

2: The Alternatives and Their Common Elements

OVERVIEW This chapter of the draft GMP/EIS outlines alternative approaches for managing Fire Island National Seashore (the Seashore). The alternatives are general in nature, not detailed, specific, or highly technical. As funds become available to implement actions consistent with the approved GMP (e.g., undertaking landscape treatments, constructing or rehabilitating facilities), appropriate site-specific planning and compliance will be completed including further risk assessments and scenario planning for climate change. It is important to note that all construction and staffing proposals under the various alternatives are subject to National Park Service (NPS) funding limitations and priorities and are expected to be phased over the life of the GMP.

The Seashore includes two separate and distinct units – Fire Island and the William Floyd Estate (the Estate). The Seashore’s headquarters and primary maintenance facility are located in the village of Patchogue, as is the Ferry Transportation Center that serves Watch Hill on Fire Island. The units are separated by the Great South Bay and are vastly different in composition and overall character. To properly address the future needs of these units, two separate sets of management alternatives have been developed. While some common elements apply to both units, the management alternatives are organized somewhat differently and are presented in separate sections.

The Otis Pike Fire Island High Dunes Wilderness Area (referred to as the Fire Island Wilderness) is also addressed in the draft GMP/EIS. The general management direction proposed for the Fire Island Wilderness is described in this chapter. Consistent with direction that the planning team received from the NPS Wilderness Stewardship Office in Washington, DC, a draft Wilderness Stewardship Plan appears in the appendix of the draft GMP/EIS. A final Wilderness Stewardship Plan will be approved and released concurrent with the final GMP/EIS.

DEVELOPING NEW DIRECTIONS: DECISION POINTS

The planning team developed two action alternatives in response to public input and an analysis of the Seashore’s legislation, purpose and significance, fundamental resources and values, and goals. After examining this information, the team identified five core questions, or “decision points,” that were central to the development of the management alternatives.

1. What are the ways that the NPS can ensure resource protection while facilitating a safe, rewarding, and relevant experience for visitors and residents?
2. How do we develop an integrated management model that capitalizes on partnerships to encourage the long-term protection of Fire Island resources?
3. What are the best and most appropriate methods for moving people, goods, and services to, from, and along Fire Island?
4. How do Seashore staff and their partners operate and maintain the Seashore in a flexible, proactive, sustainable, and cost-effective way over the long term?
5. How can the NPS ensure resource protection and a high-quality visitor experience at the William Floyd Estate?

MANAGEMENT PHILOSOPHY

A collaborative approach to stewardship of Fire Island that brings together the NPS, the Fire Island communities, government agencies, and all Seashore partners is essential for the following reasons:

- Fire Island is a dynamic place where natural and human forces are interwoven to create a diverse landscape.
- As stated by Congress in the Seashore’s enabling legislation, the primary purpose of the National Seashore is to protect and preserve natural resources for future generations.
- Natural change is an integral part of the functioning of a barrier island. Within this context, the human needs of today and tomorrow must be mutually understood and addressed in a manner that supports long-term resource protection.
- At the Seashore, the NPS fosters a relationship between people and the natural and cultural environment that is healthy and sustainable.
- A mosaic of jurisdictions involving private property owners, non-profit institutions, the villages of Saltaire, Ocean Beach, and Bellport, the towns of Islip and Brookhaven, Suffolk County, the State of New York, and the National Park Service, all have real property interests on Fire Island, each with its own, sometimes conflicting, management mandates and guidelines.
- Activities and practices within this mosaic of jurisdictions can affect the Seashore’s resources, just as NPS management activities can affect these other interests on Fire Island.

MANAGEMENT GOALS

Management goals articulate the ideal conditions that park managers strive to attain in perpetuity. Following are specific goals for Fire Island National Seashore (not listed in priority order):

Resource Management

1. Partner with the public, Fire Island communities, state and local governments, and others in the stewardship and preservation of Fire Island’s natural and cultural resources and its distinctive character.
2. Provide for the stewardship of the coastal environment and its cultural and natural systems, while recognizing that the Seashore is part of a larger ecological, social, economic, and cultural context.
3. Management decisions about natural and cultural resources are based on scholarly and scientific information, fundamental resources and values, consultation with appropriate agencies and communities, and consideration of the broader context of the resources and Fire Island.

Land Use and Development

1. Partner with others to ensure that land-use and development practices undertaken on Fire Island promote ecological health and environmental quality in this dynamic environment, and acknowledge and respect the community character and the continued presence of Fire Island’s communities.

Seashore Experience

1. Through outreach and education, the Seashore will foster public understanding and appreciation of the purpose and significance of the Seashore and its natural and cultural resources, as well as the public’s vital stewardship role in protecting Fire Island.
2. Provide a wide variety of quality recreational and interpretive experiences for a broad range of audiences, emphasizing human interactions with the environment and the historical and cultural values of the Seashore.

Transportation and Access

1. Preserve the “roadless” character of Fire Island and ensure that water-based transportation is the primary form of access to Fire Island whenever and wherever feasible.
2. Ensure that the transportation routes to and from NPS facilities on Fire Island and Long Island are well known, well-marked, and easy and safe to navigate.



3. Enable broad access to NPS facilities by all members of the public regardless of income or physical ability to the greatest extent practicable.

Park Operations and Maintenance/Facilities

1. Provide a safe, healthy, and accessible environment for visitors, residents, and NPS employees as feasible and appropriate.
2. Develop facilities that are environmentally sensitive and sustainable and can be adapted to the changing environment.
3. Assume a leadership role in implementing sustainable design and management practices.

RESPONDING TO CLIMATE CHANGE

Over the last decade, the NPS has consulted with the scientific community, federal agencies, non-profit organizations, and other informed parties to gather data and explore strategies to prepare the national park system for potential future impacts of a changing climate. Sea-level rise, extreme precipitation events, heat waves, and increases in severe winds or other phenomena related to climate change will alter how natural and cultural resources are managed, and the types of activities, facilities and infrastructure the NPS can support.

Climate change is expected to result in many changes to the Atlantic coast, including the northeastern coast of the United States. Both historical trends and future projections suggest increases in temperature, precipitation levels, accelerated rates of sea-level rise and intensity of weather events, such as storms, should be expected. In addition, climate change is expected to affect Fire Island's weather, resources (e.g., shorelines, vegetation, wildlife, historic sites, and archeological resources), and visitor use patterns. These changes will have direct implications on resource management, recreational facilities, park operations, and visitor use and experience. Some of these impacts are already occurring or are expected at Fire Island in the time frame of this management plan.

There are a number of executive orders, policies and plans that guide the national park system and Fire Island's response to climate change.

- Executive Order 11988 (1977) requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development.
- Executive Order 13653 (2013) directs federal agencies to prepare for the impacts of climate change by undertaking actions to enhance climate preparedness and resilience.
- Executive Order 13514 (2009) establishes an integrated strategy towards sustainability in the Federal Government and makes reduction of greenhouse gas emissions a priority for Federal agencies.

- Secretarial Order 3289, Amendment 1 (2010) directs each bureau and office of the Department to consider and analyze the potential climate change impacts when undertaking long-range planning exercises.
- Department of the Interior Climate Change Adaptation Policy (523 DM1) outlines a set of principles and provides guidance for integrating climate change adaptation strategies into policies, planning, programs and operations.
- NPS *Management Policies 2006* §9.1.1 guides sustainable facility planning and development.
- NPS Climate Change Response Strategy (NPS, 2010) outlines a four-prong approach to addressing climate change: science, adaptation, mitigation, and communication.
- NPS Climate Change Action Plan 2012-2014 (NPS, 2012) details actions and recommendations to implement the climate change response strategy.
- NPS Green Parks Plan (NPS, 2012) defines a collective vision and a long-term strategic plan for sustainable management of NPS operations including reducing greenhouse gas emissions and adapting facilities at risk from climate change.

Climate Change Response Strategy for Fire Island

Fire Island National Seashore encompasses a coastal landscape that has been shaped and re-shaped by wind and waves. The complex interaction of sediment, waves, and currents results in a dynamic landscape, with formations like beaches, dunes, and spits that shift overtime. The history of human activity on Fire Island – including NPS management over the last 50 years – has been reflective of this dynamic character and has taken the form of adaptation to or manipulation of Fire Island in some shape or form in response to changing conditions. We are now confronted with the observed trends and projected impacts of rising sea levels and climate change requiring a more formal and clearly articulated strategy for addressing changing conditions on Fire Island.

The draft GMP/EIS describes the approach that the Seashore would take to mitigate and adapt to the effects of climate change and over the next 20 years. Many opportunities exist for the NPS to incorporate climate change adaptation into long-term planning across the Seashore and at the William Floyd Estate.

Specific options to protect Fire Island’s resources include integrating long-term planning into Seashore operations, monitoring observed and projected climate trends, conducting climate-related vulnerability assessments for fundamental resources and values, monitoring climate sensitive species, and implementing a range of adaptive management actions.

► STRATEGIES FOR SEASHORE FACILITIES AND OPERATIONS

The Seashore’s visitor use areas are in coastal environments and are vulnerable to future sea-level rise and storm surges. Climate change will result in significant effects on conditions at the Seashore, including impacts from sea-level rise and potentially destructive storm events. More detailed examination of these effects will be critical as actions in the approved GMP are analyzed and implemented at site-specific levels. Factoring in sea-level rise, these analyses will influence the type, design, location, and ultimate feasibility of park facilities and developments. When developments do occur, site-specific design will provide an outstanding opportunity for the Seashore to teach through example – to demonstrate forward thinking, innovative designs, flexibility, and readiness for change in response to sea-level rise.

Coastal resiliency will be incorporated into any new developed areas and adaptively reused structures and facilities. While the action alternatives propose a range of facility additions and renovations to expand recreational opportunities, proposed facility investments in the approved GMP will be evaluated using the following climate change strategies prior to project approvals to ensure the long-term sustainability of these investments. Future plans and studies would provide technical data and resource information to support the following strategies:

- Find creative solutions to limit impacts from future flooding, storm surge and other impacts on existing visitor and operations facilities. When these facilities are no longer viable to retain and use, transition to moveable and portable facilities or other means to continue to offer visitor services, as feasible.
- Remove existing visitor facilities and discontinue recreational uses where continued use is unsafe, infeasible, or undesirable due to changing environmental conditions.

- Avoid or minimize additions of new infrastructure, construction of high value assets or major investments in facility renovations within coastal flood or storm surge zones.
- Substantial facility investments within the FEMA 100-year floodplain, including an adjustment for projected sea-level rise by year 2100, should be avoided to the extent possible. Essential improvements within these flood-prone areas, such as rehabilitation of historic structures or provision of necessary facilities for beach access and recreation, will be carefully evaluated to determine whether facilities should be elevated, made portable, hardened or otherwise made resilient to potential flooding. Any decision to proceed with substantial improvements within the flood zone as adjusted for sea level rise will be made in compliance with Executive Order 11988.
- Transition wastewater and sewage treatment systems to more sustainable systems and facilities.
- Keep utilities and critical systems and infrastructure out of flood zones.
- Use up-to-date policy guidance to respond to changing conditions.
- Integrate climate change mitigation into all NPS business, operations, and management practices.
- Pursue Leadership in Energy and Environmental Design (LEED) certification for rehabilitated buildings as educational topic and as sustainable practice.

► **STRATEGIES FOR RESPONDING TO CHANGING CONDITIONS**

Fire Island National Seashore would use and promote innovation, best practices, and partnerships to respond to the challenges of climate change and its effects on park resources. By using and developing tools and monitoring methods, including seeking outside assistance, Seashore staff can better respond to climate change. Seashore staff would interpret climate change science and develop management strategies, which may include predicting and projecting expected changes. The Seashore would coordinate with other agencies in developing tools and strategies to help identify and manage climate change impacts. By adopting the best information on climate change as it becomes available, the Seashore would be positioned to respond quickly and appropriately to the local effects of climate change.

Consistent with DOI policies, Fire Island National Seashore would use an adaptive management framework to respond to the effects of climate change. Temperature and precipitation changes may require that the Seashore manages for native biodiversity and ecosystem function instead of managing for natural communities. In most cases, the Seashore would allow natural processes to continue unimpeded, except when public health and safety or the Seashore's fundamental resources and values are threatened. Scenario planning would likely play a pivotal role in developing the Seashore's responses to climate change.

The Seashore would coordinate with Fire Island communities and other stakeholders while implementing adaptation strategies that support the protection, preservation, and restoration of coastal wetlands and coastal processes, and can serve as vital tools in buffering coastal communities from the effects of climate change and sea-level rise. Some of the strategies the park would pursue, as feasible, include:

National parks can demonstrate how to minimize their contribution to global warming through practices such as energy efficiency and use of renewable energy. The Seashore will reduce the CO₂ emissions of NPS and concessioner operations, increase the use of renewable energy and other sustainable practices, and encourage the use of alternative transportation. Specific actions that the park would pursue, as feasible:

- Test, use, and promote carbon-neutral energy, innovations, and infrastructure for Seashore and partner operations.
- Consolidate Seashore operations to reduce energy consumption.
- Construct and operate visitor facilities with the highest sustainability standards possible.
- Use biodegradable/recycled resources and zero waste options.
- Upgrade/retrofit vehicle and vessel fleets and machinery for low emissions.
- Reduce vehicle miles traveled by Seashore staff and visitors who work in and use the park.

- Inventory, monitor and assess vulnerability of key attributes of the natural systems, cultural resources, and visitor experiences likely to be affected by climate change.

- Build resiliency of natural coastal resources to sea-level rise and other effects of climate change.
- Restore key ecosystem features and processes, and protect key cultural resources to increase their resiliency to climate change. By reducing other types of impacts on resources, the overall condition of the resources could more easily recover from or resist the impacts of climate change.
- Reduce current and future stressors to the resource and the environment; this would improve the condition of the resource and build resiliency in the ecosystem that would help to minimize future adverse effects of climate change.
- Reduce habitat fragmentation and increase habitat connectivity and movement corridors.
- Give highest priority to preserving cultural resources and artifacts in situ, coupled with sustainable efforts (intervention techniques) to mitigate and reduce stressors that might adversely affect the resource. As warranted to protect from loss due to sea-level rise and storm events, implement strategies to relocate or document cultural assets, or remove artifacts to safe locations.

► ENGAGE THE SCIENTIFIC COMMUNITY AND VISITORS IN CLIMATE CHANGE

Fire Island National Seashore would continue to collaborate with a variety of academic and scientific institutions, non-profit organizations and agencies on research and projects to find creative solutions for the long-term preservation of natural and cultural resources.

Education and interpretive programs help visitors understand climate change impacts at Fire Island and beyond, and how they can respond to climate change. NPS and its partners would engage visitors on the topic of climate change, provide the latest research and monitoring data and trends, inform the public about what response is being taken at the Seashore, and inspire visitors to aid in that response.

MANAGEMENT AREAS

(Management Zoning)

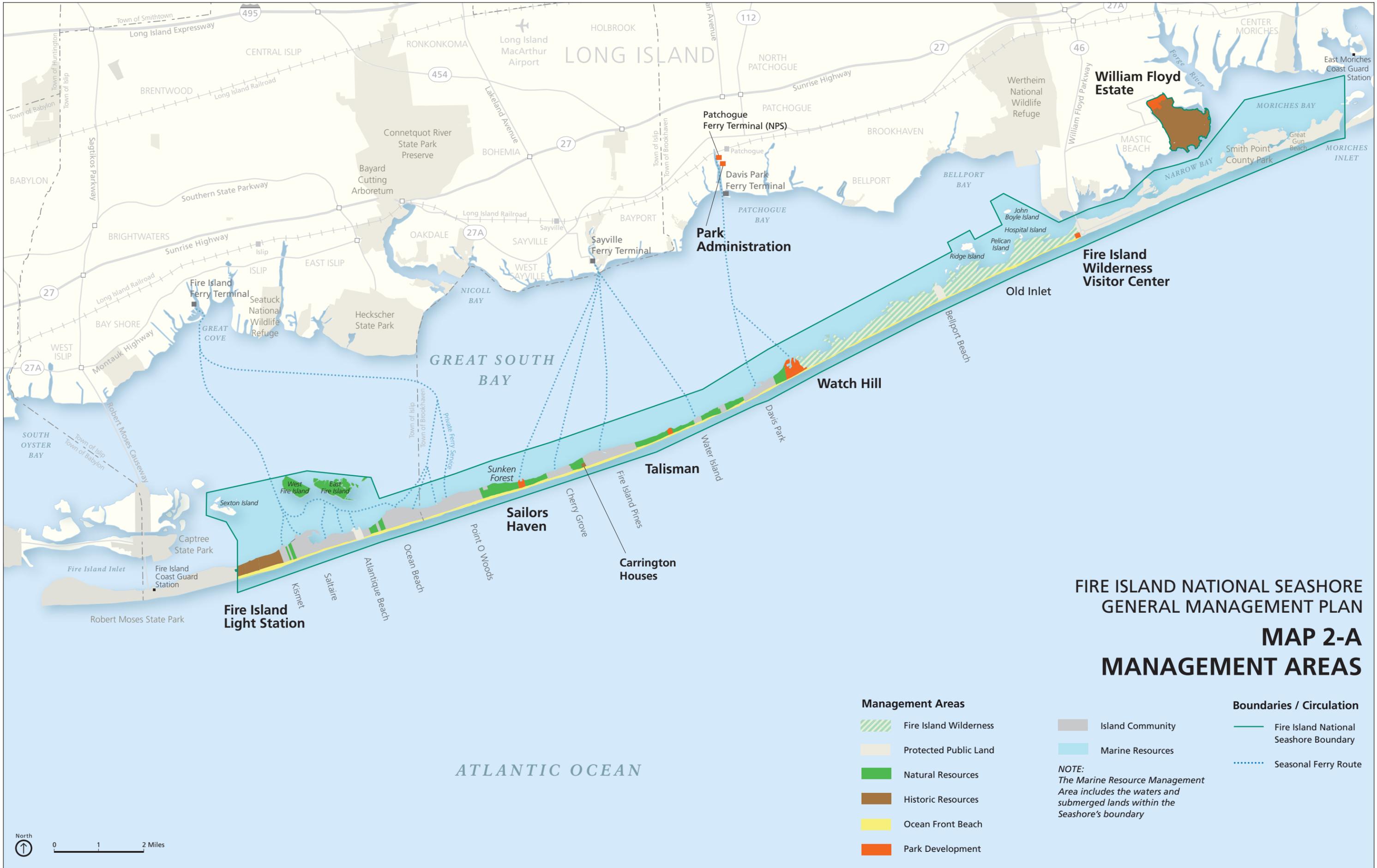
NPS policies for park planning require the identification of management zones that guide park managers on how each part of a park should be managed to achieve desired future conditions. Park management zoning

directs the location and character of development and other management activities within the park. It is used in combination with other policies governing proposed changes to parklands. To avoid confusion with land-use regulatory zoning that is also discussed in this plan, park management zones will be referred to as “Management Areas.”

In this draft GMP/EIS, the management areas are the same for all alternatives. As the following map indicates, the planning team identified eight management areas within the Seashore boundary: Natural Resource, Historic Resource, Ocean Front Beach, Marine Resource, Park Development, Island Community, Wilderness, and Non-Federal Public Lands. The management areas possess different characteristics, based on the resources they encompass and may need to be adjusted if new information changes the current understanding of park or park-related resources and facilities. The management areas require different management approaches for resource management and visitor experience. It is important to note that not all management areas identified within the park boundary are under the ownership or control of the NPS.

The Seashore’s enabling legislation directs the NPS to develop zoning standards that guide land use and development within the residential communities on Fire Island. These land use/ zoning regulations are called the Secretary of the Interior’s Zoning Standards for Fire Island National Seashore (Secretary’s zoning standards [36 CFR Part 28]). The Secretary’s zoning standards identify three zoning districts that apply only to Fire Island:

- *Community Development District* encompassing the 17 developed communities
- *Seashore District* encompassing all portions of the lands and waters within the boundary of the Seashore on Fire Island which are not included in the Community Development District
- *Dune District*, an overlay district over the Community Development and Seashore districts, encompasses the area extending from the mean high water line to 40 feet landward of the primary natural high dune crest as it was mapped in 1976 and adopted by Congress in 1978. Although outdated, it is still used by the park to evaluate development within the district.



**FIRE ISLAND NATIONAL SEASHORE
GENERAL MANAGEMENT PLAN
MAP 2-A
MANAGEMENT AREAS**





FIRE ISLAND NATIONAL SEASHORE
GENERAL MANAGEMENT PLAN

**MAP 2-B WILLIAM FLOYD ESTATE
MANAGEMENT AREAS**

- Fire Island National Seashore
- Public Access Road (Paved)
- Point of Entry
- Historic Resources
- Park Development
- Parking Area
- Building

The Community Development District applies only to the Island Community Management Area, while the Seashore District applies to all of the remaining management areas. The Dune District applies to all of the management areas. The Fire Island National Seashore Federal Zoning Standards (CFR 36, Part 28) appear in Appendix C.

Management area descriptions apply to Fire Island, the Patchogue facilities, and the William Floyd Estate.

The resource conditions and appropriate activities for each of the management areas are described below.

► NATURAL RESOURCE AREAS

Description

This management area embraces lands within the Seashore that include off-shore islands in the Great South Bay as well as a number of bay-to-ocean tracts that are dispersed across Fire Island. These lands are undeveloped natural resource areas comprising the open spaces located between communities and/or Seashore facilities. They include freshwater wetlands, salt marsh, dune, forests, shrub, and grassland areas. The Sunken Forest is a notable example of a natural resource. These bay-to-ocean tracts range in size from the 8 acres located between Kismet and Seabay Beach (eastern half of Kismet) to the 167 acre tract encompassing Sailors Haven and the Sunken Forest. All of these areas fall within the Seashore District as described in the Secretary's zoning standards and may contain small pockets of private development including but not limited to the enclaves of Oakleyville, Blue Point Beach, and other private properties within the Seashore District. These developed areas are not considered part of the Community Development District defined by the Secretary's zoning standards.

Desired Resource Condition

In this area, natural resource values would be preserved or restored to obtain a higher degree of ecological integrity and resilience to changing climate conditions, and their associated natural processes would continue unimpeded to the greatest extent possible. In this area the bayshore would be naturalized and the impacts of adjoining bayside structures would be mitigated to the greatest degree possible. Improved properties within the management area (e.g., Oakleyville, Blue Point Beach) would be acquired on a willing-seller basis over time and would be removed, allowing these sites to return to their natural state.

Desired Visitor Experience

Visitor access to some of these areas would be managed through the use of trails and boardwalks to limit impacts to sensitive resources such as the Sunken Forest at Sailors Haven. In these locations, ranger-led programs, citizen-science programs, interpretive waysides, brochures, and other interpretive media would enable visitors to immerse themselves in these environments in a manner that enhances their understanding and appreciation of Fire Island's natural resources while ensuring the protection of those resources. Not all natural resource areas would be managed for visitor access; in some areas there would be no services or facilities.

Appropriate Kinds and Levels of Development

Development in this management area would be limited to trails and boardwalks that support public access and management activities, temporary structures that support resource management and research (e.g., bird blinds, monitoring equipment, etc.), and sensitively designed interpretive signage.

Appropriate Kinds and Level of Management Activity

This area would be managed for a high level of protection, monitoring, and scientific investigation.

Appropriate Kinds and Level of Visitor Use

Visitor access within this management area would be restricted primarily to trails and boardwalks except when participating in structured park programming (e.g., citizen science). Visitors to these areas would have the opportunity to participate in low-impact activities like walking, observing flora and fauna, participating in ranger or volunteer-led programming, and sketching or photography, etc. Some of these areas have neither visitor amenities nor ferry service. The likelihood that visitors to these areas would encounter NPS staff and other visitors is relatively low but would vary seasonally. During the summer the likelihood of encountering other visitors on these tracts would be somewhat higher than during other times of the year. Popular nature trails like those traversing the Sunken Forest or Watch Hill would experience significantly more traffic during the summer visitor season.

► HISTORIC RESOURCE AREAS

Description

This management area encompasses federal lands within the Seashore that contain historic resources that are on or eligible for listing on the National Register of Historic

Places and are managed for their cultural or historic significance. Historic resource areas encompass historic structures, cultural landscapes, archeological resources, ethnographic resources, and museum and archival collections on federal lands that are largely managed for their cultural values. These areas include the Fire Island Light Station, the Carrington Estate, as well as a significant portion of the William Floyd Estate that has been defined as the historic core and Lower Acreage. All of these properties include substantial landscape features possessing both cultural and natural values.

Desired Resource Condition

The cultural resource values associated with these properties would be completely documented and, wherever possible and/or feasible, preserved for the understanding and appreciation of future generations.

Desired Visitor Experience

The Fire Island Light Station and the William Floyd Estate offer regular visitor programming during the course of the year. Visitors to those facilities would have the opportunity to view interpretive exhibits, tour the resource, and participate in a slate of regularly scheduled programs and special events. Visitors would be engaged by well-informed and enthusiastic interpretive rangers and volunteers. Group programs and tours would continue to be popular. The Carrington Estate would not be available for general public access; it would be used largely for park administrative purposes. If the property becomes home to an artist-in-residence program, visitors would be invited to participate in occasional open studio programs.

Appropriate Kinds and Levels of Development

Facilities may include: orientation space, sales space, indoor and outdoor exhibits, park and visitor support facilities, and amenities such as trails, boardwalks, and benches.

Appropriate Kinds and Level of Management Activity

The Fire Island Light Station and the William Floyd Estate would be staffed facilities managed for the preservation and interpretation of their cultural and natural resource values. Some administrative functions (e.g., interpretive staff offices, park housing) could occur within this management area.

Appropriate Kinds and Level of Visitor Use

Uses that are compatible with specific cultural resources, including ranger or volunteer-led interpretive tours, special events, self-guided walking tours, and

interactive interpretive media exploration, would all be appropriate within this management area. Group tours of the Lighthouse and the William Floyd home (Old Mast House) would continue to be limited in numbers to address visitor safety and resource protection considerations. Visitors could expect a high likelihood of encountering other visitors and NPS staff at the core of each of these properties. Visitors who venture out on their own to visit other parts of the property (e.g., Lower Acreage at the William Floyd Estate) would likely have fewer encounters with other visitors.

► OCEAN FRONT BEACH AREA

Description

The Ocean Front Beach Area includes the entire length of the beach from the eastern boundary of Robert Moses State Park to Moriches Inlet. Its northern boundary is roughly the seaward toe of the primary dune and extends south to the ocean water's edge. The 26-mile stretch of ocean beach encompassed by the Seashore is a dynamic resource that changes with each tide and can be significantly narrowed or widened based on prevailing conditions during any given year, season, tide, and/or storm. On the beach are busy lifeguard-protected areas as well as long stretches of unprotected beach. The Seashore manages three lifeguard-protected beaches on Fire Island.

The Fire Island communities, including the villages of Ocean Beach and Saltaire, manage recreational use of the beaches in front of their respective communities; the towns of Islip and Brookhaven as well as the village of Bellport also manage recreational activity on portions of the beach. The formally designated recreational beaches along Fire Island are supported by facilities in the adjoining Park Developed Area or Island Community Area. The beach also provides habitat for critical Threatened and Endangered Species (T & E species, e.g., Piping Plover). Beach nourishment has been conducted on community beaches over the years.

Desired Resource Condition

To the greatest degree possible, the natural beach is protected and natural beach processes are allowed to occur.

Desired Visitor Experience

Visitors to the Ocean Front Beach Area can enjoy a variety of opportunities to experience the management area's natural, recreational, and scenic values. Lifeguard-protected beach areas offer a monitored environment for water-based recreation. In other areas of the beach,

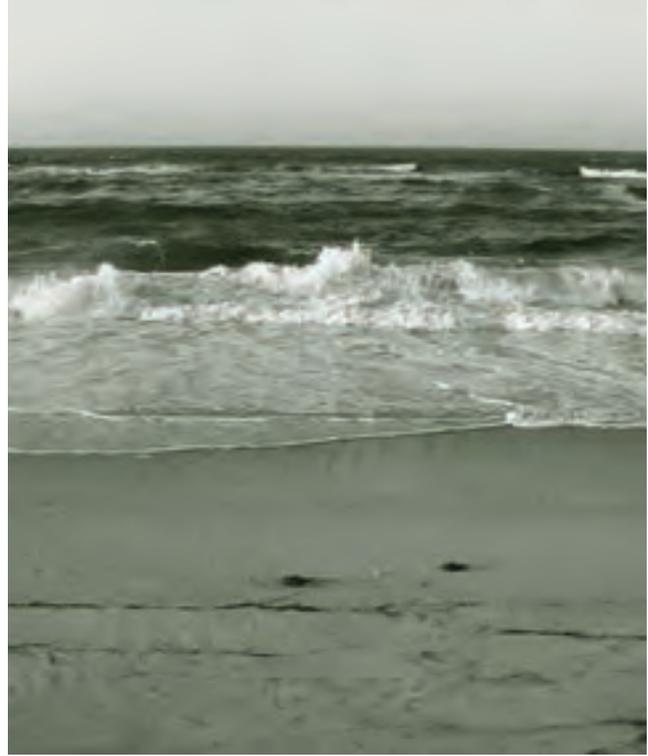
visitors may find more remote areas of beach where they can experience a much greater level of solitude. To the extent possible, all visitors would enjoy beaches that are accessible via designated dune crossings, are clean and free of debris, and offer good water quality. At appropriate times of the year, vehicular access would be permitted on the beach to support access to private properties and access for hunting, fishing, and other recreational activities.

Appropriate Kinds and Levels of Development

Development in this management area would be limited to the removable structures needed to support beach lifeguard operations. This includes items such as removable lifeguard stands, signs, and trash receptacles. Temporary exclosures to protect nesting birds and/or critical habitat would also be permitted. The construction of permanent structures or other development would be prohibited, with the exception of designated dune crossings.

Appropriate Kinds and Level of Management Activity

The intensity of management activity varies from location to location and from season to season. During the summer season, the most intensive management activity would be concentrated in the areas of the lifeguard-protected beaches, where managing for the safety of a large number of visitors would be paramount. These areas would be staffed with lifeguards and an increased visitor and resource protection staff presence. During other seasons, greater emphasis would be placed on managing driving, fishing, and hunting activities on the beach and also on monitoring and managing for nesting birds and protection of beach plants. There are times when driving on the beach must be temporarily prohibited to protect threatened and endangered shorebirds and their nests. Driving activity would continue to be undertaken consistent with regulations found in 36 CFR as amended by the NPS through the rule-making process. Beach management activities such as beach nourishment may be permitted on the beaches in accordance with the Secretary's zoning standards subject to all applicable compliance requirements and consistent with the approved GMP and/or the Fire Island Inlet to Montauk Point Reformulation Study (FIMP). Because of the potential impact of beach nourishment above and below mean high tide on adjoining federal tracts, the Seashore has a management interest in beach nourishment projects that occur in front of the communities.



Appropriate Kinds and Level of Visitor Use

Visitor activities would include day-use beach recreation, beach combing, hiking, surf fishing, picnicking, wildlife viewing, nature study, photography, participation in ranger-led activities, stewardship activities (e.g., shoreline cleanup, citizen science), and backcountry camping (by permit) on the beach in front of the Fire Island Wilderness. Limited vehicle use would be authorized during certain times of the year. At some locations in the Ocean Front Management Area, visitors are likely to experience crowding and a high level of social interaction, including encounters with other visitors and Seashore staff. At other locations, visitors are likely to experience a high degree of solitude, with only limited encounters with other visitors or Seashore staff.

► MARINE RESOURCE AREA

Description

This management area embraces all marine waters within the Seashore's boundaries. Approximately 14,600 acres or approximately 75 percent of the area within the Seashore's legislative boundary would be within the marine resource area. The Marine Resource Management Area includes both estuarine and ocean natural resources as well as submerged cultural resources. The Marine Resource Area extends approximately 4,000 feet into Great South Bay and

approximately 1,000 feet into the Atlantic Ocean from mean high water, and its resources must be recognized as integral parts of these larger water bodies.

The Marine Resource Management Area cannot be considered in isolation. Like the Ocean Front Management Area, there are multiple jurisdictions involved in the management of resources within this management area. NPS has jurisdiction over all activities on the surface and in the water column within the Seashore's boundaries, regardless of land ownership. On the Great South Bay, the towns of Islip and Brookhaven own the bottom lands within their boundaries, with the exception of specific individually owned lots and private marinas located at Cherry Grove, Ocean Bay Park, and Fire Island Pines, the Blue Point bottom lands (owned by The Nature Conservancy), and four NPS parcels. On the ocean side, New York State holds title to the Atlantic Ocean within the Seashore boundary but has granted full use and occupancy rights and ceded concurrent jurisdiction to the NPS. Navigation channels and aids to navigation (e.g., lights and buoys) are present on the bay side and are maintained by NPS and other agencies. The Great South Bay experiences heavy boating traffic during the summer season, with regularly scheduled ferry service traversing its waters as well as a large population of recreational boaters. Fishing and shellfishing are permitted and occur within Seashore waters.

Desired Resource Condition

The marine resources of the park are better understood and protected by the Seashore in collaboration with others to ensure the ecological integrity of the ocean and bay environments and to preserve Fire Island's cultural heritage.

The marine resource area is managed to ensure that water quality, submerged aquatic vegetation (SAV), marsh and shoreline habitats are protected and, where feasible, improved.

Desired Visitor Experience

Visitors to the Marine Resource Management Area would have the opportunity to engage in a number of water-based activities and visitor programming (e.g., off-shore fishing, motor boating, kayaking, canoeing, sailing, bay tours, clamming, swimming, surfing, etc.). Resource management activities that encourage citizen-science participation would also be encouraged.

Appropriate Kinds and Levels of Development

Development would be limited to navigation channels, navigational aids, and off-shore moorings. Equipment

necessary for scientific research may also be located within the marine resource area.

Appropriate Kinds and Level of Management Activity

Working collaboratively with others, extensive inventory and monitoring of marine resources would be undertaken, as would the continued management and maintenance of navigation channels and aids to navigation. Marine research being undertaken by NPS and academic institutions would also occur. Seashore staff, the Suffolk County Police Department Marine Bureau, and NYS DEC would continue to patrol park waters to ensure visitor safety and resource protection. Fishing and shellfishing activities would continue to be permitted and monitored to insure that fish populations remain self-sustaining and habitats are not impacted. Monitoring assessments and regulation would be in cooperation with state and town agencies.

Appropriate Kinds and Level of Visitor Use

Motorized and non-motorized boating, swimming, research and interpretation would be appropriate kinds of visitor use in this management area. Visitor use would be managed to improve the quality of park resources, limit crowding, and reduce conflicts between uses.

► PARK DEVELOPMENT AREAS

Description

This management area includes the areas on federal lands where development occurs that supports visitor use, operations, maintenance, and administration. The Park Development Areas include: the Seashore's administrative headquarters, main maintenance facility, and ferry terminal in Patchogue, the visitor- use, operations, and maintenance facilities at the William Floyd Estate in Mastic Beach on Long Island; and developed areas at Sailors Haven, Talisman, Watch Hill and the Wilderness Visitor Center on Fire Island. The Lighthouse Tract does include some park support functions but is characterized as a Historic Management Area. A wide variety of facilities operated and maintained by the Seashore and its concessioners include ferry docks and marinas, snack bars, restaurants, boardwalks and trails, campground, visitor contact facilities, bathhouses, restrooms, curatorial storage, administrative buildings, maintenance facilities, park housing, and parking areas. A detailed description of Seashore operations and visitor facilities appears in Chapter 3 – Affected Environment.

Desired Resource Condition

The NPS, working with Seashore concessioners and others would ensure that the scale of development is appropriate to meet park and visitor needs. Facilities within the Park Development Areas are well maintained and are as safe as possible for all users. Seashore development would be designed to allow for adaptation and achieve resilience within the dynamic coastal environment.

Desired Visitor Experience

Visitors would experience clean, safe, well-maintained facilities and would be offered opportunities to enjoy the many facets of each Development Area including their recreational, educational, natural, and cultural assets. A wide range of visitor programming and media would be available at varying locations within the Seashore. These may include but would not be limited to ranger or volunteer-led and self-guided programming, evening programs, and varying degrees of interpretive signage, exhibits, and other media.

Appropriate Kinds and Levels of Development

Wide-ranging types of development would be permissible in this management area and could include: parking lots; operations, maintenance, administration and visitor use structures, and related facilities; park housing; boat docks; boardwalks and trails; snack bars; interpretive centers; restrooms; bath houses; and campgrounds, as appropriate.

Appropriate Kinds and Level of Management Activity

These areas would require an intensive management presence involving Seashore staff, concessioners, cooperators and volunteers. Management activities in this area would draw upon the talents of multiple divisions including administration, facility management, interpretation and visitor services, resource management, and visitor and resource protection.

Appropriate Kinds and Level of Visitor Use

Visitors to Park Development Areas would be able to engage in a number of activities including swimming, boating, hiking, camping, nature walks, ranger- and volunteer-led programs, guided canoe trips, etc. On a regular basis during the visitor season, the facilities at Sailors Haven and Watch Hill would be well used, and visitors would be highly likely to encounter other visitors and Seashore staff and would sometimes experience crowded conditions. At Talisman, weekends during the summer can be busy, and as at Sailors Haven and Watch Hill, visitors would be likely to encounter other

visitors and some crowded conditions. During the week, Talisman can offer opportunities for a less crowded experience.

► ISLAND COMMUNITY AREAS**Description**

This management area embraces areas within the Seashore that are defined as the Community Development District in the Secretary's zoning standards encompassing 17 island communities. This management area encompasses approximately 2,300 acres or 27 percent of upland on Fire Island within the Seashore's boundary that are privately owned, developed parcels.

Among the 17 communities are two incorporated villages, Ocean Beach and Saltaire. Within the community of Davis Park, the town of Brookhaven owns and manages a marina and Leja Beach. With the exception of the two incorporated villages, the Fire Island communities fall under the jurisdiction of either of the Long Island towns of Islip or Brookhaven.

Land use and development within this management area is based on local zoning that has met the Secretary's zoning standards. Zoning is administered and approved by local boards. Requests for variances to local zoning within the Community Development District (and hence the Island Community Management Area), require consultation with and a finding from the Superintendent of the Seashore.

There are 4,200 private properties within the Fire Island communities, the vast majority of which are used as seasonal residences. The larger concentrations of commercial properties are located in the village of Ocean Beach and the unincorporated communities of Ocean Bay Park, Cherry Grove, Fire Island Pines, and Davis Park. The density of residential development on Fire Island has increased since the Seashore's establishment. Concerns among Fire Island residents about preserving the character of their communities and managing their visitation have been raised throughout the planning process.

Desired Resource Condition

The distinctiveness of each community would be recognized in its contribution to the overall character of Fire Island. Residential development would continue to be low profile and maintained at a density consistent with the Secretary's zoning standards and the commercial areas would continue to primarily serve the needs of Fire Island's population. Communities would evolve in a way

that makes them more resilient and ecologically sound within the context of the dynamic coastal environment.

Desired Visitor Experience

Visitors to Fire Island could visit Fire Island's communities as well as Seashore facilities. Visitors would have the opportunity to view and appreciate a great array of historic and contemporary resort-style architecture and experience the distinctive qualities of each community they visit. They could also enjoy opportunities to dine and shop in Fire Island's communities and participate in nightlife. The Seashore would make its visitors aware that the communities are largely private and should be experienced accordingly.

Appropriate Kinds and Levels of Development

These areas are primarily privately developed for residential use. Commercial development is primarily to support Fire Island communities and residents. Park and recreational facilities, religious and civic facilities, and volunteer firehouses are also present in the communities. Development and land uses should be consistent with existing plans, local zoning, and other regulations as adopted by municipal, county, and state government.



Appropriate Kinds and Level of Management Activity

NPS management activity in these areas is limited to responding with an opinion in the case of a proposed zoning variance, permitting for shoreline management projects (e.g., bulkhead replacement, beach nourishment), and cooperating in the management of T&E species. NPS may also provide technical assistance for planning, interpretation, and resource protection and offer interpretive or educational programming at community venues.

Appropriate Kinds and Level of Visitor Use

The NPS role in monitoring or influencing visitor use in the Fire Island communities would be limited. Seashore visitors would be made aware of the private nature of the communities and would be asked to respect private property. Seashore visitors may be likely to take advantage of restaurants and shops as well as enjoy the architecture and overall ambiance of Fire Island's distinctive communities.

► WILDERNESS AREA

Description

This management area embraces the Otis Pike Fire Island High Dune Wilderness (referred to as Fire Island Wilderness) that stretches across 7 miles of the Seashore and contains a variety of barrier island ecosystems in a relatively natural condition. It is the only federally designated wilderness area in the State of New York. At 1,380 acres, it is also one of the smallest wilderness areas managed by the NPS. The Fire Island Wilderness is located in the eastern portion of the Seashore extending from Smith Point County Park, on the east, to Watch Hill on the west. An ocean-to-bay parcel of non-federal, publicly-owned land, Bellport Beach, lies roughly in the middle of the Fire Island Wilderness, separating it into an eastern and a western segment. The Fire Island Wilderness is accessible from Watch Hill (which is accessible seasonally by ferry or private boat) and by the Wilderness Visitor Center (located adjacent to Smith Point County Park, accessible year round by car or bus).

Desired Resource Condition

The Fire Island Wilderness is managed to maintain its wilderness character consistent with the Wilderness Act: being untrammled, natural, and undeveloped and able to provide opportunities for primitive and unconfined recreation and other unique features as deemed important to the Fire Island Wilderness.

Desired Visitor Experience

Wilderness is described in the Wilderness Act as an area “where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.” The visitor must accept wilderness largely on its own terms. Modern conveniences would not be provided for the comfort of the visitor and the risks of wilderness travel, potential accidents, wildlife, and natural phenomena must be accepted as part of the wilderness experience.

Appropriate Kinds and Levels of Development

Development within the Fire Island Wilderness would be limited to dune crossings, minimal maintenance of a path along the Burma Road Trace and the Smith Point West Nature Trail, and, when necessary, use of temporary signage to address visitor safety and resource protection. The placement of scientific instruments to support ongoing research and aids to navigation would also be considered and, if deemed appropriate, would be permitted. The installation, maintenance, or removal of any development would be undertaken in a manner consistent with the requirements of the Wilderness Act.

Appropriate Kinds and Level of Management Activity

The Fire Island Wilderness would be managed so as to preserve its specific wilderness character and qualities to ensure wilderness preservation. The natural flora, fauna, and physiographic conditions of this unique area would be preserved in a primitive state, and the entire wilderness would be administered as a natural ecosystem, where the influence of humans is minimal and the character of the area would be molded by the forces of nature. Cultural resources, as evidence of previous human actions, would continue to be minimally represented. Resources considered to be culturally significant would be documented and protected; resources not considered culturally significant would be removed or reclaimed by nature.

Appropriate Kinds and Level of Visitor Use

Some of the primary uses of the Fire Island Wilderness would include hiking, sunbathing, collecting beach plums and blueberries, hunting, and backcountry camping. Some traditional use by the Unkechaug Indian Nation and the federally recognized Shinnecock Nation would continue including ceremonial activities. Backcountry camping would be by permit only, and the number of permits and size and distribution of groups between the two zones would be monitored to maintain a sense of solitude. The most intensive use, where visitors would be

likely to encounter others, would be on the eastern and western edges or gateways to the Fire Island Wilderness. In its interior, contact with other visitors would likely be very limited.

► NON-FEDERAL PUBLIC LAND AREAS**Description**

This management area encompasses designated town and county parkland within the boundaries of the Seashore – an area of approximately 1,030 acres or 12 percent of upland. This area refers to Great Gun Beach (owned and managed by the town of Brookhaven) and Smith Point County Park (owned and managed by Suffolk County) at the eastern end of Fire Island, Bellport Beach (owned and managed by the village of Bellport), which bifurcates the Fire Island Wilderness, Leja Beach within the community of Davis Park (also owned and managed by the town of Brookhaven), and Atlantique Beach (owned and managed by the town of Islip) between the communities of Lonelyville and Atlantique.

Desired Resource Condition

These are not federal facilities. The desired resource condition would be defined by the plans, rules, and regulations that govern each of these facilities as carried out by various village, town, and county agencies. The NPS would work collaboratively with the owners and operators of these properties to ensure consistency of resource management goals and coordination of actions.

Desired Visitor Experience

These are not federal facilities. The desired visitor experience would be defined by the plans, rules, and regulations that govern each of these facilities.

Appropriate Kinds and Levels of Development

The town and county parks include a wide range of developed facilities including parking, lifeguarded beaches, bathhouses, food service, campground, and marinas, etc.

Appropriate Kinds and Level of Management Activity

NPS management activity in these areas is limited to participating in permitting for shoreline management projects (e.g., bulkhead replacement, beach nourishment), and cooperation in the management of T&E species. The NPS would collaborate with the owners and operators of these properties to ensure consistency of resource management goals and coordination of actions.

Appropriate Kinds and Level of Visitor Use

Activities at these facilities may include boating, camping, swimming, picnicking, surf-fishing, playground activities, shellfishing, beachcombing, etc. Visitors should expect to encounter others at any of these facilities on most summer days and may experience crowded conditions on weekends. Smith Point is a primary gateway to the Wilderness Visitor Center and the eastern-most edge of the Fire Island Wilderness.

Management Alternative 1:

CONTINUATION OF CURRENT MANAGEMENT PRACTICES

(No-Action Alternative)

Concept

Alternative 1 is the “No- Action” alternative. Under this alternative, current management practices and the use of approved and interim plans would continue. NPS would continue to collaborate with local, county, and state officials on an as-needed basis to address common regulatory, policy, and management issues. The NPS would continue to meet day-to-day operations, management, legal, and regulatory requirements based on existing plans and the availability of funds.

Resource Management in General

Resource Stewardship Planning

The NPS would continue to work collaboratively with its management partners to develop resource stewardship plans for the Seashore that are consistent with the management direction adopted in the final approved GMP and NPS *Management Policies 2006*.

Natural Resource Management

The NPS would continue to work to preserve the natural environment and take actions to retain and enhance natural processes.

Terrestrial Resources

► SUNKEN FOREST & OTHER MARITIME FORESTS

Bayside Restoration/ Shoreline Naturalization

The Sailors Haven Marina has been interrupting sediment processes, resulting in erosion impacts to the bay shore and the Sunken Forest. Similar adverse effects of hard structures interrupting littoral transport

and accelerating bay shore erosion are occurring at other locations adjacent to the approximately 4 miles of hardened bay shoreline of the Seashore. The NPS would continue current efforts to better understand bay side sediment transport along the north shore of Fire Island and in particular at the Sunken Forest.

To mitigate the impacts of these existing hard structures, the NPS would continue to collaborate with New York State agencies and others to undertake research and demonstration projects to explore effective mitigation methods. In 2011, the Seashore began a demonstration project at Sailors Haven regarding bayside sediment transport and constructed a feeder beach to supply sediment to the system. The sand used to construct the feeder beach was provided through maintenance dredging of the nearby navigation channel. The feeder beach will have to be replenished periodically. The effect of this method will be studied and evaluated over time.

► THREATENED & ENDANGERED SPECIES

The NPS would continue its collaborative efforts to preserve and monitor critical habitats and open spaces for the protection of threatened and endangered (T & E) species. Two federally listed endangered bird species are known to nest within the Seashore — the Piping Plover (*Charadrius melodus*) and the roseate tern (*Sterna dougallii*). The state-listed threatened least tern (*Sterna antillarum*) and the common tern (*Sterna hirundo*) also nest on Fire Island. The black skimmer (*Rhynchops niger*) and the osprey (*Pandion haliaetus*) are bird species of special concern in New York State. Sea beach amaranth (*Amaranthus pumilus*) is a federally-listed threatened annual plant species that grows on some of Fire Island’s beaches. The sea beach knotweed (*Polygonum glaucum*) is a New York State rare plant that can be found on Fire Island. A complete list of state and federally listed species appears in Chapter Three – Affected Environment.

Threatened & Endangered Species Management Plan

As funds become available, the NPS would update the Seashore’s Threatened and Endangered Species Management Plan and include provisions to consider and address the potential effects of climate change and sea-level rise on T & E species.

Monitoring & Protection

The NPS would continue to monitor the populations of nesting shorebirds and plant populations that are listed as T&E species in collaboration with other agencies and

organizations. T & E species germination and nesting areas would continue to be protected with exclosures and symbolic fencing and monitored throughout the nesting season. Nests in high-traffic areas would continue to be protected through vehicle closures and public education. Symbolic fencing would also be used to protect T & E plant species.

Support Other Efforts to Protect Species of Special Concern

The NPS would be supportive of and work collaboratively with public agencies and non-profit conservation organizations to meet their conservation goals for Species of Special Concern within the Seashore's boundary, as appropriate and feasible.

► NATIVE PLANT AND ANIMAL SPECIES

Managing Native Plant and Animal Species

Native or indigenous plants naturally occur in the region in which they evolved. The NPS would work to maintain viable populations of native plant and animal species at the Seashore relative to the natural resource conditions and human health and would work to educate residents and visitors about those populations.

Native plant and animal species perceived as nuisances (such as biting insects, poison ivy, and raccoons) would be managed consistent with resource management and public safety objectives and based on guidance provided by existing Seashore management protocols, NPS *Management Policies 2006*, and associated Directors Orders. Native plant and animal species that are out of balance and are affecting other native plant and animal species and habitats would be managed by the NPS to ensure that such species do not crowd out or destroy species and habitats that support other native species.

Mosquito Surveillance & Management

The NPS would continue to engage in a regular program of mosquito surveillance based on the annual Mosquito Action Plan and Surveillance Protocols (Protocols). These would be updated annually in collaboration with county, state, and federal organizations, including Suffolk County Vector Control (SCVC), Suffolk County Department of Health Services, and the United States Geological Survey (USGS) and would be consistent with an approved Mosquito Management Plan completed by Suffolk County.

The SCVC would continue to manage mosquitoes within Smith Point County Park and residential communities located within the boundaries of the Seashore on Fire Island. The SCVC operates its program within the Seashore under a Letter of Authorization from the NPS. The SCVC would continue to be restricted from using any form of pesticides on the federal tracts of Fire Island and the William Floyd Estate as per management policies documented in the Protocols. In order to maintain and preserve the environment within the Seashore, NPS policy states that mosquito management interventions would be applied within the Seashore only if the presence of West Nile Virus (WNV) (and/or Eastern Equine Encephalitis (EEE)), in or near the park, is strong enough to suggest disease risk to humans and the risk of disease transmission would be substantially lowered by the intervention.

Tick Surveillance & Management

The NPS would continue to monitor ticks throughout the Seashore and provide education to visitors regarding ticks, tick-borne illnesses, preventive measures to avoid exposure to ticks and tick bites, and what to do in response to tick bites. The NPS would continue to focus its primary tick surveillance and management efforts at the William Floyd Estate. (See section on the William Floyd Estate for more information.)

In 2011 the New York State Department of Environmental Conservation (NYS DEC) completed a three-year study on the use of four-poster baiting stations to treat deer with the pesticide permethrin when they feed, with the intent of killing ticks on the deer. The baiting stations use corn as a lure to attract the deer. The baiting stations were located on non-federal lands on Fire Island. NYS approved the use of four-poster baiting stations for tick management in 2013. However, NPS continues to reject the use of the four-poster baiting stations on federal lands because the devices provide a regular, introduced food source for the deer population, in contradiction of NPS policies and NPS efforts at the Seashore to control the deer population.

Public Education & Outreach

The NPS would continue to disseminate information related to living with wildlife using a variety of means. Informational and interpretive exhibits, waysides, and print media regarding park natural resources and resource issues such as Lyme disease and ticks, feeding wildlife, and other topics would continue to be offered at visitor contact locations. Interpretive rangers and

other members of the Seashore's staff would also provide information on these topics to the public as feasible. Finally, the NPS would continue to post relevant information on the Seashore's website, on social media, and through local news outlets.

► NON-NATIVE INVASIVE PLANT & ANIMAL SPECIES

Managing Non-native Invasive Plant and Animal Species

The NPS would work to control non-native invasive plant and animal species that pose a specific threat to native species and other natural resources within the Seashore.

The spread of invasive species is recognized as one of the major factors contributing to ecosystem change and instability throughout the world. An invasive species is “a non-native species whose introduction does, or is likely to cause, economic or environmental harm or harm to human, animal, or plant health” (Executive Order 13112, 1999). These species have the ability to displace native species, alter fire regimes, damage infrastructure, and threaten human livelihoods. The NPS would continue to manage invasive species on Seashore lands through a suite of national and local programs, each based upon the following strategies: cooperation and collaboration, inventory and monitoring, prevention, early detection and rapid response, treatment and control, and restoration.

► NATURAL LIGHTSCAPE

Natural Lightscape

A “Natural Lightscape” is a place or environment characterized by the natural rhythm of the sun and moon cycles, clean air, and dark nights undisturbed by artificial light. Natural lightscapes, including dark night skies, are not only a resource unto themselves, but are an integral component of countless park experiences.

While the glow of Long Island's developed south shore is apparent from Fire Island, the more immediate experience on Fire Island is the opportunity to observe the naturally dark night sky as one looks out over the Atlantic Ocean. On Fire Island and at the William Floyd Estate, the naturally dark night sky would be preserved to the degree feasible. The NPS would minimize or reconfigure artificial light sources within the Seashore and would work with adjoining areas to reconfigure artificial lighting to better enable opportunities to see the moon, stars, planets, and other celestial features.

Marine Resources

► OCEAN AND ESTUARINE RESOURCES

Freshwater and Saltwater Marshes

Recent analysis of marsh development processes at the Seashore¹ have revealed that salt marshes do not appear to be keeping pace with the recent rates of sea-level rise. If the observed deficit continues, it is likely that the Fire Island marshes will become wetter; areas of high-marsh *Spartina patens* may convert to *Spartina alterniflora*, and open water habitat may increase, indicating that sea-level rise and climate change are having an effect on the marsh. There could also be landward encroachment of marshes into upland areas.

The NPS would work with state and local agencies to ensure the protection of freshwater wetlands and salt marshes. Working with the NPS Inventory and Monitoring program and state and local government agencies and other stakeholders (e.g., The Nature Conservancy) the NPS would update wetland maps and undertake regular trend analysis regarding water quality, nekton, vegetation communities, etc. to inform management decisions and facilitate adaptive management among agencies with shared stewardship for estuarine water resources. Salt marsh elevation monitoring, in concert with vegetation and marsh landscape change analysis, would continue in collaboration with the NPS Northeast Coastal Barrier Monitoring Network. Research to better understand the changes occurring in and affecting Fire Island's salt marshes would continue.

Fin fishing/ Shellfishing

Section 5 of the Seashore's enabling legislation provides that the Secretary shall permit hunting, fishing, and shellfishing on lands and water under the administrative jurisdiction of the Department of the Interior within Fire Island National Seashore in accordance with the laws of New York and the United States of America.

Recreational fishing

Recreational fishing is clearly permitted by the Seashore's enabling legislation. Commercial fishing is defined as fin fishing or shellfishing where the catch is sold. NPS considered commercial fishing during development

1 National Park Service, U.S. Department of the Interior. (2007). *Evaluation of Marsh Development Processes at Fire Island National Seashore (New York): Recent and Historic Perspectives*. (Technical Report NPS/NER/NRTR—2007/089).

of the Draft GMP/EIS, and reviewed 36 Code of Federal Regulations [CFR] 2.3 [d][4], which states that commercial fishing is prohibited in units of the National Park System unless specifically authorized by federal statutory law or treaty right. The Fire Island National Seashore enabling legislation does not specifically authorize commercial fishing within the Seashore. Thus, commercial fishing is prohibited. However, limited commercial shellfishing has been occurring within the Seashore boundary. Commercial fishing would likely continue under this alternative unless and until NPS takes action to enforce regulations at 36 CFR § 2.3(d)(4). Such action would require public notice as well as consultation with state and local agencies,

Recreational fin fishing and shellfishing may be restricted if it is determined that it is causing unacceptable impacts on Seashore resources and natural processes. Inventory, monitoring, consultation with fisheries managers, and research would be used to evaluate the effects of the harvest on Seashore resources and processes. Any recreational harvest should be managed to provide for self-sustaining populations of harvested species.

Although the NPS does not own the submerged bottom, the Seashore does have jurisdiction over the water column within the NPS boundary, described as the intertidal lands from mean high water out 4,000 feet into Great South Bay. Therefore, fin and shellfishing are subject to NPS policies and regulations, as well as NYS DEC regulations, wherein concurrent jurisdiction exists between these two agencies as occurs from mean high water to 1,000 feet into the Atlantic Ocean.

Cultural Resource Management

Under this alternative, the Seashore's management emphasis would continue to be primarily on cultural resources on federal lands, particularly at the Fire Island Light Station, the Carrington Estate and the William Floyd Estate. The NPS would rehabilitate or restore cultural resources based on the highest Seashore priorities and would continue efforts to identify, manage, and protect submerged and other archeological resources. Seashore collections would continue to be housed in the existing curatorial storage facility located at the William Floyd Estate.

It is important to note that a separate set of management alternatives has been prepared for the William Floyd Estate and appears at the end of this



chapter. While there may be an occasional reference to cultural resource management at the William Floyd Estate, this section considers primarily the cultural resources associated with Fire Island.

Fire Island Light Station

The NPS would continue to preserve and interpret the Fire Island Light Station through a cooperative agreement with the Fire Island Lighthouse Preservation Society (FILPS). The treatment period for the light station would continue to be ca. 1939 as recommended in the 2004 Historic Structures Report. The recently built Fresnel Lens building (opened in 2011), which houses the original 1858 Fresnel Lens that once illuminated the Fire Island Light, would also be maintained and interpreted by FILPS.

Carrington Estate

The NPS would work collaboratively with local conservation and preservation interests to rehabilitate and adaptively reuse the main house and cottage on the property for administrative purposes. The associated landscape would be rehabilitated to the degree necessary to ensure safe circulation on the property and access to the structures.

Archeological Resources

The NPS would continue to identify, manage, and protect submerged and terrestrial archeological resources on an opportunistic basis beyond basic compliance with Section 106 of the Historic Preservation Act, as amended.

As submerged cultural resources are revealed by erosion, efforts would be made to document and protect these sites and artifacts.

The lack of information about prehistoric resources associated with Fire Island has been expressed in more than one cultural resources analysis prepared for the Seashore. Research to learn more about the prehistoric resources that may be associated with Fire Island could be carried out opportunistically over time. To facilitate this, the NPS would develop a predictive model and testing strategy to record prehistoric resources within the Seashore.

Ethnographic Resources and Associations

The NPS would seek to establish an enhanced working relationship and regularly consult with the Shinnecock Indian Nation, a federally recognized tribe concentrated on eastern Long Island, and the Unkechaug Nation, a state-recognized tribe having a well-known, historic association with Fire Island and the William Floyd Estate.

Museum and Archival Collections -- Curatorial Storage

Beyond the large collection of artifacts and archival materials displayed in the main house at the William Floyd Estate, the Seashore houses segments of its collection at the dedicated curatorial storage facility (erected in 1996) located at the William Floyd Estate, at visitor facilities on Fire Island, and at Seashore headquarters in Patchogue. In addition to museum artifacts and archival materials, the NPS also maintains collections of archeological materials, natural history specimens, and architectural elements. The Seashore collection continues to grow. The NPS would continue to house the museum and archival collections in their present locations. The Seashore's curatorial storage facility would continue to function at capacity. Seashore staff would continue to offer limited tours of the curatorial storage facility as feasible and would continue to provide assistance to researchers. Workspace for conservation and research activities would continue to be limited.

Shoreline Management

► FIRE ISLAND INLET TO MONTAUK POINT (FIMP) REFORMULATION STUDY

As discussed in Chapter One, the U.S. Army Corps of Engineers (USACE) has been engaged in an effort to reformulate plans for shoreline management, including storm damage reduction along five reaches of the south shore of Long Island between Fire Island Inlet and Montauk Point, a distance of approximately 83 miles. To date, the reformulation plan has not been completed and approved.

Consistent with the Seashore's enabling legislation, any plan developed for this area that involves erosion control and beach nourishment must be mutually acceptable to the United States Secretary of the Army and Secretary of the Interior. The USACE and the DOI have arrived at a Tentative Federally Supported Plan (TFSP) that outlines an approach that appears to meet the Federal agency objectives and requirements necessary for mutual acceptability. Under the no-action alternative, the Seashore would continue to follow the Tentative Federally Supported Plan and would continue to participate in the USACE's development of the FIMP Reformulation Plan, which would then become the guiding document when completed and approved. The primary tenets of the TFSP are summarized below.

Barrier Island Processes

The NPS would work with others to protect, restore, and emulate the natural processes of Fire Island to the greatest degree possible. These natural processes include the transport of sand by waves, currents, storms, and wind. The NPS would evaluate opportunities and establish a strategy to permit natural processes to proceed, especially on the major federal tracts.

Beaches and Dunes

NPS acknowledges a need to transition from the current practice of beach nourishment to a more natural (dynamic) beach and dune system. Emphasis would be placed on land-use management and non-structural means to restore dynamic beach and dune processes; however, beach nourishment in front of the 17 communities would be allowed over the life of the FIMP shoreline management plan subject to adaptive management considerations and local land-use regulations. Compliance requirements would include a programmatic environmental impact statement (EIS) to consider the broad impacts of beach nourishment on Fire Island with more detailed environmental assessments (EAs) being prepared to address and evaluate the impacts of specific projects.

Ocean Sediment Transport

Ocean sediment transport processes are important for maintaining beach and dune development as well as cross-island sediment transport processes. Sediment bypassing at Moriches Inlet and tapering of the groins at Ocean Beach would be initiated. The practice of beach scraping would cease upon adoption of FIMP. Although NPS would continue to allow removal of sand from near-shore borrow sites, recent scientific investigations suggest that these offshore sand resources may be a significant source of sand coming into the Fire Island sediment transport system. Removal of sediment from these sources must be accompanied by a monitoring program to detect increased erosion as well as an adaptive management plan that would allow for a change in the sand removal program if negative impacts are detected.

Bay Side Sediment Transport

Bay side sediment transport processes shape the estuarine shoreline as a mosaic of narrow sandy beaches, tidal creeks, mud and sand tidal flats, salt marshes, and eelgrass beds that can buffer the upland from attack by waves. On the bayside, a variety of erosion control measures would be considered acceptable within the Seashore, but the NPS would work with USACE and

NYS to mitigate the impacts of bulk heads and promote resource-sensitive and environmentally sustainable alternatives. NPS would permit in-place and in-kind replacement of bulkheads per NYS DEC regulations. NPS would work with partners to pursue opportunities to restore bay side sediment transport processes through regional sediment management, softening of shorelines, and other alternatives that are generally consistent with NPS policies.

Routine maintenance (e.g., dredging) of navigation channels to Sailors Haven, Watch Hill, Talisman, and specific Fire Island communities would be planned to maximize opportunities to return dredge sediment to bay side sediment transport systems.

Cross-Island Sediment Transport (CIST)

Cross-Island Sediment Transport (CIST) is the wind-, wave-, current-, and storm-driven movement of sand back and forth across the barrier island between offshore bars, beach face, berm, dune, island core, bay shore, and bay. CIST processes are important for maintaining the diversity of barrier island habitats and long-term geomorphology of a barrier island. As part of the transition to a more dynamic beach and dune system, pre-breach maintenance and management that reduces CIST will be allowed in front of the 17 communities over the life of FIMP. A breach response plan would be developed to provide for closure of breaches that would affect a Fire Island community. The plan would provide a protocol for breach management decision making and monitoring to ensure that manipulation of breaches within the remaining public tracts occurs only as necessary for public safety.

It is expected that FIMP will address breach management throughout the 83-mile project area. Although the Tentative Federally Supported Plan (TFSP) identifies the following elements that pertain to breach management, the FIMP EIS will consider all alternatives for breach management.

- A breach is defined as a continuous exchange of water between the ocean and bay at low tide.
- No new permanent inlets would be allowed to form.
- Closure of breaches would generally occur within 90 days.

- Closure of any breach that occurs from the eastern boundary of Robert Moses State Park through Point of Woods and in the communities of Cherry Grove, Fire Island Pines, Water Island, and Davis Park would begin within 45 days of the breach.
- Breaches within the five major federal tracts will be monitored and if such a breach does not close naturally within 45 to 60 days, then a Science Response Team would advise decision makers for conditional closure.

Seek effective enforcement of Coastal Erosion Hazard Area (CEHA) Act

The NPS would work with state and local agencies to ensure that the CEHA on Fire Island is updated and enforced when developments that are inconsistent with the CEHA are proposed.

Seashore Experience

Under this alternative, the Seashore experience would remain somewhat segmented, with visitors to Seashore facilities largely staying within those facilities and visitors and local residents of communities largely staying within their individual communities. Current efforts to raise awareness of the presence of the Seashore would continue. The NPS would continue to offer a broad slate of visitor programs at selected locations on a limited schedule as funding and staffing permit. The Seashore's informational website, exhibits, social media presence, brochures, and other publications would continue to be available.

Interpretive Emphasis

Under this alternative, the interpretive emphasis would continue to focus on raising awareness of and the development of an appreciation for the unique qualities of Fire Island and how future human activity may affect its resources.

Public Information and Programs

The Seashore would continue to maintain a robust web page on the NPS website (www.nps.gov/fiis) that provides information on Seashore programs, recreational opportunities, resources, and management. Ranger-, partner-, and volunteer-led programs would continue to occur primarily during the summer visitor season at Sailors Haven and Watch Hill and are offered on a regular basis year-round at the Lighthouse, Wilderness Visitor Center, and the William Floyd Estate. The Seashore's website, social media presence, and print media would continue to be the primary vehicle for delivering a wide

range of information including general park orientation, specific site information, and public safety.

Educational & Community Outreach

The NPS would continue to offer a limited number of educational and community outreach programs that would be available upon request and dependent upon the availability of resources.

► VISITOR FACILITIES

Under this alternative, the NPS would continue the present use of existing facilities that generally meet visitor needs. Existing structures would be maintained, repaired, and rehabilitated as funding becomes available and in accordance with existing plans and analysis, and the overall needs of the Seashore. The NPS would construct new facilities in accordance with existing plans as construction and operations funding becomes available. Any proposed new visitor facilities development, rehabilitation, or post-storm reconstruction would be undertaken only after appropriate climate change and sea-level rise risk assessments have been completed. A more detailed examination of these factors will influence the type, design, location, and ultimate feasibility of any proposed project. With the exception of the Fire Island Light and the Wilderness Visitor Center, which are open year round, the rest of the visitor facilities described below are open to the public for regular operating hours during the visitor season from late spring to early fall. Special programming may occur at these locations throughout the year.

Patchogue/ Mainland Facilities

The Ferry Transportation Center (opened in 2010) with ferry service to the Seashore's Watch Hill facility would continue to serve the public with restrooms, a multipurpose program space, outdoor orientation exhibits, and 188-space parking lot. The Ferry Transportation Center is within walking distance of local bus and train service.

Fire Island Light Station

The Fire Island Lighthouse Preservation Society (FILPS) would continue to operate the site offering tours and access to the lighthouse, exhibits, and gift shop on a year-round basis. The Fresnel Lens building would also continue to be open to the public and staffed by FILPS volunteers.

The Fire Island Light Station is one of the few sites associated with the Seashore that is accessible by vehicle. Visitors arriving by car would continue to park at Field 5

at Robert Moses State Park and walk to the Lighthouse using the existing system of boardwalks. School bus parking would be available at Field 5 with a drop-off area located at the Lighthouse. A Ranger Station, staff housing, and seasonal restrooms would also continue to be located in the Lighthouse Annex.

The NPS would retain the existing West End Entrance Station and restroom located at the east end of the Robert Moses Causeway.

Sailors Haven/ Sunken Forest

The NPS would retain the 45-slip marina, ferry dock, visitor center, and the current system of boardwalks and walkways that permit access to the Sunken Forest, ocean side beach, and other visitor amenities. The Seashore would continue to operate the facility as a “clean marina” consistent with standards suggested by the NOAA Office of Ocean and Coastal Management’s Clean Marina Initiative. The NPS would rehabilitate the Sailors Haven Visitor Center to include the replacement of existing exhibits and sales space as funds become available. The marina, restrooms, general store, snack bar, and picnic area would continue to be operated through a concessions agreement awarded through a competitive process to a private enterprise. The NPS would continue to staff the beaches with lifeguards, provide ranger-led interpretive and educational programming, operate the First Aid station, and maintain the bathhouse and restroom facilities, boardwalks, and walkways.

Talisman

The Talisman area would remain a protected ocean beach with lifeguard service limited to weekends during the regular visitor season as funding is available. Primary public access to this area is by foot, private boat, or by chartered ferry or water taxi. The NPS would continue to maintain existing facilities including the boat dock, bathhouse, restrooms, boardwalks, and picnic area. A bulletin board and waysides would continue to provide relevant information to visitors to the area. Occasional ranger-led interpretive programming would be offered as funding permits.

Watch Hill

Watch Hill would remain the Seashore’s most intensely developed destination, offering a variety of services and facilities including the ferry dock and 188-slip marina, general store, snack bar, restaurant, and bar. The Watch Hill marina would also continue to be operated as a “clean marina” consistent with guidance provided by the NOAA Office of Ocean and Coastal Management’s Clean

Marina Initiative. The marina facilities, campground, and the Dune Station/ bathhouse would continue to be operated through a concessions agreement awarded through a competitive process to a private enterprise. The formal reservation system currently in place for the marina and campground would continue. The NPS would continue to staff the public beach with lifeguards and would also staff the visitor center, which would continue to offer a visitor desk, limited orientation and interpretive exhibits, and a small sales area currently stocked by a cooperating association, Eastern National, and the extensive system of boardwalks through the maritime forest and salt marsh. The NPS would rehabilitate the Watch Hill Visitor Center to include the replacement of existing exhibits and sales space as funds become available. Wilderness camping permits would continue to be issued at this location, as it would continue to serve ranger-led interpretive and educational programming. An on-line permitting and reservation system became operational in 2013. The Friends of Watch Hill would continue to maintain certain recreational improvements to the marina made by the organization (e.g., Bocce ball court).

Wilderness Visitor Center

The Wilderness Visitor Center would continue to serve as the eastern gateway to the Fire Island Wilderness offering a visitor contact desk, restrooms, exhibit space, and a small sales area currently stocked by Eastern National. The facility would be staffed by Seashore staff and volunteers and would continue to serve as a station for informal visitor contact, interpretive and educational programming, and issuing permits for backcountry camping, sportsman ORV, and hunting. This would continue to be the primary point of entry for recreational vehicular beach access. As noted above, an on-line permitting and reservation system became operational in 2013.

Public Non-Federal Facilities

Atlantique Beach, Leja Beach, Smith Point County Park, Bellport Beach, and Great Gun Beach are the five official municipally owned beaches on Fire Island. Additionally, Robert Moses State Park is located on Fire Island west of the Seashore’s boundary. Local jurisdictions would continue to own and manage their respective areas within the Seashore boundary. The NPS would work collaboratively with the owners and operators of these properties to ensure consistency of resource management goals and coordination of actions.

Old Inlet

The visitor facilities located at Old Inlet, including the boardwalk, vault toilet, and boat dock, were lost when Fire Island was breached during Hurricane Sandy in 2012 and will not be reconstructed.

► RECREATIONAL USES

The Seashore would continue to provide the venue for a wide range of recreational activities including but not limited to beach combing, bird watching, boating, camping, fishing, hiking, hunting, interpretive programming, volunteering, citizen science, nature walks, photography, star gazing, swimming, surfing, wilderness camping, and wildlife viewing. The following recreational uses were identified during the project scoping phase as areas that may be subject to change from current practices.

Life Guarded Beaches

The NPS would continue to provide lifeguards seasonally at the Sailors Haven, Talisman, and Watch Hill ocean beaches as funding permits. Hours of life-guarding operations at the protected beaches would be determined based on the level of visitor use and consistent with existing policies and guidelines for visitor safety.

Beach Camping in front of the Wilderness Area

The NPS would continue to permit backcountry camping on the beach in front of the Fire Island Wilderness. In practice, this would not expand the total number of people camping in the Wilderness Area and on the beach combined; it simply offers the same number of permittees currently allowed in the Wilderness the option of camping in the Wilderness Area or on the beach. Under this alternative, this practice would continue under the following conditions:

- No more than 36 people may camp in the Fire Island Wilderness zones and the Great South Beach zones combined.
- No more than 12 individuals in no larger than groups of 4 per campsite in the Eastern Zone.
- No more than 24 individuals in no larger than groups of 8 per campsite in the Western Zone.
- Camping on the beach would be permitted annually from March 15 through Labor Day.



Kayaking/Canoeing

The NPS would continue to offer a guided canoeing program at Watch Hill during the summer, when staffing and conditions permit providing an opportunity to explore and appreciate Fire Island's most extensive salt marsh, skirting the northern boundary of the Fire Island Wilderness.

Recreational ORV use

The NPS would continue to allow the use of recreational off-road vehicles (ORVs) at certain times on Fire Island's ocean beach from west of the Wilderness Visitor Center (at Smith Point) to Long Cove (approximately 6 miles) as a means of access for fishing, hunting, or other recreational activities between September 15 and December 31 as conditions permit. In 2012, Hurricane Sandy caused a breach that has affected recreational driving and will continue to do so until the breach closes either naturally or by mechanical means. This activity would continue to require a Sportsman's Vehicle Permit.

Vehicles would not be allowed in the designated Fire Island Wilderness.

Land Use and Development

Land-Use Regulation of Properties within the Community Development District

Under this alternative, land use and development within the Community Development District would continue to be guided by existing local plans and regulated by local zoning as adopted by the towns of Islip and Brookhaven and the villages of Ocean Beach and Saltaire, as consistent with the 1991 Secretary's zoning standards. All parties would continue to rely on the NYS CEHA Act as applied by state and local authorities.

The NPS would continue to review applications for variances, exceptions, permits for commercial or industrial use, or special permit submitted to the zoning authority and provide a written response indicating whether the proposal conforms to the Secretary's zoning standards or the purposes of the Seashore's enabling legislation. Frequently the findings and recommendations of the Seashore are not wholly considered by the local zoning authorities, and developments that are not in compliance with the Secretary's zoning standards have been granted variances and permitted by local jurisdictions. The only tools available to the NPS in the event of a non-conforming action would be to revoke the Secretary's suspension of his or her condemnation authority or to seek condemnation of the property, if the inconsistency is considered to be sufficiently egregious and funds can be appropriated for such condemnation. The use of condemnation authority as a tool for controlling development has not been used on Fire Island since the 1970s for lack of financial and political support.

Transportation

► LAND-BASED ACCESS

Public Transportation

Public transportation access to Fire Island would continue through the existing network of public transit, bus, and ferry service. The Long Island Railroad would continue to provide access for visitors to the mainland ferry terminals via a short walk, cab, or bus ride. Public bus service currently connects the Babylon train station to Robert Moses State Park (RMSP) during the summer. There is also currently summer bus service from the Mastic/Shirley train station to Smith Point County Park (SPCP), which would also serve the Fire Island Wilderness and the Wilderness Visitor Center. The Fire Island Light Station, the Wilderness Visitor Center, and

the William Floyd Estate would continue to be accessible for school groups by school bus.

Private Vehicle

In general, access to Fire Island by private vehicle would continue to be limited. Visitors arriving by private vehicle would continue to be able to park for a fee in either the Robert Moses State Park lot on the west end of Fire Island with pedestrian access to Fire Island Light or the Smith Point County Park lot on the east end of Fire Island with pedestrian access to the Wilderness Area and the Wilderness Visitor Center. A small number of handicapped spaces would continue to be available in closer proximity to the Fire Island Light and at the Wilderness Visitor Center. Private vehicles would not be allowed past these parking areas without a permit.

Roadless Island

The NPS would work with Fire Island communities, the towns of Islip and Brookhaven, Suffolk County, New York State, and others to manage Fire Island's transportation system in a manner that supports a roadless environment where driving is kept to a minimum, except at designated areas on Fire Island's east and west ends.

Bicycles

On Long Island, the Patchogue Ferry Terminal and the William Floyd Estate are accessible by bicycle via existing public roads. Bicycle racks are available at each of these locations. On Fire Island, there would continue to be no through recreational bicycle trail linking Seashore facilities. Bicycles would continue to be allowed on federal tracts where and when vehicles are permitted. Bicycles would continue to be used during certain times of the year by workers for transportation to and from Fire Island job sites. In addition, bicycles would continue to be used by Fire Island community residents consistent with the rules and restrictions imposed by each community.

On-Island Vehicle Access

Limited driving is permitted on Fire Island but is strictly regulated to protect Fire Island's natural resources, the roadless character, and its communities. Driving permits are available to a limited number of year-round and part-time residents, a limited number of contractors. NPS grants fleet permits to the water, phone, and electric utilities; essential service permits for garbage haulers; and municipal permits to municipal or Fire Island community employees. NPS also can grant special permits on a case-by-case basis for temporary uses, such as access to Fire Island during ice-over conditions when ferry service is suspended.

► WATER-BASED ACCESS

Private Boaters

Slips at Sailors Haven would continue to be available on a first come, first served basis. The reservation system at the Watch Hill marina would continue. The NPS would continue to impose a 14- consecutive- day limit on all overnight stays in Seashore marinas at Sailors Haven and Watch Hill. Boats would continue to be able to drop anchor off shore.

Lateral & Cross Bay Ferry Service

In recognition of the importance of the roadless character of Fire Island, the Seashore would continue to work with other Fire Island stakeholders to manage ferry service to ensure that it continues to provide a quality experience and remains the primary form of transportation to and from Fire Island. The NPS would require that ferries serving Seashore destinations be more sustainable (e.g., reduced emissions, use of alternative fuels, etc.) and encourage Fire Island communities to do the same with their ferry operators.

Navigation

Aids to navigation and navigation channels would be maintained by NPS at Sailor's Haven, Watch Hill and Talisman, as appropriate. Moriches and Fire Island Inlets would continue to be dredged, as would the Intracoastal Waterway and navigation channels that serve the Seashore and Fire Island communities by the USACE and Suffolk County (respectively).

Operations & Maintenance

Seashore Headquarters & Main Maintenance Facility – Patchogue

The NPS would continue to concentrate its administrative, operations, and maintenance functions on the Patchogue River within the village of Patchogue.

Currently, the Seashore's administrative offices are dispersed across two locations, with the Superintendent and several division chiefs housed at Laurel Street. The interpretive staff offices, the maintenance division, the park planner, and some resource management staff are located at the nearby Patchogue Maintenance Facility (PMF) and Administrative Annex on West Avenue.

At PMF, the NPS maintains the riverfront bulkhead and piers for docking boats, a warehouse for storing materials and equipment, storage for fuel and hazardous material, workshop, and office space. A small building on the site, the River Room, provides dedicated meeting

space. The Patchogue Ferry Terminal is also available for administrative purposes (e.g., staff training, public meetings, etc.).

As funding becomes available, these facilities would be updated and, where necessary, rehabilitated, to address environmental concerns (e.g., storm water drainage, energy efficiency, etc.), the impacts of climate change and sea-level rise, and consistency with the Americans with Disabilities Act (ADA). The consolidation of administrative facilities into a single location would also be considered.

Satellite Maintenance Facilities

The NPS would continue to maintain a number of small satellite maintenance facilities to support remote operations on Fire Island and at the William Floyd Estate. The Fire Island facilities are largely used during the spring, summer, and fall, and shut down over the winter. These facilities would continue to provide modest workshop space, storage for materials and fuel, and seasonal workspace for Seashore staff. These facilities would continue to be dispersed across Fire Island at: Fire Island Light Station, Sailors Haven, and Watch Hill. The maintenance facility at the William Floyd Estate is discussed in greater detail in the next section.

Boat & Ferry Docks

The NPS would continue to maintain a number of boat and ferry docks to facilitate public access and Seashore operations. Boat and ferry docks would continue to be located at the Ferry Transportation Center in Patchogue, Watch Hill, Talisman, Sailors Haven, and at the Fire Island Light Station. Boat docks at the Seashore's administrative headquarters and at the Patchogue Maintenance facility would also continue to be maintained for official use.

Carrington Estate

The NPS would continue to work with local conservation and preservation interests to rehabilitate and adaptively reuse the main house and guest cottage on the Carrington Estate consistent with the Seashore's purpose and management goals and as funds become available. Visitor access to the property could be limited depending upon the ultimate use selected for the structures.

Staff Housing

Under this alternative, the NPS would continue to maintain and make housing available to Seashore and concession employees for rent at fair market rates. Seashore housing would also continue to be available to researchers on an as- needed basis. Seashore -owned housing would continue to be dispersed throughout the

park, with the largest number (12 units) being located at Watch Hill. Other housing locations would continue to include Fire Island Light Station (7 units), Sailors Haven (3 units), Talisman (2 units), and the William Floyd Estate (2 units).

Marine Vessels

The NPS would continue to maintain a fleet of work and patrol boats. As vessels are replaced, the Seashore would ensure that vessels coming into the fleet meet the best available standards for energy efficiency and environmental sustainability, as available funding permits.

Trash Transfer Stations/ Waste Management

Concessioners would continue to operate garbage transfer stations and recycling at Sailors Haven and Watch Hill using buildings assigned to them for that purpose. The NPS would continue to cart refuse off Fire Island by vessel. Other federal areas throughout the park would continue to be “carry in/carry out” areas.

Ranger Stations

Ranger Stations would remain in their current locations – the Lighthouse Annex on the Lighthouse tract, the visitor center at Sailors Haven, the maintenance facility at Watch Hill, and the Wilderness Visitor Center.

Lifeguard Facilities

Lifeguard facilities include changing room, showers, lockers, and storage for gear and would continue to be located at Sailors Haven and Watch Hill.

Fire Island Light Station Operations/Kismet Fire House

The structure is currently leased to the Kismet Fire Department through 2014 and is presently used for storage and public restrooms. Upon expiration of the lease, the NPS would consider the structure an extension of the Fire Island Light Station in planning for its long-term use.

“Greening” Park Operations & Facilities

Overall the NPS would work internally and in partnership with cooperators and concessioners to improve much of the Seashore’s existing infrastructure and refocus, rebuild and reorient the facility management program to make it more sustainable and operationally efficient. Where appropriate, the NPS would work to consolidate facilities and ensure that they are in the most suitable location and meet needs and requirements in accordance with each facility’s function. Whenever feasible, the NPS would strive to ensure all Seashore structures, facilities, vehicles, and equipment showcase the principles of sustainability within a dynamic coastal environment and serve as

a model to others. Facilities would be evaluated and upgraded as appropriate in the context of their regular maintenance cycle and consistent with NPS “Green Park” and facility management standards, and factors related to climate change and sea-level rise.

Potable Water System

The NPS would address issues associated with remaining park-maintained potable well water systems at Fire Island Light and Talisman to bring them into compliance with federal, state, and local standards through upgrading existing systems or connecting to the Suffolk County Water Authority.

Universal Accessibility

Structures, grounds, and facilities on Fire Island and at the William Floyd Estate are made universally accessible to the greatest degree possible as funds become available. In the event that creating universal access is not feasible, other means (e.g., the use of interpretive media) would be used to accommodate visitors with disabilities.

Fire Safety & Security

The NPS would evaluate existing fire safety and security systems at all Seashore sites and facilities for consistency with existing codes and make any necessary improvements to ensure the safety of visitors, Seashore staff, and collections.

Park Administration

Under this alternative the NPS would continue to operate Seashore facilities and provide for public programming and visitor safety by relying on a combination of NPS staff, volunteers, partners, cooperators, and commercial service providers. Most resource management, land-use planning, zoning, and other regulatory activities would be undertaken by Seashore and other NPS staff.

Cooperative Stewardship

Under this alternative, Fire Island National Seashore would continue to employ various strategies to advance cooperative stewardship of the Seashore’s resource values. The Seashore would continue to work with existing laws and authorities to address issues that cross jurisdictions on an ad-hoc and/or case-by-case basis.

Staffing

Under this alternative existing staffing (approximately 57 Full Time Equivalents or FTEs) would be augmented to meet current management demands at the Seashore as funds become available.

Volunteers

The Seashore has a corps of as many as 180 volunteers. It is estimated that volunteers contributed 30,000 hours of labor in FY12 or the equivalent of 15 FTE. Volunteers would continue to participate in many facets of Seashore management including curatorial support, staffing visitor desks, developing and conducting interpretive and educational programming, organizing the Seashore library, collecting natural and cultural resource data, organizing and participating in clean-ups, maintaining Fire Island Light and other facilities, developing exhibits, training other volunteers, engaging in community relations, hosting at the campground, and performing administrative functions.

Partners

The NPS would continue to expand its network of partners and cooperators including existing and emerging Friends groups, academic institutions, federal, state, and local agencies, community groups and associations, etc.

Commercial Services

The NPS would continue to employ concessioners to provide regular ferry service seasonally to NPS visitor facilities on Fire Island and to manage and maintain the public facilities at Sailors Haven and Watch Hill including the marinas, campground, food service, and general stores. The concessions would continue to be awarded on a competitive basis at regular intervals. Seashore staff would continue to be responsible for monitoring the concession to ensure that the terms of the concessions agreement are met.

Cooperators

The NPS would continue to rely on a cooperating association, the Fire Island Lighthouse Preservation Society, to operate and maintain the Fire Island Lighthouse and provide visitor services to the public. The NPS would also continue its relationship with Eastern National (EN), a cooperating association that manages sales outlets at various locations throughout the park including Watch Hill, Sailors Haven, Wilderness Visitor Center, and the William Floyd Estate.

Strategic Plan for Fire Island Light Station

Capital facility development for the Fire Island Light Station is essentially complete. The strategic management emphasis must shift to sustaining visitor services and resource preservation into the future. Working with the Fire Island Lighthouse Preservation Society, the NPS would develop a strategic plan to address the long-term

operation and preservation of the Fire Island Light Station complex.

Collaboration in Public Safety & Law Enforcement

The NPS would continue to collaborate with cooperating law enforcement and emergency response agencies on Fire Island to meet public safety needs Fire Island-wide, and to promote the message of stewardship, resource protection, public safety, and a quality visitor experience at the Seashore. The NPS would continue to participate on the Fire Island Law Enforcement, Safety, and Emergency Council (FILSEC), an ad hoc working group that assembles on a regular basis to promote interagency communication and coordination in meeting the needs of public safety and law enforcement on Fire Island.

Land Acquisition

All Seashore District Land as identified in the 1984 Land Protection Plan would be acquired on a willing-seller basis as properties become available, and as funds are appropriated for such purposes.

Improved Properties within the Seashore District

As defined by the Secretary's zoning standards for the Seashore, the Seashore District encompasses all portions of lands and waters within the boundary of the Seashore on Fire Island which are not included in the Community Development District. The intention of the Fire Island National Seashore Act was that all private lands within the Seashore District (except certain "improved properties" built as of July 1, 1963) would eventually be acquired on a willing-seller basis. Continuation of these residential property uses and ownership would be guaranteed as long as they conform to the local zoning authority and the Secretary's zoning standards. Like the properties in the Community Development District, private properties in the Seashore District would continue to be subject to local, state, and federal environmental regulatory controls. The Seashore's 1984 Land Protection Plan outlined the goals for protection of lands within the boundary of the Seashore, including the private properties owned in the Seashore District, reiterating the long-term goal of acquiring all private parcels in the Seashore District based on a willing seller and the availability of funds for land acquisition. Upon acquisition of a property, structures and other improvements would be removed and the land would be permitted to return to a natural state.



Park Boundary

Boundary Demarcation

The NPS would take steps to reduce encroachments onto and provide better protection of the Seashore's federal lands (e.g., provide additional markers to clearly identify Seashore boundaries both landward and seaward) and to ensure that the Seashore's seaward boundary is noted on National Oceanic and Atmospheric Administration (NOAA) charts in print and digital formats.

The NPS would work to rectify the boundary with Suffolk County at Smith Point County Park and pursue formal survey of the 100-square-foot parcel on which the Wilderness Visitor Center sits.

Legislative Requirements

There are no legislative requirements related to Alternative 1 – Continuation of Current Management Practices.

ELEMENTS COMMON TO ALL ACTION ALTERNATIVES

This section outlines proposed management objectives that would be considered to be common to all action alternatives. Seashore managers would strive to achieve the objectives outlined below regardless of which alternative is ultimately implemented. The common objectives highlight the resource conditions, park experiences, and cooperative efforts that are of overall importance to the management of the Seashore.

Actions that may be taken in association with management objectives that are common to all action alternatives could differ between alternatives and would be represented accordingly.

In addition to the elements described below, a number of current practices described under Alternative 1 – Continuation of Current Management Practices (No Action) would generally continue regardless of the management alternative ultimately adopted as a result of this process.

These current practices include:

Natural Resource Management

- Resource Stewardship Planning
- Threatened & Endangered Species Planning, Monitoring, and Protection
- Management of Native Plant and Animal Species
- Tick Surveillance and Management
- Resource Stewardship – Public Education and Outreach
- Management of Non-native Invasive Plant and Animal Species
- Enhancing opportunities for observing the natural night sky
- Protecting Freshwater and Saltwater marshes

Cultural Resource Management

- Research and documentation of federal cultural properties on Fire Island
- Development of a predictive model and testing strategy to record prehistoric sites within the Seashore
- Documentation and protection of submerged archeological sites revealed by erosion
- Establishment of enhanced working relationships with the Unkechaug Nation and the Shinnecock Indian Nation
- Maintenance of the Seashore’s museum and archival collections in good condition and work to make them more readily available to the public

Shoreline Management

- Subscription to the tenets of the Tentative Federally Support Plan (TFSP) for the Fire Island to Montauk Point (FIMP) Reformulation Study

Seashore Experience

- Continuation of Recreational Off- Road Vehicle (ORV) use as a means of access for fishing, hunting, and other recreational activities as currently prescribed
- Operation of marinas consistent with NOAA Office of Ocean and Coastal Management’s Clean Marina Initiative

Transportation

- Collaboration with others to support a roadless environment on Fire Island where driving is kept to a minimum
- Continued regulation of vehicle access on Fire Island
- Collaboration with others to ensure that water-based transportation remains the primary form of access to Fire Island
- Maintenance of aids to navigation and navigation channels

Seashore Maintenance and Operations

- Rehabilitation of the Seashore’s administrative facilities to address environmental concerns and operational inefficiencies
- Retention of satellite maintenance facilities on Fire Island
- Maintenance of a fleet of work and patrol boats, replacement of vessels to meet best available standards
- Maintenance of boat and ferry docks at NPS facilities
- “Greening” of park operations and facilities
- Ensuring Potable Water System at NPS facilities complies with federal, state, and local standards
- Ensuring that NPS facilities are universally accessible to the greatest degree possible
- Provision of staff housing to meet operational needs
- Commitment to cooperative stewardship
- Expansion of network of partners and cooperators
- Collaboration with the Fire Island Lighthouse Preservation Society to prepare a Strategic Plan for the Light Station
- Acquisition of Improved Properties in the Seashore District as identified in the 1984 Land Protection Plan
- Demarcation of the Seashore’s landward and seaward boundaries

Resource Management in General

Encourage Greater Scientific & Scholarly Research

The NPS would develop a coordinated, comprehensive research and monitoring program to better understand and manage the broad range of natural and cultural resources within the Seashore's boundaries, particularly in the context of climate change, and would consider strategies for adaptive management. The research program would include both land- and marine-based resources, and the Seashore would become a setting for scientific and scholarly research related to cultural and natural resources. Working with the North Atlantic Coast Cooperative Ecosystem Studies Unit (CESU) and other CESUs within the national network as appropriate, the NPS would encourage greater scientific and scholarly research to enhance understanding of park resource values and processes and to support the Seashore's natural and cultural resource management needs in a number of ways.

Support for these efforts might include:

- providing housing for researchers or sponsoring a researcher-in-residence type program;
- providing staff assistance;
- working through Eastern National or others to co-publish major reports and studies for public consumption;
- creating and managing a virtual Seashore library making NPS and its partners' products available at no cost to stakeholders via the Internet; and
- sponsoring public forums and lectures to make research findings more accessible.

Expand Opportunities for Public Involvement in Research & Scholarship

At the Seashore the NPS would expand opportunities for the public to support research and scholarship through participation in hands-on programs such as "Citizen Science." The NPS would work collaboratively with park stakeholders to develop programs and activities that encourage individual stewardship of *natural and cultural resources* including engaging in sustainable practices, taking actions to eliminate or reduce the spread of invasive species, and participating in the documentation of the cultural heritage on Fire Island and at the William

Floyd Estate. Programs and activities would emphasize public education and would encompass research, monitoring, and the adoption of best management practices.

Catalogue of Natural and Cultural Data and Research Needs

The NPS would develop a catalog of the Seashore's natural and cultural data and research needs and make it available to researchers, universities, and other educational entities. The NPS would identify and prioritize research needs and make resources available to encourage research that directly assists NPS managers in their efforts to better understand the Seashore's natural and cultural resources and support resource protection actions.

Model Best Management Practices

The NPS would model "best management practices" at the Seashore for activities like energy and water conservation, and wastewater management on federal lands and work with others to encourage "best management practices" for activities Fire Island-wide, including the development of demonstration projects to pilot new ideas and broadly share results.

The NPS would work with Fire Island communities and homeowners to adopt a number of methods that would discourage certain species associated with health risks (e.g., mosquitoes, raccoons, etc.). Such actions could include the installation of skirting on the undersides of buildings to eliminate attractive shelters, the storage of garbage in enclosed sheds, etc.

The NPS would advance educational programming that defines the principles of sustainability and adaptive management and how they have been adopted and applied within the National Park System. This programming would target Seashore staff, partners, community residents, and the general public.

Natural Resources

Terrestrial Resources

► SUNKEN FOREST & OTHER MARITIME FORESTS

The approximately 40 acre Sunken Forest is located within the Sailors Haven federal tract between Oakleyville (to the west) and Cherry Grove (to the east). It is a globally rare holly maritime forest and is specifically identified in the Seashore's enabling legislation. A series of studies concluded that since 1967 heavy deer browse has altered the composition of the forest. Further,

accelerated bay shore erosion associated with the disruption of sediment transport processes adjacent to the Sailors Haven marina is also contributing to the loss of this globally rare forest community.

The NPS would work to create conditions for regeneration of native vegetation in the Sunken Forest and other similar maritime forests on Fire Island. Depending upon research recommendations, options could include restoration via native re-vegetation, reducing deer populations, or large-scale fencing.

Restoration of Native Vegetation

The NPS would maintain the character of the maritime forest by ensuring the regeneration of key canopy constituent tree species and a reasonable representation of herbs and shrubs reminiscent of its floristic composition when the Seashore was established.

Long-Term Monitoring Program

Efforts to restore the Sunken Forest would include a monitoring strategy that allows for adaptive management. Management practices would be reevaluated periodically to ensure that they continue to be sound given the dynamic character of Fire Island (e.g., periodic storms, unchecked erosion, climate change, etc.).

► **THREATENED & ENDANGERED SPECIES**

Research on Human Impacts

The NPS would undertake the necessary research to better understand and manage for the impact of human disturbance on T & E species at the Seashore.

► **NATIVE PLANT & ANIMAL SPECIES**

Addressing the Effects of Climate Change

As climate change affects the composition of native species within the Seashore (e.g., range expansion), Seashore staff would work with research partners and others to monitor and evaluate the effects of climate change and identify appropriate strategies for addressing them.

► **NON-NATIVE INVASIVE PLANT & ANIMAL SPECIES**

Non-native Invasive Plant and Animal Species Management Plan

The NPS would develop a comprehensive non-native invasive species management plan for the Seashore that addresses prevention, monitoring, and management priorities. Consistent with the Seashore's overall management approach, educational programs, media, incentive programs, and other outreach methods would



be used to garner assistance in this effort from Fire Island communities and other private and public entities.

► WATER RESOURCES

Wastewater Management Plan

In collaboration with the US Geological Survey (USGS), Suffolk County, the towns of Brookhaven and Islip and Fire Island communities, the NPS would initiate a Fire Island-wide process to evaluate the issues and impacts associated with the present state of wastewater on Fire Island on both federal and non-federal lands, outline a range of possible alternatives for addressing them, and develop a cooperative implementation strategy to address the issues identified.

► NATURAL SOUNDSCAPE

Soundscape

The combination of physical sound resources, or soundscape, at a particular location makes up what is known as the acoustical environment. The soundscape could include both natural sounds (wind, waves, wildlife, vegetation) and cultural and historic sounds (glasses clinking, tribal ceremonies, quiet reverence). The Seashore exists within the metropolitan New York area and is subject to many urban sounds (e.g., crowds at some locations, boat motors, aircraft, etc.). The NPS would undertake an evaluation of the Seashore's acoustic environment and explore opportunities to minimize the sounds of modern society throughout the Seashore as feasible and appropriate.

Marine Resources

► OCEAN AND ESTUARINE RESOURCES

Recent NPS initiatives have called for enhanced marine resource stewardship. In response to the President's Ocean Action Plan, in June 2007 the NPS issued an Ocean Park Stewardship Action Plan aimed at enhancing efforts to protect and restore the natural and cultural resources of national park system marine ecosystems. The NPS Northeast Region went on to develop a Northeast Region Ocean Park Strategic Plan to enhance knowledge of marine resources within parks in the Northeast Region, identify strategies for protection and restoration, foster partnerships with those engaged in ocean stewardship, and engage visitors in ocean stewardship (June 2007). The 1977 Seashore GMP, published over three decades ago, made little mention of submerged marine resources within

the Seashore boundary. The new NPS initiatives now call for coastal parks to address marine resource issues.

Marine Research and Monitoring

The NPS would work collaboratively with partners of the North Atlantic Coast CESU, the NPS Northeast Coastal and Barrier Monitoring Network, the South Shore Estuary Reserve Council, and others to foster academic research, programming, and data sharing related to marine resources in the Great South Bay and nearby waters of the Atlantic Ocean. The research program would address the development of maps and baseline data for natural and cultural resources, periodic trend analysis, and evaluation of changes in resource conditions. Monitoring would be designed to detect significant changes in marine resources (e.g., water quality) and used to inform both management and research. The NPS would engage in partnership opportunities at the Seashore among federal, state, and local agencies and non-government organizations to enhance marine resource research, monitoring, conservation, and education, with particular emphasis on waters within the Seashore's boundary, acknowledging the larger context of these resources in the Great South Bay and Atlantic Ocean.

Understanding fisheries

The NPS would assess fishing (finfish and shellfish) activity occurring at the Seashore (both recreational and commercial). Commercial fishing would be assessed in light of the prohibition at 36 CFR § 2.3(d)(4). Information would be gathered on where, how, and when fishing occurs, coupled with information on the catch (e.g., species harvested, number harvested, size, fishing gear/methods, etc.). Design of the fisheries information program would be in collaboration with state and local marine fisheries managers to ensure that the information will contribute to overall knowledge of marine resource sustainability within the Seashore's waters and the region. Particular emphasis would be placed on understanding how recreational fishing and marine resources within the Seashore's boundary contribute to visitor education, inspiration and enjoyment. Management of fishing will be addressed in the Marine Resources Management Plan or a subsequent Action Plan.

Marine Resources Management Plan

The NPS would work with others having jurisdictional authority to address both natural and cultural marine-based resources to develop a Marine Resources Management Plan for submerged lands and shared

resources of the Seashore. The Marine Resource Management Plan would define NPS roles and priorities and would recommend collaborative management strategies to promote the long-term protection and sustainability of marine resources within the larger contexts of Great South Bay and the Atlantic Ocean. The Marine Resources Management Plan would address issues pertinent to fishing and shellfishing, the protection of submerged aquatic vegetation, the protection of submerged archeological resources, and the management of operational and recreational activities (e.g., motor boat access) within the marine management area of the Seashore.

Protection & Restoration of Marine Resources

The NPS would collaborate with other stakeholders across a broad spectrum of interests to restore the Seashore's native animal and plant communities (e.g., eel grass, clam beds). The ultimate aim of these efforts would be to protect and, where feasible, to restore the natural abundance, diversity, dynamics, distributions, habitats, and behaviors of native plant and animal populations and the communities and ecosystems where they occur. Collaboration for shared stewardship is particularly important, since the Seashore's estuarine and ocean resources are part of a larger ecosystem, and pelagic resources are highly transient.

Cultural Resources

It is important to note that a separate set of management alternatives has been prepared for the William Floyd Estate and appear at the end of this chapter. Many proposals in this section apply to both Fire Island and the William Floyd Estate.

Research and Documentation of Federal Cultural Properties on Fire Island

The NPS would update the Historic Resource Study and develop a Cultural Landscape Report (CLR) and Treatment plan for Fire Island Light Station. Historic Structure Reports would also be prepared for the house and cottage at the Carrington Estate. The CLR would consider the potential effects of climate change and sea-level rise on the cultural landscape and would recommend adaptive management strategies to address them.

Submerged Archeological Resources

The Archeological Overview and Assessment prepared for the Seashore in 2005 did not address submerged archeological resources within the Seashore. However,

the report did note that the Seashore was likely to contain important submerged sites. The NPS would undertake an Overview and Assessment of submerged archeological resources within the Seashore's boundary that would consider both federal and non-federal lands.

Curatorial Storage – Vulnerability Assessment

The Seashore would undertake a vulnerability assessment to evaluate conditions relative to climate change and sea-level rise in planning for any changes to the curatorial storage facility and would consider any resulting recommendations or concerns.

Cultural Resources at Risk from Coastal Erosion or Overwash

The NPS would identify areas where cultural resources are at highest risk due to erosion or overwash and would undertake the necessary process (e.g., archeological identification surveys, HABS/HAER/HALS documentation²) to document any cultural resources before they are permanently lost to natural processes on either federal and non-federal lands.

Oral History

To enhance the existing knowledge of how Fire Island and its surrounding waters have been enjoyed, used, and developed, the NPS would collaborate with local academic and historical institutions (e.g., Long Island Traditions, the Gilder Lehrman Institute of American History, local historical societies, Native American tribes, etc.) to undertake an oral history project regarding Fire Island and the establishment of the Seashore. The products associated with the project would be made available to the general public in a number of formats.

Shoreline Management

► COASTAL LAND USE/ SHORELINE MANAGEMENT

Coastal Land Use/ Shoreline Management Plan

The NPS would assume a leadership role in working with Fire Island communities, the towns of Islip and Brookhaven, Suffolk County, and New York State to develop a coastal land use plan for Fire Island. The plan would address shoreline protection, land-use controls, site planning, and design standards, and post-storm response in the context of the dynamic barrier environment and emerging trends resulting from sea-level rise and climate change. The plan must be undertaken and adopted as a multi-lateral, collaborative effort.

2 HABS – Historic American Building Survey, HAER – Historic American Engineering Record, and HALS – Historic American Landscape Survey

The plan would be consistent with the Tentative Federally Supported Plan (TFSP) for FIMP and would articulate a comprehensive strategy for protecting coastal resources while addressing resilience in land-use development within the coastal zone on both federal and non-federal lands within the Seashore. Further, the plan would be consistent with the recommendations of the 2013 interagency Hurricane Sandy Rebuilding Strategy. The report includes a number of recommendations relevant to Fire Island National Seashore. They include:

- Facilitating future risk assessment, such as sea-level rise, into planning and redevelopment efforts
- Applying infrastructure resilience guidelines to all federal infrastructure investments
- Ensuring a regionally coordinated, resilient approach to infrastructure investments
- Consider green options in all infrastructure investments
- Working with local governments to improve their capacity to plan for long-term rebuilding and prepare for future disasters.

Post-Storm Recovery Planning

Within the Community Development District, properties damaged or destroyed by overwash would continue to be allowed to be repaired or rebuilt, consistent with existing state and federal law, local codes, and the Secretary's zoning standards.

The NPS would work with other federal and state agencies, towns, communities, and state and county parks to develop a post-storm recovery plan for Fire Island. The plan would provide guidelines on how to respond to a range of storm events, including various degrees of structural damage and shoreline change. The NPS would encourage Fire Island communities, Smith Point County Park, and Robert Moses State Park to include post-storm planning guidelines in their local comprehensive or master plans that are consistent with the post-storm recovery plan developed for Fire Island. The plans should be consistent with the Fire Island Coastal Land Use and Shoreline Management Plan, and the Tentative Federally Supported Plan for FIMP.

Seek Opportunities for Acquisition through application of Retained Use & Occupancy

The NPS would pursue the acquisition of developed private properties located in environmentally sensitive areas such as dunes or wetlands and would enable the seller to retain use and occupancy of the property for a

specified period of time. The landowners are paid the full fair market value of the property minus a deduction based upon the number of years they will remain in possession. Such actions would be undertaken opportunistically by the NPS only on a willing-seller basis. Once the former owner permanently vacates and NPS assumes full ownership of the property, structures would be removed and the land would be allowed to revert to a natural state.

Conservation Easements

The NPS would work with Fire Island communities and local land trusts to preserve open space within the communities and would accept the donation of conservation easements on undeveloped parcels on Fire Island that possess important natural or cultural values.

Dredge Management Plan

The NPS would work with federal, state, and local government, and other entities to develop a programmatic dredge management plan to allow for the placement of dredge materials for beneficial purposes (e.g., augment eroding shorelines and protect habitats) along the bay and ocean shorelines of Fire Island as appropriate. Use and placement of dredge materials would emulate bayside natural systems of sand movement as feasible. This plan would be consistent with the Coastal Land Use and Shoreline Management plan and would also address maintenance dredging needs for navigation channels and marinas on Fire Island, assess any contaminant issues, determine a planned frequency of dredging, and evaluate environmental and cost-effective alternatives to dredging at some locations (e.g., shallow draft vessels).

Public Outreach

The NPS would work with Fire Island communities, state and local agencies, the realty community, and others to ensure that property owners, property managers, and the general public fully understand the dynamic nature of the barrier island and the potential risks associated with owning and managing property within the coastal environment. Through personal communication, publications, on-line media, and formal training and workshops, the NPS and its partners would work to communicate this important information.

Seashore Experience

Broaden Visitor Base

The NPS would continue to seek to broaden the diversity and geographic scope of the Seashore's visitation to ensure that it is more representative of regional and

national demographics with regard to ethnic, cultural, and socioeconomic groups. The NPS would accommodate a variety of recreational activities in a manner that minimizes resource degradation and user conflicts.

Educational Outreach

The NPS would enhance its public outreach program through a variety of means, including the use of technology and social media. The NPS would expand educational outreach to a broad demographic, including more in-school programming, teacher education, and greater opportunities for field experiences (e.g., citizen-scientist programs). Educational programs would highlight the Seashore's resources, resource issues, and current park science and scholarship.

Sustainability Role Models

The NPS would model the principles of sustainability through its actions as a manager and steward of Fire Island and the William Floyd Estate to adopt and model the best possible management practices, minimizing the Seashore's impacts on the natural and cultural environment. The principles of sustainability would become an important tenet of the Seashore's educational outreach programs.

Public Information, Orientation and Way finding

The NPS, in conjunction with other entities would improve way finding to and throughout the Seashore, including signs, maps, and other information that may be located at such places as the region's airports, connecting train stations, ferry terminals, Fire Island communities, Seashore destinations on Fire Island, and the William Floyd Estate. The NPS would take advantage of new and developing technologies to provide Seashore visitor information and orientation.

Visitor Research

The NPS would regularly research visitor use and satisfaction throughout Fire Island to better understand and respond to visitor issues, needs, and desires. Elements of the Seashore experience such as visitor use patterns, experiences, safety, and satisfaction with services and facilities would be identified. Joint efforts to collect data on visitor activity and attitudes would be undertaken in partnership with Fire Island communities and adjoining recreation areas. Interpretive programs and media would incorporate formal and informal evaluation components to gauge effectiveness.

► VISITOR FACILITIES

Patchogue/ Mainland Facilities

Consistent with the clean energy objectives proposed in the Seashore's "Climate Friendly Park Action Plan," the NPS would pursue the development of solar shade structures over some or all of the Ferry Terminal parking area to mitigate the effect of urban heat islands, reduce the Seashore's environmental footprint, and lower utility costs. To manage costs, NPS would collaborate with local utilities while ensuring consistency with federal laws, regulations, and policy.

Talisman

The NPS would consolidate the facilities serving Barrett Beach and Talisman into an area known simply as "Talisman."

Land Use & Development

Community Character

The NPS would work collaboratively with other entities to encourage, support, and cooperate with Fire Island communities and the towns of Islip and Brookhaven to assist in the identification and preservation of the distinctive character of each Fire Island community and of Fire Island as a whole. NPS involvement would largely take the form of research, technical assistance, and interpretation, and in support of local community visioning or hamlet planning efforts.

Revise Land-Use Regulations

Working in collaboration with Fire Island stakeholders, the NPS would revise the Secretary's zoning standards guiding land use and development and subsequently local land-use regulations to address inconsistencies, provide greater specificity and/or guidance, and define with greater clarity the role of the NPS. Alternatives to traditional zoning (e.g., performance based measures, etc.) would be considered. Revised land-use regulations would articulate the standards to be met for a variance, outline a clear review process, and clearly describe how inconsistent developments would be addressed, on the local or federal level, or both.

The NPS would also work with state and local interests to improve the development process making it more transparent and predictable. Information about the development process including necessary reviews, permitting, certifications, and the status of active proposals should be readily available to the public.

Zoning Workshops

New York State law requires that members of local planning and zoning boards obtain four hours of training annually. Town, village and city zoning boards of appeal and planning board members, as well as county planning board members must receive training. NPS would offer trainings for its management partners and relevant local boards with regard to the application of the Secretary’s zoning standards on a regular schedule – perhaps biannually, or as board membership turns over.

Realign the Dune District with CEHA

The NPS would pursue the realignment of the Dune District to be either co-terminus with the NYS CEHA or dropped entirely, wherein CEHA would become the officially designated/legislated line for federal zoning purposes. Presently, both state and federal designations are intended to protect the protective feature, the primary dune, from inappropriate developments. Per 36 CFR Part 28.3(d), The *Dune District* “extends from the mean high water line to 40 feet landward of the primary dune crest” as mapped in 1976 and adopted by Congress in 1978, and described on a map entitled Fire Island National Seashore Map #OGP-0004. The CEHA line is described under NYS law as including the near shore, beach and dunes to a northern boundary line measured 25 feet landward of the landward toe of the primary dune. This difference would need to be reconciled under federal regulations via a legislative amendment. Additionally, although both federal and state districts may be remapped, NYS law explicitly states that it is permissible to remap the CEHA based on erosion or accretion, whether by natural or manmade processes. The federal law would likely not permit any kind of remapping of a dune protection

measure based on any kind of accretion event; as such an event would undoubtedly be temporary in nature, resulting in potential developments that would require a greater degree of government protection and/or intervention.

Support Sustainable Infrastructure

Through the cooperative stewardship entity, NPS would collaborate with communities, towns, the county, and others to support the development of sustainable infrastructure solutions related to renewable and alternative forms of energy, water conservation, and waste management Fire Island-wide. The NPS would adopt the principle of “Reduce, Reuse, Recycle” and would work with others to move Fire Island toward a “zero waste” objective. The NPS would establish incentive programs, such as awards and other acknowledgements for communities and/or individuals, to promote green practices and recognize achievements.

New Master Plans for Federal Facilities

The NPS would develop updated master plans for Fire Island Light Station, Sailors Haven, Talisman, Watch Hill, and the Wilderness Visitor Center that address site circulation, rehabilitation or replacement of existing facilities (e.g., maintenance, staff housing, visitor facilities), visitor amenities (e.g., group educational shelters, moorings), interpretive media, infrastructure, reducing environmental impacts (e.g., water quality, shoreline erosion, etc.) and improving operational efficiencies. Each master plan would include an analysis of the potential impacts of climate change and sea-level rise, and employ relevant departmental and agency standards and guidelines.



Transportation

► LAND-BASED ACCESS

Develop “Driver’s Manual”

In collaboration with Fire Island communities, the towns of Islip and Brookhaven, and Suffolk County, the NPS would create a “drivers manual” that would educate residents, workers, and visitors about driving etiquette and getting around on Fire Island while protecting the fragile barrier island environment. This could also include information on the availability and cost of freight, garbage collection, and other services. It could also offer examples of “best practices” that enhance the use of water-based transportation while limiting driving.

► WATER-BASED ACCESS

Lateral & Cross-Bay Ferry Service

The NPS would also work with others to improve the lateral and cross-bay ferry service to ensure it meets the needs of more visitors and contractors related to schedule, destinations, affordability, and universal accessibility to Fire Island.

Coordination of Transportation of Personnel

The NPS would seek out opportunities to coordinate travel to Fire Island among the Seashore’s management divisions to reduce the number of boat trips and vehicular use. The NPS would explore the use of incentives to encourage utilities, essential services, and contractors to coordinate travel and/or increase their use of water-based transportation. Some possible incentives could include reduced permit fees or space on NPS lands on Fire Island to temporarily stage equipment or materials.

Moorings or No-Anchor Zones

The NPS may consider the institution of a formal mooring system or “no anchor zones” to protect the Seashore’s marine resources. These measures could be instituted in response to the recommendations of a Marine Resources Management Plan.

Operations and Maintenance

► SEASHORE HEADQUARTERS & MAIN MAINTENANCE FACILITY – PATCHOGUE

New NPS Facility Development

The NPS acknowledges that climate change will significantly change conditions at the Seashore, including the impacts from sea-level rise and potentially destructive

storm events. More detailed examination of these factors will influence the type, design, location, and ultimate feasibility of any proposed project.

On federal lands the NPS would concentrate any new or redeveloped facilities within existing disturbed areas, away from wetlands and other environmentally sensitive areas. The NPS would ensure that all new construction or redevelopment meets departmental, agency, and relevant local standards and codes for construction and are consistent with nationally recognized principles and processes for sustainable development within a coastal context.

Park Administration

► COOPERATIVE STEWARDSHIP

In support of the NPS commitment to cooperative stewardship, the NPS, Fire Island communities and other relevant entities would work collaboratively to improve land-use planning and regulations and to protect the environmental quality and distinctive character of Fire Island. Such work would rely on regular and meaningful communication among parties, coordination in issue resolution, and cooperation in action. To accomplish this, the NPS would propose the creation of a regular forum for communication, coordination, and collaboration in managing Fire Island. Two distinct alternative approaches are being considered, one of which could be adopted to create a forum for regular communication, cooperation, and collaboration. Under any cooperative stewardship approach, the NPS would continue to manage Fire Island National Seashore in accordance with all applicable laws and policies including the National Park System Organic Act and NPS Management Policies.

Reauthorize and re-establish the Fire Island National Seashore Advisory Commission³

The Seashore’s original enabling legislation (P.L.88-587, Section 9) established an advisory commission with the stipulation that it be terminated “on the tenth anniversary of this Act or on the declaration, pursuant to Section 2(b) of this Act, of the establishment of the Fire Island National Seashore, whichever occurs first.” As originally indicated in the legislation, “the Secretary or his designee shall, from time to time, consult with the members of the Commission with respect to matters relating to the development of Fire Island National Seashore and shall

³ The Advisory Commission model described here is largely based on the Cape Cod National Seashore Advisory Commission. To learn more, visit www.nps.gov/caco/parkmgmt/advisory-commission.htm.

consult with members with respect to carrying out the provisions of Sections 2 (land acquisition), 3 (regulations), and 4 (owners' use of property) of this Act.”

NPS would seek legislative authority to reauthorize and re-establish the Fire Island National Seashore Advisory Commission to serve as an advisory body. The Advisory Commission would be composed of a broad representation of Fire Island stakeholders and interests who would serve staggered terms. The purpose of the Advisory Commission would be to represent various groups with interests in the Seashore and make recommendations to the Superintendent on issues related to the management of the Seashore and Island-wide matters including but not limited to land use and development, coastal zone management, transportation, marine resource management, and wildlife management.

The Commission's role would be purely advisory. It would meet on a regular basis and it would be undertaken in compliance with the Federal Advisory Committee Act (FACA). Meetings of the Commission would be open to the public and would be held in locations and in such a manner as to ensure public access and involvement. The NPS would provide staff and technical assistance to the Commission.

Create the Fire Island Management Partnership⁴

The NPS would seek legislative authority to create a Fire Island Management Partnership. The partnership's purpose would be to coordinate the activities of federal, state, and local authorities and the private sector as they pertain to Fire Island National Seashore and Island-wide matters including but not limited to land use and development, coastal zone management, transportation, marine resource management, and wildlife management. The Partnership would collaborate in the development, adoption, and implementation of any management plan having Island-wide implications including land use zoning or relevant management plans (e.g., Coastal Land Use and Shoreline Management Plan). The Partnership would play a formal role in the review of applications for variances, exceptions, permits for commercial or industrial use, or special permits submitted to the zoning authority for any development, use or change of use, and could offer a formal recommendation to the Superintendent of the Seashore.

The Management Partnership would be composed of members appointed by the Secretary of the Interior and could include representation from the NPS, New York State, Suffolk County, the towns of Islip and Brookhaven, the villages of Ocean Beach and Saltaire, the Fire Island Association, the U.S. Coast Guard, and the U.S. Army Corps of Engineers. Under this model, participating stakeholders would play a planning and advisory role, but would not have regulatory authority that reaches beyond their individual missions and mandates. The NPS would provide staff and technical assistance to the Partnership.

The Partnership may be endowed with the following authorities:

- To hold hearings and to take testimony
- To seek and accept donations of funds, property or services for the purposes of carrying out its duties
- To use funds to meet matching obligations in order to obtain funds from any source under any program or law
- To obtain by purchase, rental, donation, or otherwise, such property, facilities, and services as may be needed to carry out its duties. The Partnership may not acquire any real property or interest in real property.
- To implement the Plan, and for purposes of carrying out the Plan, enter into cooperative agreements with local or state government, any organization, or person

Commercial Services Plan

Under all action alternatives, the NPS would prepare a commercial services plan to determine which types and levels of activities, services, and facilities would be provided at the Seashore and how they would be managed by the NPS in the most effective and efficient manner. The commercial services plan would identify the best management approach for ferry transportation and the operation of marinas, food services, and other visitor service activities. The Commercial Services Plan would also address strategies for introducing sustainable design, energy efficiency, pricing and affordability, and other conditions of use into the administration of commercial services at the Seashore.

Volunteers

The NPS would work to expand its corps of volunteers and encourage greater volunteer involvement in educational outreach, resource inventory and monitoring, and other facets of park management.

⁴ The Management Partnership model described here is largely based on the Boston Harbor Islands Partnership. To learn more, visit www.nps.gov/boha/parkmgmt/partnership-members.htm.

Legislative Requirements

Recognizing Island Communities as Stewards

The Seashore's enabling legislation would be amended to include language recognizing the role of the Fire Island communities as partners in its management as they continue to play a substantial role in shaping Fire Island's natural and human environment.

Cooperative Stewardship Approach

The two cooperative stewardship approaches described above would each require Congressional action to authorize and enable them.

Realign Dune District with CEHA Line

The NPS would seek the necessary authority to realign the existing Dune District with the state's CEHA line, as appropriate.

Otis Pike Fire Island High Dunes Wilderness

The Otis Pike Fire Island High Dune Wilderness ("Fire Island Wilderness"), encompassing 1,380 acres of the Seashore, was designated in December 1980 (P.L. 96-585). In the Seashore's 1964 enabling legislation (P.L. 88-587), the area now encompassing the Fire Island Wilderness was referred to as "8 mile zone" that would be accessible by "ferry and footpath only" and "no development or plan for conveniences of visitor shall be undertaken therein which would be incompatible with the preservation of flora and fauna or physiographic conditions now prevailing and every effort shall be exerted to maintain and preserve this section of the Seashore . . . in as nearly (its) present state and condition as possible." The Fire Island Wilderness is unique as it is the smallest wilderness area managed by the NPS and the only federally designated wilderness in New York State. It is further distinguished by the fact that it occurs in the single largest metropolitan area of the United States, offering the opportunity to experience wilderness in a location and at a scale that makes it accessible both physically and emotionally to a large urban population.

In 1983, a Wilderness Management Plan was completed for the area. That plan addressed the removal or gradual filling in of incompatible structures and other man-made features such as old community walkways and mosquito ditches. It also addressed Wilderness exclusions, potential additions, uses, management, and facilities.



The NPS is preparing a new Wilderness Stewardship Plan for the Fire Island Wilderness, which is broadly addressed in this draft GMP/EIS as outlined below. Early in the planning process, the national office of the NPS Wilderness Stewardship Program requested that wilderness planning be integrated with Seashore's GMP/EIS planning process to ensure that it was given full consideration as other proposals within the plan were developed and evaluated for environmental compliance.

A more detailed draft Wilderness Stewardship Plan that, when approved and adopted, would supersede the 1983 Wilderness Management Plan, appears in Appendix D of this document. Typically, the Wilderness Stewardship Plan is prepared as an implementation plan after the completion of an approved GMP. However, because the proposed actions related to the Fire Island Wilderness are considered to be Common to All Action Alternatives, it was deemed appropriate to prepare and release these documents concurrently.

Wilderness Character Monitoring Program

The NPS would monitor and manage resources within the Fire Island Wilderness in a manner that protects its untrammeled and undeveloped qualities, natural systems, offers opportunities for solitude or primitive and unconfined recreation, and preserves its unique features consistent with indicators and measures based on the Interagency monitoring strategy called *Keeping it Wild: An Interagency Strategy to Monitor Trends in*

Wilderness Character across the National Wilderness Preservation System.

The strategy was developed by the Interagency Wilderness Character Monitoring Team representing several bureaus within the Department of the Interior including the Bureau of Land Management, the Fish and Wildlife Service, the National Park Service, and the U.S. Geological Survey, and the U.S. Forest Service in the U.S. Department of Agriculture. It was designed to apply to every wilderness regardless of administering agency, size, geographic location, type of ecosystem, permitted uses, or any other attribute.

Potential Wilderness Additions

Because of existing facilities or uses located at Old Inlet and the Smith Point West Nature Trail, these areas were originally deemed incompatible with a Wilderness designation. Due to the removal of the incompatible features related to the Smith Point West Nature Trail and the loss of Old Inlet facilities resulting from Hurricane Sandy in 2012, these areas (approximately 1 acre) will be designated as Wilderness upon publication of a notice in the Federal Register.

Wilderness Use

Passive recreational activities such as hiking and sunbathing would continue, as would the collection of beach plums and blueberries. Hunting and overnight camping would continue to be allowed by permit. The NPS would consider allowing horseback riding by permit in the Fire Island Wilderness. The NPS would continue to work with native tribes to accommodate traditional uses in the wilderness, including ceremonial activities.

Resource Management

Natural and cultural resources would be managed in a manner that does not impede natural processes or infringe upon wilderness character. Wildlife and vegetation management within the Fire Island Wilderness would continue, with each proposed management action undergoing a Minimum Requirement Analysis to consider its potential impacts on the character and qualities of the Fire Island Wilderness.

Trails & Dune Crossings

The NPS would no longer maintain formal dune crossings into the Fire Island Wilderness that connect to a trail that in places follows the historic path of the Burma Road. In their stead, the Seashore would place temporary markers on the beach face to indicate appropriate places for visitors to access the Fire Island Wilderness. The through trail would be minimally maintained to

accommodate foot traffic. The Smith Point West Nature Trail (approximately 1,000 feet) would be maintained by the NPS.

Signage

The NPS would continue the use of temporary signage to address visitor safety and resource protection needs as necessary. The NPS would ensure that such signage is kept to a minimum and does not permanently affect any of the factors contributing to wilderness character.

Research facilities and aids to navigation

The NPS would continue to allow for the temporary placement of some research instruments (e.g., sediment, elevation table) that support the Seashore's resource management objectives. A Minimum Requirement Analysis would be undertaken to evaluate research proposals for their compatibility with Wilderness character. The NPS would also continue to allow existing aids to navigation located within the Fire Island Wilderness to remain.

Bellport Beach

The Fire Island Wilderness is bisected by Bellport Beach, which is a bay- to -ocean stretch that is owned and operated by the Village of Bellport for the use of its residents. The NPS would continue to work with the Village of Bellport to ensure that Bellport Beach and the activities that occur there do not have a negative impact on the Fire Island Wilderness.

Management Alternative 2:

ENHANCING NATURAL RESOURCE VALUES

Concept

Under this alternative, greater emphasis would be placed on the protection and restoration of natural ecological systems, patterns, and resources on federal lands. A nature-based park experience would be emphasized, and the overall development footprint of the Seashore would be reduced. Visitor use and activity would be carefully distributed and accommodated in a manner that emphasizes protection of the Seashore's resources. A proactive, collaborative approach to stewardship among existing and new partners would be considered fundamental to the plan's success.

Natural Resource Management

Under this alternative the NPS would work with park partners to pursue a proactive program of natural resource protection within the Seashore and would seek to restore degraded or damaged ecosystems, as feasible.

In addition to the proposals prescribed under Elements Common to All Action Alternatives, the following management practices would be proposed:

Terrestrial Resources

► NATIVE PLANT AND ANIMAL SPECIES

Mosquito Surveillance & Management

Same as Alternative 1

Public Education & Outreach

As in Alternative 1, the NPS would continue to disseminate information related to living with wildlife to the public using a variety of interpretive media to inform and educate visitors about the Seashore's natural resources and resource management issues (such as endangered species and living with wildlife). In addition to informational brochures and other publications, the NPS would expand the use of ranger- or volunteer-led programming and personal contact with the public, and make additional use of the Internet and social media to foster a greater understanding of how visitors can safely enjoy their outdoor experience and be better resource stewards. Cooperative educational programs and demonstration projects related to resource stewardship (e.g., citizen science) would also be an important facet of public education and outreach.

Restoration of Native Plant Species

The NPS would develop and execute a proactive strategy for the eradication of invasive non-native plant species and the restoration of native plant species on federal lands through the most effective and environmentally sound means available.

The NPS would collaborate with Fire Island communities, the towns of Islip and Brookhaven, and Suffolk County to encourage similar eradication and restoration efforts on non-federal lands on Fire Island. Collaboration could take the form of but would not be limited to education, a cooperative greenhouse to propagate native species, and/or joint demonstration projects.

In addition to restoration efforts at Sunken Forest (described in “Elements Common to All Action Alternatives”), the NPS would seek to protect and restore other maritime forests on Fire Island as well as other terrestrial habitat types.

Marine Resources

► OCEAN AND ESTUARINE RESOURCES

Managing Non-Native Invasive Plant and Animal Species

The NPS would undertake inventory and monitoring to identify non-native species in the marine environment. The NPS would work collaboratively with local, state, and regional agencies on the control and eradication of non-native species (such as mute swans, Asian shore crabs, and colonial tunicates –i.e. marine invertebrates such as sea squirts) that negatively affect sensitive marine habitats. The NPS would collaborate with others to conduct research to understand the impacts of non-native species on marine ecosystem structure and function.

Cultural Resource Management

Similar to Alternative 1, under this alternative the Seashore's primary management emphasis would continue to be cultural resources that occur on federal lands, particularly at the Fire Island Light Station and the William Floyd Estate. As funding becomes available, the NPS would continue work to preserve cultural resources, undertaking appropriate preservation treatments. Seashore collections would continue to be housed in the curatorial storage facility located at the William Floyd Estate.

It is important to note that a separate set of management alternatives has been prepared for the William Floyd Estate and appear at the end of this chapter. While there may be an occasional reference to cultural resource management at the William Floyd Estate, this section focuses primarily on the cultural resources associated with Fire Island.

In addition to the proposals prescribed under Elements Common to All Alternatives, the following management practices would be proposed:

Carrington Estate

As in Alternative 1, the NPS would work collaboratively with local conservation and preservation interests to rehabilitate and adaptively reuse the main house and cottage on the property for administrative purposes. The associated landscape would be rehabilitated to the degree

necessary to ensure safe circulation on the property and access to the structures.

Museum and Archival Collections -- Curatorial Storage

The NPS would continue to house the museum and archival collections in their present locations. Consistent with recommendations made in the Seashore's Collection Management Plan (2006), the existing interior space of the present curatorial storage facility would be reorganized and refurnished with more space-efficient, archival-quality storage units to maximize the use of the space. The NPS would adjust the Seashore's Scope of Collections to better manage the accession of museum and archival materials and allow for the expansion of its natural history collection. Seashore staff would continue to offer limited tours of the curatorial storage facility as feasible and would continue to provide assistance to researchers. Workspace for conservation and research activities would continue to be limited.

Seashore Experience

While visitors would continue to enjoy access to and interpretation of cultural resources at the William Floyd Estate and the Fire Island Light Station, under this alternative the park experience at the Seashore would center on close contact with and immersion in the natural landscape. Clearly organized access routes would minimize the disturbance of natural resources, with access to some areas being restricted and some different types of uses that are "lighter on the land" being encouraged.

Interpretive Emphasis

Interpretive media and programs would emphasize the power of natural processes to shape this landscape. It would also focus on the richness and fragility of Fire Island and how human actions undertaken to adapt to or manipulate the coastal environment have affected the barrier island both positively and negatively.

Public Information and Programs

The NPS would continue to maintain a robust Seashore web page on the NPS website (www.nps.gov/fiis) and a social media presence providing information on Seashore programs, recreational opportunities, resources, and management. Ranger-, partner-, and volunteer-led programs would continue primarily during the summer visitor season and be available at most Seashore facilities on Fire Island. A wide range of regularly scheduled public programming would occur year round at the Fire Island

Light, the William Floyd Estate, and at the eastern entry to the Fire Island Wilderness.

In addition to the traditional museum exhibits and interpretive waysides found at Fire Island Light Station, the William Floyd Estate and other Seashore facilities, the availability of digital media (e.g., web info/download, cell phones, iPods) and personal services would be expanded, particularly in the Seashore's natural areas. Seashore brochures would also continue to be an important way to deliver a wide range of information on general Seashore orientation, specific sites, and public safety, among other topics.

Educational & Community Outreach

The NPS would expand its educational and community outreach programs to make them available to a wider audience. Sustainability efforts would focus on modeling methods for the stewardship of natural resources and related processes, citizen stewardship programs, and outreach to schools and community groups. Community-based programming would be an important facet of this outreach strategy.

► VISITOR FACILITIES

Under Alternative 2, the visitor experience would emphasize opportunities for immersion in the natural environment. Visitor orientation facilities and exhibits would be located on Long Island rather than on Fire Island and would make use of existing structures wherever feasible. The number of visitor facilities on Fire Island would be reduced. Where feasible, the use of seasonal, temporary structures would be considered.

Patchogue/ Mainland Facilities

As in Alternative 1, the Ferry Transportation Center (opened in 2010) with ferry service to the Seashore's Watch Hill facility would continue to serve the public. Under this alternative, a more in-depth orientation exhibit would be installed in the multipurpose space. An audio-visual presentation orienting visitors to the Seashore would also be available for viewing on a regular schedule in the same space. The multipurpose program space would continue to be available for meetings, lectures, and other special programs as necessary. In addition to encouraging the use of public transportation, the NPS would work with Long Island Railroad (LIRR) and the ferry operators to orient their Fire Island travel packages and marketing campaigns toward the use and enjoyment of the Seashore's visitor areas at Fire Island

Lighthouse, Sailors Haven, Watch Hill, and the William Floyd Estate.

Fire Island Light Station

As in Alternative 1, operations and visitor programming at the Fire Island Light Station would continue to be managed by the Fire Island Lighthouse Preservation Society (FILPS) through a formal agreement with the NPS. The NPS would work with FILPS to update exhibits to include expanded interpretation of the Light Station's cultural landscape, natural features, and to provide more information orienting the visitor to Fire Island as a whole. The NPS would work with Robert Moses State Park and the local transit authority to make the West End Entrance Station a formal transit bus stop. The NPS would collaborate with Robert Moses State Park to develop an outdoor interpretive exhibit that would be located at Field 5 and would orient visitors to Fire Island and provide interpretive information on barrier island dynamics, living on a barrier island, and other relevant topics.

Sailors Haven/Sunken Forest

Under this alternative, facilities at this location would gradually be scaled back to allow for the restoration and regeneration of the Sunken Forest and the bayside shoreline. Greater emphasis would be placed on offering educational and interpretive programming related to the particular natural resource values associated with the site. Consistent with a new master plan to be developed

for the site, when existing facilities reach the end of their structural lifecycle, they would be removed and, in some cases, replaced with more sustainable structures. At the end of its structural lifecycle, the existing 48-slip marina would be removed to enable restoration of the bay shoreline in the location of Sunken Forest. The ferry dock, existing bathhouse, visitor contact facility, and the current system of boardwalks and concrete trail would be retained. Services would continue to include lifeguards at the ocean front beach and ranger-led programming. The NPS would rehabilitate the Sailors Haven Visitor Center to include an update of exhibits and sales space as funds become available. Interpretive signage along the Sunken Forest trail would also be updated. NPS would also develop a covered, outdoor flexible program space to support interpretive and educational programming.

Talisman

Under this alternative, Talisman would remain a day-use area. Consistent with a new master plan, at the end of their structural lifecycle, the restrooms, beach walk, and old hotel building at the west end of the area would be removed. The boat dock and nearby restrooms would be retained as would the boardwalk to the ocean beach.

Watch Hill

Under this alternative greater emphasis would be placed on offering educational and interpretive programming related to the specific natural resource values associated



with Watch Hill – particularly emphasizing its relationship to the salt marsh and the water. Watch Hill’s place as the western gateway to the Fire Island Wilderness would also be recognized and addressed. The NPS would continue to provide a lifeguarded beach on the ocean side. A new master plan would be prepared for Watch Hill to address the site’s aging infrastructure in the context of the dynamic coastal environment as it is influenced by climate change and sea-level rise.

A new campground similar in scale to the current facility would be developed at a more suitable location on Fire Island. The new campground would be located in a previously disturbed area at Sailors Haven, Talisman, or Watch Hill and would be considered in the master planning process for each of these locations. The old campground would be removed and the site would be permitted to revert to its natural state.

Wilderness Visitor Center

The Wilderness Visitor Center is located at the eastern entry of the Wilderness Area. Under this Alternative, the NPS would minimize development at the edges of the Fire Island Wilderness. The existing Wilderness Visitor Center would be replaced with a small simple structure that would offer an outdoor information plaza with a kiosk and restroom facilities. The existing parking corral would be retained to accommodate universal access. Most visitors would continue to park in the adjoining Smith Point County Park lot. An electronic beach access gate would be installed to control access for off-road vehicles.

Bay Shore, Sayville, & Patchogue (Davis Park) Ferry Terminals

The NPS would collaborate with boat operators to develop basic orientation waysides to be installed in a prominent location at each Long Island ferry terminal to provide visitor information to passengers traveling to Fire Island by way of the communities.

► RECREATIONAL USES

As in Alternative 1, a range of recreational opportunities would continue to be available at Fire Island. Activities that enable visitors to make a greater connection to the natural environment would be encouraged. Smaller-scale facilities may reduce crowding in certain locations producing more opportunities for a contemplative experience.

Life-Guarded Beaches

The Seashore would continue to provide lifeguards seasonally at the ocean beaches at Sailors Haven and Watch Hill. Hours of lifeguard operations at the protected beaches would be determined based on the level of visitor use and consistent with existing policies and guidelines for visitor safety. There would be no life-guarded beach at Talisman.

Kayaking/Canoeing

Under this alternative, the Seashore would continue Watch Hill guided canoe trips and would add route(s) through shallow waters on the bay side of the Fire Island Wilderness. The development of a water route would be undertaken by the NPS with the support of the NPSs Rivers, Trails, and Conservation Assistance (RTCA) program. The NPS would offer a water trail guide or brochure, and occasional guided experiences offered by Seashore staff.

Beach Camping in front of the Wilderness Area

As in Alternative 1, beach camping in front of the Wilderness Area would continue under the following conditions:

- No more than 36 people may camp in the Fire Island Wilderness zones and the Great South Beach zones combined.
- No more than 12 individuals in no larger than groups of 4 per campsite in the Eastern Zone.
- No more than 24 individuals in no larger than groups of 8 per campsite in the Western Zone.
- Camping on the beach would be permitted annually from July 1 through Labor Day.

Transportation

► LAND-BASED ACCESS

Public Transportation

Under this alternative, the NPS would collaborate with the Long Island Railroad, Suffolk County Transit, and the ferry companies to aggressively promote the use of public transportation to access all of Fire Island and the William Floyd Estate. Methods may include the use of special promotions (e.g., if visitors can show a valid, dated transit ticket they may be eligible for program fee waiver or reduced fares) or improved infrastructure like bicycle racks located at train, bus, and ferry terminals.

► WATER-BASED ACCESS

Private Boaters

Under this alternative, the number of overnight boat slips available for the use of private boaters on Fire Island would be reduced because the marina at Sailors Haven would eventually be removed. At Sailors Haven and Talisman, private boaters would continue to be able to drop off passengers and gear at the dock and to anchor offshore.

Lateral and Cross-Bay Ferry Services

As in Alternative 1, the Seashore would continue to work with other Fire Island stakeholders to manage ferry service to ensure that it continues to provide a quality experience and remains the primary form of transportation to and from Fire Island. The NPS would require that ferries serving Seashore destinations be more sustainable (e.g., reduced emissions, use of alternative fuels, etc.) and encourage Fire Island communities to do the same with their ferry operators.

Improve Water-Based Access

The NPS would work with Fire Island communities, the towns of Islip and Brookhaven, and Suffolk County to expand opportunities for water-based facilities on Fire Island that can accommodate the movement of goods and services (e.g., cargo/materials delivery; debris removal, etc.).

Operations & Maintenance

Under this alternative the scope and function of the operation and maintenance of the Seashore would be adjusted consistent with the new changes and requirements proposed under this alternative. Though there would be fewer large-scale facilities, more trails and boardwalks may be developed to accommodate

public access while preventing resource degradation. Some new structures developed on Fire Island may be seasonal and removable, requiring significant effort at the beginning and close of each visitor season as well as off-season storage. Any expansion of facilities for administrative or maintenance purposes would take place on Long Island, not Fire Island. Greater emphasis would be placed on improving energy efficiency and making use of alternative technologies to power facilities and address transportation, wastewater, and waste management needs.

Staff Housing

As under Alternative 1, the NPS would continue to maintain and make housing available to Seashore and concession employees for rent at fair market rates. Seashore housing would also continue to be available to researchers on an as-needed basis. Under this alternative the number of available units would be reduced. Seashore housing at Talisman would be removed. The number of Seashore housing units at Fire Island Light Station and the William Floyd Estate would stay largely the same, while the number of housing units at Sailors Haven and Watch Hill would likely be reduced. The Seashore's Housing Plan would be updated to be consistent with the final approved GMP.

Trash Transfer Stations/ Waste Management

Under this alternative, the trash transfer station at Sailors Haven would be removed and a policy of "carry in/carry out" for trash would be instituted there and would remain in effect at Talisman and other undeveloped federal areas. The NPS would retain and operate the trash transfer station at Watch Hill and would continue to cart refuse off Fire Island by vessel.

Ranger Stations

Ranger Stations would continue to be located at the Lighthouse Annex at Fire Island Light and at the visitor facilities at Sailors Haven and Watch Hill. There would no longer be a ranger station at the eastern most end of the Seashore adjoining the Fire Island Wilderness; however, an electronic gate would be installed to control vehicular access to the beach. Permitting for camping, hunting, and driving would all occur online, at the Patchogue ferry terminal, or at the Seashore's administrative offices in Patchogue.

Lifeguard Facilities

As under Alternative 1, lifeguard facilities would continue to be located at Sailors Haven and Watch Hill.

Fire Island Light Station /Kismet Fire House

After the termination of the Kismet Fire Department lease in 2014, the NPS would remove the structure and allow the site to return to a natural state.

Park Administration

Under this alternative the NPS would continue to operate its facilities and provide for public programming and visitor safety by relying on a combination of NPS staff, volunteers, partners, cooperators, and commercial service providers. However, the NPS would assume responsibility for operating the campground on Fire Island. Resource management functions that are particular to federal lands would continue to be overseen primarily by the Seashore.

Staffing

Supplemental to the proposed additions to the Seashore staff described under Alternative 1, up to six other positions would be required to meet the demands of this alternative, with an increased focus on research, monitoring, resource protection, and education related to natural resources. This would include a dedicated GIS specialist for the Seashore and additional natural resource management professionals with expertise in coastal ecology and marine biology.

Commercial Services

Under this alternative the NPS would reduce the number of services provided by private concessioners. The NPS would resume responsibility for managing the campground on Fire Island. The Watch Hill Marina would continue to be operated through a concessions contract.

Cooperators

As under Alternative 1, the NPS would continue to rely on cooperating associations. The Fire Island Lighthouse Preservation Society would continue to operate and maintain the Fire Island Lighthouse and provide visitor services to the public. The Seashore would also continue to work with a cooperating association (presently Eastern National) that manages sales outlets at various locations throughout the park including Watch Hill, Sailor's Haven, and the William Floyd Estate.

Partners

The NPS would expand the Seashore's network of partners and cooperators to assist in managing park facilities, areas, and programs consistent with the Seashore's purpose and goals.

Legislative Requirements

There are no legislative proposals specific to this Alternative.

Management Alternative 3:

RECOGNIZING THE RELATIONSHIP BETWEEN HUMAN USE AND NATURE *(NPS Preferred Alternative)*

Concept

This alternative acknowledges that Fire Island is a natural landscape with a significant cultural overlay and recognizes the strong connection between natural and cultural resource protection and human use. Historically, human use and development on Fire Island have reflected and responded to the natural qualities and character of the barrier island environment in the ways that it has been used, adapted to, and manipulated. In the 1950s, when the natural qualities and character of the barrier island environment were threatened by a destructive development proposal, the cultural response was to advocate for the creation of Fire Island National Seashore. On Fire Island it has long been recognized that care must be taken to ensure that the "cultural footprint" on the barrier island does not overwhelm its natural qualities and character. Through a proactive and collaborative management approach, the NPS would seek an appropriate balance between continuing human use and protecting Fire Island's fragile environment.

The Seashore experience and interpretation would recognize the relationship of human involvement with the dynamic natural landscape of the barrier island. Fire Island would be explored from the perspective of the pre- and post-contact history of Long Island and New York Harbor, from its early use for agricultural and maritime purposes to its emergence as a distinctive vacation destination and finally a National Seashore. In considering Fire Island's human history, the relationship to the natural environment would be central, as it is largely a story of adaptation and manipulation that has shaped the place that exists today and will influence how the NPS, Fire Island communities, and other Seashore stakeholders respond to the effects of climate change and sea-level rise.

The NPS would also engage in outreach and collaborative efforts that would enhance the public's understanding and appreciation of the Seashore within its regional historic, cultural, and natural context.

Existing infrastructure would be retained and, over time, would be improved and/or reoriented to be greener, more efficient, and better adapted to the coastal environment. Any new development meant to create improved opportunities for visitor use and appreciation of resources would be limited to existing visitor-use areas and would be undertaken only after appropriate climate change and sea-level rise risk assessments have been completed. A more detailed examination of these factors will influence the type, design, location, and ultimate feasibility of any proposed project.

Natural Resources

Under this alternative, the NPS recognizes that human activities and the built environment would continue and would commit to working collaboratively to minimize or mitigate impacts on the natural environment in order to prevent further loss or degradation (e.g., implement sustainable practices, upgrade wastewater management, etc.)

In addition to the proposals prescribed under Elements Common to All Action Alternatives, the following management practices would be proposed:

Terrestrial Resources

► NATIVE PLANT & ANIMAL SPECIES

Tick Surveillance & Management

Under this alternative, the Tick Surveillance & Management protocols would be revised to enable the Seashore to implement proactive management strategies in areas of high use and high risk of exposure to reduce the human health risk. A range of low-impact methods would be employed to minimize the effects on other Seashore resources. Intensive public education and separation of the public from high-risk areas would also figure prominently in the strategy.

Mosquito Surveillance & Management

Under this alternative, the NPS would work collaboratively with Suffolk County Vector Control (SCVC) to revise the Mosquito Action Plan and Surveillance Protocols (Protocols) within the Seashore boundary consistent with the Seashore's Mosquito Surveillance and Management Program. The revised protocols would enable the NPS and Suffolk County

to implement proactive management strategies in areas of high use and high risk of exposure to reduce human health risk. A range of low-impact methods would be employed to minimize the effects on other Seashore resources. Intensive public education would also figure prominently in the strategy.

Cultural Resources

Under this alternative, the NPS would place increased emphasis on research, documentation, interpretation, and preservation of cultural resources on Fire Island. The NPS would work with the New York State Historic Preservation Office (NYSHPO), Fire Island communities, the towns of Islip and Brookhaven, and Suffolk County to consider cultural resources in their island-wide as well as their regional context. The NPS would make a concerted effort to protect and interpret the Seashore's primary cultural resources and stories across Fire Island (e.g., Light Station complex, submerged resources, cultural traditions, evolutions of island development and uses over time) and would make technical assistance available to Fire Island communities that wish to inventory, protect, and interpret their historic and cultural assets. The NPS would complete the necessary research to fill in information gaps related to cultural resources, both terrestrial and submerged, on federal and non-federal lands, within the Seashore.

It is important to note that a separate set of management alternatives has been prepared for the William Floyd Estate and appear at the end of this chapter. While there may be an occasional reference to cultural resource management at the William Floyd Estate, this section focuses primarily on the cultural resources associated with Fire Island.

In addition to the proposals prescribed under Elements Common to All Action Alternatives, the following management practices would be proposed:

Research and Documentation of Cultural Properties on Fire Island

The NPS would collaborate with Fire Island communities and the towns of Islip and Brookhaven to develop a Cultural Landscape Report (CLR) that would consider Fire Island as a whole, including federal and non-federal tracts. The project would involve the preparation of a site history, description of existing conditions, and the identification and analysis of contributing landscape characteristics within the dynamic coastal environment. The CLR would provide essential information for protecting and interpreting Fire Island's cultural heritage.



The NPS would also work collaboratively with the NYSHPO and Fire Island communities that express an interest in undertaking a formal inventory of historic resources (including structures, landscape features, museum and archival collections, archeology, etc.).

Archeological Resources

The Seashore's Archeological Overview and Assessment (2005) identified a number of locations within the Fire Island communities where archeological resources may be present. The NPS would work with Fire Island communities to make them aware of such resources and to work with them to document them or otherwise secure the site and/or the information associated with them.

Museum and Archival Collections

The NPS would work with individuals and local groups possessing relevant historical and archival collections to conserve those collections and consider ways to make them more available to a wider audience. Methods may include offering workshops on the practical care and storage of historic and archival materials, and mounting temporary exhibits that highlight relevant local collections in the context of Fire Island's history.

Museum and Archival Collections – Curatorial Storage

The NPS would work to meet the needs of its growing collection, including museum and archival materials, natural history items, and archeological artifacts. Consistent with recommendations made in the Seashore's Collection Management Plan, under this alternative, the

existing curatorial storage facility would be reorganized and expanded to meet the needs of the Seashore's collection, including additional space for cataloging and caring for the collection and an appropriate area for researchers to review materials. The existing interior space of the present curatorial storage facility would be reorganized and refurnished with more space-efficient, archival-quality storage units to maximize the use of the space. The improved facility would offer an outdoor panel exhibit to provide interpretation of the collection even when the curatorial storage facility is closed. An approximately 1,000-square-foot addition would be constructed to address additional storage, work, and research space.

Institutional Partners for Cultural Resource Management

The NPS would seek to strengthen the Seashore's relationship with the academic community, local and regional museums, historical societies and others to expand opportunities for collaboration in undertaking research, inventories, preservation initiatives, and interpretation.

Seashore Experience

Under this alternative, the Seashore experience would stress the connections between the natural and cultural environment and offer a more integrated visitor experience on Fire Island and at the William Floyd Estate. Through collaborating on programs and special events, the NPS would create more opportunities to

link experiences between Fire Island communities and the Seashore. The NPS would work to increase the distribution and dispersion of visitors across Seashore facilities and encourage a broad range of experiences.

The NPS and its partners would offer a diversity of opportunities – educational, recreational, water-based, land-based, interpretive, and virtual – that would be designed to engage diverse audiences that are representative of the tri-state area demographic, and delivered by a range of personal and non-personal services and media. The visitor experience would draw on regional connections to encourage visitors to seek out related resources on Long Island (e.g., Wertheim National Wildlife Refuge, Long Island Maritime Museum, the Manor of Saint George, etc.) to enhance their understanding of Fire Island.

Interpretive Emphasis

The interpretive focus would be on the Seashore's natural and cultural heritage ("life on the barrier island"). Interpretation would explore the historical importance of human settlement to the natural systems of Fire Island, Great South Bay, and the South Shore of Long Island. The natural ecologies here have been influenced and altered by people over the course of human history and will continue to be affected into the future.

Interpretive media and programs would emphasize the power of natural processes to shape this landscape. Because human actions may be having major impacts, interpretive programming would help Seashore audiences consider how we mitigate for those impacts, how we adapt to the conditions found in this dynamic environment, how we expect conditions to change in the future due to climate change, and finally, how we work together to address these questions. The public has an important role to play in creating positive outcomes by modeling good practices and educating others.

Public Information and Programs

The NPS would continue to maintain a robust web page on the NPS website (www.nps.gov/fiis) and reach out via social media to provide information on Seashore programs, recreational opportunities, resources, and management. Ranger-, partner-, and volunteer-led programs would continue primarily during the summer visitor season and would be available at most Seashore facilities on Fire Island and by invitation at other partner locations. Such programs would be offered year-round at Fire Island Light, the Wilderness Visitor Center, and at the William Floyd Estate. Visitor- or user-generated content

and digital media (e.g., web info, downloadable smart phone and iPod/iPad applications, podcasts, video, etc.) and services (e.g., virtual exhibits and tours) in addition to physical exhibits, museums, and waysides would be utilized. Seashore brochures would also continue to be an important way to deliver a wide range of information on general Seashore orientation, specific sites, public safety, etc.

Educational & Community Outreach

The NPS would expand its educational and community outreach programs to make them available to a wider audience. Educational and community outreach would focus on natural and cultural processes and related issues, citizen stewardship programs, and schools and community groups. Offering off-site programming to meet the public where they live and emphasizing regional context and connections would be a fundamental interpretive strategy.

► VISITOR FACILITIES

Under this alternative, the major visitor service areas within the Seashore would be retained and the expansion of some areas would be considered. Existing facilities would be retained and, over time, would be improved and/or reoriented to be greener, more efficient, and better adapted to the coastal environment.

Patchogue/ Mainland Facilities

As in Alternatives 1 and 2, the Ferry Transportation Center would continue to serve the public with ferry service to the Seashore's Watch Hill facility, restrooms, multipurpose program space, changing and permanent indoor exhibits, and outdoor orientation exhibits. The NPS would work with Long Island Railroad (LIRR) and the ferry operators to encourage the use of public transportation and orientation of their Fire Island travel packages and marketing campaigns toward the use and enjoyment of the Seashore as a special place to be enjoyed and protected. A covered waiting/program area would be added to the existing deck adjoining the dock. During the shoulder seasons, the dock may accommodate visiting vessels such as the 1888 Oyster Sloop *Priscilla*, owned by the Long Island Maritime Museum.

Fire Island Light Station

As in Alternatives 1 and 2, operations and visitor programming at the Fire Island Light Station would continue to be managed by the Fire Island Lighthouse Preservation Society (FILPS) through a formal agreement with the NPS. Under this alternative, the NPS would work with FILPS to update exhibits to include expanded

interpretation of the Light Station's cultural landscape and natural features through the use of waysides and other interpretive media. The NPS would work with Robert Moses State Park and the local transit authority to make the West End Entrance Station a formal transit bus stop. Additional orientation and interpretive information would also be provided at the West End Entrance Station to aid visitors arriving by public transportation and could take the form of a panel mounted to the side of the building and/or expanded freestanding wayside exhibits at Field 5.

Sailors Haven/Sunken Forest

The NPS would develop a new master plan for the Sailors Haven/ Sunken Forest area that would re-envision it as a destination that relies on sustainable infrastructure and facilities to support recreation and outdoor education. The NPS would explore options for redesigning the Sailors Haven marina and ferry dock to minimize the downdrift impacts that have been causing erosion and undermining portions of the Sunken Forest.

The NPS would continue to maintain a lifeguarded beach on the ocean side at Sailors Haven.

The NPS would rehabilitate the Sailors Haven Visitor Center and would develop a sheltered group program area for groups of up to 50 people. Such proposed outdoor spaces would provide a staging area for walking tours, outdoor program space for large groups, as well as a location for evening programming. It would be located on previously disturbed lands.

The NPS would retain the current trail network and would work to upgrade the associated interpretive media. Interpretive signage along the Sunken Forest boardwalk trail would be updated and expanded.

Carrington Estate

Similar to Alternatives 1 and 2, the NPS would rehabilitate and use the historic Carrington house for administrative purposes. Under this alternative, the cottage may be used for an artist-in-residence program managed in partnership with local cultural institutions. The NPS would continue to maintain the boardwalks and the dune crossing to the west of the houses.

Talisman

At Talisman, the NPS would provide for a lifeguard-protected beach on the ocean side as funding permits, and existing recreational facilities (e.g., restrooms, bathhouse) would be retained. Interpretive programming would be offered as staffing permits. The current boat dock would be retained as would the existing sun

shelters and picnic areas, waysides, and informational bulletin boards.

Watch Hill

As in Alternative 2, NPS would develop a new Master Plan for Watch Hill that would guide the removal or rehabilitation of outdated facilities, enhance site circulation, identify appropriate space for visitor contact activities, interpretive and educational programming, exhibits, and retail sales, and improve operational efficiencies.

The Watch Hill marina and ferry dock would be retained. The marina facilities, campground, and the bathhouse as well as ferry service would continue to be operated through concessions agreements awarded through a competitive process to a private enterprise. The NPS would continue to maintain the life-guard-protected beach and the extensive system of boardwalks that traverse the maritime forest and salt marsh at Watch Hill.

The NPS would also consider rehabilitating and reusing the current restaurant space for educational programming, perhaps considering a seasonal arrangement enabling its use for educational purposes during the shoulder seasons and its continued use as a restaurant during the summer season.

Informational signage identifying the Fire Island Wilderness would be installed at various points of entry.

Residential Environmental Education Program

The NPS would work collaboratively with one or more partners to reestablish a residential environmental education program. The education program could be located at one of the Seashore's developed areas and would be a small-scale, formal program that is a destination for day-use and overnight participants of all ages and backgrounds to learn about the ecology of Fire Island. The program would be housed using existing facilities that are available during the Seashore's shoulder seasons. Most of the structures at Sailors Haven and Watch Hill would be readily available and would require few, if any, modifications. At Talisman, the existing hotel would need to be completely rehabilitated to accommodate this use.

This program would be a collaborative venture and would not be undertaken until the appropriate partnerships have been forged and a significant proportion of the resources necessary to undertake and sustain the project are in place.

Wilderness Visitor Center

At the eastern gateway of the Fire Island Wilderness, the Wilderness Visitor Center would be rehabilitated to improve universal access to the facility. Permanent exhibits orienting visitors to the Fire Island Wilderness and other facets of Fire Island National Seashore would be installed.

The existing parking corral would be improved, enabling more efficient use of the space and providing for designated handicapped parking. The Seashore would work with Suffolk County to make overnight parking available at the Smith Point County Park.

► RECREATIONAL USES

As in Alternative 1, a wide range of recreational opportunities would continue to be available at Fire Island. Activities that enable visitors to make a greater connection to the Seashore as a whole and its wider regional context would be encouraged. Expanded opportunities to engage in educational programming within the Seashore and in programming offered jointly with other institutions throughout Suffolk County would be available to Seashore visitors.

Lifeguarded Beaches

The NPS would provide for life-guard-protected beaches in high use areas including Watch Hill, Sailors Haven, and Talisman as funding allows. The scale of the life-guarded beach could be adjusted in response to increasing or decreasing levels of use. Restrooms would be provided in relation to these beaches.



Kayaking/Canoeing

The NPS would continue Watch Hill guided trips as in Alternative 1 and add route(s) through shallow waters on the bay side. Water routes could also be expanded to include a larger regional experience and linking a number of destinations including Wertheim National Wildlife Refuge, the Fire Island Wilderness, and Watch Hill. The development of a water route would be undertaken by the NPS with the support of the NPS's Rivers, Trails, and Conservation Assistance (RTCA) program. The NPS would identify canoe/kayak landing locations, provide a water trail guide or brochure, and offer occasional guided experiences. The operation of the water route including the maintenance of buoys and markers, guides and brochures, canoe and kayak rentals, and guided tours could be undertaken through a concession agreement that would be competitively awarded to a private enterprise.

Beach Camping in Front of the Wilderness Area

Under this alternative, camping on the beach would continue to be permitted and the total number of people permitted to camp in either the Wilderness Area or on beach in front of the Wilderness Area would increase.

- No more than 72 people may camp in the Fire Island Wilderness zones and the Great South Beach zones combined. Camping on the beach is permitted annually from March 15 through Labor Day.
- In addition to those permitted to camp in the Wilderness from March 15 through Labor Day, no more than 36 people may camp on the beach.
 - » No more than 12 individuals in no larger than groups of 4 per campsite in the Eastern Zone of the beach in front of the Fire Island Wilderness.
 - » No more than 24 individuals in no larger than groups of 8 per campsite in the Western Zone of the beach in front of the Fire Island Wilderness.
- No more than 36 people may camp in the Fire Island Wilderness zones year round.
 - » No more than 12 individuals in no larger than groups of 4 per campsite in the Eastern Zone of the Fire Island Wilderness.
 - » No more than 24 individuals in no larger than groups of 8 per campsite in the Western Zone of the Fire Island Wilderness

Transportation

► LAND-BASED ACCESS

As in Alternative 2, the NPS would work with others to improve bus and non-motorized connections to Fire Island and enhance visitor awareness of train and bus connections.

Inter-community Bicycle Working Group

The NPS would convene an inter-community bicycle working group to consider the specific benefits and impacts of expanding the use of bicycles as a lateral transportation option, particularly during the shoulder seasons. The working group would include representation from the Fire Island communities, the towns of Islip and Brookhaven, ferry operators, and the NPS to address the types of bicycle use and under what circumstances it would be accommodated. The working group would produce recommendations on how to best accommodate cycling and what level of bicycling would be feasible on Fire Island.

► WATER- BASED ACCESS

Ferry Service

The NPS would work with the ferry companies currently servicing the Seashore and others to improve service to NPS sites by expanding service during shoulder season to specific destinations. The NPS would also work with the ferry companies to permit the transport of bicycles and kayaks on passenger ferries. The NPS would work with the Seashore's ferry concessions and others to explore the possibility of providing a subsidy to reduce fares or offer a waiver, particularly for underserved school districts and low-income families.

Private Boaters

As in Management Alternative 1, slips at Sailors Haven and Watch Hill would continue to be available on a first-come, first-served basis. The limited reservation system at the Watch Hill marina would continue. The NPS would continue to impose a 14-consecutive-day limit on marina docks on all overnight stays. Boats would continue to be able to moor off shore.

Improve Water-Based Access

The NPS would work with Fire Island communities, the towns of Islip and Brookhaven, and Suffolk County to expand opportunities for water-based facilities on Fire Island that can accommodate the movement of goods and services (e.g., cargo/ materials delivery; debris removal, etc.).

Lateral Transportation Services

The NPS would work with the ferry companies and other stakeholders to increase service to NPS sites and explore ways to expand lateral water taxi service and try to make it more affordable.

Operations And Maintenance

Under this alternative the scope and function of the operation and maintenance of the Seashore would be adjusted consistent with the new changes and requirements proposed under this alternative. Additional facilities proposed for Sailors Haven would require operation and maintenance by the Seashore. Some replacement structures developed on Fire Island may be seasonal and removable, requiring significant effort at the beginning and close of each visitor season as well as off-season storage. Greater emphasis would be placed on improving energy efficiency and making use of alternative technologies to power facilities and address transportation, wastewater, and waste management needs, as well as increasing resilience to climate change and sea-level rise.

Staff Housing

Under this alternative the NPS would continue to maintain and make housing available to Seashore and concession employees for rent at fair market rates consistent with DOI and NPS housing management standards. Seashore housing would also continue to be available to researchers on an as-needed basis and would continue to be dispersed throughout the Seashore at the following locations: Fire Island Light Station, Sailors Haven, Carrington, Talisman, Watch Hill, and the William Floyd Estate.

At Sailors Haven, Talisman, and Watch Hill the use of seasonal, removable structures would be considered for seasonal staff housing.

At Talisman, one of the two existing housing units is currently located in front of the CEHA line. This house would be removed from its present location and, if feasible, relocated to a more appropriate location on the site. These housing units would continue to be available for staff housing or other administrative purposes. At Watch Hill, one unit of housing is located in a sensitive area. Similar to what is proposed for Talisman, it would be removed from its present location and, if feasible, relocated to a more appropriate site. The Seashore's Housing Plan would be updated to be consistent with the final approved GMP.

Boat and Ferry Docks

Same as Alternative 1.

Trash Transfer Stations/ Waste Management

Same as Alternative 1.

Ranger Stations

The Ranger Stations would continue to be located at Fire Island Light, Sailors Haven, Watch Hill, and the Wilderness Visitor Center.

Lifeguard Facilities

These facilities typically include a changing room, showers, lockers, and storage for gear and are associated with the lifeguard-protected beaches. Under this alternative, these facilities would continue to be located at Sailors Haven and Watch Hill. A new lifeguard facility would be developed at Talisman, considering adaptive reuse of an existing building, as funding allows.

Fire Island Light Station Operations/Kismet Fire House

Same as Alternative 1.

Park Administration

Like Alternatives 1 and 2, under this alternative the Seashore would continue to operate its facilities and provide for public programming and visitor safety by relying on a combination of NPS staff, volunteers, partners, cooperators, and commercial service providers. Most resource management, land-use planning and regulation, law enforcement and emergency response functions would continue to be undertaken by Seashore and other NPS staff in collaboration with other relevant agencies and organizations.

Staffing

Supplemental to the proposed additions to the Seashore staff described under Alternative 1, up to six other positions would be required to meet the demands of this alternative, with an increased focus on cultural and natural resource management, planning, and community and educational outreach.

Commercial Services

The NPS would continue to employ concessioners to provide regular ferry service seasonally from Long Island to Seashore visitor facilities on Fire Island and to manage the public facilities at Sailors Haven, Talisman, and Watch Hill. The concessions would be awarded on a competitive basis at regular intervals. Seashore staff would continue to be responsible for monitoring the concessions to ensure that the terms of concession agreements are being met.

Cooperators

The NPS would continue to rely on a cooperating association, The Fire Island Lighthouse Preservation Society, to operate and maintain the Fire Island Lighthouse and provide visitor services to the public. The NPS would work with the Society to explore the possibility of expanding its role and responsibilities in interpreting the cultural heritage of all of Fire Island. The NPS would also continue its relationship with Eastern National (EN) or similar cooperating association for management of sales outlets at various locations throughout the Seashore including Watch Hill, Sailors Haven, Wilderness Visitor Center, and the William Floyd Estate.

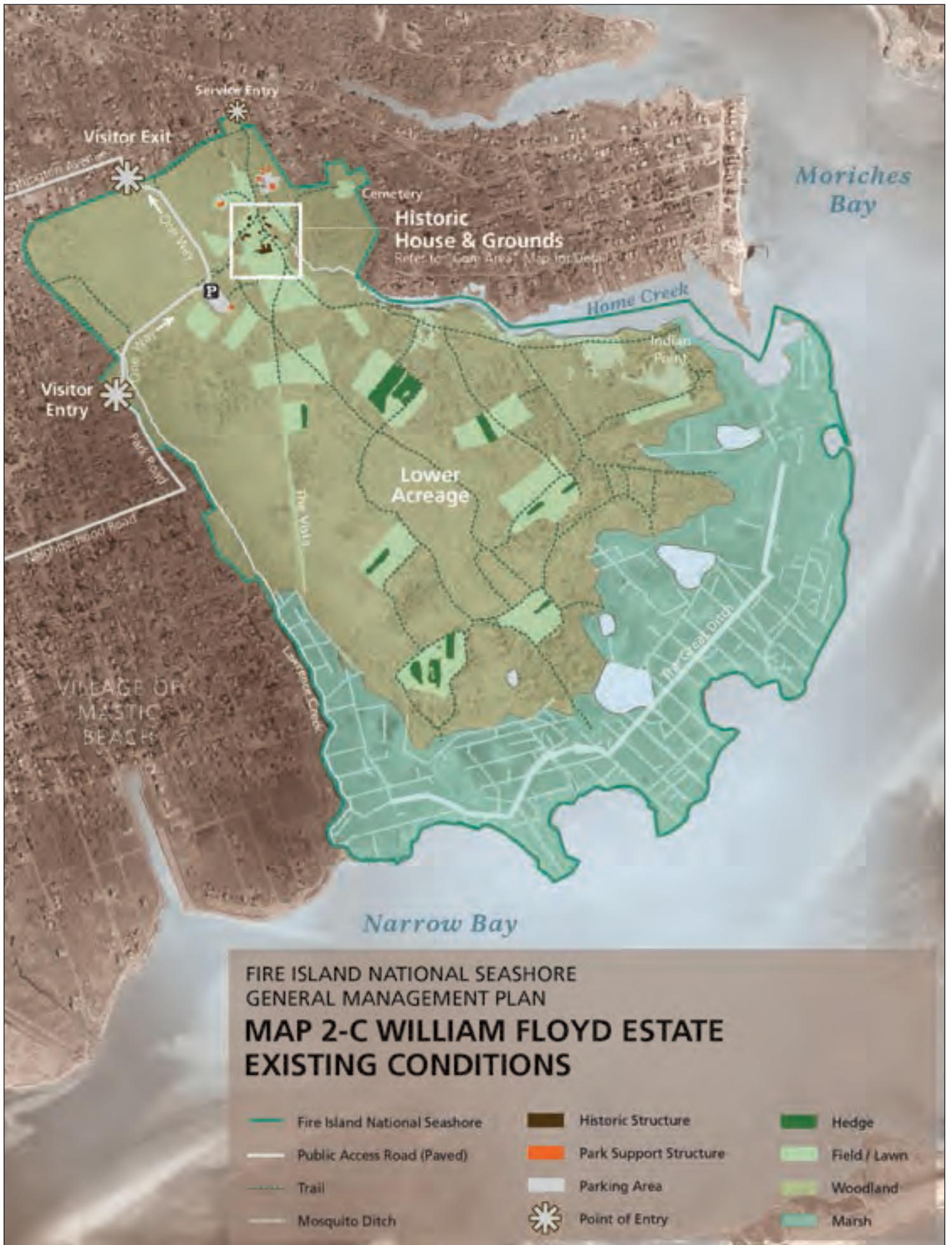
The NPS would seek appropriate cooperators to develop, operate, and manage the residential environmental education program as well as the proposed artist-in-residence program. An appropriate cooperator would most likely be an academic institution or an environmental organization.

Partners

The NPS would develop a more extensive network of partners to help operate, manage, interpret, and support the Seashore and assist Fire Island communities and towns with ecologically sound practices (e.g., gardening, water features), historic preservation, collecting data on local history, community visioning, etc. Partners could include -- but certainly would not be limited to -- such institutions and organizations as the Western Suffolk Board of Cooperative Educational Services (BOCES), Cornell Cooperative Extension, and the Society for the Preservation of Long Island Antiquities (SPLIA). As the NPS engages in new activities, it would look for opportunities to engage in partnerships to achieve the objectives of each new initiative.

Legislative Requirements**Acknowledging Cultural Heritage of the Island**

The Seashore's enabling legislation would be amended to include language acknowledging that Fire Island possesses significant *cultural resource* values, as well as natural resources that must be considered in the management of the park.



Visitor Exit

Service Entry

Cemetery

Historic House & Grounds
Refer to "Camp Area" Map for Details

Moriches Bay

Home Creek

Visitor Entry

Indian Point

Lower Acreage

The Vista

Myrtle Ditch

VILLAGE OF MASTIC BEACH

Narrow Bay

FIRE ISLAND NATIONAL SEASHORE
GENERAL MANAGEMENT PLAN

**MAP 2-C WILLIAM FLOYD ESTATE
EXISTING CONDITIONS**

Fire Island National Seashore

Historic Structure

Hedge

Public Access Road (Paved)

Park Support Structure

Field / Lawn

Trail

Parking Area

Woodland

Mosquito Ditch

Point of Entry

Marsh

The William Floyd Estate

INTRODUCTION: The William Floyd Estate (the Estate) is a separate and distinct unit of Fire Island National Seashore with its own unique characteristics. To properly address the future needs of the Estate, workshops and alternative planning concepts were developed separately from the overall planning effort for Fire Island National Seashore. Occupied by the Floyd family and descendants from 1720 to 1976, the Estate was the home of General William Floyd, a signer of the Declaration of Independence. The interpretive themes for the Estate have been identified as follows:

Three Centuries of Change at the Floyd Estate

The Floyd family's personal stories and 250-year residency at the Floyd Estate in Mastic Beach provide a lens through which to understand the dynamic social, economic, and political changes over that time on Long Island and throughout the nation.

The Life and Times of a Patriot

As a signer of the Declaration of Independence, William Floyd, prominent New York political leader and wealthy plantation owner, provides a personal perspective on the risks to life, property, and reputation associated with being a patriot in New York during the War for Independence.

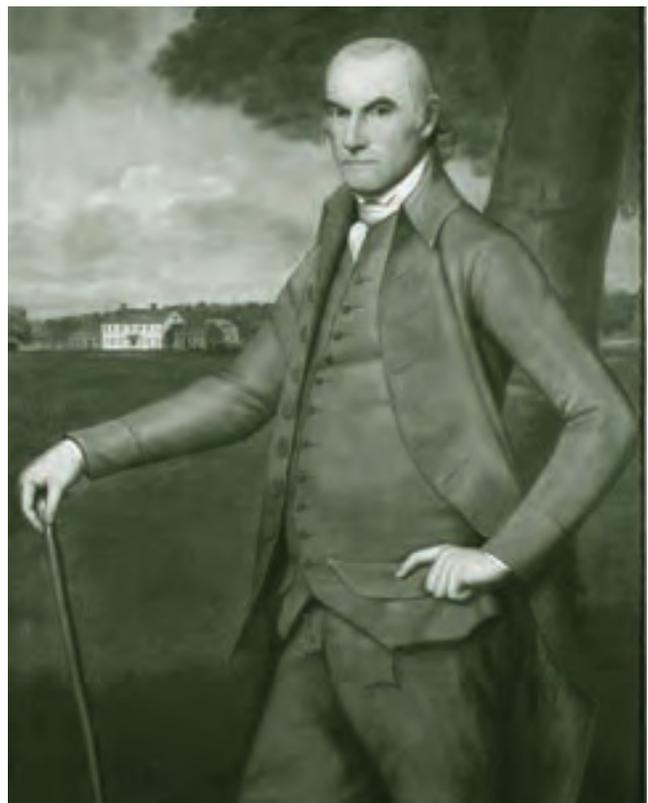
Some key questions and priorities guided the planning process for the William Floyd Estate. At the very core of planning for the Estate was the following question: *How can the National Park Service provide a balanced strategy for management at the William Floyd Estate that accommodates expanded hours, programming, and outreach while ensuring resource protection and a high-quality visitor experience?*

This question was refined through the course of two planning workshops held with key stakeholders associated with the property and the surrounding community. These workshop participants also helped to define the following critical planning priorities for the Estate:

- **Defining the Message** – Work with other entities to develop a consistent message that defines the Estate's significance, themes, and objectives and also broadens understanding and appreciation of the William Floyd

Estate locally, nationally, and globally and within the context of Fire Island National Seashore and the national park system.

- **Education Destination** – Establish the Estate as a place for research and education. Become a living classroom that builds understanding for the cultural and historical significance of the property through engaging, hands-on activities and tangible examples of the historic uses of the site.



- **Access** – Ensure the Estate is easy to find and available to the public on a regular basis. Provide a facility that orients visitors and provides space for educational programs throughout the year.
- **Health, Safety, and Security** – Ensure that visitors have a safe and healthy visitor experience that fosters their understanding and appreciation of the Estate. Create an appropriate monitoring and security system to ensure the site’s long-term protection.
- **Improving Relationships** – In collaboration with others, establish a broad range of diverse and lasting partnerships with other sites, institutions, and museums that encourage educational opportunities for a wide array of audiences and foster long-term stewardship of the property.

ELEMENTS COMMON TO ALL ALTERNATIVES

A series of Elements Common to All Alternatives has been developed specifically for the William Floyd Estate. These elements are so important to management of the Estate that they would be applicable regardless of which management alternative is selected.

In addition, there are a number of key actions included in the draft GMP/EIS alternatives that would also be relevant to the Estate and are also considered fundamental to its management. These common proposed actions span a number of Seashore management topics from general resource management through Seashore administration. Though described in greater detail earlier in this chapter, they include:

Resource Management – In General

- Greater Scientific and Scholarly Research
- Expanded Opportunities for Public Involvement in Research and Scholarship
- Catalogue of Natural and Cultural Data and Research Needs

Natural Resource Management

- Addressing the effects of Climate Change on Native Species
- Management Plan for Non-Native Invasive Species

Cultural Resource Management

- Archeological Overview and Assessment for Submerged Archeological Resources

Seashore Experience

- Broaden Visitor Base at Fire Island National Seashore
- Educational Outreach to wider audience
- Sustainability Role Model within the region

Park Administration

- Cooperative Stewardship

In addition to the elements described above, a number of current practices described under Management Alternative 1 – Continuation of Current Management Practices (No Action) would generally continue regardless of the management alternative ultimately adopted as a result of this process and would also apply to the William Floyd Estate. Though these practices are described in greater detail under Management Alternative 1: Continuation of Current Management Practices (No Action). They include:

Natural Resource Management

- Resource Stewardship Planning
- Threatened & Endangered Species Planning, Monitoring, and Protection
- Management of Native Plant and Animal Species
- Tick Surveillance and Management
- Resource Stewardship – Public Education and Outreach
- Management of Non-native Invasive Plant and Animal Species
- Enhancing opportunities for observing the natural night sky
- Protecting Freshwater and Saltwater marshes

Cultural Resource Management

- Development of a predictive model and testing strategy to record prehistoric sites within the Seashore
- Documentation and protection of submerged archeological sites revealed by erosion
- Establishment of enhanced working relationships with the Poospatuck Unkechaug tribe and the Shinnecock Indian Nation

Seashore Maintenance and Operations

- “Greening” of park operations and facilities
- Ensure that NPS facilities are universally accessible to the greatest degree possible



FIRE ISLAND NATIONAL SEASHORE
GENERAL MANAGEMENT PLAN

**MAP 2-D WILLIAM FLOYD ESTATE
EXISTING CONDITIONS – CORE AREA**

- Fire Island National Seashore
- Public Access Road (Paved)
- Trail
- Mosquito Ditch
- Point of Entry
- Parking Area
- Historic Structure
- Park Support Structure
- Hedge
- Field / Lawn
- Woodland
- Marsh

Historic Structures and Features

- 1 Old Mastic House
- 2 Caretaker's Workshop (Ranger Office)
- 3 Carriage House
- 4 Wood Shed
- 5 Corn Grib
- 6 New Barn
- 7 Barn
- 8 Incinerator
- 9 Pump House
- 10 Old Shop
- 11 Storage Crib
- 12 Ice House
- 13 Gazebo
- 14 Brick Walkway
- 15 Cemetary

Nonexant Structures and Features

- A Sheep Barn
- B Former Garden Area

Lower Acreage

- Provision of staff housing to meet operational needs
- Expansion of network of partners and cooperators
- Demarcation of the Seashore's landward and seaward boundaries

Cultural Resource Management

Additional information about the William Floyd Estate is needed to broaden educational programming and to help ensure accurate preservation and interpretation at the site. Informational gaps would be filled by completing such documents as the Estate's Cultural Landscape Report, implementing an archeological program, and working with others to undertake an ethnographic assessment to obtain more information related to the Estate's ethnographic resources and associations (e.g., enslaved people, indentured servants, and other workers). The NPS would work to acquire additional information about the local Native American associations with the Estate.

Historic Structures

The existing historic structures, including the Old Mastic House and its associated outbuildings, would continue to be preserved and interpreted. The Caretaker's Workshop would continue to serve as an office for staff on the property.

Complete Stabilization of the Old Mastic House

NPS would undertake work to correct structural issues at the Old Mastic House, including installation of structural supports in the basement and repair of other structural elements. The proposal for the stabilization of the Old Mastic House has been submitted and approved for funding within the NPS Project Management Information System.

Historic Furnishings Implementation Plan for Old Mastic House

The NPS has recently completed a Historic Furnishing Report (HFR) for the Old Mastic House. In response to the HFR recommendations, the NPS would prepare a Historic Furnishings Implementation Plan that would include an operating plan, recommended list of furnishings, and schematic floor plans.

Cultural Landscape

The NPS would prepare a Cultural Landscape Report (CLR) and Treatment Plan for the Estate. Consistent with the recommendations of the CLR and Treatment Plan, the Lower Acreage would continue to be managed as a cultural resource and would be monitored to retain

its natural resource values. The historic cemetery would continue to be preserved and maintained.

Museum & Archival Collections

The NPS would continue working with the Floyd family descendants and others related to the Estate to enhance its collections and our knowledge of the property.

Contact with Floyd Family Descendants

The NPS would maintain its contact with descendants of the Floyd family and seek to expand its contacts with other people historically associated with the Estate in order to broaden interpretation of the place, augment the artifact collection, and deepen our understanding of the Estate and its linkages to related sites.

Natural Resource Management

In addition to proposed Seashore-wide natural resource management actions described as Elements Common to All Alternatives, the following proposed common actions are particular to the William Floyd Estate.

Native Plant & Animal Species

The NPS would undertake additional research to obtain more information on the abundance and spatial distribution of flora and fauna such as white tail deer (*Odocoileus virginianus*) and eastern box turtles (*Terrapene carolina carolina*).

Tick Monitoring & Management

The NPS would continue its program of tick surveillance and management at the William Floyd Estate. Tick monitoring and management at the Estate continues to be consistent with the Seashore's Tick Monitoring and Management Protocol established in 2008. Tick monitoring would typically commence in the spring when staff begin to observe growing numbers of ticks. Seashore staff would actively monitor the tick population at five specific sites on the Estate.

Consistent with the Tick Monitoring and Management Protocol, the decision to manage tick populations by chemical means would continue to depend on the abundance, species composition, and life stage of ticks in high-traffic areas for employees and visitors. The following would be considered before any application to control ticks:

1. the tick composition strongly suggests that there is an imminent disease risk to people; and

2. the risk of disease transmission to humans will be reduced by the intervention (i.e. the tick abundance will be reduced below the established threshold by the application); and
3. tick population management at the William Floyd Estate is more effective than other available approaches to managing this disease risk (e.g., education, personal protective equipment, etc.).

Mosquito Surveillance & Management

The NPS would continue to engage in a regular program of mosquito surveillance based on the existing Mosquito Surveillance and Management Protocols (Protocols). These would be updated annually in collaboration with county, state, and federal organizations, including Suffolk County Vector Control (SCVC), Suffolk County Department of Health Services, and the United States Geological Survey (USGS) and would be consistent with an approved Mosquito Management Plan completed by Suffolk County.

The SCVC would continue to manage mosquitoes using pesticides within Smith Point County Park and private communities located within the boundaries of Fire Island. The SCVC operates its program within the National Seashore under a Letter of Authorization from the National Park Service. The SCVC would continue to be restricted from using any form of pesticides on the federal tracts of Fire Island and the William Floyd Estate as per management policies documented in the Protocols. As on Fire Island, in order to maintain and preserve the environment within the William Floyd Estate, NPS policy states that mosquito management interventions would be applied on the Estate only if the presence of West Nile Virus (WNV) and/or Eastern Equine Encephalitis (EEE) in or near the Estate, is strong enough to suggest disease risk to humans and the risk of disease transmission would be substantially lowered by the intervention.

Fire management planning

In the recent past, woodland fires have put the Old Mastic House, outbuildings, and collections at risk. Likewise, fire has been used historically as a management tool to maintain the fields on the Lower Acreage. The NPS would complete plans that would address the risk of wildland fire (i.e., any nonstructural fire, other than prescribed fire, that occurs in the wildland) on the Estate and consider the use of prescribed fire in the management of the cultural landscape. The effect of climate change on wildland fire risk would be considered in the fire management plan.

Management of Non-Native Invasive Plants

The NPS would continue efforts to control or eradicate non-native invasive plants consistent with the guidance provided by the Cultural Landscape Report and Treatment Plan

Maintenance of the Mixed Habitat Complex

The NPS would maintain the existing mixed habitat complex of field, forest, wetland, and marsh presently found on the Estate and would rely on the Cultural Landscape Report and Treatment Plan to provide guidance on preserving the cultural values associated with the landscape.

Visitor Experience & Interpretation

Interpretive emphasis

The time period for interpretation would continue to be 1724 to 1975, with an emphasis on the continuum of family occupancy and how the Floyd family reflects important themes of American history within a local, national, and global context.

Educational Outreach

Educational programming regarding the William Floyd Estate is an important means for enhancing public enjoyment, building appreciation and fostering stewardship of the Estate and related area resources. The NPS would work with others to make the Estate an educational destination for diverse audiences and expand programs and events using a variety of methods and media.

Special programs and exhibits would continue to support the interpretation of the Estate. Such programs may include but are not limited to music performances, lectures, and temporary exhibits.

The NPS would develop an outreach initiative to make the Estate and its history better known locally, regionally, and nationally. To do this effectively, the Estate's hours and season of operation would be expanded, as funding becomes available.

Links to Related Sites

The NPS would develop connections to related local, regional, and national sites. Such sites may include the homes of other Signers of the Declaration of Independence (e.g., Adams NHP), related estates on Long Island (e.g., the Manor of St. George), historical museums (e.g., Suffolk County Historical Society museum), and natural areas such as Wertheim National Wildlife Refuge. The NPS would work with these related entities to undertake events, programs, and special tours



FIRE ISLAND NATIONAL SEASHORE
GENERAL MANAGEMENT PLAN

**MAP 2-E WILLIAM FLOYD ESTATE
CIRCULATION**

- Fire Island National Seashore
- Parking Area
- Public Access Road (Paved)
- Bus Stop
- Point of Entry
- Visitor Parking

(e.g., holiday tours, historic craft events, films, lectures) that further visitor understanding of the Estate and its geographic and historical context.

Circulation and Access

Way finding

Working in conjunction with the village of Mastic Beach, the town of Brookhaven, and Suffolk County, the NPS would improve way finding to the William Floyd Estate through diverse means. These would include signs, maps, and other information located at key places in the area. The information would also be posted on the web. Digital technologies would be used to distribute information and orient visitors.

Access/Egress

The existing entry and exit roads at the Estate would remain the same, with signage on local roads improved to direct people easily to and from the Estate through the Village of Mastic Beach. For large-scale special events, the NPS would work with the local community and other entities to provide off-site parking with shuttle service to and from the Estate.

Operations and Maintenance

Staff Housing

NPS staff would continue to reside in housing on the William Floyd Estate to increase the after-hours presence and security on the Estate.

Partnerships

Partnership Strategy for the William Floyd Estate

The NPS would work with new and existing partners to develop a strategic partnership plan to advance resource management and interpretation goals at the William Floyd Estate. The NPS would strive to integrate the local community and related entities so they become a vital part of the Estate's stewardship and expand the number of volunteers to assist in a multitude of ways. Partnerships would also be expanded for research, programming, and outreach and include the Native American community and such entities as area libraries, schools (pre-school to university), historical societies, youth groups, and other interest groups or entities with connections to the Estate.

Collaborative Research & Programming

The NPS would work with the Town of Brookhaven (particularly its Department of Parks, Recreation, Sports, & Cultural Resources), the Society for the Preservation

of Long Island Antiquities (SPLIA), the Suffolk County Historical Society, and other relevant organizations to undertake research and develop programming that reflects the significance and primary interpretive themes of the William Floyd Estate.

Administration

The William Floyd Estate would continue to be managed as a discrete unit of Fire Island National Seashore, with numerous volunteers trained and scheduled to provide interpretive tours of the Old Mastic House.

Management Alternative A:

THE ESTATE'S CURRENT MANAGEMENT *(No-Action Alternative)*

Management Alternative A – The Estate's Current Management is the No-Action alternative. Under the No-Action alternative, current management practices and the use of approved and interim plans would continue. The NPS would continue to collaborate with local, county, and state officials on an as-needed basis to address policy and management issues. The Estate would continue to meet day-to-day operations, management, legal, and regulatory requirements based on existing plans and the availability of funds.

In addition to the proposals prescribed under Elements Common to All Alternatives, the following management practices would continue:

Cultural Resource Management

Historic Structures

The Old Mastic House would continue to be preserved and furnished to reflect the family's use and occupancy. While most of the rooms would reflect changes at the Estate over the last 250 years, one room would continue to serve as an introductory exhibit space, while another would serve as a small sales area.

Museum & Archival Collections

A number of museum objects would continue to be displayed in the Old Mastic House. The NPS would continue to house and maintain an extensive collection of archival and museum items related to the Estate at the curatorial storage facility located on the property. Other museum objects would also continue to be stored in the non-public areas of the Old Mastic House and in one or more outbuildings.

Visitor Experience, Interpretation, and Education

The primary visitor experience at the William Floyd Estate would continue to be a small-group, guided tour of the historic Old Mastic House. House tours would be available during the visitor season, from Memorial Day through mid-November on Fridays, weekends, and holidays.

Visitors would continue to be guided through 25 furnished rooms by a ranger or a volunteer describing the changes in the land, the house, and the family over their 250 years of occupancy at the home. Tour size would continue to be limited to a maximum of 12 visitors per tour with 13 tours being offered per day during normal business hours. The number of tours given may increase on special event days.

Self-guided walking tours would continue to be available to visitors wishing to see the historic outbuildings, cemetery, and the Lower Acreage.

Estate educational programs would continue to be curtailed due to a variety of reasons such as health and safety concerns (e.g., ticks, poison ivy, mosquitoes) and the lack of appropriate facilities and staffing.

Thematically relevant programs as well as nature walks would also be offered year-round, as staffing and conditions permit.

The orientation and sales space would continue to be located inside the Old Mastic House. Restrooms would continue to be located away from the historic core in a small facility near the existing parking lot.

Circulation & Access

Visitors would continue to use the existing entrance road that guides them to a parking lot and restroom facility in the northwest section of the William Floyd Estate. The parking lot would continue to be connected with a boardwalk system through the woods to a grass clearing at the Old Mastic House. A nearby cleared area would continue to be available for event overflow parking.

The network of unpaved roadways throughout the Estate would be retained, many of which would be marked and keyed to a visitor map to facilitate way finding.

Operations & Maintenance

A small collection of aging maintenance sheds in the northeastern section of the Estate would continue to serve as the storage and preservation area for all Estate maintenance and operational activities. These facilities

would also continue to support maintenance and operations at NPS facilities on the east end of Fire Island.

Management Alternative B:

HISTORICAL PARK AND MUSEUM

(NPS Preferred Alternative)

This alternative would advance the vision of the William Floyd Estate as a historical park and museum where visitor activities and experiences would focus on understanding and appreciating the historical relevance of William Floyd and his descendants, the evolution of the site from agricultural plantation to recreational retreat, and the political, social, and economic forces that shaped this family and their use of the property. The value of the Estate as a large area of undeveloped land in a developed community would be more fully recognized.

Cultural, natural, and recreational opportunities would be expanded, as appropriate within the context of the Estate's purpose and significance. The interpretative emphasis would be broadened to embrace more of the property's historic regional context, with more collaborative exhibits and programming taking place with other institutions, both on and off-site.

Cultural Resource Management

The historic core (Old Mastic House, surrounding grounds, cemetery) would be preserved in a manner that supports interpretation of the continuum of the Estate's multi-generational history.

Historic Structures

In the Old Mastic House, the orientation exhibit and sales area would be removed, and all the spaces in the home would be furnished to illustrate the continuum of family use. The existing structures and selected landscape features (e.g., garden, portions of the orchard) within the historic core would be rehabilitated and interpreted. Relevant missing structures and features would be interpreted to help visitors understand the Estate's history.

Cultural Landscape

In the Lower Acreage, the existing cultural landscape features (e.g., fields, marshlands, the Vista, ponds, remnants of the corduroy road, and lopped tree fence system) would be retained and rehabilitated. Landscape vignettes (e.g., introduction of cultivated fields in some locations) would be created to evoke different periods in the Estate's history in support of interpretive objectives.

Roads and trails would be rehabilitated to support additional recreational use, making use of the best practice methods and materials.

Archeological Resource Management Plan

The NPS would undertake a comprehensive archeological resource management plan for the Estate that would consider previously conducted archeological investigations on the property. The NPS would conduct a systematic archeological survey to delineate a complex series of interrelated resources consisting of dwellings, outbuildings, quarters, and other landscape features.

Visitor Experience, Interpretation, and Education

Visitor Orientation

For many, the visitor experience at the Estate would begin at a rehabilitated visitor facility located near the existing parking area. This facility would build upon existing visitor infrastructure including restrooms and an orientation kiosk and would provide a versatile and safe indoor orientation and program space for a variety of audiences, but particularly school children. Concerns about exposure to tick-borne illnesses and adverse weather conditions at the Floyd Estate have discouraged educational visits to the property. Indoor and outdoor program spaces would be available for day and evening programs as well as a place to orient and stage school groups and provide a sheltered area for lunch.

At the facility, visitors would have the opportunity to see an introductory multimedia presentation, use the restroom, and talk with a park ranger or volunteer to plan their visit. Visitors would also have an opportunity to view an orientation exhibit that interprets the historic evolution of the property as well as other relevant changing exhibits. The proposed facility would also enable the NPS to remove non-historic functions from the Old Mastic House.

Village-based Visitor Orientation

The NPS would also work in collaboration with the Village of Mastic Beach to explore the possibility of creating an off-site orientation exhibit about the Estate in a village-based location, possibly the Village's proposed welcome center. The proposed off-site orientation exhibit would be located along Neighborhood Road and would perform a gateway function, augmenting improved signage by providing information and assistance to visitors traveling to the Estate

Interpretive Emphasis

Interpretation and educational programming would emphasize regional and community connections to the Estate in historical, cultural, and physical terms. A strong focus would be placed on working with area school districts to tie on-site school programs to the state and national education standards. In addition, a variety of programs would be provided that encourage families of diverse interests and backgrounds to make return visits to the Estate.

Interpretation would be intertwined with recreational activities throughout the site. Walking, hiking, birding, and photography and related activities would be encouraged. The NPS would create a wildlife observation point (e.g., a blind or a small platform) in the northern section of the marsh near one of the ponds in the Lower Acreage. Access to the observation point would be along rehabilitated historic footpaths.

Tours of the Old Mastic House would be scheduled and ticketed to manage the volume and flow of visitors through the house. Visitors would also have the opportunity to explore other structures and features within the historic core, see an exhibit at the expanded curatorial storage facility, and walk along the historic system of roads and trails to learn about the Estate's grounds from a historical perspective. Landscape vignettes that visually illustrate the Estate's cultural past would be created to support its interpretive objectives and help visitors understand its historic evolution.

Landscape vignettes may include a planted agricultural field, garden, or other landscape feature illustrative of an important period in the Estate's history. Landscape vignettes would be designed to be consistent with any CLR recommendations and to support interpretive objectives for the Estate. Because the Floyd family was active in natural resource conservation, the NPS would also highlight the Estate's natural landscape and its flora and fauna as well as its natural history.

Non-personal interpretive media (such as a self-guided walking tour brochure, audio tour, or digital media) would be available to visitors and would provide important information on safety while touring the site (e.g., ticks and poison ivy) and interpret the different periods in the Estate's history. Digital media options may also include virtual exhibits highlighting the Estate's museum collection and virtual tours of the Old Mastic House and grounds.

Access and Circulation

Way finding

The directional signage system guiding visitors to the Estate and back through the Village of Mastic Beach would be improved. The Estate's existing road system would be retained; however, the existing parking lot would be reconfigured to accommodate the rehabilitated facility. As a result, parking may need to be relocated to portions of the current overflow field. Additional overflow parking may need to be identified to accommodate demand during special events.

The current boardwalk may need to be realigned in certain areas to better connect the proposed visitor orientation facility to the Old Mastic House.

Operations & Maintenance

Consolidated Maintenance Facility at William Floyd Estate

Building upon the existing maintenance shop, the NPS would develop a consolidated maintenance facility at the Estate and house the primary functions within a single structure. The consolidated facility would offer safe and sufficient space to support the maintenance and preservation operations for the Estate as well as the east end of the Seashore.

Space would be provided for the Estate's administrative and site staff at the rehabilitated orientation facility. The caretaker's workshop would continue to be staffed as a ranger and visitor contact facility to support the additional activities that occur on the property.

Administration

Operating Season and Hours

The historic grounds and the upgraded orientation facility would be open to the public year round, with days and hours of operation varying seasonally. The Old Mastic House would continue to be open seasonally. The extension of the operating season and school programming would be contingent upon the availability of funding.

Park Boundary

The NPS would undertake a study to consider adjustments to the western boundary of the William Floyd Estate for purposes of regularizing the boundary, improving resource protection, and enhancing the "gateway" experience for visitors to the property.

COST ESTIMATES FOR THE ALTERNATIVES

Once approved, the GMP provides a framework for coordinating and integrating subsequent planning and management decisions affecting Fire Island National Seashore. When funds become available to implement specific plans or individual actions consistent with the approved GMP, site-specific planning, research, and environmental analysis will take place. Specific actions will be subject to all applicable compliance requirements including federal and state consultation requirements, and the public will be involved throughout the process.

The presentation of costs within the draft GMP/EIS is applied to the types and general intensities of development in a comparative format. The costs are presented as estimates that allow for flexibility in application of components and are not appropriate for budgeting purposes.

The costs presented have been developed using industry standards to the extent available. Actual costs will be determined at a later date, considering the design of facilities, identification of detailed resource protection needs, and changing visitor expectations. The cost estimates presented represent the total costs of projects. Potential cost-sharing opportunities with partners would reduce overall costs.

Facility costs related to Alternative 1 include the rehabilitation of the Sailors Haven Visitor Center and connections to county water services on Fire Island, and the stabilization of the Old Mastic House at the William Floyd Estate. Alternatives 2 and 3 include facility costs as described under Alternative 1. Facility costs under Alternative 2 also include the demolition and removal of existing facilities, related landscape restoration work, the relocation of the campground, and the construction of covered, outdoor program space on Fire Island. Under Alternative 3, facility costs also include the expansion of the Seashore's curatorial storage facility, rehabilitation of existing space for educational programming, and the development of covered outdoor program spaces on Fire Island and at the Patchogue Ferry Terminal. Under Alternatives 2 and 3, facility costs associated with the William Floyd Estate include the rehabilitation of historic structures (e.g., outbuildings, fencing, etc.), the redevelopment of existing structures to create a visitor facility offering indoor program and orientation space, and the development of a consolidated maintenance facility.

Alternative 2 and 3 call for the development of a solar shade structure over some or all of the Patchogue Ferry Terminal parking area. This particular development may be undertaken in partnership with local utilities, significantly reducing the cost to the government.

► **CLIMATE CHANGE**

Fire Island National Seashore exists entirely within the coastal plain of the state of New York. The Seashore's headquarters, primary maintenance facility, mainland ferry terminal, parking lots, visitor facilities, and most other infrastructure and resources are all vulnerable to future sea-level rise and storm surges. The action alternatives propose a number of facility-related actions to address a variety of visitor and infrastructure needs. The National Park Service will evaluate proposed facility investments prior to project approvals using the best scientific information available and the climate change strategies described above to ensure the long-term sustainability of these investments. Due to the Seashore's location and potential vulnerabilities, it is possible that the National Park Service may conclude that such financial investments for facilities would be unwise and that other options would be considered or that the proposed project would not be implemented at all.

► **PHASING GMP IMPLEMENTATION**

The successful implementation of Fire Island's approved GMP will rely on undertaking the many interrelated and additive actions proposed in the plan using a phased approach. The first phase would involve those actions that would support or otherwise form the basis for future actions. These include baseline research (e.g., marine resources inventory and evaluation, cultural resources inventory, and vulnerability assessments); key implementation plans (e.g., coastal land use and shoreline management plan); and legislative initiatives (e.g., seeking creation of a cooperative stewardship forum).

The next phases of the implementation would tier off the first phase efforts. For instance, following the completion of key marine research, work may begin on a marine resource management plan. A number of planning and development initiatives would rely on the completion of the Coastal Land Use and Shoreline Management Plan for guidance. These efforts include, but would not be limited to the Post Storm Recovery Plan, Dredge Management Plan, Wastewater Management Plan, and

master planning for NPS facilities. Finally, the design and installation of new interpretive exhibits would occur as each site-specific master plan is completed.

Many proposed actions described in the plan could be completed independent of other plans and actions and may be undertaken at any time when the availability of funds and other relevant resources permit. The preparation of many of the proposed natural and cultural resource studies and plans could be addressed this way.

Approval of the GMP does not guarantee that funding or staffing for proposed actions will be available. Implementation of the approved GMP will depend on the availability of funds. Full implementation may occur many years in the future. All NPS construction and staffing proposals are contingent on NPS funding limitations and must compete for funds through the NPS priority-setting process.

TABLE 2-1: COMPARISON OF COST ESTIMATES FOR THE ALTERNATIVES			
ALL COSTS REPRESENTED IN 2012 DOLLARS.			
Annual Total Park Operating Costs¹	FIIS 1 / WFE A Alternative 1	FIIS 2 / WFE B Alternative 2	FIIS 3 / WFE B Alternative 3
Staff FTE ²	57	63.1	59
Total Annual Operating Costs (assumes FTE is 87% of Total)	\$4,900,000	\$5,430,000	\$5,130,000
One Time Costs	FIIS 1 / WFE A Alternative 1	FIIS 2 / WFE B Alternative 2	FIIS 3 / WFE B Alternative 3
NPS Facility Costs³			
Facility projects (Fire Island) Park Area Wide Initiatives	\$ 1,800,000	\$ 3,900,000	\$ 3,100,000
Facility Projects William Floyd Estate	\$ 400,000	\$ 4,000,000	\$ 4,000,000
Total Facility Costs	\$ 2,200,000	\$ 7,900,000	\$ 7,100,000
NPS Non-Facility Costs⁴			
Non-Facility projects (Fire Island) Park Area Wide Initiatives	\$ 250,000	\$2,400,000	\$ 2,500,000
Non-Facility projects William Floyd Estate	\$ 330,000	\$1,070,000	\$ 1,070,000
Total Non-Facility Costs	\$ 580,000	\$ 3,470,000	\$ 3,550,000
Partnership Projects⁵			
Solar Shade Structure / Patchogue Ferry Terminal	\$ 0	\$ 4,200,000	\$ 4,200,000
Total Partnership Costs	\$ 0	\$ 4,200,000	\$ 4,200,000
Grand Totals — One Time Costs	\$ 2,780,000	\$ 15,570,000	\$ 14,850,000
<p>1 Annual operating costs are the total annual costs for park operations associated with each alternative, including: maintenance, utilities, staff salaries and benefits, supplies, and other materials. Cost estimates assume that the alternative is fully implemented as described in the narrative. Existing costs based on 2012 ONPS budget.</p> <p>2 The total FTE is the number of person-years required to maintain the assets of the parks at a good level, provide acceptable visitor services, protect resources, and generally support the parks' operations. The FTE number indicates the ONPS-funded staff only, not volunteer positions or positions funded by partners FTE salaries and benefits are included in the annual operating costs.</p> <p>3 One-time facility costs include design, construction, rehabilitation, or adaptive re-use of visitor centers, roads, parking areas, administrative facilities, comfort stations, educational facilities, maintenance facilities, museum service facilities, and other visitor facilities. Alternative 1 also incorporates cost for the William Floyd Estate's Management Alternative A; Alternatives 2 and 3 also incorporate costs for the William Floyd Estate's Management Alternative B.</p> <p>4 One-time non-facility costs include actions not related to facilities, such as plans and studies and other park activities that would require substantial funding above annual operating costs. Alternative 1 also incorporates cost for the William Floyd Estate's Management Alternative A; Alternatives 2 and 3 also incorporate costs for the William Floyd Estate's Management Alternative B.</p> <p>5 Partnership projects represent one-time facility costs that would be undertaken in pursuit of opportunities and partnerships for green infrastructure. Such projects would not be undertaken unilaterally by the NPS and would only be pursued if the NPS share represented 25% or less of the total project cost.</p>			

NPS PREFERRED ALTERNATIVE

The NPS Preferred Alternative (43 CFR 46.420d) is the alternative which the NPS believes would best accomplish the purpose and need of the proposed action while fulfilling its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors.

Management Alternative 3, in combination with Management Alternative B as described for the William Floyd Estate, has been identified as the NPS Preferred Alternative because it best meets the Seashore's management goals and conveys the greatest number of significant beneficial results relative to its potential impacts in comparison with other alternatives. Management Alternative 3 would do the most to ensure the cooperative stewardship of Fire Island National Seashore's dynamic coastal environment and its cultural and natural systems while recognizing its larger ecological, social, economic, and cultural context. This combination would also meet the specific needs and management goals related to the William Floyd Estate.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

In accordance with the DO-12 Handbook, the NPS identifies the environmentally preferable alternative in its NEPA documents for public review and comment [Sect. 4.5 E(9)]. The environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one environmentally preferable alternative (43 CFR 46.30).

After evaluating the potential impacts of the management alternatives on cultural and natural resources, the NPS has determined that Management Alternative 3 in combination with Management Alternative B as described for the William Floyd Estate is the Environmentally Preferable Alternative because it best protects, preserves, and enhances the Seashore's natural and cultural resources. Management Alternative

3 proposes that Fire Island National Seashore be considered holistically – including its natural, cultural, and recreational values – and that it be understood within its regional context, resulting in a more effective approach to achieving these results.

CONSISTENCY WITH SECTION 101 AND 102 OF NEPA

This section describes how each alternative meets or achieves the purposes of NEPA, as stated in sections 101(b) and 102(1) (40 CFR 1502.2(d)). It includes a discussion of 1) disclosing how each alternative, one of which is identified as the environmentally preferred, meets the criteria set forth in section 101(b) of NEPA; and 2) any inconsistencies between the alternatives analyzed in detail and other environmental laws and policies.

- 1. Fulfills the responsibilities of each generation as trustee of the environment for succeeding generations.
- 2. Assures for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
- 3. Attains the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- 4. Preserves important historic, cultural, and natural aspects of our national heritage and maintains, wherever possible, an environment that supports diversity and variety of individual choice.
- 5. Achieves a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
- 6. Enhances the quality of renewable resources and approaches the maximum attainable recycling of depletable resources.
- Criterion 1: Fulfills the responsibilities of each generation as trustee of the environment for succeeding generations.

All of the Management Alternatives fulfill Criterion 1 by preserving the Seashore's fundamental resources and values for succeeding generations. Alternative 1, the No-Action alternative, fulfills this criterion in the most limited way as it is largely reactive in its approach and generally protects and preserves the Seashore's natural resources in their current state. Under Alternative 2, greater emphasis is placed on the restoration of natural landscapes and

processes on some federal parcels, but cultural resource and recreational values are not wholly considered, which could prevent it from being fully successful in meeting this criterion. Under Alternative 3, the environmentally preferable alternative, the NPS recognizes Fire Island as a natural landscape with a significant cultural overlay that extends across the geographic breadth of the national seashore to include both federal and non-federal lands. Efforts to better understand the cultural context and history of human use within the dynamic coastal environment on Fire Island and the William Floyd Estate could foster greater stewardship of the natural environment as the Seashore considers future management actions and adapts to changing conditions. The reinstatement of a residential environmental education program, targeting multiple audiences, is another important facet of Alternative 3 that would serve to foster a sense of stewardship in succeeding generations.

Criterion 2: Assures for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.

All of the management alternatives ensure safe, healthful, productive, and aesthetically and culturally pleasing surroundings for all Americans. Under Alternatives 2 and 3, protection of Fire Island's character is enhanced by proposals to revisit existing land-use regulations to consider ways to make them more effective in protecting the natural environment and sensitive to the overall character of Fire Island and its distinctive communities. This combination of the natural and the built environment has defined the Fire Island experience for generations of Seashore visitors. However, under Alternative 3, greater emphasis is placed on understanding and appreciating Fire Island as a whole, while the visitor experience under Alternatives 1 and 2 is focused on the federal lands. The NPS would prepare Fire Island-wide cultural landscape report and would offer technical assistance to Fire Island communities to inventory, preserve, and interpret cultural resources that are relevant to the history of Fire Island and the national seashore. Fostering understanding of Fire Island's heritage would contribute positively to the protection of Fire Island's overall character and sense of place. Under Alternative 3, resource protection and the visitor experience are enhanced through this more holistic management approach.

Criterion 3: Attains the widest range of beneficial uses of the environment without degradation, risk of

health or safety, or other undesirable and unintended consequences.

Alternative 3 attains the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequence. As described in Alternative 3, NPS continues to provide for a wide range of visitor experiences and retains most of its existing visitor infrastructure. Additional shade structures are proposed for the Patchogue Ferry Terminal and Sailors Haven to allow for additional outdoor programming while providing visitors with protection from the elements (particularly the sun's harmful rays and the heat). At the William Floyd Estate, the existing visitor facilities would be rehabilitated and expanded to allow for the creation of year-round indoor program space, providing for expanded activities and use while reducing the risk of exposure to tick-borne disease. In Alternatives 1 and 2, the visitor experience would continue to be largely confined to the Seashore facilities, with little opportunity or incentive to explore other parts of Fire Island. Likewise, visitors to and residents of Fire Island communities would rarely visit the Seashore facilities.

Criterion 4: Preserves important historic, cultural, and natural aspects of our national heritage and maintains, wherever possible, an environment that supports diversity and variety of individual choice.

All of the proposed alternatives achieve this criterion to some degree. With its emphasis on a holistic approach to Fire Island that considers the visitor experience across the entire island and encourages greater exploration of related resources regionally, Alternative 3 carries this concept the furthest. Under Alternative 3, the NPS would place a higher priority on partnerships with Fire Island communities and others to illuminate the natural and cultural history of the island and to create new visitor opportunities to explore Fire Island in its entirety. The NPS would also work collaboratively with the ferry companies to extend water-based transportation into the shoulder seasons, improve water taxi service, and explore ways to make ferry service more affordable to low-income families and school districts. Under Alternative 3, the Seashore would continue to support a wide range of visitor facilities and recreational activities that range from the developed recreational facilities and protected beaches at Sailors Haven, Talisman, and Watch Hill to the wholly undeveloped expanse of the Fire Island Wilderness to a tour of the Old Mastic House at the William Floyd Estate.

Criterion 5: Achieves a balance between population and resource use that will permit high standards of living and a wide sharing of life’s amenities.

Since the Seashore’s establishment, the Secretary’s zoning standards have been the only practical and legal tool available to the NPS to balance private residential and commercial development with the protection of the natural environment on Fire Island. For many reasons articulated throughout this document, this has not always met with success in terms of environmental protection or the preservation of community character. Alternatives 2 and 3 include proposals for a cooperative stewardship approach to managing the shared resources of Fire Island National Seashore and the collaborative development of a Coastal Land Use and Shoreline Management Plan. These proposed actions would provide the necessary framework for revisiting the land use and development regulations presently in place on Fire Island. Also noted above, both Alternatives 2 and 3 include proposals to revisit existing land use regulations to consider ways to make them more effective in protecting the natural environment and sensitive to the overall character of Fire Island and its distinctive communities. Under Alternative 3, the Seashore would work with ferry operators to consider expanding service during the shoulder seasons and subsidizing or waiving fares for school groups and low-income families. It would also provide for the creation of a residential environmental education program that would take advantage of underutilized, existing facilities during the shoulder seasons. These proposed actions would enable the Seashore to reach out to and serve broader audiences while fostering an understanding and appreciation of Fire Island’s fragile resources. It would promote high standards of living and a wide sharing of life’s amenities.

Criterion 6: Enhances the quality of renewable resources and approaches the maximum attainable recycling of depletable resources.

This criterion is largely addressed by proposals found to some degree under all of the management alternatives. Under all alternatives, efforts to systematically update park infrastructure to address energy efficiency, water conservation, wastewater management, and the use of sustainable materials would maintain or improve the quality of renewable resources and reduce the use of depletable resources. This is also true of other proposed efforts to make the Seashore’s fleets of vehicles and vessels more environmentally friendly as well as

increasing the park’s reliance on alternative energy to power its facilities.

IDEAS CONSIDERED BUT NOT ADVANCED FOR FURTHER ANALYSIS

Alternative 4 – Explore New Opportunities for Public Use

The planning team considered but rejected a fourth GMP alternative that would expand opportunities for public use on the island and encourage greater connections between the Seashore and related sites on Long Island. The proposal called for the expansion of existing facilities and the development of new ones on Fire Island and sought to increase visitation. Concerns about the additional development of the Seashore, the potential for a significant increase in visitation, and potential impacts on Fire Island communities have resulted in the dismissal of this proposal.

Removal of the Carrington House and Cottage

The planning team considered but rejected a proposal to remove the Carrington House and Cottage and allow the property to revert to a natural state. In the intervening time since the proposal was first made the Carrington House and Cottage was listed on the National Register of Historic Places. Also, work to rehabilitate the cottage had been undertaken by the Seashore in collaboration with a community-based partner with the intent of adaptively reusing the property. Under these new circumstances, the planning team found the proposal impractical and dismissed it.

Redevelopment of Watch Hill

The planning team considered but rejected a proposal to redevelop Watch Hill that called for reducing the size of the Watch Hill Marina by half, removing a number of existing structures and constructing a small, multipurpose facility in their place. Concerns were raised about a significant reduction in the number of boat slips, the recent expenditure of post-Sandy funds to improve and protect existing facilities, and the costs associated with the proposed projects. As a result, this proposal was dismissed.

Filling Mosquito Ditches in the Wilderness Area

The planning team considered but rejected a proposal to fill mosquito ditches in the Wilderness Area. It was determined that the costs associated with completing this work in the context of the Wilderness Area and

the constraints it places on the use of machinery would outweigh its ecological benefit. For this reason, the proposal was dismissed.

Restore Pre-existing Spur Trails in the Fire Island Wilderness

The planning team considered but rejected a proposal to restore pre-existing spur trails from the minimally maintained Burma Road trace into some areas of the Fire Island Wilderness. The planning team determined that the small scale of the Fire Island Wilderness area and the relative ease of navigation within it did not support the need for additional trails. Further, the reintroduction of spur trails would alter the wilderness character and experience by infringing upon opportunities for unconfined recreation.

Recreational Cross-Island Bike Trail

The planning team considered but rejected a proposal to create a cross-island recreational bike trail. The proposal met with considerable resistance from community representatives who raised concerns about



the introduction of a formal, surfaced road or pathway across Fire Island. Currently there are no such roads on the island. The creation of a cross-island bike trail would require considerable cooperation among the various private and public property owners. In the absence of the necessary widespread support for the idea, the proposal was dismissed from further consideration.

Redrawing the Park Boundary to Exclude the Communities and/or Smith Point County Park

The planning team considered but rejected a proposal to redraw the park boundary to exclude the developed communities and/or the Smith Point County Park. These proposals were considered because the lack of NPS ownership and clear authority as well as conflicting institutional objectives often contributes to inefficient and costly management conflicts. The initial concept was that removing these lands from the park boundary would address this issue. In the final analysis, this proposal was rejected because these lands contributed to the overall character of Fire Island and possessed important resource values that transcended existing property boundaries. These resource values would be best managed through the pursuit of a collaborative management strategy.

South Shore Coastal Resources Institute

The planning team considered but rejected a proposal to create an institute to foster academic research, programming, and data sharing related to coastal resources of the South Shore Estuary in partnership with the Long Island South Shore Estuary Reserve, state and local agencies, and other institutions. The proposed Coastal Resource Institute appeared to very closely parallel the current role of SUNY/Stony Brook, raising concerns about unnecessary redundancies in the region.

Floating Classroom

The planning team considered but rejected the idea of inviting an educational vessel to dock for an entire season to offer programming due to concerns about shading out aquatic species. Instead the planning team considered inviting such vessels to participate in shorter-term visits to support programming in a one-to-two-day special event format.

Create Formal Off-shore Mooring Systems to Augment Existing Marina Space

The planning team considered creating formal off-shore mooring systems to augment existing marina space in lieu of permitting boaters to simply anchor off shore. Because of concerns related to the costs of managing such a system, the park determined that it would only consider this action if there were a resource- protection reason to do so.

Relocating Curatorial Storage

The planning team considered but rejected a proposal to relocate the Seashore's curatorial storage from its current location at the William Floyd Estate to a higher-elevation, off-site location. This was considered an unnecessary and costly proposal. The museum collection would continue to be adequately protected in its present location which is outside the 100- year floodplain.

Increase Recreational Emphasis at the William Floyd Estate

The planning team considered the possibility of an alternative that emphasized recreational use of the property and proposed rehabilitating and expanding the existing circulation system to accommodate increased recreational uses such as hiking, biking, and horseback riding. The proposal also called for the increased use of the grounds for activities like antique auto shows, art shows, and concerts. Under this alternative, public access to and programming for the historic house and grounds would have continued to emphasize the Estate's historic values. This alternative was dismissed from further consideration due to concerns about preserving and protecting the Estate's fundamental resources and about duplicating activities and opportunities already offered at other state, county, and local parks in the area.

Construct an Outhouse in the Lower Acreage at the William Floyd Estate

The planning team proposed the construction of an outhouse in the Lower Acreage at the William Floyd Estate to accommodate visitors to that area of the property. The proposal was dismissed from further consideration due to concerns that there was actually minimal need for such a facility and that it would have a negative impact on the cultural landscape.

Reconstruct the Sheep Barn at the William Floyd Estate

The planning team considered but rejected a proposal to reconstruct the Sheep Barn. Current NPS policy does not support the reconstruction of missing structures unless there is no alternative that would accomplish

the park's interpretive mission. Proposals to interpret missing historic features using appropriate interpretive media have been incorporated into the proposed action alternative.

Allow for Non-Motorized Watercraft Access to the William Floyd Estate

The planning team proposed the designation of a landing for non-motorized watercraft at an appropriate location along Home Creek on the eastern side of the Estate. This proposal was dismissed from further consideration due to concerns about challenges associated with monitoring and controlling this access point and protecting and preserving the fundamental resources and values associated with the William Floyd Estate.

Relocate Main Gate of the William Floyd Estate to Washington Avenue

The planning team considered the possibility of relocating the main gate of the William Floyd Estate to Washington Avenue. The Washington Avenue gate is the currently the property's exit, served by a one-lane, one-way interior access road. Using the Washington Avenue gate for both entering and exiting visitor traffic would require that some existing interior roads be widened to accommodate two-way traffic. An analysis of existing routes from the William Floyd Parkway through the village of Mastic Beach to the William Floyd Estate did not reveal any significant advantages of using this gate as a point of entry over the existing entrance gate on Park Drive. For these reasons, the proposal was dismissed from further consideration.

Designate the William Floyd Estate as a Separate Unit of the National Park System

The planning team considered the possibility of seeking designation of the William Floyd Estate as a separate unit of the National Park System. The purpose of the proposed action would be to elevate the profile of the site as a separate and distinct unit and to secure dedicated, regular annual operating funds through the operating budget of the National Park Service. This would require an act of Congress and should a new unit be established, it would likely be administered by Fire Island National Seashore. This proposal was dismissed from further consideration because, on balance, it did not appear that it would offer significantly more benefits than simply improving on current management strategies for the property in its current status as a unit within Fire Island National Seashore.

TABLE 2-2: SUMMARY OF IMPACTS BY MANAGEMENT ALTERNATIVE

	Management Alternative 1/ Management Alternative A – Continuation of Current Management Practices (No Action)	Management Alternative 2 / Management B – Enhancing Natural Resource Values	Management Alternative 3/ Management B – Recognizing the Rela- tionship between Human Use and Nature
Natural Resources			
Coastal Processes/ Floodplain	<p>Both beneficial and adverse impacts to coastal processes and floodplains.</p> <p>The cumulative impact would be long-term and adverse, and Alternative 1 would contribute a beneficial increment to the overall adverse cumulative impact.</p> <p>Impacts would not be significant.</p>	<p>Overall long-term, beneficial impacts to coastal processes and floodplains.</p> <p>The cumulative impact would be beneficial over the long-term, and Alternative 2 would contribute an appreciable beneficial increment to the overall beneficial cumulative impact.</p> <p>Beneficial impacts would be significant. Adverse impacts would not be significant.</p>	<p>Overall long-term, beneficial impacts to coastal processes and floodplains.</p> <p>The cumulative impact would be beneficial over the long-term, and Alternative 3 would contribute an appreciable beneficial increment to the overall adverse cumulative impact.</p> <p>Beneficial impacts would be significant. Adverse impacts would not be significant.</p>
Water Resources	<p>Both beneficial and adverse impacts to water resources.</p> <p>The cumulative impact would be adverse, and Alternative 1 would contribute an adverse increment to the overall adverse cumulative impact.</p> <p>Impacts would not be significant.</p>	<p>Overall long-term beneficial impacts to water resources.</p> <p>The cumulative impact would be long-term beneficial, and Alternative 2 would contribute an appreciable beneficial increment to the overall beneficial cumulative impact.</p> <p>Impacts would not be significant.</p>	<p>Both beneficial and adverse impacts to water resources.</p> <p>The cumulative impact would be long-term minor adverse, and Alternative 3 would contribute a noticeable adverse increment to the overall adverse cumulative impact.</p> <p>Impacts would not be significant.</p>
Vegetation	<p>Overall long-term beneficial impacts to vegetation</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant as overall health of unique vegetation communities would be noticeably improved.</p> <p>Adverse impacts would not be significant.</p>	<p>Overall long-term beneficial and adverse short-term impacts to vegetation.</p> <p>No cumulative impacts.</p> <p>The overall beneficial impact of Alternative 2 would be considered significant, as the overall health of the unique vegetation resources within the Seashore would be improved to an even greater extent than under Alternative 1.</p> <p>Adverse impacts would not be significant.</p>	<p>Overall long-term beneficial and short-term adverse impacts to vegetation</p> <p>No cumulative impacts.</p> <p>The overall beneficial impact of Alternative 3 would be considered significant, as the overall health of the unique vegetation resources within the Seashore would be improved to an even greater extent than under Alternative 1.</p> <p>Adverse impacts would not be significant.</p>

TABLE 2-2: SUMMARY OF IMPACTS BY MANAGEMENT ALTERNATIVE

	Management Alternative 1/ Management Alternative A – Continuation of Current Management Practices (No Action)	Management Alternative 2 / Management B – Enhancing Natural Resource Values	Management Alternative 3/ Management B – Recognizing the Rela- tionship between Human Use and Nature
Wildlife and Wildlife Habitat	<p>Both beneficial and short-term adverse impacts to wildlife and wildlife habitat.</p> <p>The cumulative impact would be long-term beneficial, and Alternative 1 would contribute a noticeable beneficial increment to the overall beneficial impact.</p> <p>Impacts would not be significant.</p>	<p>Overall long-term beneficial impact on wildlife and wildlife habitat.</p> <p>The cumulative impact would be long-term beneficial, and Alternative 2 would contribute a noticeable beneficial increment to the overall beneficial impact.</p> <p>Impacts would not be significant.</p>	<p>Both beneficial and adverse impacts to wildlife and wildlife habitat.</p> <p>The cumulative impact would be long-term beneficial, and Alternative 3 would contribute a noticeable beneficial increment to the overall beneficial impact.</p> <p>Impacts would not be significant.</p>
Special Status Species	<p>Both beneficial and adverse impacts to special status species.</p> <p>The cumulative impact would be long-term beneficial, and Alternative 1 would contribute a noticeable beneficial increment but also contribute an adverse increment to the overall beneficial impact.</p> <p>Impacts would not be significant.</p>	<p>Both beneficial and adverse impacts to special status species.</p> <p>The cumulative impact would be long-term beneficial, and Alternative 2 would contribute a noticeable beneficial increment to the overall beneficial impact.</p> <p>Impacts would not be significant.</p>	<p>Both beneficial and adverse impacts to special status species.</p> <p>The cumulative impact would be long-term beneficial, and Alternative 3 would contribute a noticeable beneficial increment to the overall beneficial impact.</p> <p>Impacts would not be significant.</p>
Cultural Resources			
Cultural Landscape	<p>Long-term beneficial impacts to cultural landscapes.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant. Rehabilitation of the William Floyd Estate and Fire Island Light Station landscapes would be readily apparent.</p>	<p>Long-term beneficial and adverse impacts to cultural landscapes.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant. Rehabilitation of the William Floyd Estate and Fire Island Light Station landscapes would be readily apparent</p> <p>Adverse impacts would not be considered significant.</p>	<p>Overall long-term beneficial and localized adverse impacts to cultural landscapes.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant. Rehabilitation of the William Floyd Estate and Fire Island Light Station landscapes, would be readily apparent and completion of a Fire Island-wide cultural landscape report would enhance opportunities for protecting Fire Island's overall character.</p> <p>Adverse impacts would not be considered significant.</p>

TABLE 2-2: SUMMARY OF IMPACTS BY MANAGEMENT ALTERNATIVE

	Management Alternative 1/ Management Alternative A – Continuation of Current Management Practices (No Action)	Management Alternative 2 / Management B – Enhancing Natural Resource Values	Management Alternative 3/ Management B – Recognizing the Rela- tionship between Human Use and Nature
Historic Structures	<p>Overall long-term beneficial and localized adverse impacts to historic structures.</p> <p>No cumulative impacts.</p> <p>Impacts would not be significant.</p>	<p>Overall long-term beneficial and localized adverse impacts to historic structures.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant. Proposed rehabilitation efforts, and the relocation of non-historic functions from historic buildings would be detectable, and historic structures would be noticeably affected by these actions.</p>	<p>Overall long-term beneficial and localized adverse impacts to historic structures.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant. Proposed rehabilitation efforts, relocation of non-historic functions from historic buildings would be detectable, and historic structures would be noticeably affected by these actions.</p>
Archeology	<p>Overall long-term beneficial and localized adverse impacts archeological resources.</p> <p>No cumulative impacts.</p> <p>Impacts would not be significant.</p>	<p>Both beneficial and adverse impacts to archeological resources.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant; adverse impacts would not be. Efforts to inventory and document archeological resources and plan for their long-term protection and management would beneficially affect archeological resources.</p>	<p>Both beneficial and adverse impacts to archeological resources.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant; adverse impacts would not be. Efforts to inventory and document archeological resources and plan for their long-term protection and management would beneficially affect archeological resources.</p>
Museum Collections	<p>Overall long-term beneficial and adverse impacts to museum collections.</p> <p>No cumulative impacts.</p> <p>Impacts would not be significant.</p>	<p>Overall long-term beneficial and adverse impacts to museum collections.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant. Reorganizing and refurbishing the curatorial storage facility would result in substantive changes and their beneficial impact on museum collections would be slightly to readily detectable.</p> <p>Adverse impacts would not be significant.</p>	<p>Overall long-term beneficial impacts to museum collections.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant. Expanding the curatorial storage facility would result in substantive changes and their beneficial impact on museum collections would be readily detectable.</p>

TABLE 2-2: SUMMARY OF IMPACTS BY MANAGEMENT ALTERNATIVE

	Management Alternative 1/ Management Alternative A – Continuation of Current Management Practices (No Action)	Management Alternative 2 / Management B – Enhancing Natural Resource Values	Management Alternative 3/ Management B – Recognizing the Rela- tionship between Human Use and Nature
Wilderness			
Fire Island Wilderness	<p>Overall long-term beneficial impacts to Fire Island Wilderness.</p> <p>No cumulative impacts.</p> <p>Impacts would not be significant.</p>	<p>Overall long-term beneficial impacts to Fire Island Wilderness.</p> <p>No cumulative impacts.</p> <p>Impacts would be significant. Development on the edges of the Fire Island Wilderness would be minimized and the emphasis on ecological restoration would help NPS to more fully meet the goals and directives regarding management of Wilderness.</p>	<p>Overall long-term beneficial impacts to Fire Island Wilderness.</p> <p>No cumulative impacts.</p> <p>Impacts would not be significant.</p>
Transportation and Access			
Transportation and Access	<p>Overall long-term beneficial impacts to transportation and access.</p> <p>Alternative 1 would contribute an imperceptible beneficial increment to the overall beneficial impact.</p> <p>Impacts would not be significant.</p>	<p>Overall long-term beneficial and adverse impacts to transportation and access.</p> <p>Alternative 2 would contribute an imperceptible adverse increment to the overall beneficial impact.</p> <p>Beneficial impacts would be significant. Improvements to parking and circulation system at the Floyd Estate, wayfinding, and public transportation, and preserving the roadless character of Fire Island would be notable.</p> <p>Adverse impacts would not be significant.</p>	<p>Overall long-term beneficial and adverse impacts to transportation and access.</p> <p>Alternative 3 would contribute an imperceptible beneficial increment to the overall beneficial impact.</p> <p>Beneficial impacts would be significant. Improvements to parking and circulation system at the Floyd Estate, wayfinding, and public transportation, and preserving the roadless character of Fire Island would be notable.</p> <p>Adverse impacts would not be significant.</p>

TABLE 2-2: SUMMARY OF IMPACTS BY MANAGEMENT ALTERNATIVE

	Management Alternative 1/ Management Alternative A – Continuation of Current Management Practices (No Action)	Management Alternative 2 / Management B – Enhancing Natural Resource Values	Management Alternative 3/ Management B – Recognizing the Rela- tionship between Human Use and Nature
Visitor Use and Experience			
Visitor Use and Experience	<p>Overall long-term beneficial and adverse impacts to visitor use and experience.</p> <p>Alternative 1 would contribute an imperceptible long term minor adverse increment to the overall beneficial impact.</p> <p>Impacts would not be significant.</p>	<p>Overall long-term beneficial and adverse impacts to visitor use and experience.</p> <p>Alternative 2 would contribute imperceptible long term minor adverse and beneficial increments to the overall beneficial impact.</p> <p>Both beneficial and adverse impacts would be significant. Removal of visitor facilities, changes in visitor programming and access, and the emphasis on interaction with the natural environment would substantially change the way visitors experience many of the Seashore’s sites and facilities on Fire Island. This change could be viewed positively by some and negatively by others. Improvements to the cultural landscape, historic structures, visitor facilities, and visitor programming at the William Floyd Estate would be beneficial.</p>	<p>Overall long-term beneficial and adverse impacts to visitor use and experience.</p> <p>Management Alternative 3 would contribute short term minor adverse and beneficial increments to the overall beneficial impact.</p> <p>Beneficial impacts would be significant. Many of the proposed actions described under this alternative would result in readily detectable and substantive impacts including broadening the visitor experience to address both natural and cultural heritage of Fire Island and its regional context; and improvements to the cultural landscape, historic structures, visitor facilities, and visitor programming at the William Floyd Estate.</p> <p>Adverse impacts would not be considered significant.</p>

TABLE 2-2: SUMMARY OF IMPACTS BY MANAGEMENT ALTERNATIVE

	Management Alternative 1/ Management Alternative A – Continuation of Current Management Practices (No Action)	Management Alternative 2 / Management B – Enhancing Natural Resource Values	Management Alternative 3/ Management B – Recognizing the Rela- tionship between Human Use and Nature
Socioeconomic Environment			
Socioeconomic Environment	<p>Overall long-term beneficial and adverse impacts to the socioeconomic environment.</p> <p>Alternative 1 would contribute imperceptible long term minor adverse and beneficial increments to the overall beneficial impact.</p> <p>Beneficial impacts would not be significant.</p> <p>Adverse impacts would be considered significant over time resulting in the failure to adequately address land-use and development practices.</p>	<p>Overall long-term beneficial and adverse impacts to the socioeconomic environment.</p> <p>Alternative 2 would contribute minor adverse increments to the overall beneficial impact.</p> <p>Beneficial impacts would be significant. Many proposed actions would result in readily detectable and substantive impacts that would improve stewardship of Seashore resources.</p> <p>Adverse impacts would not be considered significant.</p>	<p>Overall long-term beneficial and adverse impacts to the socioeconomic environment.</p> <p>Alternative 3 would contribute a beneficial increment to the overall beneficial impact.</p> <p>Beneficial impacts would be significant. Many proposed actions would result in readily detectable and substantive impacts that would improve stewardship of Seashore resources.</p> <p>Adverse impacts would not be considered significant.</p>
Seashore Operations			
Seashore Operations	<p>Overall long-term adverse impacts to Seashore operations.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would not be significant.</p> <p>Adverse impacts would be significant because of the degree to which they are likely to exceed existing park budget and staffing constraints.</p>	<p>Overall long-term beneficial and adverse impacts to Seashore operations.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant and would result in expanded use of partners to achieve objectives and facilities that become more ecologically sensitive and sustainable. Removal of selected facilities would reduce maintenance and operational requirements.</p> <p>Adverse impacts would be significant because they are likely to result in exceeding park budgets and staffing constraints.</p>	<p>Overall long-term beneficial and adverse impacts to Seashore operations.</p> <p>No cumulative impacts.</p> <p>Beneficial impacts would be significant and would result in expanded use of partners to achieve objectives and facilities that become more ecologically sensitive and sustainable.</p> <p>Adverse impacts would be significant because they are likely to result in exceeding park budgets and staffing constraints.</p>

Proposed Plans	Description	Priority (H,M,L)
Coastal Land Use and Shoreline Management Plan	This plan would address shoreline protection, land- use controls, site planning, and design standards, and post- storm response in the context of the dynamic barrier environment and emerging trends resulting from sea- level rise and climate change. The plan must be undertaken and adopted as a multi-lateral, collaborative effort. The plan would be consistent with the Tentative Federally Supported Plan (TFSP) for FIMP and would articulate a comprehensive strategy for protecting coastal resources while addressing resilience in land – use development within the coastal zone on both federal and non-federal lands within the Seashore. Further, the plan would be consistent with the recommendations of the 2013 interagency Hurricane Sandy Task Force.	H
Commercial Services Plan	The NPS would prepare a commercial services plan to determine which types and levels of activities, services, and facilities would be provided at the Seashore and how they would be managed by the NPS in the most effective and efficient manner. The commercial services plan would identify the best management approach for ferry transportation and the operation of marinas, food services, and other visitor service activities. The Commercial Services Plan would also address strategies for introducing sustainable design, energy efficiency, pricing and affordability, and other conditions of use into the administration of commercial services at the Seashore.	H
Marine Resource Management Plan	This plan would define NPS roles and priorities and would recommend collaborative management strategies to promote the long-term protection and sustainability of marine resources within the larger contexts of Great South Bay and the Atlantic Ocean. The Marine Resources Management Plan would address issues pertinent to fishing and shellfishing, the protection of submerged aquatic vegetation, the protection of submerged archeological resources, and the management of operational and recreational activities (e.g. motor boat access) with in the marine management area of the Seashore.	H
Dredge Management Plan	The NPS would work with federal, state, and local government, and other entities to develop a programmatic dredge management plan to allow for the placement of dredge materials for beneficial purposes (e.g., augment eroding shorelines and protect habitats) along the bay and ocean shorelines of Fire Island as appropriate. Use and placement of dredge materials would emulate bayside natural systems of sand movement as feasible. This plan would be consistent with the Coastal Land Use and Shoreline Management plan and would also address maintenance dredging needs for navigation channels and marinas on Fire Island, assess any contaminant issues, determine a planned frequency of dredging, and evaluate environmental and cost-effective alternatives to dredging at some locations (e.g., shallow draft vessels).	M

Post-Storm Recovery Plan	This plan would provide guidelines on how to respond to a range of storm events, including various degrees of structural damage and shoreline change. The NPS would encourage Fire Island communities, Smith Point County Park, and Robert Moses State Park to include post-storm planning guidelines in their local comprehensive or master plans that are consistent with the post-storm recovery plan developed for Fire Island. The plans should be consistent with the Fire Island Coastal Land Use and Shoreline Management Plan, the Tentative Federally Support Plan for FIMP, and the recommendations of the Hurricane Sandy Task Force.	M
Wastewater Management Plan	The plan would evaluate the issues and impacts associated with the present state of wastewater management on Fire Island on both federal and non-federal lands and outline a range of possible alternatives and develop a cooperative implementation strategy. The plan would be undertaken in collaboration with USGS, Suffolk County, the towns of Brookhaven and Islip, and the Fire Island communities.	M
New Master Plans for Federal Facilities at Fire Island Light Station, Sailors Haven, Talisman, Watch Hill, and Wilderness Visitor Center	The NPS would develop updated master plans for the federal facilities on Fire Island that address site circulation, rehabilitation or replacement of existing facilities (e.g., maintenance, staff housing, visitor facilities), visitor amenities (e.g., group educational shelters, moorings), interpretive media, infrastructure, reducing environmental impacts (e.g. water quality, shoreline erosion, etc.) and improving operational efficiencies. Each master plan would include an analysis of the potential impacts of climate change and sea-level rise, employ relevant departmental and agency standards and guidelines, and incorporate the recommendations of the Hurricane Sandy Task Force.	M
Threatened & Endangered (T&E) Species Management Plan	This plan would update the Seashore's T&E Species Management Plan and include provisions to consider and address the potential effects of climate change and sea-level rise on T&E species.	M
Comprehensive Invasive Species Management Plan	This plan would address prevention, surveillance, and management priorities for non-native invasive species management. The plan would identify educational and other strategies for achieving management objectives across Fire Island and at the William Floyd Estate.	M
Cultural Landscape Report and Treatment Plan for William Floyd Estate	The NPS would prepare a Cultural Landscape Report (CLR) and Treatment Plan for the Estate.	M
Historic Furnishings Implementation Plan for Old Mastic	In response to the Old Mastic Historic Furnishings Report recommendations, the NPS would prepare a Historic Furnishings Implementation Plan that would include an operating plan, recommended list of furnishings, and schematic floor plans.	L
Fire Management Plan for William Floyd Estate	The NPS would complete plans that would address the risk of wildland fire (i.e., any nonstructural fire, other than prescribed fire, that occurs in the wildland) on the Estate and consider the use of prescribed fire in the management of the cultural landscape. The affect of climate change on wildland fire risk would be considered in the fire management plan.	L
Archeological Resource Management Plan for William Floyd Estate	The NPS would undertake a comprehensive archeological resource management plan for the Estate that would consider previously conducted archeological investigations on the property.	L