitations and because the marina would require extensive dredging of Mosquito Lagoon.

In keeping with the site's enabling legislation and purpose, primary consideration must be given to protection and interpretation of the archeological and historic resources. Whatever space is available for interpretation and visitor use would be devoted to telling the story of the history and prehistory of the site. The National Park Service would be willing to consult with local residents and officials regarding private development of facilities nearby that would contribute to the local economy while enhancing the visitor experience and preserving park resources.

ADAPTIVE USE OF CARETAKER'S HOUSE, PRESERVATION OF INSTONE HOUSE WITH NO ADAPTIVE USE, AND ACQUISITION OF ADJACENT LAND FOR VISITOR USE FACILITIES

This alternative is similar to alternative 4. The main difference is that it allows for no adaptive use of the Instone House. This alternative was initially included to lessen impacts on Snyder's Mound by not allowing visitors to walk across the mound to the house. A number of factors contributed to dismissing this alternative from further analysis.

It is important for visitors to go into the Instone house and to learn about the history of the buildings and the families that lived in them. In addition, rooms in the house could be used for meetings, special activities, or organized

educational programs. The impact on Snyder's Mound would be mitigated by a pathway that would channel visitors and encourage them to stay off the mound. The design could include a boardwalk with rails and signs encouraging people to stay on the path. Park staff would continuously monitor the situation to ensure that visitors stay on the paths and interpretive trails.

The National Park Service is required by law to protect and interpret the site's archeological and historic resources, which include the Instone house. The house would be restored according to recommendations in a historic structures report. It would be unreasonable to spend money on restoring the building and not to allow appropriate uses. Furthermore, continuous use of the building would better ensure that it will be properly maintained rather than allowed to deteriorate.

TABLE 6: SUMMARY OF ALTERNATIVES

	ALTERNATIVE 1 – EXISTING CONDITIONS (NO ACTION)	ALTERNATIVE 2 – PRESERVE HOUSES, NO ADAPTIVE USE	ALTERNATIVE 3 – ADAPTIVELY USE HOUSES	ALTERNATIVE 4 – ADAPTIVELY USE HOUSES AND ACQUIRE LAND FOR VISITOR USE FACILITIES (PROPOSED ACTION)
USE OF HISTORIC STRUCTURES	<ul style="list-style-type: none"> Stabilize and preserve houses and garage No adaptive use of either house Use garage for grounds maintenance requirements 	<ul style="list-style-type: none"> Stabilize houses and restore exteriors No adaptive use of either house Remove garage 	<ul style="list-style-type: none"> Restore exterior and adaptively use interior of houses Provide visitor contact station and interpretation on first floor of Instone house; exhibits and other interpretive media would relate to: <ul style="list-style-type: none"> site archeology historic structures Native Americans and their lifestyles site history natural history of Mosquito Lagoon and how it related to lifestyles Provide educational programs for schools Provide office space for staff on first floor of caretaker’s house Remove garage 	<p>Same as alternative 3, except that interpretation at the Instone house would relate primarily to the archeology and history specific to the site</p> <ul style="list-style-type: none"> Acquire land immediately north Remove structures Construct visitor contact station for: <ul style="list-style-type: none"> information/orientation exhibits auditorium with audiovisual presentation sales area fee collection Provide an outdoor demonstration area Provide boat dock for interpretive boat tours Provide parking and utilities Provide interpretive boat tours of Mosquito Lagoon
VISITOR USE	<ul style="list-style-type: none"> Occasional group tours on request; otherwise closed to the public 	<ul style="list-style-type: none"> Scheduled visitor use or by appointment only Guided interpretive tours Site closed to public at all other times 	<ul style="list-style-type: none"> Open to the general public Scheduled by appointment for groups Guided interpretive tours Self-guided tours 	<p>Same as alternative 3</p>
WAYSIDE EXHIBITS	<ul style="list-style-type: none"> Informational signs at entrance 	<ul style="list-style-type: none"> Informational sign at parking area Site bulletin for handout (no box on site) Update park brochure to identify site 	<ul style="list-style-type: none"> Wayside exhibits along walkways Informational signs at parking area and dock Site bulletin Update park brochure to identify site 	<ul style="list-style-type: none"> Same as alternative 3, plus provide wayside exhibits on newly acquired land
WALKWAYS	<ul style="list-style-type: none"> No designated walkways 	<ul style="list-style-type: none"> Designate tour route via occasional mowing No walkways or boardwalks other than as required for accessibility 	<ul style="list-style-type: none"> Construct walkway to interpretive trail and encourage visitors to stay off the shell mound, add boardwalk if necessary for accessibility Walkway would lead to houses 	<ul style="list-style-type: none"> Same as alternative 3, plus develop walkways to visitor attractions on newly acquired land and connect trails between those attractions and Seminole Rest
BOAT ACCESS	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Provide boat dock for shallow-draft vessels Provide no dredging Allow tour boats under permit access from the lagoon Provide for ranger boat use No boat launching from site 	<ul style="list-style-type: none"> On newly acquired land, provide boat dock for tour boats, ranger boats, and private boats. No dredging would be done, and boat launching would not be allowed.
PARKING	<ul style="list-style-type: none"> Allow parking on NPS land on west side of River Road north of Palm Avenue; no designated spaces 	<ul style="list-style-type: none"> Provide parking on east side of River Road for 12 cars and 3 oversized vehicles Provide overflow parking on west side of River Road just north of Palm Avenue 	<ul style="list-style-type: none"> Provide parking on east side of River Road for 15 cars and 3–4 oversized vehicles Provide overflow parking on west side of River Road north of Palm Avenue 	<ul style="list-style-type: none"> Provide primary visitor and staff parking on west side of River Road, north of Palm Avenue for 30 cars Provide bus dropoff, close-in accessible parking near visitor contact station (for 1–2 buses and 6–8 cars) Provide overflow parking on east side of River Road south of Palm Avenue
UTILITIES	<ul style="list-style-type: none"> Provide no restrooms Provide electricity for houses Provide water for fire protection (unpotable) Provide no potable water or wastewater treatment 	<p>Same as alternative 1, plus remove overhead powerlines and aboveground water and/or sewerlines</p>	<ul style="list-style-type: none"> Provide public restrooms in Instone house and toilets in caretaker’s house Provide electricity, water, and wastewater treatment Provide water for fire protection (unpotable) Place powerlines and water and sewerlines underground 	<p>Same as alternative 3, plus restrooms and utilities on newly acquired land for visitor contact station</p>

TABLE 6: SUMMARY OF ALTERNATIVES (CONTINUED)

	ALTERNATIVE 1 – EXISTING CONDITIONS (NO ACTION)	ALTERNATIVE 2 – PRESERVE HOUSES, NO ADAPTIVE USE	ALTERNATIVE 3 – ADAPTIVELY USE HOUSES	ALTERNATIVE 4 – ADAPTIVELY USE HOUSES AND ACQUIRE LAND FOR VISITOR USE FACILITIES (PROPOSED ACTION)
LANDSCAPE	<ul style="list-style-type: none"> • Maintain landscape with occasional mowing and clearing of brush and fallen tree limbs 	<ul style="list-style-type: none"> • Restore shell mound where it has been divided by the entrance driveway • Mow a path to designate the tour route • Other modifications would be proposed in a cultural landscape report 	<ul style="list-style-type: none"> • Modifications of historic landscape would be proposed in a cultural landscape report 	<ul style="list-style-type: none"> • Modifications of historic landscape would be proposed in a cultural landscape report • On newly acquired land, remove existing structures and construct facilities, provide landscaping
PARK BOUNDARY	<ul style="list-style-type: none"> • Modify the boundary by including about 35 acres of submerged land in Mosquito Lagoon between the mainland site and the Intracoastal Waterway 	Modify the boundary to connect Seminole Rest and about 38 acres of newly acquired upland to the national seashore by including approximately 57 acres of submerged land in Mosquito Lagoon between the mainland and the Intracoastal Waterway.	Same as alternative 2	<ul style="list-style-type: none"> • Modify the boundary to connect Seminole Rest and about 41.6 acres of newly acquired upland with the national seashore proper by including approximately 66 acres of submerged land in Mosquito Lagoon between the mainland site and the Intracoastal Waterway
REQUIRED STAFF	0.5 FTE	1.5 FTE	4 FTE	7 FTE
ESTIMATED DEVELOPMENT COSTS	Total project cost \$691,000	Total project cost (not including land acquisition) \$1,660,500	Total project cost (not including land acquisition) \$3,011,200	Phase I project cost \$3,011,200 Phase II project cost 3,366,500 Grand total project cost (not including land acquisition) \$6,377,700
ADVANTAGES OF ALTERNATIVE	<ul style="list-style-type: none"> • Preserves two historic houses • Provides visitor access to site but on a very limited basis 	<ul style="list-style-type: none"> • Provides for limited visitor use and interpretation • Preserves houses with restored exteriors • Provides better opportunity for visitors to understand the prehistoric appearance of Snyder’s Mound 	<ul style="list-style-type: none"> • Preserves houses with restored exteriors • Houses would be adaptively used • Provides for more public visitation • Provides more information about the history and prehistory of the site • Allows for boat access • Provides office space for staff • Provides additional security 	In addition to the advantages of alternative 3: <ul style="list-style-type: none"> • Provides more visitor attractions • Provides a major interpretive experience of Seminole Rest and Turtle Mound/Eldora via tour boat • Generates more visitation and resulting benefits to the local economy than alternatives 1, 2, or 3

**TABLE 7: SUMMARY
OF ENVIRONMENTAL CONSEQUENCES**

Impacts Common to All Alternatives		
<p>IMPACTS ON CULTURAL RESOURCES</p> <ul style="list-style-type: none"> • All significant archeological features would be preserved and protected. • All new development would be in areas of low archeological significance. • Instone and caretaker's houses would be preserved and documented. • Installation of fire alarms and sprinkler systems in the historic houses would provide better protection. • Damage to Snyder's Mound would be minimized. 	<p>IMPACTS ON NATURAL RESOURCES</p> <ul style="list-style-type: none"> • Threatened and endangered species would continue to be protected. • Proposed development would occur within the 100-year floodplain. • Construction would take place on disturbed land. 	<p>IMPACTS ON SOCIOECONOMIC ENVIRONMENT</p> <ul style="list-style-type: none"> • A portion of Mosquito Lagoon would not be available for aquaculture.

IMPACTS OF EACH ALTERNATIVE				
	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Cultural Resources	<ul style="list-style-type: none"> • Instone and caretaker's houses would be preserved. • Archeological and historic resources would be subject to deterioration because they would not be inspected daily. • Periodic patrols by rangers would provide some protection against site vandalism. 	<ul style="list-style-type: none"> • Instone and caretaker's houses would be restored. • Archeological and historic resources would be subject to deterioration because they would not be inspected daily. • Periodic patrols by rangers would provide some protection against site vandalism. • Mound would be restored to more prehistoric appearance. • Removal of the garage would eliminate a nonhistoric element from the historic scene. • Keeping visitors on mowed pathways would reduce damage to archeological resources. 	<ul style="list-style-type: none"> • Instone and caretaker's houses would be used and preserved. • Historic structures would be used, and maintenance needs would be addressed quickly. • Some historic fabric could be lost during rehabilitation. • Utility installation could result in some loss of archeological resources. • Site vandalism would be reduced by a daily ranger presence. • Removal of the garage would eliminate a nonhistoric element from the historic scene. • Walkway construction would minimize erosion caused by visitors. 	<ul style="list-style-type: none"> • Instone and caretaker's houses would be used and preserved. • Historic structures would be used, and their maintenance needs would be addressed quickly. • Some historic fabric could be lost during rehabilitation. • Utility installation could result in some loss of archeological resources. • Site vandalism would be reduced by a daily ranger presence. • Removal of the garage would eliminate a nonhistoric element from the historic scene. • Walkway construction would minimize erosion caused by visitors. • Construction of park facilities on newly acquired property would avoid visual and physical impact on sensitive areas. • Evaluation of structures and archeological resources on newly acquired property would ensure preservation of valuable cultural resources.

TABLE 7: SUMMARY OF ENVIRONMENTAL CONSEQUENCES (CONTINUED)

IMPACTS OF EACH ALTERNATIVE				
	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Natural Resources	<ul style="list-style-type: none"> Acquisition of 35 acres of submerged land would protect that fragile ecosystem. There would be no other impacts on biotic communities, species of concern, wetlands, water quality, or floodplains. 	<ul style="list-style-type: none"> Acquisition of 57 acres of submerged land and nearly 38 acres of wetlands would protect those fragile ecosystems. There would be minimal impact on species of concern and no impacts on wetlands. All water quality standards would be met or exceeded. All development would occur in 100-year floodplain but would conform to NPS <i>Floodplain Management Guidelines</i>. 0.5 acres of disturbed lands would be impacted. 	<ul style="list-style-type: none"> Acquisition of 57 acres of submerged land and nearly 38 acres of wetlands would protect those fragile ecosystems. Impacts on species of concern would be minimized because development would occur only on disturbed sites. There would be no dredging. Drainage to wetlands would be minimized. Wastewater lines would be encased to ensure against damage to groundwater. All water quality standards would be met or exceeded. All development would be in the 100-year floodplain but would conform to NPS <i>Floodplain Management Guidelines</i>. 1.2 acres of disturbed land would be impacted by development. 	<ul style="list-style-type: none"> Acquisition of 66 acres of submerged land and nearly 40 acres of wetlands would protect those fragile ecosystems. Impacts on species of concern would be minimized because development would occur only on disturbed sites. Impacts of interpretive tour boats on wildlife would be minor and temporary. No dredging for boat docks would be done. Only native trees and shrubs would be planted on acquired land to the north. Drainage to wetlands would be minimized. Wastewater lines would be encased to ensure against damage to groundwater. All water quality standards would be met or exceeded. All new development would occur in 100-year floodplain but would conform to NPS <i>Floodplain Management Guidelines</i>. 2.5 acres of disturbed land would be impacted by development.
Interpretation and Visitor Use	<ul style="list-style-type: none"> Would provide limited educational opportunities for public. Site would contribute little to visitor knowledge, understanding, or appreciation. 	<ul style="list-style-type: none"> Exterior restoration of the Instone and caretaker's houses would help visitors to visualize site's earlier appearance. Guided tours would increase opportunities for a limited number of visitors to gain a more in-depth understanding of the site. Recontouring Snyder's Mound would give visitors a better understanding of its prehistoric appearance. 	<ul style="list-style-type: none"> Exterior restoration of the Instone and caretaker's houses would help visitors to visualize site's earlier appearance. Visitors should come away with an excellent understanding of site prehistory and history with the interpretive trail and the use of the Instone house for exhibition space. Lack of a visitor contact station at the park entrance may confuse visitors and make fee collections more difficult 	<ul style="list-style-type: none"> Exterior restoration of the Instone and caretaker's houses would help visitors to visualize site's earlier appearance. Visitors should come away with the best understanding of site prehistory and history of all the alternatives due to better site orientation and exhibit/demonstration space on newly acquired land, the use of the Instone House and visitor contact station for exhibition space, and the interpretive trail around Snyder's Mound. A better understanding of the natural history of Mosquito Lagoon would be provided by the interpretive boat tour. The visitor experience should be greatly improved through better siting of facilities, access and circulation, and landscaping.

**TABLE 7: SUMMARY
OF ENVIRONMENTAL CONSEQUENCES (CONTINUED)**

	ALTERNATIVE 1	ALTERNATIVE 4
Socioeconomic Environment	<ul style="list-style-type: none"> Except for the removal of 35 acres from use for aquaculture, there would be no socioeconomic impacts. 	<p>Approximately 66 acres of Mosquito Lagoon would be available for use for aquaculture. There would be improved economic benefit to the community during construction resulting from the purchase of supplies and the use of community services over an extended period of time.</p> <p>A better visitor experience at Seminole Rest would result in visitors staying longer in the community and in more demand for food/visitor services.</p> <p>There would be a greater opportunity for local businesses to attract visitors to their stores.</p> <p>Additional staff at the site would seek more housing and services in the Oak Hill community than in alternative 3.</p> <p>There would be more traffic along River Road and Halifax Avenue than alternatives 1, 2, or 3.</p> <p>There would be more need for city and county services such as police, medical services, and road maintenance.</p> <p>Approximately 41.6 acres of privately owned land would be removed from the tax base; however, the city and county might be eligible for payment in lieu of taxes.</p> <p>A shrimp business and approximately 12 rental buildings would be removed from the newly acquired site and, unless replaced elsewhere, would be a loss to the community.</p>
NPS Operations	<ul style="list-style-type: none"> 0.5 FTE would be required for park operations. With no full-time onsite staff, vandalism would increase, and archeological resources would be at risk. 	<p>1.5 FTE would be required to staff and maintain a third ranger station and to provide staff for additional visitor facilities, which would impact staffing in other areas of the park unless new FTEs are approved and funded.</p> <p>Response time to emergencies in Mosquito Lagoon would be improved.</p> <p>With full-time park employees onsite, there would be less opportunity for vandalism and faster response to maintenance problems.</p> <p>A maintenance facility might have to be located in the nearby community to service the new facilities.</p> <p>Initial costs for construction of new facilities and restoration/rehabilitation of structures would be higher than the other alternatives.</p>

TABLE 7: SUMMARY
OF ENVIRONMENTAL CONSEQUENCES (CONTINUED)

IMPACTS OF EACH ALTERNATIVE				
	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Socioeconomic Environment	<ul style="list-style-type: none"> Except for the removal of 35 acres of Mosquito Lagoon from use for aquaculture, there would be no socioeconomic impacts. 	<ul style="list-style-type: none"> Approximately 57 acres of Mosquito Lagoon would be unavailable for use for aquaculture. There would be minor economic benefit to the community during construction resulting from the purchase of supplies and the use of community resources. There would be limited visitor use of community services. There would be minor traffic increases in the community during park hours of operation. Approximately 38 acres of privately owned land would be removed from the tax base; the city and county might be eligible for payment in lieu of taxes. 	<ul style="list-style-type: none"> Approximately 57 acres of Mosquito Lagoon would be unavailable for use for aquaculture. There would be minor economic benefits to the community during construction resulting from the purchase of supplies and the use of community services. There would be more economic benefit to community from visitors using community services than alternatives 1 or 2. With the site staffed daily, the likelihood of park staff seeking housing and services within the Oak Hill community would be improved. Increased visitation would result in more traffic on River Road and Halifax Avenue. Approximately 38 acres of privately owned land would be removed from the tax base; the city and county might be eligible for payment in lieu of taxes. 	<ul style="list-style-type: none"> Approximately 66 acres of Mosquito Lagoon would be unavailable for use for aquaculture There would be improved economic benefit to community during construction resulting from the purchase of supplies and the use of community services over an extended period of time. A better visitor experience at Seminole Rest would result in visitors staying longer in the community and in more need for food/visitor services. There would be a greater opportunity for local businesses to attract visitors to their stores. Additional staff at the site would seek more housing and services in the Oak Hill community than in alternative 3. There would be more traffic along River Road and Halifax Avenue than alternatives 1, 2, or 3. There would be more need for city and county services such as police, medical services, and road maintenance. Approximately 41.6 acres of privately owned land would be removed from the tax base; however, the city and county might be eligible for payment in lieu of taxes. A shrimp business and approximately 12 rental buildings would be removed from the newly acquired site and, unless replaced elsewhere, would be a loss to the community.
NPS Operations	<ul style="list-style-type: none"> 0.5 FTE would be required for site upkeep. With no full-time onsite staff, opportunities for vandalism would increase, and maintenance of historic and archeological resources would be more difficult. 	<ul style="list-style-type: none"> 1.5 FTE would be required due to increased maintenance and interpretive presence. With no full-time onsite staff, opportunities for vandalism would increase, and maintenance of historic and archeological resources would be more difficult. Initial costs would increase due to restoration of building exteriors and mound contour restoration. 	<ul style="list-style-type: none"> 4 FTE would be necessary to staff and maintain a third ranger station, which would impact staffing in other areas of the park unless new FTEs are approved and funded. Response time to emergencies in Mosquito Lagoon would be improved. With full-time park employees onsite, there would be less opportunity for vandalism, and the identification of maintenance problems would be faster. Initial costs would increase due to restoration of building exteriors, rehabilitation of interiors, and the provision of utilities and furnishings. 	<ul style="list-style-type: none"> 7 FTE would be required to staff and maintain a third ranger station and to provide staff for additional visitor facilities, which would impact staffing in other areas of the park unless new FTEs are approved and funded. Response time to emergencies in Mosquito Lagoon would be improved. With full-time park employees onsite, there would be less opportunity for vandalism and faster response to maintenance problems. A maintenance facility might have to be located in the nearby community to service the new facilities. Initial costs for construction of new facilities and restoration/rehabilitation of structures would be higher than in the other alternatives.



Affected Environment

CULTURAL RESOURCES

SITE PREHISTORY AND HISTORY

The Timucuan and Ais Indians inhabited this part of Florida when the Spanish arrived. They raised corn, beans, and squash and supplemented their diets by gathering berries, nuts, tubers, and seeds and by hunting and fishing. Women maintained the crops and gathered food while the men hunted, fished, and waged war. Small villages included several extended families. Houses were constructed of logs with thatched roofs and woven twig or mat siding.

Seasonally, groups settled along the coast to gather and process clams, oysters, and fish that supplemented the meat and agricultural products eaten the rest of the year. Women and children were responsible for collecting the clams and processing them for later use while the men fished, hunted, and protected their families. The same sites were revisited year after year, and the large mounds that once dotted the Florida coastline were created.

At Seminole Rest several mounds exist, evidencing that this lifeway continued for hundreds of years. The largest is Snyder's Mound, which lies on the shore of Mosquito Lagoon. It was a large quahog clam processing center and dates from approximately A.D. 600–1420. It was used primarily between A.D. 700–1100. It measures approximately 740 feet from north to south and about 340 feet east to west and is approximately 13 feet high. Archeological testing recovered very few artifacts, which suggests that the mound was used seasonally for the gathering and processing of clams that were then taken elsewhere and consumed. Processing would have consisted of removing the shell and drying or smoking the clams. Over many seasons the clamshells accumulated and resulted in the large mound. No evidence of burials in the mound has been found and none is expected given the difficulty of excavation and the burial practices of the time.

Fiddle Crab Mound is a much smaller shell-capped sand mound, purposefully constructed, approximately 15 feet in diameter, between River Road and the canal. It was probably a platform for a structure, although no archeological evidence could be found of post molds that would have signified a structure. A much larger range of artifacts was found with this mound than with Snyder Mound, which suggests that the site was occupied seasonally during the late winter and spring and that it may have been a seasonal base camp used by a family. A series of four small middens or refuse sites are also associated with Fiddle Crab Mound, which appears to have been constructed on an earlier midden. Radiocarbon dating indicates that Fiddle Crab Mound and associated middens date between A.D. 120–1040.

Occupation of the site began even earlier, as indicated by the inclusion of a type of pottery known as Orange series. This pottery dates as early as 2000 B.C. or as late as 500 B.C. Further study would be required to learn more about the earliest period of site occupation.

In the 1500s Europeans arrived, bringing disease and social disintegration. The Timucuan and Ais ceased to exist as separate tribal units, and sites like Seminole Rest were abandoned.

Permanent settlement of this part of Florida began after the Civil War. The area had been harvested for live oaks used to build ships. This gave the name Oak Hill to the mound that later lent its name to the town to the west. Today the mound is called Snyder's Mound or Seminole Rest.

The site was settled in the early 1870s, the pioneer period for this part of Florida. It was inland from the ocean, mostly low and swampy, and more difficult to get to than the communities along the coast, so this area was not heavily settled until drainage projects could create large expanses of dry land for citrus

farms. With the coming of the railroads at the end of the 19th century, the citrus industry grew rapidly. This area has remained relatively rural and agricultural despite the rapid population growth to the north, south, and west created by the burgeoning aerospace and tourist industries.

Snyder's Mound was divided into several lots during the 1870s and 1880s. One lot became the location of the post office serving Oak Hill. It escaped the fate of many of the other mounds along the east coast that were used for construction materials for roads because its owners, the Turnors and the Snyders, refused to sell.

Structures now on the site are the historic Instone house, the historic caretaker's house, a nonhistoric garage, and pilings from a nonhistoric boat dock.

The Instone house was constructed sometime prior to 1890 and may have been moved from its original location elsewhere on the mound. It was enlarged from nine rooms to 14 plus three baths through the addition of a third floor by Hatton Turnor, who owned the property from 1890-1911. The structure is of a late Victorian style with steeply pitched roof and end gables. It is wood frame with board and batten siding covered with yellow shingles. It originally had porches surrounding it, but only the porches on the east, south, and west remain. The interior retains much of its original fabric and appears to have been altered only to provide electricity, indoor plumbing, and a modern kitchen.

In 1911 the property was purchased by Wesley H. Snyder and remained in the Snyder family until the late 1980s when it was sold to the Nature Conservancy and then to the National Park Service.

The caretaker's house or cottage is a wood frame structure that dates to pre-1890. It has a steeply pitched roof, board and batten siding, an original bay window, and porches on the east and south. Several doors and windows have been modified from the original, and the interior has undergone much more extensive

modernization than the Instone house. This structure may have been the post office for Oak Hill for some years.

The garage is a frame structure with corrugated metal roof and siding on cement block piers. The national register form designates it as "noncontributing."

A wooden dock once extended out to the Intracoastal Waterway. It was replaced with a boat dock near the caretaker's house that was designated on the national register form as "noncontributing." Pilings are all that remain of that dock.

The significance of the historic structures and landscape as described in the national register form relates to (1) design and integrity of the buildings, (2) the nearly 100 years of occupation by only two families, (3) the local prominence of the two families, and (4) the lack of landscape change during the last 80 years. The history section of a historic structures report would probably compare and contrast the historic structures with others in this part of Florida to better understand their architectural significance.

The landscape of the site's historic period is thought to be relatively intact. Significance relative to the national register would be identified in a cultural landscape report at some future time.

The archeological significance of the Seminole Rest mounds lies in the fact that they have survived relatively intact when 70% of the mounds in Volusia County have been destroyed. They are also significant because they are the only remaining mounds known to have data covering the Orange–St. Johns II periods. The scientific value of the mounds is high.

Together, the archeological and historic resources are of statewide significance. They do not meet the criteria for a national landmark designation.

Preservation of the Seminole Rest site is made challenging by the nature of the resources to be protected. Mounds are best preserved by limiting public access and carefully monitoring for damage due to erosion, animal burrowing, or vegetation. Structures, on the other hand, are best preserved through use and quick repair of any damage resulting from wear and tear, weather, pest infestations, or aging. Because the historic structures are on the archeological mounds, and their stories are integral to an understanding of the site, preservation and interpretation would be hampered by not allowing visitor access. Visitors would be restricted to walkways leading up to the houses and to the interpretive trail around the base of Snyder's Mound.

Structures on the property proposed for acquisition to the north have not been evaluated for inclusion on the National Register of Historic Places. They are small, relatively recent structures of wood with some mobile home-type dwellings. There is a dock and a facility used for aquaculture. All structures would require evaluation prior to removal.

ARCHEOLOGY

The large shell mound commonly referred to as Seminole Rest but traditionally known as Snyder's Mound and sometimes Oak Hill or Live Oak Hill received a cursory visit by J. Francis LeBaron, chief engineer for the St. Johns and Indian River Railroad and an avocational archeologist, in 1877. While engaged in locating the rail line from Titusville to Lake Harney, he carried out an archeological reconnaissance for the Harvard Peabody Museum and described many mounds in the Canaveral area (Brewer 1991). He described the site accurately and stated:

There is a post office called Oak Hill upon it and several houses. Mr. Rideout, formerly a county commissioner of Volusia County, once lived here, and two of his family are buried on the top, just

south of his house. (LeBaron 1884, quoted in Wilson 1988).

The site received its state designation, 8 VO 124, in 1952 (Florida, Volusia County, site # 124).

In 1917, at the request of Dr. E. H. Sellards, the state geologist, Dr. Nels C. Nelson of the American Museum of Natural History visited the large mound just to the south (on the site of the present-day LeFils Fish Camp), which was being mined for road fill. "Dr. Nelson carried out a commendable stratigraphic study, collected a number of potsherds as well as worked bone and shell tools. He noted that ceramics were absent in the lowest 2 feet near the center and that although plain sherds were spread throughout the remaining levels, decorated sherds were found only in the upper level" (Brewer 1991). No human burials were noted or observed.

The investigation carried out by Elizabeth Horvath of the Southeast Archeological Center, National Park Service, in April and May 1993, consisted of shovel tests, coring of the mound, and test excavations. Based on the radiocarbon dates of the core samples recovered from various levels throughout the mound, Horvath stated in her preliminary report that "the mound was primarily occupied from about A.D. 300–800, well within the St. Johns 1a and 1b periods" (Horvath 1994). In the final report she states that the calibrated radiocarbon dates indicate that this clam shell midden was used from A.D. 590–A.D. 1420 or late St. Johns I–St. Johns II periods (Horvath 1995).

The small shell-capped sand mound (Fiddle Crab Mound) yielded calibrated radiocarbon dates of A.D. 120–A.D. 910 (Horvath 1995). The presence of an Orange Period component with ceramics pushes possible occupation back to 2000 B.C. The function of the Fiddle Crab Mound was never positively stated, but the size and form, the presence of associated midden features outside and adjacent to the feature, and an identified living floor seem to indicate a

house mound, and no material recovered by Horvath indicated any association with burials or any other ceremonial function. Returning to Snyder's Mound, Horvath concluded in her preliminary report that:

The relative lack of non-clam species within the mound may suggest that this site was utilized primarily as a resource extraction camp. The clams would be harvested in the cooler months when they are less likely to spoil. They could have been processed via smoking or some other means and transported to other occupation sites. The relative paucity of ceramic and lithic materials and the low diversity of faunal remains recovered suggest short-term utilization of the site. The apparent abundance of clam in this locale may have served as a focal point during a regional migration pattern to utilize various resources as they come into abundance (Horvath 1994).

Based upon the completed analysis, she states, "Snyder's Mound is believed to be a quahog (*Mercenaria* spp.) clam processing station which was used periodically throughout the annual cycle" (Horvath 1995). She differentiates between the larger Snyder's Mound and the smaller, earlier, Fiddle Crab Mound:

Given the massiveness of Snyder's Mound, this component most likely served as a processing station rather than a temporarily occupied site focused on the exploitation of a variety of locally available resources. The wider range of materials recovered from the ancillary middens around Fiddle Crab Mound may be more representative of short-term generalized extractive camps or possibly residential base camps (Horvath 1995).

NATURAL RESOURCES

BIOTIC COMMUNITIES

The national seashore is an area where the temperate zone meets the subtropical zone, which results in a wide variety of plant and animal species. There are three different communities in the area of Seminole Rest: the upland area, the tidal salt marsh, and the saltwater lagoon.

The vegetation of the upland area of Seminole Rest has been landscaped with live oak, palms, and some fruit trees. Birds in the area include blue heron, wood stork, roseate spoonbill, prairie warbler, boat-tailed grackle, American coot, red-winged blackbird, bald eagle, belted kingfisher, and osprey. Mammals include raccoons, possums, and feral cats. Reptiles may include green and brown anoles and the southern water snake.

The tidal salt marsh includes plant species such as cordgrass, salt bush, panicum grass, goldenrod, mallow, black and white mangroves, bayberry, prickly pear cactus, saltmarsh bulrush, and sand bur. Animals are similar to the upland species.

The saltwater lagoon has a seagrass bottom. Fish found here include oyster toadfish, Atlantic needlefish, striped anchovy, southern stingray, gulf pipefish, striped mullet, clearnose stingray, snook, sheephead minnow, sailfin molly, windowpane, hole choker, and Florida pompano.

Juvenile sea turtles, manatees and bottlenose dolphins may be found in this area of the lagoon.

SPECIES OF CONCERN

The National Park Service consulted with the U.S. Fish and Wildlife Service regarding threatened or endangered species or other plant

and animal species of concern. Table 8 presents federally listed species and their status as determined by the Fish and Wildlife Service as of June 24, 1997.

WETLANDS

There are approximately 10 acres of wetlands within the NPS boundary at Seminole Rest, including the borrow canal, which connects with Mosquito Lagoon, and the salt marsh. Additional wetlands are adjacent to the site.

WATER QUALITY

Mosquito Lagoon, which is the northernmost sub-basin of the Indian River lagoon system, has a surface area of 37,854 acres and a watershed area of 38,182 acres. The Indian River Lagoon system has the greatest species diversity of any estuary in North America, with more than 600 ichthyofaunal species. The Indian River Estuary is a national estuary as designated by the U.S. Environmental Protection Agency.

Mosquito Lagoon also has been classified by the state of Florida as an Outstanding Florida Water. This allows for no change to ambient water quality, and any degradation must be short-term and temporary.

The water quality of any area in Mosquito Lagoon depends on many variables, such as the distance from the inlet, wind speed and direction, rainfall, temperature, solar radiation, biogeochemical processes, watershed characteristics, and groundwater interactions. In addition, Mosquito Lagoon has a low ability to assimilate contaminants, since it is poorly flushed.

FLOODPLAINS

Seminole Rest is protected from the ocean by a barrier island and a number of islands in the lagoon. The area is within the 100-year

floodplain, as indicated on National Flood Insurance Program maps produced by the Federal Emergency Management Agency. Data from these maps indicates that flood elevations in the area would be 7–8 feet.

TABLE 8: FEDERALLY LISTED SPECIES OF CONCERN

Mammals		
Florida black bear	<i>Ursus americanus floridanus</i>	candidate
* West Indian manatee	<i>Trechechus manatus latirostris</i>	endangered, critical habitat
Southeastern beach mouse	<i>Peromyscus polionotus niveiventris</i>	threatened
Birds		
Bald eagle	<i>Haliaeetus leucocephalus</i>	threatened
Piping plover	<i>Charadrius melodus</i>	threatened
Florida scrubjays	<i>Aphelocoma coerulescens</i>	threatened
* Wood stork	<i>Mycteria americana</i>	endangered
Red-cockaded woodpecker	<i>Picoides borealis</i>	endangered
Reptiles		
Atlantic salt marsh snake	<i>Nerodia clarkii (= fasciata) taeniata</i>	threatened
Eastern indigo snake	<i>Drymarchon corais couperi</i>	threatened
*Green sea turtle	<i>Chelonia mydas</i>	endangered
* Hawksbill sea turtle	<i>Eretmochelys imbricata</i>	endangered
*Leatherback sea turtle	<i>Dermochelys coriacea</i>	endangered
*Loggerhead sea turtle	<i>Caretta caretta</i>	threatened
Plants		
Carter's mustard	<i>Warea carteri</i>	endangered

* Species that may be affected by any of the alternatives.

INTERPRETATION AND VISITOR USE

VISITOR EXPERIENCE

Seminole Rest is currently closed to the public. The park brochure and other literature available to the public do not mention the site. Visitation is limited to occasional guided tours for individuals and special groups. There are no designated trails. Visitors park on the road shoulder.

A sign, declaring the area closed to the public, identifies the site by name and as a unit of the national park system.

VISITOR FACILITIES

There are no visitor facilities at Seminole Rest.

VISITOR USE DATA

Since the site is closed to the public, no visitor use records are kept for Seminole Rest. Probably no more than 100 people visit the site each year. Some trespassing, transient use of the buildings, and vandalism have been reported.

SOCIOECONOMIC ENVIRONMENT

POPULATION AND ECONOMY

The population of Volusia County in 1990 (according to the U.S. census) was 370,737, an increase of more than 40% over 1980. Continued growth is expected to exceed 20% between 1990 and 2000.

The median age was 40.7. Nearly one in three (32%) was a college graduate. Sixty-eight percent of households earn more than \$25,000 and 21% earn more than \$50,000. The unemployment rate in 1995 was 6.2%. Primary employers are (in order) the service industries, government, retail trade, manufacturing, and construction.

Oak Hill lost 2.2% between 1980 and 1990 and the population is now 917. No projections were available for the period 1990–2000. The median age of the Oak Hill community is 30–34. Eight percent of the population graduated from college. Approximately 15% of households earn more than \$25,000, and approximately 4% earn more than \$50,000. Oak Hill's unemployment rate in 1990 was 7.1%. Because the community is small, many people commute north or south to work in communities such as Daytona, New Smyrna Beach, or Titusville. Primary employers are the service industries, retail trade, and construction. Oak Hill is known as the center of Volusia County's fishing industry.

LAND USE

Much of the land in southern Volusia County is swamp or marshland. About 50% of Seminole Rest consists of such wetlands. It was these wetlands and the location on Mosquito Lagoon that made southern Volusia County less desirable for development than the oceanfront communities farther north where populations have increased greatly over the past 30 years or farther south where the development of Cape

Canaveral and the Kennedy Space Center have driven exponential growth.

Large areas of original wetlands have been filled to allow citrus to be grown. In recent years many of the citrus orchards have been turned to other uses or abandoned. As development from the north and south continues, this trend will also include the Oak Hill area. Construction of planned and retirement communities and commercial development is expected.

ACCESS AND CIRCULATION

Seminole Rest is in the town of Oak Hill in southern Volusia County. Access is by private vehicle only. It is easily reached via Interstate 95 or U.S. Highway 1. From I-95, the site may be reached by taking the Scottsmeer exit and driving east to U.S. Highway 1, then north to Oak Hill, east on Halifax Avenue (a two-lane paved road through a residential area), then north on River Road to the Palm Avenue entrance. Visitors could return to U.S. Highway 1 by driving north on River Road or by backtracking along Halifax Avenue. The entrance to the site is approximately 1.5 miles from U.S. Highway 1 via either route.

NPS OPERATIONS

The National Park Service has virtually no presence at Seminole Rest. The site is closed to the public, and a fence surrounds the area, encouraging people to keep out. Occasionally people enter the site and cause damage to the historic structures.

The historic structures are deteriorated and are in need of major repair if they are to be preserved. Occasionally minor repairs are done on the two buildings, and park employees mow the grass and clear brush and fallen tree limbs. This work amounts to a total of less than 0.5 FTE.

Electrical power is supplied via an overhead line that connects to a line that runs along River Road. There is no potable water or operable wastewater treatment system for the houses. All potable water is supplied by individual wells, and wastewater treatment is accomplished by

septic tank and leach fields. There are no municipal water or sewerlines along River Road. There is no fire protection water system in the houses.

For a number of years, the managers of Canaveral National Seashore have considered creating a third ranger district. They would like to provide a district ranger station on Mosquito Lagoon so that rangers can have quick boat access to any area within the park's jurisdiction in case of emergency. Seminole Rest is considered a good location for such a facility.

An increasing amount of habitat and water quality research is envisioned for Mosquito Lagoon, where environmental protection and monitoring is vital. Seminole Rest is considered to be a good location as a logistical center for this work.



Environmental Consequences

INTRODUCTION

IMPACTS ON CULTURAL RESOURCES

All the significant archeological features of Seminole Rest would be preserved and protected for future generations. Surveys and testing to identify archeological features would precede any ground-disturbing activities or construction. This would allow placement of park facilities such as parking, utilities, and trails in areas of low archeological significance.

The Instone and caretaker's houses would be preserved in all alternatives. Each structure would undergo architectural evaluation and documentation to assist with preservation and/or adaptive use. The level of preservation would depend on the proposed uses in each alternative.

Although guidelines would be developed to minimize damage to the mound and landscape caused by construction activities, it is likely that some damage would be unavoidable.

IMPACTS ON NATURAL RESOURCES

In accordance with the Endangered Species Act, threatened and endangered species would continue to be protected. The alternatives have been designed to avoid adverse impacts on species of concern.

Seminole Rest and the land immediately surrounding it are within the 100-year floodplain. Any proposed development would be in the 100-year floodplain. There is no practical alternative if visitor facilities are to be included in the site. All construction would take place on disturbed land.

IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT

A portion of Mosquito Lagoon would be excluded from future development of aquaculture when the National Park Service obtains jurisdiction on waters between Seminole Rest and the Intracoastal Waterway (35 acres of submerged land in alternative 1, 57 acres in alternatives 2 and 3, and 66 acres in alternative 4). No such industries use the waters proposed for acquisition but operate immediately north and south of Seminole Rest. Aquaculture has the potential for high financial returns and is being encouraged by the state of Florida.

IMPACTS OF ALTERNATIVE 1

IMPACTS ON CULTURAL RESOURCES

Preservation measures such as stabilization, periodic maintenance, fire alarms, and an adequate water system for fire protection would help to ensure that the Instone and caretaker's houses would be preserved.

Locked gates and periodic patrolling of the site by law enforcement rangers would provide some protection for the mounds.

Because the structures would not be used every day, problems such as a leaking roof, termite damage, break-ins, theft, or malfunctioning fire alarms would take longer to identify and correct, possibly jeopardizing the long-range preservation of the structures. Illegal archeological digging could significantly damage the mound's integrity before it was discovered. The effects of erosion on Seminole Rest would also not be as quickly identified and corrected.

IMPACTS ON NATURAL RESOURCES

More natural resources associated with Mosquito Lagoon would be protected than at present with the addition of 35 acres of submerged land between Seminole Rest and the current seashore boundary along the east side of the Intracoastal Waterway.

There would be no other impacts on biotic communities, species of concern, wetlands, water quality, or floodplains.

IMPACTS ON INTERPRETATION AND VISITOR USE

By keeping the Seminole Rest unit closed to the public, most visitors to Canaveral National Seashore or the region would have no knowledge of the site's existence. Area visitors also would not have opportunities to appreciate the significance of the resources and their contribution to a

better understanding of Timucuan history and culture.

IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT

Except as noted under Impacts Common to All Alternatives there would be few or no socioeconomic impacts associated with this alternative.

IMPACTS ON NPS OPERATIONS

There would be an initial cost to stabilize the Instone house and the caretaker's house for long-term preservation and to install a high-pressure water system for fire protection.

There would be very little change in the amount of staff time spent at Seminole Rest, which is estimated at less than 0.5 FTE. An interpretive ranger would occasionally conduct a group tour around the site. Law enforcement rangers would sporadically patrol the site, and maintenance would remain the same — periodic grounds maintenance and repair of the buildings.

Vandalism would continue to be a problem, and it would be difficult to adequately maintain the two historic buildings, since there would rarely be park staff on site.

CONCLUSION

More fragile natural resources would be protected than at present due to the inclusion of 35 acres of submerged land within the park boundary. There would be no additional impact on natural resources.

The two historic houses would be repaired and stabilized for long-term preservation. However, since they would not be used on a daily basis, they would be subject to more deterioration and

vandalism than if adaptively used. Lack of a daily onsite staff presence would also make the archeological resources more vulnerable to vandalism.

Turtle Mound and the adjacent information center on the ocean side of the national seashore would be the only place in the park where visitors could learn about Timucuan history and culture. The amount of information and interpretation provided would remain very limited and would reach only a small fraction of park and area visitors.

CUMULATIVE EFFECTS

When combined with similar resources in other federal, state, and private areas, including those in the Golden Crescent, the Seminole Rest site would not contribute to the visitor experience in the region. Specifically, the site would not add to visitor knowledge, understanding, and appreciation of early Native American presence in the region.

IMPACTS OF ALTERNATIVE 2

IMPACTS ON CULTURAL RESOURCES

Restoration of the exteriors of the caretaker's and Instone houses to an early 20th century appearance and installation of alarms and a water system for fire protection would increase the safety of the structures. Because they would not be used on a daily basis (and the interiors not used at all) problems such as a leaking roof, termite damage, break-ins, theft, or malfunctioning fire alarms would take longer to identify and correct. This could jeopardize the long-range preservation of the structures. The effects of erosion on Seminole Rest would also not be as quickly identified and corrected.

The site would be gated and locked except when tours were scheduled. Periodic patrolling of the site by law enforcement rangers during times when the site is not open to the public would identify vandalism or illegal archeological excavations on the mound.

The entrance road onto the mound would be removed and the mound contour restored, which would discourage unauthorized entry, but vandals intent on illegal archeological activity could still significantly damage the mound before it was discovered.

Removing the entrance drive and recontouring the mound would result in loss of a landscape feature (the entrance road) associated with historic use. It would also result in a restoration to an earlier time, giving visitors a better understanding of the mound's prehistoric appearance.

A mowed path would control where visitors walk and would reduce damage to cultural resources caused by visitors walking or climbing on sensitive archeological resources.

Removal of the garage would eliminate a noncontributing, deteriorated element from the historic area.

IMPACTS ON NATURAL RESOURCES

The National Park Service would protect more natural resources associated with Mosquito Lagoon than in alternative 1 with the addition of 57 acres of submerged land between Seminole Rest and the current seashore boundary along the east side of the Intracoastal Waterway.

A majority of the 38 acres to the south of Seminole Rest that is proposed for acquisition is wetlands. A positive impact would be the long-term protection of these wetlands, which are currently not protected.

Impacts on species of concern would be minimal or nonexistent because development would be on disturbed land. Site-specific surveys would be required before construction.

Approximately 0.5 acre of disturbed land would be affected by the construction of two new parking areas adjacent to wetlands. There would be impacts on wetlands, Mosquito Lagoon, and groundwater from runoff organic pollutants such as gasoline, grease, and oil. Design of the parking areas would incorporate measures to eliminate or minimize these impacts.

Approximately 600 linear feet of disturbed land would be affected by the installation of electric powerlines from River Road to the two historic houses.

A total of 0.5 acre of disturbed land would be affected by the proposed development. During the construction phase of the project, there could be minor short-term degradation of water quality because of sediment. Strict erosion and sediment controls would be instituted as part of any construction activity in accordance with federal and state laws to ensure minimal impacts on water quality, wetlands, and Mosquito Lagoon. All water quality standards would be met or exceeded.

All new facilities would be in the 100-year floodplain. Construction would conform to NPS *Floodplain Management Guidelines*. In case of a flood, the site would be evacuated.

IMPACTS ON INTERPRETATION AND VISITOR USE

Through guided tours visitors would experience and appreciate the resources and better understand Timucuan history and culture. The number of visitors able to have this experience would be limited. Tours could be few and could be limited to a small number of participants.

The restoration of Snyder's Mound on the side facing River Road would give visitors a much better appreciation of what the original mound might have looked like.

IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT

There could be some minor benefits to the economy of Oak Hill. Businesses could temporarily benefit from the construction activity. During preservation of the two structures and parking construction, workmen would need food and lodging near Oak Hill. Some of these workers might be from the Oak Hill community. Some construction supplies could be purchased in Oak Hill. Because of the short duration of the construction, probably one season, there would not be a major impact.

Following work on the houses, expected visitation to the site would still be low, limiting the days and hours the site is open. The less time that visitors spend in the area, the less likely they are to use local restaurants, hotels, or retail outlets.

No park employees would be stationed at the site, so no housing would be required in the community.

Visitors to Seminole Rest would cause a relatively minor increase in traffic along River

Road and through the residential areas along Halifax Avenue.

If the National Park Service acquires the land south of Seminole Rest, approximately 38 acres of privately owned land would be lost to the Volusia County and Oak Hill tax base. The county and city might be eligible for some payment from the federal government in lieu of taxes.

IMPACTS ON NPS OPERATIONS

The initial cost of alternative 2 would be more than alternative 1 since the two houses would be more accurately restored, not simply stabilized. A paved parking area would be provided, and part of Snyder's Mound would be restored to represent more closely its original contours.

The amount of staff time devoted to Seminole Rest would probably increase by one full FTE over alternative 1, to 1.5. An interpretive ranger would spend more time conducting tours than in alternative 1. Law enforcement rangers would patrol the site more frequently. More maintenance would be required to preserve the restored buildings carefully and to maintain the mowed trail around the base of Snyder's Mound.

Visiting hours would be limited and scheduled or by appointment only, so vandalism might continue, and it would be difficult to adequately maintain the two historic houses, since there would still be no full-time park staff presence onsite.

CONCLUSION

More fragile natural resources would be protected than in alternative 1. The park boundary would be expanded to include 57 acres of submerged land in Mosquito Lagoon and wetlands that comprise the majority of 38 acres to the south of Seminole Rest. Impacts of construction on natural resources would be minor and temporary, and would affect approximately

0.5 acre of disturbed land. There would be no long-term adverse impacts on natural resources.

The exteriors of the two historic houses would be restored, and the interiors would be stabilized for long-term preservation. However, since they would not be used daily, they would be subject to more deterioration and vandalism than if adaptively used. The site would be open to the public on a limited basis, and there would be more staff presence than in alternative 1. The archeological resources would be protected to a greater extent than alternative 1 but more subject to vandalism than if the site was open on a daily, year-round basis.

This alternative would increase opportunities for a limited number of visitors and educational groups to gain a more in-depth understanding of Timucuan history and culture.

CUMULATIVE EFFECTS

When combined with similar resources in other federal, state, and private areas, including those in the Golden Crescent, the Seminole Rest site would contribute in a cumulative but limited manner to the overall visitor experience in the region. Specifically, for a small percentage of visitors, the site would add to the knowledge, understanding, and appreciation of early Native American presence in the region and the importance of preserving these fragile resources.

IMPACTS OF ALTERNATIVE 3

IMPACTS ON CULTURAL RESOURCES

Structures deteriorate if they are not used because they require the attention that results from everyday use. Problems such as leaking water, insect infestations, and vandalism should be immediately identified. With maintenance funds in short supply, unused buildings are not a priority.

The exteriors of the Instone house and caretaker's house would be restored. The interiors would be rehabilitated for adaptive use by visitors and park staff. As a result, there would be better protection from deterioration, fire, and vandalism than in alternatives 1 or 2, because the houses would be adaptively used on a daily, year-round basis. Maintenance needs would be addressed more quickly than if the buildings were unused.

Restoration of the exterior and rehabilitation of the interiors of the historic houses would preserve significant historic features of the structures, but it is likely that some historic fabric would be lost or destroyed during the conversion to adaptive use.

A walkway would be constructed around the base of Snyder's Mound leading to the Instone house. Visitors would be asked to remain on the walkway to minimize erosion damage caused by walking or climbing on sensitive archeological resources. Should visitors ignore signs and create new paths through the site, damage to archeological features could result. This is not expected due to a daily staff presence on site.

Electrical service, water for fire protection, and potable water and wastewater treatment would be provided to the houses on Snyder's Mound. It may be feasible on portions of the mound to lay utility lines on the surface and fill over them rather than bury them. It is likely, though, that some undisturbed areas of the mound would be excavated during placement, and damage to the archeological resources could result.

The preferred option for providing utilities to the historic houses is to use municipal water and wastewater lines. However, if it becomes necessary to provide a well and a wastewater treatment facility on NPS property, they would be located so that they would not impact significant archeological and historical resources.

Removal of the garage would eliminate a noncontributing, deteriorated element from the historic area.

IMPACTS ON NATURAL RESOURCES

More natural resources associated with Mosquito Lagoon would be protected than in alternative 1. Fifty-seven acres of submerged land between Seminole Rest and the current seashore boundary along the east side of the Intracoastal Waterway would be added.

Most of the 38 acres to the south of Seminole Rest that is proposed for acquisition is wetlands. Long-term protection of these fragile wetlands, which are currently not protected, would be a positive impact.

Impacts on species of concern would be minimal or nonexistent because new development would be on disturbed land. Site-specific surveys would be required before construction could begin.

In the following discussion, all measurements of linear feet, square feet, and acres of affected areas are approximate. All new construction would be on disturbed land.

A new boat dock would cover 640 square feet of Mosquito Lagoon in the same area as the former dock. Pilings are all that remain of the former dock, and they would be replaced by new pilings. Only NPS boats or tour boats operating under permit would use this dock. Only shallow-draft vessels would be used to eliminate the need for dredging and to minimize impacts on the

submerged land. When the dock is designed, there would be further environmental documentation and consultation with the state of Florida and the Corps of Engineers.

Construction of an access trail from the primary parking area to Snyder's Mound, the Instone house, and the caretaker's house and an interpretive trail around the base of the mound would affect 0.4 acre.

Construction of two new parking areas would affect 0.6 acre. They would be adjacent to wetlands and could impact those wetlands, Mosquito Lagoon, and groundwater with runoff organic pollutants such as gasoline, grease, and oil. Design of the parking areas would incorporate measures to eliminate or minimize these impacts.

The installation of electric powerlines from River Road to the two historic houses would affect 600 linear feet of land.

The construction of a temporary vault toilet would affect 0.01 acre. It would be a self-contained recirculating chemical toilet as used elsewhere in the park and would not adversely affect nearby wetlands, Mosquito Lagoon, or groundwater.

The preferred option of providing potable water and wastewater treatment for the two historic houses would be to connect to municipal lines if they are extended along River Road before development. (There are now no municipal lines near Seminole Rest.) The installation of waterlines and sewerlines encased to account for high groundwater would affect 1,200 linear feet of land.

Another option would be to construct new water and wastewater treatment facilities on NPS land if municipal lines were not available. This second option is undesirable primarily because of possible adverse impacts on wetlands, Mosquito Lagoon, and groundwater and the uncertainties of finding an adequate, high quality water supply. If this option is selected, the National Park Service would prepare additional

environmental documentation at the time of design and would consult with the state of Florida and the Corps of Engineers to meet all environmental regulations and permitting requirements.

A total of 1.2 acres of disturbed land would be affected by the proposed development. During the construction phase of the project, there would be a potential for minor and short-term degradation of water quality in the form of sediment. Strict erosion and sediment controls would be instituted in accordance with federal and state laws to ensure minimal impacts on water quality, wetlands, and Mosquito Lagoon. All water quality standards would be met or exceeded.

All new facilities would be located in the 100-year floodplain. Construction would conform to NPS *Floodplain Management Guidelines*. If there was a flood, the site would be evacuated.

IMPACTS ON INTERPRETATION AND VISITOR USE

Visitors to Canaveral National Seashore could experience and appreciate the significance of Seminole Rest. A better understanding of Timucuan history and culture and the other people and events associated with the site could be gained. Visitors and educational groups also would benefit from a variety of interpretive media, programs, and activities.

Parking along the road could pose a hazard for pedestrians. The lack of a visitor contact facility at the entrance could contribute to confusion and make future fee collection difficult.

IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT

There would be some socioeconomic impact on Oak Hill associated with this alternative. Construction at the site would last through several seasons. Workers would require food and lodging in the community. Some construction

supplies could also be purchased locally. Should the construction contractor hire local workers, lodging would not be required in the community, but there would be short-term, well-paying jobs for local workers.

With adaptive use of the houses, educational exhibits would encourage visitors to spend more time at the site. Visitors might be inclined to eat in Oak Hill, thus helping to support restaurants.

With the Seminole Rest unit staffed on a daily basis, the likelihood of park staff living in the community and buying from local merchants would increase.

Increased visitation would result in more traffic along River Road and through residential areas along Halifax Avenue than either alternative 1 or 2.

If the National Park Service acquires the land south of Seminole Rest, approximately 38 acres of privately owned land would be removed from the tax base of Volusia County and Oak Hill. However, the county and the city might be eligible for payment from the federal government in lieu of taxes.

IMPACTS ON NPS OPERATIONS

The two houses would be adaptively used, potable water and wastewater treatment would be provided, and a more comprehensive interpretive program would be developed. The initial cost would be greater than in alternative 2. The annual operating costs would also be higher due to the presence of utilities, the maintenance of the houses, and the operation of ranger boats.

Staffing would increase to approximately four FTE. Seminole Rest would become the location of a third ranger station. Office space for staff, including two law enforcement rangers and an interpreter, would be provided on the first floor of the caretaker's house. In addition, the equivalent of one full-time maintenance person would be required. This could affect staff operations elsewhere in the park unless

additional funds and FTEs were made available. Volunteers could reduce the need for more paid staff.

Response time to emergencies in Mosquito Lagoon would be reduced, which would increase visitor and resource protection.

Because park staff would be available daily year-round, vandalism would be greatly reduced. Compared to alternatives 1 and 2, it would be easier to meet the maintenance requirements of the two historic houses.

CONCLUSION

More fragile natural resources would be protected than in alternative 1. This is due to the addition of 57 acres of submerged land in Mosquito Lagoon and the wetlands that comprise the majority of the 38 acres to the south of Seminole Rest. Impacts of construction would be minor and temporary, and would affect approximately 1.2 acres of disturbed land. There would be no long-term adverse impacts on natural resources.

The exteriors of the historic houses would be restored, and the interiors would be rehabilitated for adaptive use. The site would be open to the public, and there would be staff onsite daily, year-round. The historic and archeological resources would be better protected from deterioration and vandalism than in alternatives 1 or 2.

This alternative would increase opportunities for visitors and educational groups to gain a more in-depth understanding of Timucuan history and culture and other natural and historic resources and events associated with Seminole Rest.

CUMULATIVE EFFECTS

When combined with similar resources in other federal, state, and private areas, including those in the Golden Crescent, the actions in alternative 3 would contribute to the overall visitor

experience in the region more than those in alternatives 1 and 2. Specifically, the site would add to visitor knowledge, understanding, and appreciation of early Native Americans and later inhabitants of the region and the importance of preserving the fragile resources.

IMPACTS OF ALTERNATIVE 4 (THE PROPOSED ACTION)

IMPACTS ON CULTURAL RESOURCES

Structures deteriorate if they are not used because buildings do not receive the attention that results from everyday use. Problems such as leaking water, insect infestations, and vandalism should be immediately identified. With maintenance funds in short supply, unused buildings are not a priority for such funds.

In phase I of alternative 4 the exteriors of the Instone house and caretaker's house would be restored and the interiors rehabilitated for adaptive use by visitors and park staff. As a result, there would be better protection from deterioration, fire, and vandalism than in alternatives 1 or 2, because the houses would be used on a daily, year-round basis. Maintenance needs would be addressed much more quickly than if the buildings were unused.

Restoration of the exteriors and rehabilitation of the interiors of the historic houses would preserve the significant historic features of the structures. However, it is likely that some historic fabric would be lost or destroyed during the conversion to adaptive use.

A walkway would be constructed around the base of Snyder's Mound leading to the Instone house in phase I. Visitors would be asked to remain on the walk to minimize erosion damage caused by walking or climbing on sensitive archeological resources. If visitors ignore signs and create new paths through the site, damage to archeological features could result. This is not expected due to a daily staff presence on site.

Electrical service, water for fire protection, and potable water and wastewater treatment would be provided to the houses in phase I. It may be feasible on portions of the mound to lay utility lines on the surface and cover them, but it is likely that some undisturbed areas of the mound would be excavated during placement. There

would be a possibility of damage to the archeological resources of the mound.

The preferred option for providing utilities to the historic houses is to tie into municipal water and wastewater lines. If it is necessary to provide a well and a wastewater treatment facility on NPS property, they would be located away from archeological and historical resources to reduce impacts on such resources.

Removal of the garage would eliminate a noncontributing, deteriorated element from the historic area.

Construction of new interpretive and visitor use facilities in Phase II on newly acquired property to the north rather than on Snyder's Mound would avoid visual and physical impacts on the most sensitive areas of the site.

Archeological surveys and evaluation of the newly acquired property in phase II along with evaluation of all structures would ensure that no sites or structures on or eligible for inclusion on the National Register of Historic Places are lost or damaged as a result of development.

IMPACTS ON NATURAL RESOURCES

More natural resources associated with Mosquito Lagoon would be protected than in alternatives 1, 2, or 3. This is due to the addition of 66 acres of submerged land between Seminole Rest and the current seashore boundary along the east side of the Intracoastal Waterway.

The NPS interpretive tour boats proposed in phase II would be small, shallow-draft, pontoon-type craft. Impacts on the vegetation and wildlife in Mosquito Lagoon would be minor compared to that caused by other boat traffic in the lagoon.

A majority of the 38 acres to the south of Seminole Rest and approximately 33% of the 3.6 acres to the north that are proposed for acquisition are wetlands. A positive impact would result from the long-term protection of these fragile wetlands, which are currently not protected.

Impacts on species of concern would be minimal or nonexistent because development would be on disturbed land. Site-specific surveys would be required before construction.

In the following discussion, all measurements of linear feet, square feet, and acres are approximate. All construction would be on disturbed land.

In phase I a new boat dock near the caretaker's house would cover 640 square feet of Mosquito Lagoon in the same area as the former dock. Pilings are all that remain of the former dock. They would be replaced by new pilings. Only NPS boats and tour boats operating under permit would use this dock. In phase II, 1,000 square feet of Mosquito Lagoon would be covered by a new dock that would replace the dock on the newly acquired property to the north. Privately owned boats, in addition to NPS boats, would be able to use this dock. Both docks would be available to shallow-draft vessels only to eliminate the need for dredging and to minimize impacts on submerged land. When the docks are designed, further environmental documentation would be done and the state of Florida and the Corps of Engineers would be consulted.

In phase I, 0.4 acre would be affected by construction of an access trail from the primary parking area to Snyder's Mound, the Instone house, the caretaker's house, and an interpretive trail around the base of the mound. In phase II, 0.1 acre would be affected by construction of additional pedestrian trails.

In phase I, 0.6 acre would be affected by the construction of two new parking areas. In phase II, 0.5 acre would be affected by additional

parking areas. All parking areas would be adjacent to wetlands and would impact wetlands, Mosquito Lagoon, and groundwater with organic pollutant runoff such as gasoline, grease, and oil. Design of the parking areas would incorporate measures to eliminate or minimize these impacts.

In phase II the construction of a visitor contact station to the north would disturb 0.1 acre, and the development of an outdoor interpretive demonstration area would affect 0.5 acre.

In phase I the installation of electric powerlines from River Road to the two historic houses would affect 600 linear feet of land. In phase II the installation of powerlines from River Road to the new visitor contact station would affect 300 linear feet of land.

In phase I the construction of a temporary vault toilet would affect 0.01 acre. It would be a self-contained recirculating chemical toilet and would not adversely affect nearby wetlands, Mosquito Lagoon, or groundwater.

The preferred option of providing potable water and wastewater treatment for the two historic houses in phase I would be to connect to municipal lines. (There are now no municipal lines near Seminole Rest.) This installation would affect 1,200 linear feet of land. Sewerlines would be encased to account for high groundwater.

Another option is to construct new water and wastewater treatment facilities on NPS land if municipal lines are not available. This second option is undesirable primarily because of possible adverse impacts on wetlands, Mosquito Lagoon, and groundwater and the uncertainties of finding an adequate, high quality water supply. If this option is selected, the National Park Service would prepare additional environmental documentation during design and would consult with the state of Florida and the Corps of Engineers to meet all environmental regulations and permitting requirements.

In phase II waterlines and wastewater lines would be needed to tie the new visitor contact station into the system that serves the two historic houses. This would affect 600 linear feet of land. Trees and shrubs would be planted on the land to the north to soften the visual and audible impact of vehicles. Only native vegetation would be used.

A total of 2.5 acres of disturbed land would be affected by the proposed development in alternative 4. During construction there is a potential for minor short-term degradation of water quality from sediment. Strict erosion and sediment controls would be instituted in accordance with federal and state laws to ensure minimal impacts on water quality, wetlands, and Mosquito Lagoon. All water quality standards would be met or exceeded.

All new facilities would be in the 100-year floodplain. Construction would conform to the NPS *Floodplain Management Guidelines*. During a flood the site would be evacuated. A draft statement of findings is included in Appendix D to conform with the *Floodplain Management Guidelines*.

IMPACTS ON INTERPRETATION AND VISITOR USE

All visitors to Canaveral National Seashore would be able to experience and appreciate the significance of Seminole Rest. The resources contribute to a better understanding of Timucuan history and culture and of other people and events associated with the site. Visitors and educational groups would benefit from stopping at the visitor contact station for information and orientation. They would be able to select from a variety of interpretive media, programs, and activities. The opportunity to enter the Instone house would help visitors to better understand aspects of the site's history dating from the late 19th century.

The proposed land acquisition north of Seminole Rest would provide less than 2 acres

of upland east of River Road for the siting of all desired visitor use facilities, including parking, a visitor contact station, an outdoor interpretive demonstration area, a boat dock, and connecting walkways. A passenger dropoff area and bus parking, though limited, would occupy a large portion of the available space, so buses and other vehicles would have an impact on the overall visitor experience. Careful consideration should be given to the number of vehicles that would be allowed on the site at any one time. Site design and proper landscaping would reduce the impact of vehicles on the visitor experience.

IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT

The socioeconomic benefits of this alternative to the Oak Hill community would be greater than alternatives 1, 2, or 3. Construction of facilities on newly acquired land to the north and restoration and adaptive use of historic structures would require construction crews and would last over several seasons. Workers would require food and lodging in the community. Some construction supplies might be purchased locally. If the contractor hires local workers, it would negate the need for lodging but would provide short-term well-paying jobs.

The profile of Seminole Rest would be heightened through more visitor use facilities and interpretive programs. With heightened visibility would come increased visitation and increased economic opportunities for the community as more visitors flow through Oak Hill and stay in the area longer.

Seminole Rest would provide a variety of interpretive and educational opportunities. The amount of time visitors would spend at the site is expected to double over alternative 3, particularly for those availing themselves of the interpretive boat tours on Mosquito Lagoon. Visitors would be more likely to need food, if not lodging. With increased visitation to Seminole Rest, there is an opportunity for local

businesses to broaden their selection of merchandise to accommodate and attract more visitors.

With the Seminole Rest unit staffed on a daily basis, the likelihood of park staff living in the community and buying from local merchants would increase.

The increased visitation to Seminole Rest envisioned in this alternative would place more pressure on city and county services such as police, medical services, and road maintenance. It is unlikely that any of these would be beyond current capability.

Alternative 4 would produce the most visitation of all the alternatives, resulting in the largest increase in traffic along River Road and through the residential areas along Halifax Avenue.

If the National Park Service acquires the land to the north and south of Seminole Rest, approximately 41.6 acres of privately owned land would be removed from the tax base of Volusia County and Oak Hill. The county and the city might be eligible for some payment from the federal government in lieu of taxes.

There are 12 residential rental buildings on the land to the north that would be acquired. Most are rented seasonally. A shrimp company leases structures on the site. If the land were acquired by the federal government, the rentals would no longer be available.

IMPACTS ON NPS OPERATIONS

The initial cost for alternative 4 would be more than double that of alternative 3 due to the acquisition of adjacent property and the construction of facilities and parking areas. The annual operating cost would also be higher due to the need for utilities at the visitor contact station, the operation of an interpretive tour boat, and the increase in general maintenance for facilities and grounds.

Staffing would increase to seven FTE, more than in any other alternative. This would affect staff operations elsewhere in the park unless additional annual operating funds and FTE were made available. Volunteers might be used to reduce funding requirements. Seminole Rest would be the location for a third ranger station with two law enforcement rangers. This would reduce the response time for emergencies in Mosquito Lagoon. Staff offices would be in the caretaker's house. The addition of facilities would require two interpreters and two maintenance people. The interpretive tour boat would require personnel. The need for maintenance equipment would be great enough to require a maintenance shop nearby. There would not be enough room onsite for this function, so a location would probably be sought in Oak Hill.

Vandalism to the historic buildings would be greatly reduced in this alternative, and it would be much easier to minimize maintenance problems due to the presence of park staff on a daily, year-round basis.

CONCLUSION

More fragile natural resources would be protected than in alternatives 1, 2, or 3. This would be due to the expansion of the park boundary to include 66 acres of submerged land in Mosquito Lagoon and to include the wetlands that comprise the majority of 41.6 acres of land to the south and north of Seminole rest. Impacts of construction of facilities on natural resources would be minor and temporary, and would affect approximately 2.5 acres of disturbed land. There would be no long-term adverse impacts on natural resources.

The exteriors of the two historic houses would be restored, and the interiors would be rehabilitated for adaptive use. The site would be open to the public, and there would be a staff presence on site on a daily, year-round basis, so the historic and archeological resources would

be better protected from deterioration and vandalism than in alternatives 1 or 2.

This alternative would provide more opportunities for visitors and educational groups to gain a more in-depth understanding of the natural and historic resources and events associated with Seminole Rest than any of the other alternatives.

CUMULATIVE EFFECTS

Cumulative effects on the water quality of Mosquito Lagoon would be positive. The new development on acquired land would treat wastewater in a more environmentally acceptable manner. There would be no cumulative effects on other natural resources.

More than in any of the other alternatives, Seminole Rest site would contribute to the overall visitor experience in the region. The site would add to the cumulative knowledge, understanding, and appreciation of the early Native Americans in the region, the lifestyles of more recent residents, and the fragile resources. This would add to the offerings of similar resources in other federal, state, and private areas, including those in the Golden Crescent.

UNAVOIDABLE ADVERSE EFFECTS

Seminole Rest is a significant archeological site with the potential to greatly increase understanding of the people who constructed it. The mound must be protected from erosion, which would gradually wear it away and destroy the context of artifacts in the mound, from unauthorized digging by relic hunters, from unnecessary ground-disturbing development, and from occasional acts of nature, such as hurricanes.

The preservation of the mound is complicated by the historic structures that were constructed there before the turn of the century. These structures have historic significance and are listed on the National Register of Historic

Places as significant contributing features. Because they are currently in very poor condition due to vandalism and a lack of funding to maintain them, preservation would require construction on the mound.

The legislation that established Seminole Rest gave equal importance to the historic and archeological resources of the site. The National Park Service must preserve and interpret the mound and structures in such a way that they are not impaired.

During construction work on the houses, the workers would be required to minimize the use of vehicles on the mound, use designated utility corridors, and monitor and control any activities that could result in erosion. All ground-disturbing work would be monitored by an onsite archeologist. It is still possible that archeological features could be lost or damaged as a part of preservation, stabilization, and adaptive use of the houses.

Work on the houses to restore the exteriors and stabilize or rehabilitate the interiors would result in the loss of historic fabric that has deteriorated or that must be removed to facilitate the new uses proposed. This work can be mitigated by the use of similar materials and documentation of the historic condition. It would not result in an unavoidable adverse effect.

Visitors would be allowed on the site and in the Instone house. Archeological artifacts and historic objects could be illegally removed. However, visitors would be required to remain on designated access and interpretive trails. There would be NPS staff onsite at all times during visiting hours to monitor visitor use.

Prehistorically, Snyder's Mound may have extended onto the property north of the site that is proposed for acquisition. Despite a complete archeological survey and testing program at this site and in other locations to be disturbed, it is possible that archeological resources could remain unidentified and be lost during construction.

COMPLIANCE WITH FEDERAL AND STATE LAWS, EXECUTIVE ORDERS, AND REGULATIONS

CULTURAL RESOURCES

The National Park Service is mandated to preserve and protect cultural resources as stated in the act of August 25, 1916, which established the National Park Service, and in specific legislation such as the Antiquities Act of 1906, the National Environmental Policy Act, and the National Historic Preservation Act. The cultural resources of Seminole Rest are to be managed in accordance with these acts and in accordance with NPS *Management Policies*, NPS-28, *Cultural Resource Management Guideline*, the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*, and other policy directives.

As part of the cultural resource management responsibilities mandated by section 110 of the National Historic Preservation Act, as amended, the National Park Service inventories and evaluates all cultural resources on land under its jurisdiction or that could be affected by agency actions. Cultural resources are evaluated by applying the criteria for inclusion on the National Register of Historic Places. An archeological evaluation of the Seminole Rest site has been completed (Horvath 1994). Archeological testing and evaluation would be done on newly acquired property to the north and where parking facilities are proposed. Archeological inventory of remaining portions of the unit would be completed as funding permits. The Florida state historic preservation officer was contacted regarding other historic properties in the area that might be eligible for inclusion on the National Register of Historic Places.

Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, defines the obligations of the federal government regarding activities proposed for or affecting properties on or eligible for listing on the National Register of Historic Places. Federal agencies are required to take into account the

potential effects of their activities on protected resources and to allow the Advisory Council on Historic Preservation and the state historic preservation officer an opportunity to comment. Actions are determined to have no effect, an adverse effect, or an effect that is not adverse on cultural resources. The National Park Service will work with the Florida state historic preservation officer and the Advisory Council on Historic Preservation to meet the requirements of section 106 prior to implementation of this plan.

An internal section 106 form (Assessment of Actions Having an Effect on Cultural Resources) will be completed following approval of this plan but before implementation of the proposed action. The form will document project effects, outline actions to mitigate such effects, and document that the proposed action flows from an approved plan that meets section 106 requirements. Cultural resource management specialists will review and certify all proposed actions affecting cultural resources.

All ground-disturbing actions will be preceded by an archeological evaluation to determine the level of investigation required before construction can begin. If any such resources are identified, the Florida state historic preservation officer and the National Park Service will evaluate their potential for inclusion on the National Register of Historic Places; if eligible, measures will be undertaken to preserve them. Archeological evaluation will be carried out before, or in conjunction with, construction.

Because all alternatives recommend a course of action that may have an effect on cultural resources listed on the National Register of Historic Places, the National Park Service will work closely with the Florida state historic preservation officer and the Advisory Council on Historic Preservation to determine a course

of action that avoids, reduces, minimizes, or mitigates adverse effects.

NATURAL RESOURCES

The National Park Service would comply with all laws and executive orders, including:

- Clean Air Act, as amended (42 USC 7401 et seq.) – Canaveral National Seashore is designated as a class I clean air area. Maximum allowable increases (increments) of sulfur dioxide (SO₂), particulate matter (TSP), and nitrogen oxides (NO_x) beyond baseline concentrations established for class I areas cannot be exceeded. Section 118 of the Clean Air Act requires all federal facilities to comply with federal, state, and local air pollution control laws and regulations.
- Clean Water Act – Federal facilities that may impact waters of the United States must be in compliance with the Clean Water Act. Consultation with the U.S. Army Corps of Engineers would take place during design and construction of such facilities.
- Endangered Species Act of 1973, as amended (16 USC 1531 et seq.) – Section 7 of the Endangered Species Act requires all federal agencies to consult with the U.S. Fish and Wildlife Service to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitat. The National Park Service is conducting a section 7 consultation with the U.S. Fish and Wildlife Service (see letter in Appendix C). During the design phase, further surveys and consultation would ensure that these species were protected and that no new listed species had been found on site.

- Executive Order 11988, *Floodplain Management* – This order requires all federal agencies to avoid construction within the 100-year floodplain unless there is no other practical alternative.

- Executive Order 11990, *Protection of Wetlands* – This order requires federal agencies to avoid, where possible, impacts on wetlands. Trails are exempted from compliance under NPS guidelines for implementing this executive order. During the design phase of any development, the most recent wetland maps would be consulted to ensure that facilities are not sited in wetlands.

The following additional actions would be taken to ensure compliance with federal, state, and city laws and regulations.

- All required water quality and wetland permits would be obtained prior to construction.
- Under the state of Florida designation of Outstanding Florida Waters, no degradation of water quality, other than that allowed in rule 62-4.242(2) and (3), F.A.C., would be permitted.
- If any hazardous waste is found in areas proposed for development or visitor use, the National Park Service would comply with the Comprehensive Environmental Response Compensation and Liability Act (42 USC 9601 et seq.) to determine if resources are being affected by the substance or if it presents a health and safety issue. If any excavated material is determined to be hazardous, the National Park Service would comply with the Resource Conservation and Recovery Act (42 USC 6901 et seq.).

CONSULTATION AND COORDINATION

PUBLIC INVOLVEMENT

The planning team and the park staff held three sets of public meetings related to the formulation of this development concept plan. The first was an initial scoping meeting in February 1997 at the Oak Hill City Hall. Approximately 40 people attended. The purpose of the meeting was for the planning team to brief the public about the purpose of the planning effort and to listen to the comments and concerns that the public had regarding Seminole Rest.

The second set of meetings were held in May 1997 when the planning team presented a set of preliminary development alternatives to the public and asked for responses. Open houses were held at the Oak Hill City Hall and at Seminole Rest.

Approximately 35 people attended a third meeting in December 1997 at the Oak Hill City Hall. A revised range of alternatives for visitor use and interpretation and facilities development were presented to provide another opportunity for public comment prior to completing this plan.

The park staff has consulted with a descendant of the previous owner of Seminole Rest and with representatives of the Independent Traditional Seminole Nation of Florida and the Seminole Nation of Oklahoma.

Strong support was expressed for preserving the historic houses and the archeological resources at Seminole Rest. Many people voiced a desire to associate commercial activities with the site, such as boat building, aquaculture, and a marina. Many people hoped that Seminole Rest would draw visitors and boost the local economy. There were also people who felt that the site should remain pristine, with only the development necessary to effectively interpret the history and prehistory of the site. Many felt that the major attraction of the site was its aesthetic beauty, especially as seen from Mosquito Lagoon, and that the beauty of the place should not be

compromised. Many people felt that boat access to Seminole Rest should be controlled to minimize impacts on submerged land in Mosquito Lagoon. Native Americans felt very strongly that the site is sacred, and visitation should be controlled to minimize impacts on the shell mound. They prefer that no visitors be allowed on the mound. Many people felt that the historic houses, especially the Instone house, should be open to the public. Native Americans would like to be involved in the development of the interpretive program at Seminole Rest.

All of the comments received by the park staff and the planning team were considered in the formulation of this development concept plan and in choosing the preferred alternative. This document is being made available to the public for additional comment. All of those comments will be carefully considered before a decision is made regarding the final plan.

AGENCIES TO WHOM COPIES OF THIS DOCUMENT WERE SENT

Florida Congressional Delegation

Honorable John L. Mica
U.S. House of Representatives
106 Cannon House Office Building
Washington DC 20515
(202) 225-4035

Honorable David Weldon
2725 Judge Fran Jamieson Way
Building C
Melbourne FL 32940
(407) 632-1776

Federal Agencies

Advisory Council on Historic Preservation
Chief, Eastern Division of Project Review
The Old Post Office Building
1100 Pennsylvania Avenue, N.W. #809
Washington DC 20004
(202) 606-8503

Bureau of Indian Affairs
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U.S. Department of the Interior
Room 4516 MIB
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U.S. Forest Service
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State of Florida

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District Secretary
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Deland FL 32720
(904) 943-5474

Florida State Clearing House
Florida Department of Community Affairs
2555 Shumard Oak Blvd.
Tallahassee FL 32399-2100
(850) 414-5497

State Historic Preservation Office
Division of Historic Resources
500 South Bronough St.
Tallahassee, Florida 32399-0250
(850) 488-1480

**Regional Planning Council
for Volusia County**

Intergovernmental Review Coordinator
East Central Florida Regional Planning Council
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Winter Park FL 32789
(407) 623-1075 ex. 351

City of Oak Hill

Mayor
Oak Hill City Hall
234 South U.S. Highway #1
Oak Hill, FL 32759
(904) 345-3522



**Appendixes, Bibliography,
and Preparers**

PUBLIC LAW 100-564—OCT. 31, 1988

102 STAT. 2831

Public Law 100-564
100th Congress

An Act

To authorize and direct the acquisition of lands for Canaveral National Seashore, and for other purposes.

Oct. 31, 1988
[H.R. 3559]*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

Florida.

SECTION 1. ADDITIONS TO CANAVERAL NATIONAL SEASHORE.

16 USC 459j-1
note.

(a) SEMINOLE REST AND STUCKEY'S.—

(1) The Secretary of the Interior (hereinafter in this Act referred to as the "Secretary") is authorized and directed to acquire approximately 25 acres of land in the State of Florida known as Seminole Rest and approximately 10 acres of land known as Stuckey's. Both areas are depicted on a map entitled "Additions to Canaveral National Seashore" numbered NS-CAN-40000-C and dated May 1988.

(2) The Secretary shall manage the lands known as Seminole Rest for the primary purpose of protecting and interpreting their archaeological and historic resources and the lands known as Stuckey's for the primary purpose of establishing an administrative headquarters and visitor center within Volusia County, Florida.

Historic
preservation.

(b) ACQUISITION AUTHORITY.—Land acquired under this section may only be acquired in accordance with section 2 of the Act entitled "An Act to establish the Canaveral National Seashore in the State of Florida, and for other purposes" (16 U.S.C. 459j-1).

SEC. 2. AUTHORIZATION OF APPROPRIATIONS RELATING TO DEVELOPMENT OF ESSENTIAL PUBLIC FACILITIES.

Section 9(b) of the Act entitled "An Act to establish the Canaveral National Seashore in the State of Florida, and for other purposes" (16 U.S.C. 459j-8) is amended by striking out "not more than \$500,000." and inserting in lieu thereof "\$2.6 million in addition to the sums previously appropriated."

SEC. 3. MISCELLANEOUS PROVISIONS.

16 USC 459j-1
note.

(a) MAP.—The Secretary shall file the map referred to in this Act with the Committee on Interior and Insular Affairs, House of Representatives, and the Committee on Energy and Natural Resources, Senate, and the map shall have the same force and effect as if included in this Act, except that correction of clerical and typographical errors in such map may be made. The map shall be on file and available for public inspection in the office of the Director of the National Park Service, Department of the Interior.

Public
information.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be necessary to carry out the acquisitions authorized by this Act.

Approved October 31, 1988.

LEGISLATIVE HISTORY—H.R. 3559:

HOUSE REPORTS: No. 100-695 (Comm. on Interior and Insular Affairs).
SENATE REPORTS: No. 100-594 (Comm. on Energy and Natural Resources).
CONGRESSIONAL RECORD, Vol. 134 (1988):
June 20, considered and passed House.
Oct. 11, considered and passed Senate.

APPENDIX B: RESEARCH NEEDS AND ACTION PLANS

Following is a list of plans and studies that would be necessary to fully implement this development concept plan.

ARCHEOLOGICAL STUDIES

On those areas of Seminole Rest that have not been surveyed (especially areas of proposed development), surveys would be completed prior to any ground-disturbing activities to ensure that no resources are lost or damaged. In new areas to be acquired, an archeological overview and assessment would be done to describe and assess potential archeological resources.

CULTURAL LANDSCAPE REPORT

This report would be a comprehensive and detailed history that would document the changing appearance of landscape elements over time, discuss periods of significance in depth, and provide specific recommendations regarding landscape restoration and maintenance.

HISTORIC RESOURCE STUDY

The study would identify and evaluate all historic resources on the newly acquired property prior to removal of structures and construction of new facilities. It would also ensure that all historic resources on the Seminole Rest site have been adequately studied and evaluated.

HISTORIC STRUCTURES REPORT

This report would discuss the architectural history of the Instone house and the caretaker's house and would provide technical recommendations for the restoration and rehabilitation of the two houses.

INTERPRETIVE PLAN

This plan would provide a more detailed description of proposed interpretation and visitor use than is contained in this development concept plan. It would describe all proposed interpretive media in the visitor contact station and throughout the site in detail.

LAND PROTECTION PLAN

This plan would address the details of acquisition and protection of the land proposed to be included in an expanded boundary of the Seminole Rest site.

MUSEUM OBJECTS FLOOD EVACUATION PLAN

Since Seminole Rest is in the 100-year floodplain, this plan would be written to describe what actions would be taken to move significant cultural objects and valuable museum exhibits out of the floodplain, or otherwise protect them from an impending flood.

RESOURCES MANAGEMENT PLAN

The park's *Resources Management Plan* would be updated to reflect the recommendations in the Seminole Rest *Development Concept Plan* regarding cultural and natural resources.

WAYSIDE EXHIBIT PLAN

This plan would describe the location, design, and content of information and orientation panels, interpretive signs, and interpretive wayside exhibits.

APPENDIX C: COMPLIANCE CORRESPONDENCE



United States Department of the Interior

NATIONAL PARK SERVICE
Canaveral National Seashore
308 Julia Street
Titusville, Florida 32796

IN REPLY REFER TO:

A40 (CANA)

January 29, 1997

Mr. George W. Percy
State Historic Preservation Officer and Director,
Division of Historical Resources
Department of State R.A. Gray Building
500 S. Bronough Street
Tallahassee, FL 32399-0250

Dear Mr. Percy:

The National Park Service proposes to develop and subsequently implement a Development Concept Plan and Environmental Assessment for the Seminole Rest at Canaveral National Seashore. The planning team from the Denver Service Center will be in the park the week of February 10, 1997, for introduction to the park's resources and data collection.

In addition, a meeting has been arranged to introduce the project and solicit comments from the public. We would be pleased if you and/or any other members of your office could attend. The meeting has been arranged to occur from 7:00 p.m. to 9:00 p.m., on February 12, 1997, at the Oak Hill City Hall located on U.S. 1 in Oak Hill.

Should you have questions regarding this project or meeting, please contact me or John Stiner at 407-267-1110.

Sincerely,

WJ Wendell Simpson
Superintendent



United States Department of the Interior

NATIONAL PARK SERVICE
Canaveral National Seashore
308 Julia Street
Titusville, Florida 32796

IN REPLY REFER TO:

A40 (CANA)

April 22, 1997

Mr. George W. Percy
State Historic Preservation Officer and Director
Division of Historical Resources
Department of State R. A. Gray Building
500 S. Bronough Street
Tallahassee, FL 32399-0250

Dear Mr. Percy:

In January, we sent your office a notice that the National Park Service would be developing a Development Concept Plan for the Seminole Rest Site at Oak Hill (8VO124). In response to information gathered at scoping meetings during the week of February 10th, a range of alternatives has been prepared for the site. These alternatives address opportunities for interpretation and development of Seminole Rest that will facilitate visitor access and understanding, while protecting its significant resources.

The Superintendent of Canaveral National Seashore is inviting the public to view and discuss the alternatives at two open houses. These are scheduled from 1:00 pm to 3:00 pm and 7:00 pm to 9:00 pm on Thursday, May 1, 1997, at Oak Hill City Hall, on U.S. 1 in Oak Hill. The public is also invited to visit Seminole Rest, which is located just north of the Le Fils Fish Camp in Oak Hill, on Friday morning, May 2, from 9:00 am to 11:00 am, to see the site first hand.

We would be pleased if you and/or any other members of your office could attend. Should you have questions regarding this project or the meeting, please contact me or John Stiner at 407-267-1110.

Sincerely,

Wendell Simpson
Superintendent



United States Department of the Interior

FISH AND WILDLIFE SERVICE
 6620 Southpoint Drive South
 Suite 310
 Jacksonville, Florida 32216-0912

JUN 24 1997

IN REPLY REFER TO:
 FWS/R4/ES/JAFL

Mr. Greg Jarvis
 National Park Service
 Denver Service Center
 12795 West Alameda Parkway
 Denver, Colorado 25287

RE: FWS Log Number 97-579F

Dear Mr. Jarvis:

Per your request, we have provided below the federally listed endangered and threatened species known to occur in Brevard County, Florida, the site of your proposed action. Depending on habitats found in the project area, some of these species may occur on-site. The Service does not have site-specific records for these species. It is the responsibility of the applicant to conduct any necessary endangered and threatened species surveys. If you have any further questions, please reference the FWS log number above.

Mammals

Bear, Florida Black	<i>Ursus americanus floridanus</i>	C
Manatee, West Indian	<i>Trichechus manatus latirostris</i>	E/CH
Mouse, Southeastern Beach	<i>Peromyscus polionotus niveiventris</i>	T

Birds

Eagle, Bald	<i>Haliaeetus leucocephalus</i>	T
Plover, Piping	<i>Charadrius melodus</i>	T
Scrub-jay, Florida	<i>Aphelocoma coerulescens</i>	T
Stork, Wood	<i>Mycteria americana</i>	E
Woodpecker, Red-cockaded	<i>Picoides borealis</i>	E

Reptiles

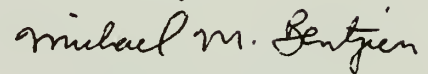
Snake, Atlantic Salt Marsh	<i>Nerodia clarkii</i> (= <i>fasciata</i>) <i>taeniata</i>	T
Snake, Eastern Indigo	<i>Drymarchon corais couperi</i>	T
Turtle, Green Sea	<i>Chelonia mydas</i>	E
Turtle, Hawksbill Sea	<i>Eretmochelys imbricata</i>	E
Turtle, Leatherback Sea	<i>Dermochelys coriacea</i>	E
Turtle, Loggerhead Sea	<i>Caretta caretta</i>	T

Plants

Carter's Mustard	<i>Warea carteri</i>	E
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E = Endangered, T = Threatened, C = Candidate, CH = Critical Habitat

Sincerely,



Michael M. Bentzien

Assistant Field Supervisor

APPENDIX D: DRAFT STATEMENT OF FINDINGS, FLOODPLAINS

INTRODUCTION

The purpose of the *Seminole Rest Development Concept Plan* is to identify alternatives for interpretation, visitor use, and development at the Seminole Rest area of Canaveral National Seashore. This area was added to the national seashore in 1988.

ACTIONS IMPACTING THE FLOODPLAIN

Under alternative 4, the proposed action, the area of development would be flooded to a depth of 7–8 feet in a 100-year flood, as indicated on National Flood Insurance Program maps prepared by the Federal Emergency Management Agency. The new facilities include a visitor contact station, an outdoor interpretive demonstration area, an interpretive trail, a vault toilet, parking areas, boat docks, and new utilities for two historic houses. The houses would be adaptively used by visitors and park staff and are elevated enough to be just at the edge of the 100-year floodplain.

JUSTIFICATION FOR USE OF THE FLOODPLAIN

Because the facilities are needed and all of the developable land at Seminole Rest is in the 100-year floodplain, the National Park Service has determined that the only practicable alternative for development is to use the area in the 100-year floodplain.

SITE-SPECIFIC FLOOD RISK

The proposed development in the floodplain would be inundated by 7–8 feet of water during a 100-year flood. Warning of a storm surge would be given by the National Weather Service at least 24 hours prior to flooding, allowing for evacuation of visitors, staff, and valuable objects. Evacuation would be via local roads.

MITIGATIVE ACTIONS WITHIN THE FLOODPLAIN

To mitigate hazards to human safety, plans would be made for evacuation of the Seminole Rest area in times of threatening rising water. In all likelihood, such flooding would be predictable as an offshore storm approaches.

Mitigation of hazards to structures would include elevating the building pad for the visitor contact station above the 100-year flood level and providing a structure capable of withstanding hurricane-force winds. The design of the parking and turnaround areas would allow for low resistance to floodwater, thereby minimizing impacts to these areas.

Because significant cultural objects and valuable museum exhibits would be on display in the visitor use areas, a museum objects flood evacuation plan would be prepared and enacted whenever necessary to protect such objects from flood damage. Significant or original documents would be stored outside the 100-year floodplain.

CONCLUSION

Development at Seminole Rest would have to be within the 100-year floodplain. Plans would be in place for evacuation of the area in case of rising floodwaters. Mitigative actions to minimize flood damage would be provided during design and construction of facilities. There is no reasonable alternative for development of the facilities elsewhere. The project would conform to NPS *Floodplain Management Guidelines* and to local, state, and federal regulations concerning floodplain use. All federal and state permits would be obtained prior to construction. The project complies with Executive Order 11988, *Floodplain Management*.

Recommended:

Superintendent
Canaveral National Seashore

Date

Concurred:

Water Resources Division Date
Washington Office

Approved:

Regional Director Date
Southeast Regional Office

Concurred:

Safety Officer Date
Southeast Regional Office

BIBLIOGRAPHY

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John Hoesterey, project manager
Greg Jarvis, natural resource specialist
Manuel Sais, technical expert, estimating

NPS Harpers Ferry Center

Paul Lee, interpretive planner

NPS Southeast Archeological Center

David Brewer, archeologist

NPS Southeast Regional Office

Rich Sussman, park planner



DATE DUE

DEMCO, INC. 38-2931



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

