

I: Plan Purpose & Foundation for Planning

INTRODUCTION Fire Island National Seashore (the Seashore), a unit of the National Park System, is located along the south shore of Long Island in Suffolk County, New York. The Seashore encompasses 19,580 acres of upland, tidal, and submerged lands along a 26-mile stretch of the 32-mile barrier island part of a much larger system of barrier islands and bluffs stretching from New York City to the very eastern end of Long Island at Montauk Point. Easily accessed on Fire Island are nearly 1,400 acres of federally designated wilderness, an extensive dune system, centuries-old maritime forests, solitary beaches and the Fire Island Light. Nearby on Long Island, also part of the Seashore, is the William Floyd Estate, the home of one of New York's signers of the Declaration of Independence.

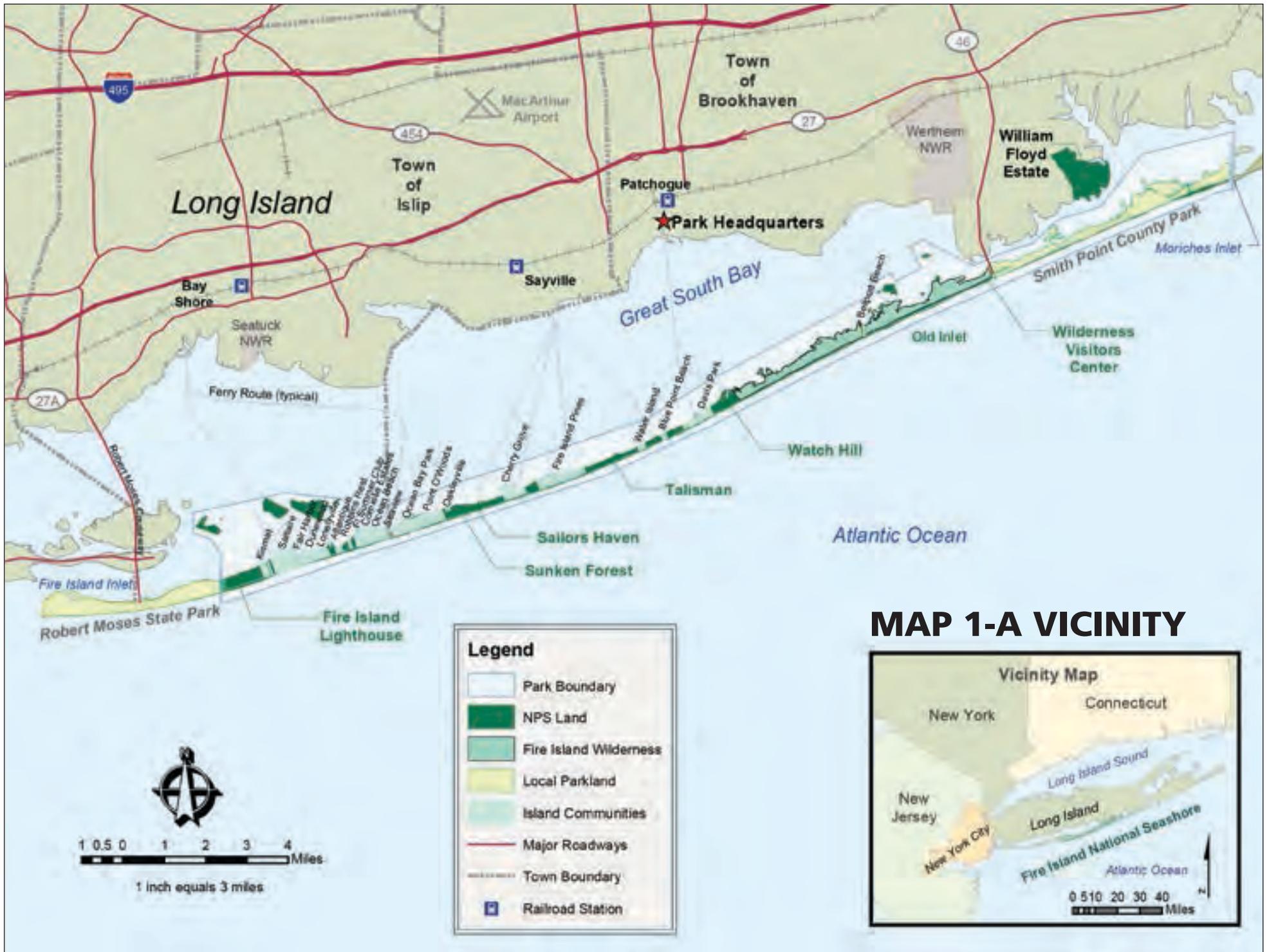
On Fire Island, interspersed among the federal lands within the Seashore are 17 residential communities that predate the Seashore's authorization. Resort development on Fire Island began as early as 1855, with a number of the communities having been established prior to the Great Depression of the 1930s. The Seashore's enabling legislation includes provisions for private land to be retained and developed if zoning requirements are met. No hard-surfaced roads connect the communities either to each other or to the mainland of Long Island. They are accessible mainly by passenger ferry or private boat. Vehicle use is restricted within the boundary of the Seashore on Fire Island. Without paved roads and with limited traffic, the communities have retained much of their original character. Some of the communities have hotels or facilities for overnight guests, while others are strictly residential. There are approximately 4,200 developed properties on Fire Island, with approximately 300 residents living on the island year-round. The number of year-round residents has slowly and steadily declined in recent years. Vehicle access is limited for year-round residents, contractors and other service providers (telephone, fuel, garbage, etc.), as all vehicles crossing federal lands must have a National Park Service driving permit.

During the summer season, the population of Fire Island swells to approximately 30,000, with a total two to three million visitors each year. Recreational visitation to sites and facilities owned or managed by the Seashore in 2012 was 483,000. The Seashore's primary visitor facilities on Fire Island are Fire Island Light, Sailors Haven, Watch Hill, and the Wilderness Visitor Center. Fire Island Light



is maintained and operated by the Fire Island Lighthouse Preservation Society, which offers tours and other visitor programming. Concessioners operate the marina at Sailors Haven, as well as the marina and campground at Watch Hill. The Seashore maintains visitor services facilities at Sailors Haven, Talisman, Watch Hill, and at the eastern end of the Wilderness Area. The Seashore offers two protected swimming areas at Sailors Haven and Watch Hill. Also located on Fire Island are ranger stations, visitor contact facilities, maintenance facilities, and several units of park housing. Located at either end of Fire Island and accessible by vehicle are major state and county beaches with sizable visitation.

On Long Island, the Seashore's headquarters are located in Patchogue and include administrative offices, a maintenance facility, and a ferry terminal. The William Floyd Estate is located about 15 miles east of Patchogue in the midst of a densely developed residential neighborhood in the village of Mastic Beach.



MAP 1-A VICINITY

PURPOSE OF AND NEED FOR THE GENERAL MANAGEMENT PLAN

A general management plan (GMP) is a comprehensive plan that defines a national park's purpose and management direction and provides the overarching guidance necessary to coordinate all subsequent planning and management. This ensures that national park managers carry out, as effectively and efficiently as possible, the mission of the National Park Service (NPS) as derived from the Organic Act of 1916, which states:

The National Park Service preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

The GMP for Fire Island takes the long view—15 to 20 years into the future—and is meant to be a policy-level document that provides overarching guidance for Seashore managers. When approved, the Fire Island GMP will serve as the foundation for all subsequent planning and management decisions. All other plans will be based upon the GMP.

The four basic elements required of NPS GMPs (by Public Law 95-625) are:

- Measures for **preservation** of the area's natural and cultural resources.
- Types and general intensities of **development** associated with public enjoyment and use of the area, including general locations, timing of implementation, and costs.
- Identification and implementation commitments for visitor **carrying capacities**.
- Potential **boundary** modifications and the reasons for them.

This GMP has also been developed to meet the requirements of an environmental impact statement (EIS) pursuant to the National Environmental Policy Act of 1969, as amended (NEPA) and its implementing regulations (43 CFR 1500-1508), the Department of the Interior's NEPA regulations (40 CFR Part 46), and the NPS Director's Order #12 – *Conservation Planning*,

Environmental Impact Analysis, and Decision Making. Once an alternative is selected as the approved GMP and actions are implemented, additional site-specific compliance may be necessary for some actions and would be undertaken in accordance with all applicable requirements.

Planning Issues

Fire Island National Seashore's last GMP was completed in 1977. Since 1977, the Seashore's resource management responsibilities have evolved, as have the philosophies underlying best management practices. A number of newly introduced mandates, events, and other actions since 1977 affect the management of the Seashore's resources. Likewise, issues related to climate change and sea-level rise, land use and development, shoreline management, and the changing needs and desires for public access and recreational use (e.g., boating, vehicular access) also affect the Seashore's resource management practices.

Since 1977, a number of new management conditions and challenges have emerged:

- Seven miles of the barrier island became federally designated wilderness;
- Five federally listed threatened and endangered species have been identified;
- Vector-borne diseases like Lyme disease and West Nile Virus have emerged as resource management issues;
- The Seashore assumed responsibility for the management of two major cultural resource areas, Fire Island Light on the west end of the island and the 613-acre William Floyd Estate on Long Island; and
- Subsequent cultural resource studies have deepened our understanding of the full extent of cultural resources represented across Fire Island.

A Wilderness Management Plan was approved in 1983. As part of the current GMP/EIS planning process, proposals for the Fire Island Wilderness are described in the Common to Action Alternatives section of Chapter Two and evaluated in Chapter Four. The Wilderness Management Plan, now referred to as a Wilderness Stewardship Plan (WSP), was updated to be consistent with the proposals in the GMP/EIS. The WSP is being made available for review concurrent with the draft GMP/EIS and appears in Appendix D.

Through the project scoping phase of the GMP/EIS process, the planning team has identified the following list of planning issues:

► **ACKNOWLEDGING THE DYNAMIC CHARACTER OF THE BARRIER ISLAND AND ADDRESSING CLIMATE CHANGE AND SEA-LEVEL RISE**

Fire Island is constantly being 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. Both natural factors and human activities affect the dynamic character of the barrier island. Natural drivers of coastal change include but are not limited to periodic storms and floods, climate change, and sea-level rise. Human activities, such as continued development and efforts to protect existing development, also influence the geomorphology of Fire Island.

Climate change refers to any substantial changes in average climatic conditions (such as average temperature, precipitation, or wind) or climatic variability (such as seasonality or storm frequencies) lasting for an extended period of time (decades or longer). Recent reports by the U.S. Climate Change Science Program, the National Academy of Sciences, and the United Nations Intergovernmental Panel on Climate Change (IPCC 2007) provide clear evidence that climate change is occurring and will accelerate in the coming decades. The effects of climate change on national parks are beginning to emerge as both science and impacts become clearer; however, it is difficult to predict the full extent of the changes that are expected under an altered climate regime.

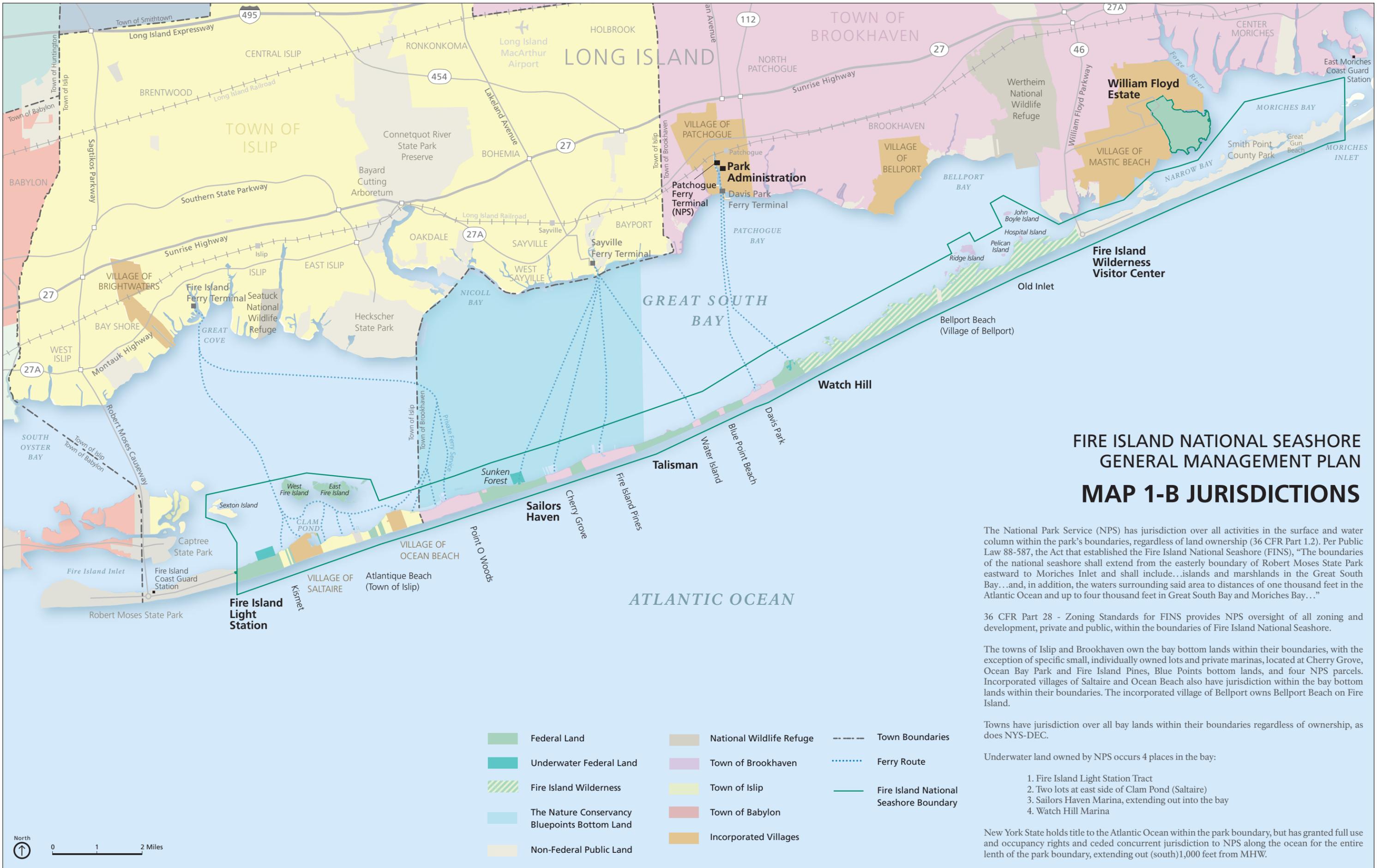
Climate change will result in significant effects on conditions at the park, including impacts from sea-level rise and potentially destructive storm events. More detailed examination of these effects will be critical as actions envisioned in the approved GMP are analyzed and implemented at site-specific levels. Factoring in sea-level rise, these analyses will influence the type, design, location, and ultimate feasibility of park facilities and developments.

► **RECOGNIZING A COMPLEX MOSAIC OF JURISDICTIONS**

The Seashore is made up of approximately 19,580 acres of land and water. Of that only 32 percent is under federal ownership. The rest of the land and water within the Seashore's boundary is made up of privately owned and developed properties, Smith Point County Park (owned and managed by Suffolk County), and town and village marinas and beaches owned and managed by the towns of Brookhaven and Islip and the villages of Bellport, Ocean Beach, and Saltaire. On the western end of Fire Island Robert Moses State Park abuts the Seashore.

As previously stated, interspersed within the Seashore are 17 diverse residential communities that were established before the Seashore's authorization. Unique to Fire Island's legislation, private land can be retained and developed if federal zoning requirements are met. No hard-surfaced roads connect the communities, and they are accessed mainly by ferry or private boat. Without paved roads and with limited traffic, the communities have retained much of their original character.





FIRE ISLAND NATIONAL SEASHORE GENERAL MANAGEMENT PLAN MAP 1-B JURISDICTIONS

The National Park Service (NPS) has jurisdiction over all activities in the surface and water column within the park's boundaries, regardless of land ownership (36 CFR Part 1.2). Per Public Law 88-587, the Act that established the Fire Island National Seashore (FINS), "The boundaries of the national seashore shall extend from the easterly boundary of Robert Moses State Park eastward to Moriches Inlet and shall include...islands and marshlands in the Great South Bay...and, in addition, the waters surrounding said area to distances of one thousand feet in the Atlantic Ocean and up to four thousand feet in Great South Bay and Moriches Bay..."

36 CFR Part 28 - Zoning Standards for FINS provides NPS oversight of all zoning and development, private and public, within the boundaries of Fire Island National Seashore.

The towns of Islip and Brookhaven own the bay bottom lands within their boundaries, with the exception of specific small, individually owned lots and private marinas, located at Cherry Grove, Ocean Bay Park and Fire Island Pines, Blue Points bottom lands, and four NPS parcels. Incorporated villages of Saltaire and Ocean Beach also have jurisdiction within the bay bottom lands within their boundaries. The incorporated village of Bellport owns Bellport Beach on Fire Island.

Towns have jurisdiction over all bay lands within their boundaries regardless of ownership, as does NYS-DEC.

Underwater land owned by NPS occurs 4 places in the bay:

1. Fire Island Light Station Tract
2. Two lots at east side of Clam Pond (Saltaire)
3. Sailors Haven Marina, extending out into the bay
4. Watch Hill Marina

New York State holds title to the Atlantic Ocean within the park boundary, but has granted full use and occupancy rights and ceded concurrent jurisdiction to NPS along the ocean for the entire length of the park boundary, extending out (south) 1,000 feet from MHW.

 Federal Land	 National Wildlife Refuge	 Town Boundaries
 Underwater Federal Land	 Town of Brookhaven	 Ferry Route
 Fire Island Wilderness	 Town of Islip	 Fire Island National Seashore Boundary
 The Nature Conservancy Bluepoints Bottom Land	 Town of Babylon	
 Non-Federal Public Land	 Incorporated Villages	



Regulatory oversight for land use and development, water, sanitation, wildlife, coastal zone management, driving, and public health and safety is distributed across multiple jurisdictions within the Seashore boundary, including two incorporated villages (Saltaire, Ocean Beach), two Long Island-based municipalities (Brookhaven, Islip), Suffolk County, and multiple NY State agencies. These agencies have missions, mandates, and policies that frequently conflict with those of the NPS. As a result, the practical application of the NPS' Management Policies to non-federal properties within the Seashore boundary has presented challenges. The public often incorrectly believes and expects that the NPS has the authority to transcend these circumstances to effectively address a myriad of issues.

Federal zoning standards developed by the NPS and approved by the Secretary of the Interior have been incorporated (for the most part) into town and village zoning codes to regulate land use and development within the residential communities. The concept of employing the Secretary's zoning standards to address land use and development on private lands within the park was originally based on the "Cape Cod Formula" applied at Cape Cod National Seashore. While the Cape Cod Formula has met with relative success in Massachusetts, it has not translated into success on Fire Island. The practice of granting variances is widespread, even when NPS has noted its objection and indicated that the property would lose its suspension from the condemnation authority of the Secretary of the Interior. The towns and villages grant variances based on precedent making it very difficult to deny subsequent applications. Further, NPS has neither the financial resources nor the political support to engage in condemnation of these properties. As a result the federal zoning in its current application has not been a particularly powerful tool for controlling development on Fire Island.

The mosaic of public and private entities, each with its own purposes, policies, guidelines, and management approaches, has resulted in confusion and frequent conflicts for management of Fire Island. No existing mechanism effectively enables planning, communication, and cooperation across those varying entities. A new management paradigm is needed to make the Island "whole" and to foster cooperative stewardship in the management of Fire Island.

► REINTERPRETING ISLAND RESOURCES

Since its establishment in 1964, the Seashore has been recognized almost exclusively for its natural resource values. The Seashore's 1977 GMP identified the "primary management concern" as being "preservation and enhancement of the serenity and natural beauty of the Island, which includes the protection of the beaches, dunes, and other natural features fundamental to the concept of Fire Island National Seashore." Since 1977, additional research has been completed on the historic resources of Fire Island, including a Historic Resource Study (1979), Archeological Overview and Assessment (2005), and an Ethnographic Overview and Assessment (2006).

These reports reveal a rich cultural heritage, with some communities and institutions (e.g., U.S. Life-Saving Service) having their roots on Fire Island in the mid-19th century. Prior to its inception as a resort area in the 1880s, Fire Island had been put to agricultural and industrial use for generations. While the significance of the natural resource values of Fire Island is not in dispute, it is important to recognize that Fire Island is a cultural landscape that has been and continues to be shaped both by human intervention and the forces of nature.

Failing to recognize the importance of this interrelationship between the human and natural dimensions of Fire Island has produced policies and management strategies that have been difficult to advance.

► PLACING NEW EMPHASIS ON MARINE AND OCEAN-BASED RESOURCES

In the past, management of the Seashore—as with other coastal national parks and seashores—has focused more on terrestrial than on aquatic resources. Yet Fire Island's boundaries extend 4,000 feet on average into the Great South Bay, and 1,000 feet into the Atlantic Ocean, encompassing a wealth of submerged and tidal resources, both natural and cultural. Over 70 percent of the Seashore is submerged. In recent years Seashore officials have become increasingly concerned about the protection of these marine resources. At the same time, the NPS has been affirming its commitment to marine resource protection service-wide, through development of new plans and initiatives.



► BROADENING THE PARK'S VISITATION

The Seashore offers a wide range of recreational activities and facilities to the visiting public. In 2012 the park's recreational visitation was approximately 483,000. However, the economic, ethnic, and geographic diversity of the Seashore's audience has remained limited, particularly compared with the demographics of the nearby metropolitan New York region. Some Seashore areas are heavily used, with little visitor infrastructure. Other facilities could handle increased public use. Opportunities to expand outreach and accessibility, strategies for broadening the Seashore's audiences, and measures to ensure that the Seashore's resources and stories are relevant to current and future generations of Americans must be considered.

► ADDRESSING AGING INFRASTRUCTURE

The Seashore's physical infrastructure is complex and serves visitors and staff at several locations on Fire Island and Long Island. The Seashore maintains over 10 miles of boardwalk and operates over 90 buildings, including the historic William Floyd Estate and the Fire Island Light Station. Many of the Seashore's visitor facilities and supporting infrastructure are over 25 years old and are located on Fire Island, making them vulnerable to severe weather and storms and difficult to operate and maintain. Because of the linear character of Fire Island and reliance on water-based transportation, the Seashore's visitor facilities are hard to reach for both the visiting public and the facilities management staff. Similar issues are associated with Seashore staff housing on Fire Island. On Long Island, the Seashore's headquarters and the

Patchogue Maintenance Facility are located just under one-half mile apart.

► THE WILLIAM FLOYD ESTATE

The William Floyd Estate (the Estate) encompasses the remaining 613 acres of the original "plantation" operated by William Floyd, who signed the Declaration of Independence as a representative of New York. In 1965 Floyd family descendants donated the Estate, composed of 27 buildings, structures, and major landscape features as well as thousands of personal effects and historical artifacts, to the NPS. The NPS assumed responsibility for the main house (Old Mastic House) in 1975, but did not acquire full management responsibility for the entire property until 1991. The Estate is located on Long Island adjacent to the village of Mastic Beach and is different in purpose and character from the larger portion of the Seashore on Fire Island. The 1978 Development Concept Plan – Interpretive Prospectus provided the primary guidance for management of the Estate. Throughout its NPS administrative history, the Estate's preservation and programming have been subject to funding shortfalls and staffing limitations. The maintenance function at the Estate is spread across a number of small sheds near the existing curatorial storage building. Maintenance projects requiring indoor space must be transported and completed at the Patchogue Maintenance Facility 15 miles to the west. This maintenance facility also serves the east end of Fire Island. Management options for the Estate aimed at improving the outlook for its long-term preservation and interpretation must be considered.

THE FOUNDATION FOR PLANNING & MANAGEMENT

The foundation for planning and management is a formal statement of a park's core mission and provides basic guidance for all the decisions to be made about a park. It describes the core mission and underpinnings of a park unit by identifying its purpose, significance, fundamental resources and values, interpretive themes, special mandates, and administrative commitments. The process of preparing a foundation document aids park managers, staff, and the public in identifying and clearly stating the essential information that is necessary for park management to consider when determining future planning efforts, outlining key planning issues, and protecting resources and values that are integral to park purpose and identity.

The Seashore's foundation for planning and management was developed with substantial stakeholder input during the course of three separate workshops. The contents of the foundation for planning and management were made available to the public for comment in GMP Newsletters 1 (2008) and 2 (2010).

Park Purpose and Significance of Fire Island National Seashore

The purpose and significance statements form the basis for the GMP. In addition, the National Park Service Organic Act of 1916 states the fundamental purpose of each unit in the National Park System is:

... to conserve the scenery and the natural and historical objects and the wild life therein and to provide for the enjoyment of the same in such a manner as to leave them unimpaired for the enjoyment of future generations.

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Fire Island National Seashore was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The park was established when the enabling legislation adopted by Congress was signed into law on September 11, 1964 (See Appendix A for enabling legislation and subsequent amendments). The purpose statement lays the foundation for understanding what is most important about the park.

Significance statements express why a park's resources and values are important enough to merit designation as a unit of the national park system. These statements are

linked to the purpose of Fire Island National Seashore, and are supported by data, research, and consensus. Statements of significance describe the distinctive nature of the park and why an area is important within a global, national, regional, and system wide context. They focus on the most important resources and values that will assist in park planning and management.

► PURPOSE

Together with the Fire Island communities, government agencies, and other partners, Fire Island National Seashore conserves, preserves, and protects for the use and appreciation of current and future generations Fire Island's larger landscape including its relatively undeveloped beaches, dunes, and other natural features and processes and its marine environment. These resources possess high natural and aesthetic values to the nation as examples of great natural beauty and wildness in close proximity to large concentrations of urban population.

Fire Island National Seashore conserves, preserves, and protects the historic structures, cultural landscapes, museum collections, and archeological resources associated with the Seashore including the Fire Island Light Station and the William Floyd Estate.

Fire Island National Seashore preserves the primitive and natural character of the Otis Pike Fire Island High Dune Wilderness and protects its wilderness character.

► SIGNIFICANCE

Fire Island National Seashore is part of a dynamic barrier island system within close proximity to the largest concentration of population of any national seashore in the United States.

The barrier island environment of Fire Island has attracted and influenced a variety of human uses over hundreds of years. It has also been shaped by this continuum of human involvement, giving rise to a distinctive relationship between the built and natural environments.

Fire Island's old growth maritime forest ecosystem running from Davis Park to Point of Woods as exemplified by Sunken Forest, just west of Sailors Haven, is globally rare. This 250 – 300 year old American holly-shadblow-sassafras maritime forest is one of only two such forests known in the world.

Fire Island National Seashore provides important habitat for marine and terrestrial plants and animals, including a number of rare, threatened, and endangered

species. Additionally, it is an important part of the Atlantic flyway and provides shelter for more than 330 migratory, over-wintering, and resident bird species.

The Otis Pike Fire Island High Dune Wilderness (Fire Island Wilderness), the only federally designated wilderness in New York State, offers a rare opportunity for a broad spectrum of the American public to experience wilderness.

Continuously owned and occupied by the Floyd Family from 1720 to 1976, the William Floyd Estate was the home of General William Floyd, a signer of the Declaration of Independence. The family's multigenerational tenure on the property not only tells their story but also reflects the dynamic social, economic, and political changes that took place over time on Long Island and throughout the nation.

Since 1826, Fire Island has served as a location for aids to navigation for ocean going vessels. The current Fire Island Light was constructed in 1850 and has served as a critical navigation aid for the port of New York for more than 150 years.

Interpretive Themes

Interpretive themes are an organizational tool that reveal and clarify meaning, concepts, contexts, and values represented by park resources. Sound themes are accurate and reflect current scholarship and science. They encourage exploration of the context in which events or natural processes occurred and the effects of those events and processes. Interpretive themes go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. These themes help explain why a park story is relevant to people who may otherwise be unaware of connections they have to an event, time, or place associated with the park.

The following interpretive themes have been identified for Fire Island National Seashore:

Nature's Rhythms of Change and Renewal

Fire Island is constantly changing and always on the move. The very existence of this barrier island, the plant and animal communities that it supports, as well as human engagement in this landscape, is dependent upon nature's rhythms of change and renewal.

Island Resources from Ocean to Bay

From the pounding surf of the ocean, to the swift flow of inlets, to the relative calm of the bay, Fire Island encompasses a myriad of marine and upland

environments that support a diverse assemblage of species and provides opportunities for maritime recreation and livelihood.

Fire Island: A Story of People and Place

For centuries, people have been and will continue to be intertwined with Fire Island's delicate environment; actions today will shape Fire Island and its surroundings into the future, challenging all to become stewards of Fire Island's natural and cultural legacy.

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 that took place 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.

Analysis of Fundamental Resources and Values

The NPS works to ensure the conservation and public enjoyment of resources and values fundamental to achieving a park's purpose and maintaining its significance. Deterioration of these qualities would jeopardize a park's purpose or significance. A park may possess other resources and values that are important but not fundamental. Identifying fundamental resources and values is intended to help focus planning and management on what is truly important about a park.

Fundamental resources and values include:

A Shared Resource

Within the boundary of Fire Island National Seashore there are 17 pre-existing, residential communities including two incorporated villages, a county park, and town and village-owned and operated beaches. Immediately adjoining the Seashore to its west is Robert Moses State Park. Collectively, these places offer a variety of experiences to a large and diverse audience and are responsible for the long-term management and protection of Fire Island's natural and cultural resources. In addition, the presence of the residential communities makes evident the rich cultural heritage of Fire Island,

and their varying character contributes to the visitor experience as the Seashore. The interrelationship among the public and private interests as they influence or affect this landscape is a fundamental value of Fire Island National Seashore.

Barrier Island/Coastal Processes

Fire Island is made up of sediment deposited during the last ice age. Wind, waves, and currents have moved and continue to move sediment along and across Fire Island, shifting its position over time. The availability of sediment has not been constant and Fire Island has progressed through periods of sediment accumulation and loss. Increases in the rates of sea-level rise as well as the frequency of storms could influence the rate and scope of change on the barrier island.

Dynamic Natural Systems (Terrestrial Habitats and the Marine Environment)

Fire Island is composed of a variety of terrestrial and marine habitats with particular distinctive qualities and characteristics. From ocean to bay, they include a segment of the Atlantic Ocean, near-shore environment, open beach, the primary dunes, the mid-island swale, the secondary dune (only in a few locations on Fire Island), maritime forest, fresh water bogs, and saltmarshes and submerged aquatic vegetation in the bay, and a segment of the Great South Bay. Fire Island supports several federally listed and state listed threatened and endangered species.

Cultural Resources

Fire Island has a rich cultural history with some communities and institutions (e.g., U.S. Lifesaving Service) having their roots on the island in the mid-19th century. Prior to its inception as a resort area in the 1880s, Fire Island had been put to agricultural and industrial use for generations. Fire Island represents a cultural landscape that has been shaped both by human intervention and the forces of nature. The Fire Island Light Station was first developed in 1826 and since that time has facilitated communication and navigation for mariners. On Long Island, the William Floyd Estate was home to one of New York's signers of the Declaration of Independence and generations of his descendants. The cultural resources of Fire Island and the William Floyd Estate enable the public to understand and appreciate the history and development of these areas in the larger context of the region and in response to changing social, economic, cultural and political conditions.

Fire Island Wilderness

The Otis Pike Fire Island High Dune Wilderness (Fire Island Wilderness) is the only federally designated wilderness area in the State of New York and occurs in the single largest metropolitan area in the United States. At 1,380 acres, it is also one of the smallest wilderness areas managed by the NPS. Due to its small scale and proximity to large urban populations, it offers the unique opportunity to introduce the concept and experience of Wilderness to a large population of potential users. The Fire Island Wilderness also encompasses cultural remnants that reflect the historic human activity that preceded the park's creation and wilderness designation.

Seashore Experience

Fire Island National Seashore offers a wide range of experiences within a coastal environment to a large and diverse urban population in one of the most populous regions of the United States. Millions of people live within a day's travel of the Seashore and can experience a range of opportunities from solitude and communion with nature to more active recreation and social interaction. Individuals participate in all forms of recreation, from completely unstructured activities to formal programs and events. People who come to Fire Island have the opportunity to enjoy a relatively car-free environment – an increasingly rare experience in the Northeast. The Seashore experience may further be complemented by Fire Island's residential communities some of which function as gateways to the Seashore and all of which exhibit distinctive and varying community character.

The following fundamental resource and values analysis was developed during the Seashore's GMP process and reflects the input of the planning team, key stakeholders, and other NPS resource management professionals. The analysis describes their condition, and lists the stakeholders in their preservation and management.

A SHARED RESOURCE**Description & Importance**

Only 32 percent of the 19,580 acres located within the Seashore's boundary is under federal ownership. Within the boundary of Fire Island National Seashore there are 17 preexisting residential communities including the villages of Ocean Beach and Saltaire, Smith Point County Park, and town- and village-owned and operated beaches. Immediately adjoining the Seashore to its west is Robert Moses State Park. Collectively, these places offer a variety of experiences to a large and diverse audience. Along with the NPS, the Fire Island communities, New York State, Suffolk County, the towns of Islip and Brookhaven, and the village of Bellport are engaged in the care and management of Fire Island's natural and cultural resources. In addition, the presence of residential communities makes evident the rich cultural heritage of Fire Island, and their varying character contributes to the visitor experience at the Seashore.

Just as the management actions and approaches of these entities may have an impact on federal lands, the management actions and approaches of Fire Island National Seashore may likewise have an impact. The interrelationship among these public and private interests as they influence or affect this landscape is a fundamental value of Fire Island National Seashore. Fire Island is a shared resource.

Current Conditions, Trends, & Threats

The confluence of a number of factors has produced a fractured approach to resource management that is often a source of conflict and fails to protect the common natural, cultural, and aesthetic values of Fire Island.

- The NPS does not and cannot independently manage the resources of Fire Island. Regulatory oversight for land use and development, water, wildlife, sanitation, coastal zone management, driving, and public health and safety is distributed across a number of jurisdictions within the park boundary including two incorporated villages (Saltaire, Ocean Beach), two Long Island-based municipalities (Brookhaven, Islip), Suffolk County, and multiple NY State agencies. However, there is no formal structure or clear authorities that ensure effective communication, collaboration, or cooperation among these regulatory and management entities.
- On Fire Island, interspersed among the federal tracts within the Seashore, are 17 residential communities (including the villages of Ocean Beach and Saltaire) that were established before the Seashore's authorization. Under the Seashore's enabling legislation, private lands may be retained and developed if federal zoning requirements are met. There are approximately 4,200 developed properties on Fire Island.
- Without paved roads and with limited vehicular traffic, the Fire Island communities have retained much of their original character. A community character analysis undertaken by the Seashore with the National Parks & Conservation Association (NPCA) in 2009 revealed that the four most important elements defining community character were actually based on how Fire Island is experienced. They included a sense of communion with both nature and community (represented by a group gathering to view the sunset); a sense of arrival (represented by passengers disembarking the ferry); a sense of self-reliance (represented by the collection of hand carts at the ferry dock); and a vehicle-free existence (represented by pedestrians on a boardwalk). The study findings also provided some insights into common values associated with the built environment, including building scale, materials, color, fencing, pathways, and landscape features.

- Federal zoning standards developed by the Seashore and approved by the Secretary of the Interior have been incorporated (for the most part) into the town and village zoning codes. The underlying purpose of the existing federal zoning standards is to protect Fire Island’s natural resources. The practice of granting variances even in cases where NPS has noted its objection and indicated that the property would lose its suspension from the Secretary’s authority to condemn noncompliant properties is widespread. The towns and villages often grant variances based on precedent, making it very difficult to deny subsequent applications. Further, NPS has neither the financial resources nor the political will to engage in condemnation of these properties. However, given the shortcomings of the federal zoning standards to prevent inappropriate developments, NPS is reevaluating the standards, while working with the local zoning authorities to move towards more compliance with NPS laws and policies.
- Over the course of decades, the U.S. Army Corps of Engineers (USACE) has been working with New York State (NYS), the Department of the Interior (DOI) and local authorities to develop a storm protection plan for Fire Island addressing, the area from Fire Island Inlet in the west to Montauk Point in the east; hence this effort is often referred to as FIMP. In 2011, the NPS, the U.S. Fish and Wildlife Service (FWS), and the USACE developed a conceptual plan referred to as the Tentative Federally Supported Plan (TFSP). In the wake of Hurricane Sandy, FIMP, as described in the TFSP, has received federal funding to move forward.
- In accordance with NYS’ Coastal Erosion Hazard Act, a coastal erosion hazard area (CEHA) has been identified on Fire Island. The CEHA is meant to be a tool to control development on and in front of the primary dune to preserve this primary protective feature of the barrier island from coastal storms and tidal surges. On some parts of Fire Island, the state retains responsibility for enforcing CEHA; on others the state has ceded this authority to the town. Regardless of who is responsible, enforcement of CEHA has been inconsistent at best, and nonexistent at worst.
- In addition, a full complement of cultural resources including historic structures, landscape features, archeological resources, ethnographic resources, and collections may be found on the non-federal lands within the Seashore. Existing documentation points to many resources that are known to occur on non-federal lands that contribute to Fire Island’s historic and cultural heritage. These resources are known to few, and their long-term protection is uncertain.
- While the NPS has authority to take steps to protect Seashore resources on federal lands within the Seashore boundary, that authority is limited on non-federal lands and, in practice, has presented problems due to conflicting missions and objectives and a lack of clarity regarding resource management responsibilities among the different landowners and regulatory authorities.

Desired Condition

The NPS partners with the public, Fire Island communities, state and local government, and others in the stewardship and preservation of Fire Island’s natural and cultural resources and its distinctive character.

The NPS provides for the stewardship of the coastal environment and its cultural and natural systems, while recognizing that Fire Island is part of a larger ecological, social, economic, and cultural context.

Through outreach and education, the NPS fosters public understanding and appreciation of the purpose and significance of the national seashore and its natural and cultural resources, as well as the public’s vital stewardship role in protecting Fire Island.

The NPS partners with others to ensure that land use 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 communities.

Stakeholder Interests

Stakeholder interests are articulated under “Current Conditions, Trends, & Threats.” The primary stakeholders are entities having direct ownership or management responsibilities for lands within the Seashore including residential communities including the villages of Ocean Beach and Saltaire, the village of Bellport, the towns of Brookhaven and Islip, Suffolk County, and the State of New York.

With regard to cultural resources, there are few groups taking an interest in the historic resources or the cultural heritage of Fire Island as a whole. On non-federal lands, there are a small number of local historical societies that maintain artifacts and archives associated with Fire Island communities – Cherry Grove, Ocean Beach, and Point o’ Woods all have such collections. Entities committed to recognizing the architectural heritage of Fire Island are less evident.

Relevant Laws & Policies

Pertinent federal laws and policies in effect for the protection of coastal, cultural, natural, and ocean resources are described in “Compliance with Federal and State Laws and Regulations” in Chapter 5.

BARRIER ISLAND AND COASTAL PROCESSES**Description & Importance**

Fire Island’s shoreline is constantly being shaped by wind and water, including longshore current, offshore currents, inlet formation, tidal delta growth, and occasional overwashing, which are all natural processes that contribute to and sustain barrier islands.

Barrier islands provide some protection to the mainland coast from the direct impact of storm waves.

Additionally, the barrier island provides a diverse assemblage of terrestrial and marine habitat.

The barrier island environment protects the mainland from storm events and wave action while providing a vital ecosystem that supports a diversity of species.

Current Conditions, Trends, & Threats

Fire Island is made up of sediment deposited during the last ice age. Wind, waves, and currents have moved and continue to move sediment along and across Fire Island, shifting its position and shape over time. The availability of sediment has not been constant, however, and Fire Island has progressed through periods of sediment accumulation and loss. Storms also shape Fire Island, causing overwashing and breaching, which carry sediment to the island interior and bay shoreline. Breaches and inlets are natural features in the barrier island landscape that have come and gone over time, opening with powerful storms and gradually closing as sand is moved along the coast.

Numerous studies have documented a deficit in the sediment budget for Fire Island. Sediment deficits are greatest along the eastern portion of the island, but appear to be augmented by offshore deposits on the inner continental shelf along the central and western segments of the island. Sea-level rise and a general negative sediment budget will result in continued beach erosion and dune displacement, with greater effects likely in the eastern portion of Fire Island.

Increases in the rate of sea-level rise as well as the frequency and intensity of storms could influence the rate and scope of change on the barrier island. A variety of administrative programs are in place to decrease or mitigate damage to coastal features and to encourage the retention and enhancement of the characteristics of the Seashore.

Desired Condition

Development on Fire Island is undertaken in a manner that conserves natural resources and the character of the island to greatest degree possible. Dynamic natural processes are allowed to proceed unimpeded by human intervention wherever feasible, and re-established where possible.

The NPS partners with the public, Fire Island communities, and others in the stewardship and preservation of Fire Island's natural and cultural resources and its distinctive character.

Stakeholder Interests

Stakeholder interests relative to the natural systems found on Fire Island vary. While there is broad acceptance and support for the notion that the coastal environment is dynamic, there are differing opinions on what the response to those changes should or could be.

NPS management policies direct parks to allow natural processes to unfold unimpeded by human intervention. Many stakeholder interests, particularly environmental conservation organizations, support NPS management policies. However, others are concerned that unimpeded natural processes would have a negative impact on their properties and the quality of their experience and believe that the system should be managed accordingly. Navigating these varying and often competing stakeholder interests has presented a major management issue for the NPS.

Relevant Laws & Policies

Pertinent federal laws and policies in effect for the protection of coastal, natural and ocean resources are described in "Compliance with Federal and State Laws and Regulations" in Chapter 5.

DYNAMIC NATURAL SYSTEMS (TERRESTRIAL HABITATS & THE MARINE ENVIRONMENT)**Description & Importance**

Fire Island is composed of a variety of terrestrial and marine habitats with particular distinctive qualities and characteristics. From ocean to bay, they include a segment of the Atlantic Ocean, open beach and near-shore environment, the primary dunes, the mid-island swale, the secondary dune (only in a few locations on Fire Island), maritime forest, fresh water bogs and saltmarshes, and submerged aquatic vegetation in the bay and a segment of the Great South Bay.

The Seashore's boundary extends up to 4,000 feet on average into the bay (or farther, depending on bay island locations within the boundary) and 1,000 feet into the ocean. As a result approximately 14,600 acres or 75 percent of lands within the Seashore's boundary are submerged. The marine resources within the Seashore's boundary are functionally part of a much larger estuarine and oceanic system and contribute in different ways to those larger systems.

The marine environment is host to ocean and estuarine-dwelling flora (algae, sea grass) and fauna (crustaceans, mollusks, and other invertebrates; birds, fish, turtles, seals, whales), and is a prime nursery and feeding location for finfish, crabs, horseshoe crabs, and migrating birds, to name a few species that rely specifically on this dynamic coastline.

The flora and fauna found on Fire Island can be very specific to these habitats or micro-environments. For example, the Sunken Forest, an old-growth maritime forest comprised mainly of American holly, sassafras, and shadbush, is a globally rare forest habitat. The valuable seagrass beds, lying submerged in the shallow bays off the back salt marshes, are critical habitats for a variety of shellfish, fish and crabs.

Fire Island supports several federally listed and state-listed threatened and endangered species, some of which are Piping Plover (*Charadrius melodus*), roseate tern (*Sterna dougallii*), least tern (*Sternula antillarum*), common tern (*Sterna hirundo*), seabeach amaranth (*Amaranthus pumillus*), and seabeach knotweed (*Polygonum glaucum*). The barrier beach provides feeding and nesting habitats for many species of migrating birds, insects, turtles, and marine mammals.

Current Conditions, Trends, & Threats

The waters of the Great South Bay and the Atlantic Ocean within the Seashore's boundary provide excellent bay and barrier beach fish habitat. These waters host diverse fish populations that show pronounced seasonal changes.

The state of the Atlantic **near-shore ecological environment** is generally unknown. This submerged area requires additional study, particularly regarding the fish and benthic communities. Issues and concerns include potential septic and groundwater leachate carrying nutrients and pathogens, overfishing, and mining sand from off shore sources.

The **beaches and dunes** are highly dynamic shoreline features with naturally occurring cycles of erosion and accretion. Adjacent to the developed areas, the natural growth and migration of the beaches and dunes is more likely to be inhibited by shoreline development. Threatened and endangered species (e.g., Piping Plovers, seabeach amaranth) are less abundant on the beach fronting the developed areas on Fire Island than they are on the beach in undeveloped areas. The continued existence of groins in the west end presents a challenge, in that they inhibit the transport of sand along the beach and possibly other natural processes, yet also serve to protect the integrity of the village of Ocean Beach's public well.

The **mid-island habitats** extend from the leeward or north side of the dunes to the marsh or bay shore and include grasslands, shrub thickets, maritime forests, and freshwater wetlands. This area provides habitat for native flora and fauna. In undeveloped areas, conditions are generally considered to be good. Where there is higher-density development, issues and concerns include mosquito control, human-wildlife conflicts (such as artificial feeding of deer and other wildlife, nuisance deer, etc.), septic discharge, manipulation of the vegetation (e.g., landscaping), fencing (channeling wildlife), and non-native invasive species (e.g., bamboo, Phragmites), and trampling (e.g., social trails).

The **saltmarshes** of Fire Island are considered to be in good condition. Some pre-existing mosquito ditching remains in the Wilderness Area but is not maintained. Non-native species (e.g., Phragmites) are also evident. Marshes in the Seashore may be vulnerable to sea-level rise if they are subject to subsidence or are unable to migrate. Sediment delivery to marshes through overwash and breach processes and flood tidal delta formation are critical to the long-term maintenance of Seashore marshes. Issues and concerns include beach stabilization efforts that could impede this sediment delivery.

The **bay shore** includes the bay beaches, marsh edges, and developed shorelines (e.g., bulkheads) and extends into the bay environment of the bay water column, submerged aquatic vegetation, and sand and mud bottoms. Seagrass beds off the Fire Island Wilderness shore and the east end of Fire Island remain as remnant habitat. The Great South Bay waters are known for high concentrations of wintering waterfowl such as Brant (*Branta bernicla*), Canada geese (*Branta canadensis*), American black duck, (*Anas rubripes*), and Bufflehead (*Bucephala albeola*). Water quality has been affected by nutrient loading, resulting in harmful algal blooms. The bay shore is affected by channel dredging, bulk heads and shoreline development that impede sediment transport.

Desired Condition

Dynamic natural processes are allowed to proceed unimpeded by human intervention wherever feasible and restored or emulated where possible.

The Seashore's marine resources are better understood, protected, and contribute to the ecological sustainability of the ocean and bay environments and to the preservation of Fire Island's natural and cultural heritage.

The NPS partners 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.

The NPS provides for the stewardship of the coastal environment and its cultural and natural systems, while recognizing that Fire Island is part of a larger ecological, social, economic, and cultural context.

Management decisions about natural and cultural resources are based on scholarly and scientific information, fundamental resources and values, and consultation with appropriate agencies and communities and in consideration of the broader context of the resources and the Seashore.

Stakeholder Interests

There is a strong, broad-based constituency that includes Fire Island property owners, visitors, conservation organizations, historic preservation organizations, state and local governments, recreational interests, law enforcement/ public safety, and economic interests that recognize the value of these resources and advocate for their continued use and protection.

Relevant Laws & Policies

Pertinent federal laws and policies in effect for the protection of coastal, natural and ocean resources are described in "Compliance with Federal and State Laws and Regulations" in Chapter 5.

CULTURAL RESOURCES**Description & Importance**

Fire Island has a rich cultural heritage with some communities and institutions (e.g., U.S. Life Saving Service) having their roots on the island in the mid-19th century. Prior to its inception as a resort area in the 1880s, Fire Island had been put to agricultural and industrial use for generations. Fire Island represents a cultural landscape that has been shaped both by human intervention and the forces of nature.

Fire Island's proximity to shipping lanes serving New York harbor made it critical to maritime navigation and communication. A lighthouse has stood on Fire Island since 1826. The lighthouse's function, as a way for ships to communicate and navigate, led to the placement of related facilities, many using more advanced technologies. The existing Fire Island Light was built in 1858 at the western edge of Fire Island, but since that time littoral drift has continued to extend the western edge so that the present-day lighthouse now sits nearly five miles east of the western border at Democrat Point. In 1868, the Western Union Telegraph Company began using the site when it built a signal tower and telegraph station immediately east of the lighthouse. Building yet again on the site's prime location, the federal government expanded its maritime and communication presence by instituting a U.S. Naval Radio Compass Station in 1906, just east of the Light Station and the Western Union Fire Island Marine Station (which was abandoned in 1920 and destroyed by a hurricane in 1938).

On Long Island, adjoining the village of Mastic Beach, the 613-acre William Floyd Estate includes the home occupied by William Floyd and generations of his descendants well into the 20th century. William Floyd was one of New York's signers of the Declaration of Independence. The Estate consists of the Old Mastic house, agricultural outbuildings, family cemetery, and the historic field and forest configuration that has been maintained to preserve its appearance at the time that NPS assumed responsibility for the property.

The Seashore's museum and archival collection is stored across several locations, but the vast majority of the collection is in the Old Mastic House and at the curatorial storage facility at the William Floyd Estate. The Seashore maintains a museum and archival collection of over 100,000 items that pertain to both the William Floyd Estate and Fire Island. The curatorial storage facility in its present configuration is at capacity, with little space to perform conservation or administrative work or research.

The cultural resources of Fire Island and the William Floyd Estate enable the public to understand and appreciate the history and development of these areas in the larger context of the region and in response to changing social, economic, cultural, and political conditions.

Current Conditions, Trends, & Threats

The Fire Island Light Station and the William Floyd Estate both occur on federal lands and are the only historical properties that are actively preserved and interpreted by the Seashore for the visiting public. The Fire Island Light Station is operated and maintained through a cooperating association agreement with the Fire Island Lighthouse Preservation Society (FILPS). FILPS offers visitor programming year-round including an interpretive exhibit, the Fresnel Lens exhibit, and guided tours of the lighthouse. Since 2006, visitation to the Fire Island Lighthouse has ranged from a low of 96,000 in 2011 to a high of nearly 120,000 in 2009. According to the 2011 assessment of the historic structures and landscape features (List of Classified Structures or LCS), most were found to be in good condition, with a notable exception being the foundation of the first Lighthouse, which was found to be in fair condition.

The William Floyd Estate is operated and maintained by NPS staff and is open to the public seasonally. Public programs at the Estate include changing interpretive exhibits, guided house tours, special programs (e.g., music concerts, craft demonstrations), guided grounds tours, and nature walks. Since 2006 visitation has ranged from a low of just under 3,000 in 2010 to a high of nearly 5,600 in 2006. According to the 2011 assessment of historic structures on the Estate, most were found to be in good condition. Several landscape features were considered to be in fair or poor condition including dirt roads and paths that traverse the Lower Acreage, the Lopped Tree lines, the Great Ditch, and the ponds.

The Seashore's collections are considered to be in good condition, though some storage conditions are suboptimal. The curatorial storage facility is at or near capacity and offers only limited workspace for conservation and research needs. Additional inventories must be completed to better assess the state of terrestrial archeological resources, submerged cultural resources, ethnographic resources, and cultural landscapes on the Island and at the William Floyd Estate. Resources on non-federal lands are particularly vulnerable because of limited knowledge and expertise.

Desired Condition

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

The NPS partners with the public, Fire Island communities, and others in the stewardship and preservation of Fire Island's natural and cultural resources and its distinctive character.

The NPS provides for the stewardship of the coastal environment and its cultural and natural systems, while recognizing that Fire Island is part of a larger ecological, social, economic, and cultural context.

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 in consideration of the broader context of the resources and the Seashore.

Stakeholder Interests

Stakeholder interest varies per site. Fire Island Light has the strongest stakeholder representation with the Fire Island Lighthouse Preservation Society, which is dedicated to preserving and interpreting the Lighthouse. This group has devoted a significant number of volunteer hours to preservation and interpretation and has spearheaded several capital campaigns – the most recent of which resulted in the construction of an exhibit building to accommodate the return of the site’s original Fresnel lens.

Relevant Laws & Policies

Pertinent federal laws and policies in effect for the protection of coastal, cultural, natural, and ocean resources are described in “Compliance with Federal and State Laws and Regulations” in Chapter 5.

FIRE ISLAND WILDERNESS

Description & Importance

The Otis Pike Fire Island High Dune Wilderness (Fire Island Wilderness) is the only federally designated wilderness area in the State of New York and occurs in the single largest metropolitan area in the United States. At 1,380 acres, it is also one of the smallest wilderness areas managed by the NPS. Due to its small scale and proximity to large urban populations, it offers the unique opportunity to introduce the concept and experience of Wilderness to a large population of potential users. The Fire Island Wilderness also encompasses cultural remnants that reflect the historic human activity that preceded the park’s creation and wilderness designation.

The Fire Island Wilderness, located east of Watch Hill extends eastward to the western boundary of Smith Point County Park. An ocean-to-bay parcel of non-federally owned land, Bellport Beach, lies roughly in the middle of the Fire Island Wilderness. Bellport Beach separates the Wilderness into an Eastern and a Western segment. The Fire Island Wilderness can be reached from Watch Hill (which is accessible seasonally by ferry or private boat) or by the Wilderness Visitor Center (located adjacent to Smith Point County Park which is accessible year round by car or bus).

Current Conditions, Trends, & Threats

The Fire Island Wilderness can be described within the context of these wilderness character qualities: 1) untrammeled, 2) natural, 3) undeveloped, 4) offers opportunities for solitude or a primitive and unconfined type of recreation, and 5) contains unique features.

Untrammeled: wilderness is essentially unhindered and free from modern human control or manipulation.

The Fire Island Wilderness is relatively untrammeled, with the exception of a small number of management actions taken to eradicate invasive plant species and assess the long-term impacts of deer browsing. Invasive plant species are annually monitored and controlled by appropriate means. Although this management action causes manipulation of the area, it increases the natural wilderness character quality by allowing native plants and processes to re-establish.

Natural: wilderness ecological systems are substantially free from the direct effect of modern civilization.

The natural character of the Fire Island Wilderness is typical of Atlantic barrier islands, which grade from a primary dune along the ocean to salt marsh along the bay. The southern boundary of the Wilderness, located at the toe of the primary dune, is constantly changing due to the dynamic nature of the barrier island system. The development of vegetation is affected by several environmental factors such as wind, salt spray, erosion and overwash. These naturally dynamic processes occur constantly in the Fire Island Wilderness. In some locations, remnants of historic features are evident but do not appreciably interfere with the experience of the Fire Island Wilderness' natural character.

Undeveloped: wilderness is essentially without permanent improvements or modern human occupation.

Currently the Fire Island Wilderness is largely undeveloped although occupied structures and buildings were common throughout the area prior to 1992. Remnants of several of these structures remain.

Outstanding opportunities for solitude or a primitive and unconfined type of recreation: Wilderness provides outstanding opportunities for people to experience solitude or primitive and unconfined recreation, including the values of inspiration and physical and mental challenge.

The Fire Island Wilderness is within 60 miles of New York City, yet it provides visitors with outstanding opportunities for solitude or a primitive and unconfined type of recreation. Surrounded and buffered by high dunes and salt marsh, one can actually feel far away from civilization. The Fire Island Wilderness has no designated campsites, and backcountry camping follows 'leave no trace' practices. Seashore staff maintains the boardwalks at the Wilderness Visitor Center in addition to portions of the footpath along the Burma Road Trace. These are the designated travel routes within the Fire Island Wilderness but visitors are not restricted to them. The Burma Road Trace is a very dynamic trail and shifts with the moving sand.

Unique Features: Wilderness preserves other features that are of scientific, educational, scenic, or historic value.

Though small in scale, the Fire Island Wilderness is near the largest urban population in the nation, offering substantial opportunities to educate the public about the distinctive qualities of wilderness in general and the Fire Island Wilderness in particular. The unique features of the Fire Island Wilderness-- its size and shape, proximity to urban population, and cultural history-- have great scientific, educational, scenic, and historic value. It is an area where urban populations can study, learn, explore, and admire the natural environment.

Desired Condition

The Fire Island Wilderness is managed to maintain and, where feasible, enhance its wilderness character, including its qualities of being untrammelled, natural and undeveloped, providing opportunities for primitive and unconfined recreation, and its unique features.

Stakeholder Interests

There is broad-based support for the Seashore's management of the Fire Island Wilderness among environmental and recreation interests. A local advocacy group, the Fire Island Wilderness Committee, has been actively engaged in the general management planning process and efforts to develop a new Wilderness Stewardship Plan.

Relevant Laws & Policies

Pertinent federal laws and policies in effect for the protection of federally designated wilderness, natural, and cultural resources are described in "Compliance with Federal and State Laws and Regulations" in Chapter 5.

SEASHORE EXPERIENCE**Description & Importance**

The Seashore offers a wide range of experiences within a coastal environment to a large and diverse urban population in one of the most populous regions of the United States. Millions of people live within a day's travel of the Seashore and can experience a range of opportunities from solitude and communion with nature to more active recreation and social interaction. Individuals participate in all forms of recreation, from completely unstructured activities to formal programs and events. People who come to Fire Island have the opportunity to enjoy a relatively car-free environment – an increasingly rare experience in the Northeast. The Seashore experience may further be complemented by Fire Island's residential communities some of which function as gateways to the Seashore and all of which exhibit distinctive and varying community character.

**Current Conditions, Trends, & Threats**

Total annual visitation to NPS facilities at the Seashore since 2001 has hovered around an average of 646,000 visitors, with a high of 819,000 in 2004 and a low of 483,000 in 2012. Annual visitation to Fire Island as a whole is believed to be considerably higher, with estimates approaching 2.5 million. Visitation to some NPS facilities at Fire Island occurs year round, but much of the activity is seasonal. Annually, visitation peaks during the months of July and August; however, several times since 2001, substantial visitation (> 20,000) occurred up to 10 months out of the year. The shoulder-season months of May and September showed the most consistently high visitation. According to visitor and resident surveys completed in 2008, over 80 percent of Seashore visitors and Fire Island residents originate from the metro New York area and have visited the Seashore on one or more occasions. Information about visiting Fire Island is gleaned most often from previous experience or word of mouth; many visitors also make use of the Seashore's website.

Visitors to the Seashore may engage in a wide range of activities including but not limited to beach combing, boating, swimming, hiking, nature walks, bird watching, touring historic sites, and photography. Volunteerism, stewardship, and citizen science are also activities in which the Seashore's visitors may participate. Bicycling on the federal lands is allowed wherever vehicles are permitted to go, but may be limited or prohibited in some Fire Island communities. Camping is permitted at Watch Hill with a reservation and by permit in the Fire Island Wilderness. Hunting and fishing require state permits and are allowed within the Seashore during specific times of the year. Finally, recreational driving is allowed by permit at the eastern point of access to facilitate hunting, fishing, and other recreational activities, also during specific times of the year.

The economic, ethnic, and geographic diversity of the Seashore's audience has remained limited, particularly given its location in the metropolitan New York region. Visitor use survey respondents at park facilities were overwhelmingly white (97%) and non-Hispanic (95%). This contrasts with 2010 census data for Long Island, which is only 77% white and 84 % non-Hispanic. Water-based access to Fire Island National Seashore can be cost-prohibitive for some families – the round trip ferry fare (including parking) for a family of four can range between \$50 to \$60 depending on date of travel, point of origin, and destination. Visitors may park for a fee at either Robert Moses State Park on the west end or Smith Point County Park on the east end and enter the Seashore on foot. Daily parking rates range from \$8 to \$15.

Desired Condition

Through outreach and education, the NPS fosters 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.

The NPS provides 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.

The NPS preserves the "roadless" character of Fire Island and ensures that water-based transportation is the primary form of access to Fire Island whenever and wherever feasible.

The NPS ensures that the ways to and from NPS facilities on Fire Island and Long Island are well known, well-marked, and easy and safe to navigate.

The NPS enables broad access to Seashore facilities by all members of the public regardless of income or physical ability.

The NPS provides a safe and healthy environment for visitors, residents, and NPS employees, as feasible and appropriate.

Stakeholder Interests

Stakeholder interests range widely and focus on particular activities and facilities. The marinas at Watch Hill and Sailors Haven have regular patrons creating in strong constituencies for these destinations. There are also constituents who have expressed opposition to any further recreational development of Fire Island and to the notion of a bicycle trail extending the length of the island.

Relevant Laws & Policies

Pertinent federal laws and policies in effect for the protection of federally designated wilderness, natural, and cultural resources, interpretation and education, and visitor use are described in "Compliance with Federal and State Laws and Regulations" in Chapter 5.

IMPORTANT RESOURCES & VALUES

CARRINGTON HOUSE & COTTAGE

Description & Importance

The Carrington House and Cottage were listed on the National Register of Historic Places (NRHP) in January 2014. The Carrington House is significant for being owned by Broadway producer Frank Carrington, who hosted a number of stage, screen, and literary celebrities. It is a bungalow-style seasonal residence originally built in 1909 and modified through the years. The cottage was originally part of a life-saving station and was moved to the property in 1947 for use as a guest house. The House and Cottage are managed by the NPS for administrative use and are not open to the public.



Current Conditions, Trends, & Threats

The Carrington House and Cottage are operated and maintained by NPS for administrative purposes. Public access to the property would continue to be limited. In 2012, the Seashore completed rehabilitation work on the exterior of both the House and Cottage consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Desired Condition

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

The NPS partners with the public, Fire Island communities, and others in the stewardship and preservation of Fire Island's natural and cultural resources and its distinctive character.

The NPS provides for the stewardship of the coastal environment and its cultural and natural systems, while recognizing that Fire Island is part of a larger ecological, social, economic, and cultural context.

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 in consideration of the broader context of the resources and the Seashore.

Stakeholder Interests

The Carrington house and cottage have benefitted from the interest of local arts, conservation, and preservation interests.

Relevant Laws & Policies

Pertinent federal laws and policies in effect for the protection of coastal, cultural, natural and ocean resources are described in "Compliance with Federal and State Laws and Regulations" in Chapter 5.

SPECIAL MANDATES AND ADMINISTRATIVE COMMITMENTS

Many of the management decisions for a park unit are directed or influenced by special mandates and administrative commitments with other federal agencies, state and local governments, utility companies, partnering organizations, and other entities. Special mandates are requirements specific to a park that must be fulfilled. Mandates can be expressed in enabling legislation, in separate legislation following the establishment of the park, or through a judicial process. They may expand on park purpose or introduce elements unrelated to the purpose of the park. Administrative commitments are, in general, agreements that have been reached through formal, documented processes, often through memoranda of agreement. Examples include easements, rights-of-way, arrangements for emergency service responses, etc. Special mandates and administrative commitments can support, in many cases, a network of partnerships that help fulfill the objectives of the park and facilitate working relationships with other organizations. They are an essential component of managing and planning for Fire Island National Seashore.



Special Mandates

- **AN ACT TO ESTABLISH THE FIRE ISLAND NATIONAL SEASHORE AND FOR OTHER PURPOSES**
(Public Law 88-587, September 11, 1964), as amended.

Re: Limitations on Powers of Condemnation

Section 2(e)—With one exception the Secretary shall not acquire any privately owned improved property or interests therein within the boundaries of the seashore or any property or interests therein within the communities delineated on the boundary map mentioned in Section 1, except beach or waters and adjoining land within such communities which the Secretary determines are needed for public access to the beach, without the consent of the owners so long as the appropriate local zoning agency shall have in force and applicable to such property a duly adopted, valid, zoning ordinance that is satisfactory to the Secretary. The sole exception to this limitation on the power of the Secretary to condemn improved property where appropriate zoning ordinances exists shall be in the approximately eight-mile area from the easterly boundary of the Brookhaven town park at Davis Park, in the town of Brookhaven, to the westerly boundary of the Smith Point County Park. In this area only, when the Secretary deems it advisable for carrying out the purposes of this Act or to improve the contiguity of the park land and ease its administration, the Secretary may acquire any land or improvements therein by condemnation. In every case in which the Secretary exercises this right of condemnation of improved property the beneficial owner or owners (not being a corporation) of any improved property so condemned, provided he, she, or they held the same or a greater estate in the property on July 1, 1963, may elect as a condition of such acquisition by the Secretary any one of the following three alternatives:

1. That the Secretary shall take the said property in fee simple absolute and pay the fair market value thereof as of the date of such taking;
2. that the owner or owners shall retain a life estate in said property, measured on the life of the sole owner or on the life of anyone person among multiple owners (notice of the person so designated to be filed in writing with the Secretary within six months after the taking) or on the life of the survivor in title of any estate held on July 1, 1963. as a tenancy by the entirety. The price in such case shall be diminished

by the actuarial fair market value of the life estate retained, determined on the basis of standard actuarial methods;

3. that the owner or owners shall retain an estate for twenty-five years. The price in this case shall likewise be diminished by the value of the estate retained.

Re: Federal zoning standards:

Section 3(a) In order to carry out the provisions of section 2, the Secretary shall issue regulations, which may be amended from time to time, specifying standards that are consistent with the purposes of this Act for zoning ordinances which must meet his approval.

(b) The standards specified in such regulations shall have the object of (1) prohibiting new commercial or industrial uses, other than commercial or industrial uses which the Secretary considers are consistent with the purpose of this Act, of all property within the national seashore, and (2) promoting the protection and development for purposes of the Act of land within the national seashore by means limitations or restrictions on the size, location, or use of any commercial, residential, and other structures. In accomplishing these objectives, such standards shall seek to reconcile the population density of the Seashore on October 17, 1984, with the protection of the natural resources of the Seashore consistent with the purposes for which it has been established as provided by the Act.

The current federal zoning standards (36 CFR Ch.1 Part 28) appear in Appendix C.

Re: Hunting and Fishing

Section 5 The Secretary shall permit hunting, fishing, and shellfishing on lands and waters under his administrative jurisdiction within the Fire Island National Seashore in accordance with the laws of New York and the United States of America, except that the Secretary may designate zones where, and establish periods when, no hunting shall be permitted for reasons of public safety, administration, or public use and enjoyment. Any regulations of the Secretary under this Section shall be issued after consultation with the Conservation Department of the State of New York.

It is important to note that National Park Service Management Policies (section 4.4.3; 2006) states that commercial fishing may be allowed only if specifically authorized by statute or regulation. The Seashore's enabling legislation does not specifically authorize commercial fin fishing or shell fishing within the park and is thus prohibited.

Re: Sunken Forest Preserve

Section 7(a) The Secretary shall administer and protect the Fire Island National Seashore with the primary aim of conserving the natural resources located there. The area known as the Sunken Forest Preserve shall be preserved from bay to ocean in as nearly its present state as possible, without developing roads therein, but continuing the present access by those trails already existing and limiting new access to similar trails limited in number to those necessary to allow visitors to explore and appreciate this section of the seashore.

Re: Access to area that is now known as the Fire Island Wilderness

Section 7(b) Access to that section of the seashore lying between the easterly boundary of the Brookhaven town park at Davis Park and the westerly boundary of the Smith Point County Park shall be provided by ferries and footpaths only, and no roads shall be constructed in this section except such minimum roads as may be necessary for park maintenance vehicles. No development or plan for the convenience of visitors shall be undertaken therein which would be incompatible with the preservation of the flora and fauna or the physiographic conditions now prevailing, and every effort shall be exerted to maintain and preserve this section of the seashore as well as that set forth in the preceding paragraph in as nearly their present state and condition as possible.

Re: Shoreline Management

Section 8 (a) The authority of the Chief of Engineers, Department of the Army, to undertake or contribute to shore erosion control or beach protection measures on lands within Fire Island National Seashore shall be exercised in accordance with a plan that is mutually acceptable to the Secretary of the Interior and the Secretary of the Army and that is consistent with the purposes of this Act.

(b) The Secretary shall also contribute the necessary land which may be required at any future date for the construction of the new inlet across Fire Island in such location as may be feasible in accordance with plans for such an inlet which are mutually acceptable to the Secretary of the Interior and the Secretary of the Army and that is consistent with the purposes of this Act.

- **AN ACT TO DESIGNATE CERTAIN LANDS OF THE FIRE ISLAND NATIONAL SEASHORE AS THE "OTIS PIKE FIRE ISLAND HIGH DUNE WILDERNESS," AND FOR OTHER PURPOSES.**
(Public Law 96-585, December 23, 1980)

Re: Breach Management

Section (d) Wilderness designation shall not preclude the repair of breaches that occur in the wilderness area, in order to prevent loss of life, flooding, and other severe economic and physical damage to the Great South Bay and surrounding areas.

In addition to special mandates described above, the Code of Federal Regulations (36 CFR) includes special regulations that have been promulgated for Fire Island National Seashore including the zoning standards (noted above) and Special Regulations (36 CFR Ch.1, Section 7.20) which govern the a) Operation of Motor Vehicles, b) Operation of Seaplanes and Amphibious Aircraft, and d) Personal Watercraft.

Administrative Commitments

Fire Island National Seashore manages several facets of its operation through cooperatives agreements and concessions contracts. The Fire Island Light is operated by a cooperator, the Fire Island Lighthouse Preservation Society. Another cooperator, Eastern National, oversees the operation of bookstores at various locations throughout the park. Concessions contracts are in place for public ferry service to Seashore facilities on Fire Island and for the operation of a number of visitor facilities at Sailors Haven and Watch Hill.

RELATED PROGRAMS, PLANS, AND INITIATIVES

- **FIRE ISLAND INLET TO MONTAUK POINT REFORMULATION STUDY (FIMP)**

Fire Island National Seashore was established with a specific directive that erosion control or beach protection measures conducted by the U.S. Army Corps of Engineers (USACE) are required to be "mutually acceptable" to the Secretary of the Interior and the



Secretary of the Army and consistent with purposes of the Seashore’s enabling legislation. In 1966, NPS rejected a USACE plan to build stone groins along the length of the Seashore to halt shoreline migration. In 1978, the Council of Environmental Quality (CEQ) concurred with the Department of the Interior (DOI) in rejecting the Environmental Impact Statement (EIS) for the USACE proposal, recommending reformulation of the proposed project for storm protection and beach erosion along the 83-mile stretch of barrier island from Fire Island to Montauk Point (FIMP) and examine impacts on the full system. Since that time (approximately 35 years ago), DOI, NPS, and Fire Island National Seashore have been attempting to achieve a “mutually agreeable” approach to coastal management involving several interim projects in addition to advancing the FIMP Reformulation Study and associated environmental compliance. Through the DOI, NPS staff is working closely with the USACE and NYS staff to develop preferred alternatives that comply with NPS policies, the Seashore’s mission, stakeholder concerns, and management priorities.

The USACE is developing the Fire Island Inlet to Montauk Point (FIMP) Reformulation Study to protect areas along the south shore of Long Island with the potential for flooding, erosion, and other storm damage. Specifically, the FIMP Reformulation Study will “identity, evaluate, and recommend long-term solutions for hurricane and storm damage reduction” along the shoreline between Fire Island Inlet and Montauk Point (Corps 2012). The FIMP would take a comprehensive approach to storm management, and would replace the individual storm management regulations and guidance currently in use. The study area encompasses approximately 83 miles of shoreline, including the Seashore. Communities within the floodplain include the Towns of Babylon, Islip, Brookhaven, Southampton, and East Hampton and incorporated villages. This project has the potential to affect geology and coastal processes, water resources, wildlife and wildlife habitat, visitor use and experience, and Seashore operations.

The Tentative Federally Supported Plan (TFSP), accepted in 2011 by the NPS, the U.S. Fish and Wildlife Service (FWS), and the USACE, has been adopted by reference within the context of this draft GMP/EIS plan as basic guidance for shoreline management within Fire Island National Seashore. Should the FIMP Reformulation Study be approved and adopted, its provisions would take precedence over the approved GMP.

► GREAT SOUTH BAY HARD CLAM RESTORATION PROJECT

In 2008, the Great South Bay Hard Clam Restoration Working Group was established by Suffolk County to develop a sustainable management plan for the Great South Bay hard clam population (Suffolk County 2011). Fire Island National Seashore was represented on the working group. The goal of the group was to “reestablish and protect populations of hard clams that are necessary to support ecological, economic, cultural, and recreational values associated with restoration of the Great South Bay (Suffolk County 2012).” Based on their research, the working group concluded that the hard clam population is generally low and inconsistently distributed in the Great South Bay. The current population cannot support commercial clamming within the bay. The primary reason for the diminished population is believed to be water quality. The report concluded that “changes in harvest management, increased and improved recreation, and concerted effort to address the environmental factors that are negatively impacting hard clam growth and survival” are necessary to reestablish and protect the hard clam population in the Great South Bay. A significant area of the bay targeted by the Hard Clam Restoration Project falls within the boundary of the Seashore. The NPS continues to be a partner in this effort.

► LONG ISLAND REGIONAL COMPREHENSIVE SUSTAINABILITY PLAN 2035

The Long Island Regional Comprehensive Sustainability Plan 2035 was prepared by the Long Island Regional Planning Council. The foundation for the Long Island sustainability planning process was the Long Island 2035 Regional Visioning Initiative funded by the New York Metropolitan Transportation Council (NYMTC), the designated Metropolitan Planning Organization for the region. The purpose of the Regional Visioning Initiative was to help achieve a regional public consensus for where the next generation of Long Islanders could live and work, the transportation systems needed to support these settlements, and the institutional actions required to ensure a prosperous, equitable, and environmentally sustainable Long Island. As stated in the document, the purpose of the plan is “to restore the promise of an affordable, high quality of life for all on Long Island and to position Long Island for the requirements of 21st century communities.” The plan addresses tax and governance reform, economic strength, quality of life, and

equitable communities. The implementation of strategies described in the Comprehensive Sustainability Plan is likely to correspond or conflict with goals, objectives, and management strategies proposed in the GMP.

► **LONG ISLAND INTRACOASTAL WATERWAY
FEDERAL NAVIGATION PROJECT**

The Rivers and Harbors Act of August 26, 1937 authorized the Long Island Intracoastal Waterway Federal Navigation Project. The existing project provides for a navigation channel 6 feet deep and 100 feet wide from the federally improved channel in Great South Bay, opposite Patchogue, to the south end of Shinnecock Canal. The lengthy project (33.6 miles) traverses the inland waters through the Great South Bay, the Bellport Bay, the Narrow Bay, the Moriches Bay, the Quantuck Bay, and the Shinnecock Bay. The channel is maintained by the USACE which performs maintenance dredging as necessary. Dredge materials are typically placed at upland locations after coordination with local sponsors. Activities associated with the Long Island Intracoastal Waterway Federal Navigation Project could affect coastal processes, vegetation, wildlife, and access and circulation and are likely to correspond or conflict with goals, objectives, and management strategies proposed in the GMP.

► **NEW YORK STATE TRANSPORTATION
IMPROVEMENT PROGRAM (STIP) 2011–2014**

The Statewide Transportation Improvement Program (STIP) is a list of all projects (or project phases), in New York State proposed for Federal funding that are scheduled to begin in the four federal fiscal years (FFY) 2011 - 2014 (between October 1, 2010 and September 30, 2014). This time frame is mandated by regulations promulgated under federal law in Title 23, United State Code, Section 135. The most recent STIP for New York State was formally approved on September 30, 2011.

The STIP begins as a compilation of regional Transportation Improvement Programs that are generally adopted every two years by Metropolitan Planning Organizations (MPOs), including rural areas where NYSDOT is responsible for programming federally funded projects, and evolves into a comprehensive list of all highway and transit projects that propose to use Federal funds. The STIP is required to be updated at

least every four years. The State may elect to update the Program more frequently. Projects that may be implemented and funded through STIP are likely to correspond or conflict with the goals, objectives, and management strategies proposed in the GMP, particularly in the area of access and circulation.

► **NEW YORK METROPOLITAN TRANSPORTATION
COUNCIL REGIONAL TRANSPORTATION PLAN
2010–2035**

Updated every four years, the Regional Transportation Plan (RTP) both forecasts future trends and provides a blueprint for long-range strategic transportation studies and investments. NYMTC is the designated Metropolitan Planning Organization (MPO) for New York City, Long Island, and the lower Hudson Valley. It is responsible for a continuing, coordinated, and comprehensive transportation planning process in its Region in order to receive federal transportation funding. The 2010-2035 Regional Transportation Plan moves the region forward based on shared goals that will ensure that NYMTC and its partners:

- Enhance the regional environment
- Improve the regional economy
- Improve the regional quality of life
- Provide convenient, flexible transportation access within the region
- Build the case for obtaining resources to implement regional investments.

Implementation of the RTP is likely to correspond or conflict with the goals, objectives, and management strategies proposed in the GMP, particularly in the area of access and circulation.

► BROOKHAVEN 2030 PLAN

The town of Brookhaven is developing a comprehensive plan to guide the look, function, and evolution of the town through 2030. The plan will consider social, economic, and environmental factors holistically and includes conservation of environmental resources and improvements in infrastructure. Improvements could include preservation of open space, protection/restoration of the environment, revitalization of pedestrian-oriented downtowns, preservation and development of a sense of place, and expansion of the range of transportation options. In the 2007 Issues and Opportunities Outreach Report prepared for Brookhaven 2030, Fire Island was recognized as an important resource to shelter from development impacts. Comments indicated that the Island's ecological needs, dynamic processes, and historic and cultural significance must all be addressed in a complimentary fashion. The enhancement and re-development of the William Floyd Parkway as a gateway to Fire Island National Seashore was also recognized as an opportunity during the scoping phase for the 2030 plan. The preliminary areas of interest defined by the Brookhaven 2030 are likely to correspond or conflict with goals, objectives, and management strategies proposed in the GMP.



► NEW YORK STATE COASTAL ZONE MANAGEMENT PLAN—COMBINED ASSESSMENT AND STRATEGY 2011–2016

The Coastal Zone Management Act (CZMA) encourages states to conduct self-evaluations of their coastal management programs every five years to assess significant changes in their coastal resources, management practices, critical needs, and priorities for enhancement. In November 2010, New York finalized its Coastal Zone Management Program (CZMP) Section 309 Assessment and Strategies for July 1, 2011 through June 30, 2016. The document evaluates nine potential coastal enhancements areas, including public access, coastal hazards, ocean and Great Lakes resources, wetlands, cumulative and secondary impacts, marine debris, special area management plans, energy and government facility siting, and aquaculture. In addition, the assessment continues the integration of the principles of ecosystem-based management into CZMA activities. The 2011–2016 Combined Assessment and Strategy includes potential approaches for improving several of the identified enhancement areas. Strategies include:

- updating the Significant Habitat Program
- establishing a direct permit program for activities within State designated Significant Coastal Fish and Wildlife Habitats
- updating the NYS coastal policies to explicitly address marine debris and resource impacts
- expanding the scale at which Local Waterfront Revitalization Programs are developed to more closely align with regional and ecosystem-based planning
- developing an amendment to the NYS CZMP through a Long Island South Shore Estuary Special Area Management Plan
- developing phased amendments to the NYS CZMP relative to habitat protection and criteria for siting wind-energy generation and transmission facilities in New York, the Atlantic Ocean, and the Great Lakes (NYS DOS 2010)

The changes to the NYS CZMP and their implementation have the potential to affect geology and coastal processes,

water resources, wildlife and wildlife habitat, visitor use, socioeconomic environment, and Seashore operations and are likely to correspond or conflict with the goals, objectives, and management strategies proposed in the GMP.

► LONG ISLAND SOUTH SHORE ESTUARY RESERVE COMPREHENSIVE MANAGEMENT PLAN

The Long Island South Shore Estuary Reserve (SSER) extends from the New York City line in Nassau County east for 75 miles to the Village of Southampton in Suffolk County. The mean high-tide line on the ocean side of Long Island serves as the southern border of the Reserve, while the inland limits of the drainage areas serve as the northern border. The Reserve includes one of the state's most distinctive estuaries and a 326-square-mile watershed in Nassau and Suffolk counties. The NYS Legislature found that the Reserve is vital to the local economy and natural resources; therefore, must be protected. Subsequently, the South Shore Estuary Council was created to represent the diverse interests of the Reserve. The Council, with the assistance of the NYS Division of Coastal Resources, developed the Long Island (SSER) Comprehensive Management Plan (CMP). The plan, which provides the foundation for the long-term health of the Reserve's bays, tributaries, tidal wetlands, wildlife, tourism, and economy, was adopted by the Council on April 12, 2001. Based on recommendations in the SSER CMP, a total of 94 state-assisted projects were supported by federal and local governments, non-profit organizations, and others between January 1, 2006 and December 31, 2010. The projects were focused on:

- Improvements and maintenance of water quality
- Protection and restoration of living resources
- Expansion of public use and enjoyment at SSER
- Sustainability and expansion of the estuary-related economy
- Increasing education, outreach, and stewardship
- An Amendment to the 2001 plan is currently under development. Actions proposed in the Long Island South Shore Estuary Reserve Comprehensive Management Plan have the potential to affect water resources, wildlife and wildlife habitat, visitor use, and socioeconomic environment, and are likely to correspond or conflict with the goals, objectives, and management strategies proposed in the GMP.

► SUFFOLK COUNTY VECTOR CONTROL AND WETLANDS MANAGEMENT LONG-TERM PLAN

In cooperation with the Suffolk County Department of Public Works (SCDPW) Vector Control Division, the Suffolk County Department of Health Services (SCDHS) is overseeing the development and implementation of a Suffolk County-wide vector control and wetlands management plan. The overall agency goals include:

- Develop an effective long-term vector control program, including a comprehensive wetlands management component
- Minimize pesticide usage while protecting public health
- Preserve and restore wetlands managed by vector control via open marsh water management, reversion of ditched areas, and other alternatives.

The actions proposed in the Suffolk County Vector Control and Wetlands Management Long-Term Plan have the potential to affect water resources, wildlife and wildlife habitat, visitor use and Seashore operations and are likely to correspond or conflict with goals, objectives, and strategies proposed in the GMP.

► VILLAGE OF PATCHOGUE LOCAL WATERFRONT REVITALIZATION PROGRAM

In 2006, the NYS DOS awarded the Village of Patchogue an Environmental Protection Fund Local Waterfront Revitalization Program grant. With the grant the village was able to develop a Local Waterfront Revitalization Program and Harbor Management Plan for its coastal area. The program/plan includes an inventory and analysis of existing conditions; a summary and consideration of local waterfront revitalization policies; proposed land and water uses and proposed projects; potential implementation techniques at the local, state, and federal levels; maps and illustrations; and compliance with the State Environmental Quality Review Act (SEQRA). The Seashore's administrative headquarters, maintenance facility, and ferry terminal are located on the Patchogue River within the Waterfront Revitalization Area boundary. The plan serves as a strategy for local management of the natural, public, working, and developed waterfronts (Village of Patchogue 2008).

Elements of Patchogue’s Local Waterfront Revitalization Program have the potential to affect water resources, access and circulation, visitor use, and socioeconomic environment and are likely to correspond or conflict with goals, objectives, and management strategies proposed in the GMP.

► MARINE PROTECTED AREA

Fire Island National Seashore is among 21 coastal NPS units designated as Marine Protected Areas (MPAs) under Executive Order 13158 – Marine Protected Areas, signed by President William Clinton in May 2000. An MPA is defined as any area of the marine environment that has been reserved by Federal, State, territorial, tribal or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources within it. The purpose of the national system of MPAs is to enhance public recognition of ocean and coastal parks; strengthen the management, protection, and conservation of existing MPAs; and encourage interagency cooperation. The MPA designation does not result in the establishment of any new regulatory authority or interfere with the exercise of existing agency authorities. The national system is a mechanism to foster greater collaboration among participating MPA sites and programs to enhance stewardship of the waters of the United States.

► NATIONAL OCEAN POLICY

Executive Order 13547 – Stewardship of Oceans, Our Coasts, and the Great Lakes was signed by President Barack Obama on July 19, 2010, and is commonly known as the National Ocean Policy. This executive order directs federal agencies to follow the recommendations of the Interagency Ocean Policy Task Force and to implement those recommendations under the guidance of the National Ocean Council.

Implementation of the National Ocean Policy is structured around nine priority objectives:

1. **Ecosystem-Based Management:** Adopt ecosystem-based management as a foundational principle for the comprehensive management of the ocean, our coasts, and the Great Lakes.
2. **Coastal and Marine Spatial Planning:** Implement comprehensive, integrated, ecosystem-based coastal and marine spatial planning and management in the United States.

3. **Inform Decisions and Improve Understanding:** Increase knowledge to continually inform and improve management and policy decisions and the capacity to respond to change and challenges. Better educate the public through formal and informal programs about the ocean, our coasts, and the Great Lakes.
4. **Coordinate and Support:** Better coordinate and support Federal, State, tribal, local, and regional management of the ocean, our coasts, and the Great Lakes. Improve coordination and integration across the Federal Government and, as appropriate, engage with the international community.
5. **Resiliency and Adaptation to Climate Change and Ocean Acidification:** Strengthen resiliency of coastal communities and marine and Great Lakes environments and their abilities to adapt to climate change impacts and ocean acidification.
6. **Regional Ecosystem Protection and Restoration:** Establish and implement an integrated ecosystem protection and restoration strategy that is science-based and aligns conservation and restoration goals at the Federal, State, tribal, local, and regional levels.
7. **Water Quality and Sustainable Practices on Land:** Enhance water quality in the ocean, along our coasts, and in the Great Lakes by promoting and implementing sustainable practices on land.
8. **Changing Conditions in the Arctic:** Address environmental stewardship needs in the Arctic Ocean and adjacent coastal areas in the face of climate-induced and other environmental changes.
9. **Ocean, Coastal, and Great Lakes Observations, Mapping, and Infrastructure:** Strengthen and integrate Federal and non-Federal ocean observing systems, sensors, data collection platforms, data management, and mapping capabilities into a national system and integrate that system into international observation efforts.

IMPACT TOPICS

To focus the environmental analysis, the issues identified during scoping were used to derive a number of “impact topics.” Impact topics are resources of concern that could be affected, either beneficially or adversely, by implementing any of the proposed alternatives and are identified on the basis of federal laws, regulations, Executive Orders, *NPS Management Policies 2006* (NPS 2006), and the results of scoping and coordination with other agencies and the public. Impact topics retained for detailed analysis within this draft GMP/EIS include:

- Natural Resources
 - » Coastal Processes and Floodplains
 - » Water Resources
 - » Vegetation
 - » Wildlife and Wildlife Habitat
 - » Special-Status Species
- Cultural Resources
 - » Cultural Landscapes
 - » Historic Buildings and Structures
 - » Collections and Archives
 - » Archeology
- Wilderness
- Visitor Use and Experience
- Access and Circulation
- Seashore Operations
- Socioeconomic Environment

For a detailed description of these resources, please refer to Chapter Three: Affected Environment.

The impact topics are examined across the spectrum of activities associated with each of the management alternatives, including those that are common to all alternatives.

Impact Topics Dismissed from Further Consideration

The NPS considered the following impact topics but did not analyze them further, because they were irrelevant to the alternatives, would have no discernible impacts, or required no more detailed work to understand their impacts in the context of the general management plan.

► AIR RESOURCES/AIR QUALITY

The Clean Air Act and *NPS Management Policies 2006* (NPS 2006) require consideration of air quality impacts related to NPS projects. Fire Island is designated as a Class II area by the U.S. Environmental Protection Agency (EPA), meaning that the state may permit a moderate amount of new air pollution as long as neither ambient air quality standards --nor the maximum allowable increases over established baseline concentrations are exceeded. The proposed actions would have some negligible, short-term impacts on air quality. In particular, the operating of equipment, vehicles, and other construction activities, such as building, demolition, or rehabilitation, could result in temporary increases in vehicle exhaust and emissions. However, hydrocarbons, nitrates, and sulfur dioxide emissions, as well as any airborne particulates created by fugitive dust plumes would be rapidly dissipated. Fire Island would retain its “roadless” character, and driving would continue to be limited. The Seashore would continue its involvement in the NPS Green Parks initiative and would work to reduce or eliminate impacts on air quality resulting from Seashore operations. Overall, there could be negligible impacts on local air quality; however, such impacts would be short-term, lasting only as long as construction.

► PRIME AND UNIQUE FARMLANDS AND FARMLANDS OF STATEWIDE IMPORTANCE

According to the U.S. Department of Agriculture’s Natural Resource Conservation Service (USDA/NRCS), prime farmland soils are present at the William Floyd Estate, i.e., Riverhead sandy loam and Sudbury sandy loam soil types (USDA 2009). Farmland of Statewide Importance, another USDA designation, is also present at the Estate in the form of Deerfield sand, Plymouth loamy sand, and Wareham loam sandy soil types. The areas identified as Prime Farmland and Farmland of Statewide Importance at the Estate are currently occupied by forests, agricultural fields, and maintained meadows. Although present within the project area, no

“unnecessary and irreversible conversion of farmland to non-agricultural uses” (Farmland Protection Policy Act of 1980) is expected under the proposed alternatives. Thus, no impacts to prime or unique farmlands are expected.

► INDIAN TRUST RESOURCES

U.S. Department of the Interior (DOI) Secretarial Order 3175 requires that any anticipated impacts to Indian Trust resources from a proposed project or action by DOI agencies be explicitly addressed in environmental documents. The federal Indian Trust responsibility is a legally enforceable obligation on the part of the U.S. to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal laws with respect to American Indians, Alaskan Natives, and Native Hawaiians. There are no known Indian Trust resources at Fire Island National Seashore, and the lands comprising the Seashore are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians.

► SACRED SITES

There are no known sacred sites within the Seashore. The Shinnecock Nation is a federally recognized tribe based on the eastern most end of Long Island. The Unkechaug Indian Nation is a New York State recognized tribe having historic association with Fire Island National Seashore, particularly the William Floyd Estate. The planning team initiated a consultation process with representatives of the Shinnecock Nation and the Unkechaug Indian Nation in September 2008. As of this date, tribal representatives have raised no concerns or issues regarding sacred sites; therefore, the impact topic of sacred sites was dismissed from further analysis. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during the implementation of the GMP, provisions outlined in the Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001) would be followed.

► ETHNOGRAPHIC RESOURCES

As noted in the Ethnographic Overview and Assessment (EO&A) prepared for the Seashore, ethnographic resources are sometimes assumed to be only Native American in origin; more rarely, groups of particular ethnic or religious backgrounds also are considered. In the case of Fire Island NS, the ethnographic overview considered both off-island and on-island groups and communities. Both groups and communities reflect

the diversified uses and interests of the Fire Island cultural landscape and its Long Island and regional associations. The Fire Island communities and segments of Seashore visitors were considered in addition to the off-island Floyd family descendants, the Native American community, the Mastic Beach residential community, and various groups of hunters and fisherman (Low et al. 2006).

According to the findings of the EO&A, the Unkechaug Indian Nation, a New York State-recognized tribe, has specific ethnographic relationships with Fire Island and the William Floyd Estate, including whaling, wampum manufacture from bay quahogs, and wage labor and indentured servitude for the Floyd family. Ethnographic relationships refer to cultural ties between groups and communities and the materials resources of Fire Island and the Floyd Estate but do not necessarily involve a traditional association (Low et al. 2006).

The report identified Great South Bay and the larger landscapes associated with Fire Island and the William Floyd Estate as having important ethnographic relationships with a number of groups, but stopped short of identifying them as ethnographic resources that are typically precise, spatially discrete locations. The report did not identify specific ethnographic resources within Fire Island National Seashore.

► NATURAL SOUNDSCAPES

As described in NPS Management Policies 2006 and NPS Director’s Orders (DO) #47: *Sound Preservation and Noise Management*, preservation of natural soundscapes associated with national park units is an important part of the NPS mission. Natural soundscapes exist in the absence of human-caused sound. The natural, ambient soundscape is the aggregate of all natural sounds that occur at the Seashore beyond the range of sounds that humans can perceive. This sound can be transmitted through air, water, or solid materials. The frequencies, magnitudes, and durations of human-caused sounds considered acceptable varies among NPS units, as well as potentially throughout each park unit, being generally greater in developed areas and less in undeveloped areas. The proposed alternatives would include efforts to promote natural soundscapes within the Seashore. The presence and use of vehicles would continue to be seasonal and concentrated in specific areas. The noise generated by passing boats and aircraft may be a common experience, but it is not constant. In more isolated areas of Fire Island such as the Fire Island Wilderness there



would continue to be greater opportunities to experience natural soundscapes. Overall, any adverse impacts associated with the proposed alternatives would be negligible.

► NIGHT SKY AND LIGHTSCAPES

In accordance with NPS *Management Policies 2006*, the NPS strives to preserve natural ambient landscapes and other values that exist in the absence of man-made light. Fire Island National Seashore is located in one of the most densely developed regions in the world. In addition to its proximity to New York City, the communities and Seashore facilities located on Fire Island produce light and also affect the night sky. As a result, there are constant impacts on the night sky, even in some of the most obscure areas. The proposed alternatives could include efforts to reduce impacts to the night sky within the Seashore's facilities; however, none of the alternatives would measurably contribute (adversely or beneficially) to existing conditions. Therefore, the impact topic of night sky/nightsapes was dismissed from further analysis.

► ENERGY USE, CONSERVATION POTENTIAL, AND SUSTAINABILITY

The Council on Environmental Quality (CEQ) guidelines for implementing the National Environmental Policy Act (NEPA) require an examination of energy requirements and conservation potential as a possible impact topic in environmental documents. Fire Island National Seashore is committed to incorporating proven sustainable practices into all aspects of future operations and management of Fire Island. The objectives of sustainability are to design structures to minimize adverse impacts on natural and cultural values; to reflect their environmental setting; to maintain and encourage biodiversity; to construct and retrofit facilities using energy efficient materials and building techniques; to operate and maintain facilities to promote their sustainability; and to illustrate and promote conservation principles and practices through sustainable design and ecologically sensitive use. Essentially, sustainability is living within the environment with the least impact on the environment. Sustainable practices minimize the short- and long-term environmental impacts of developments and other activities through resource conservation, recycling, waste minimization, and the use of energy-efficient and ecologically responsible materials and

techniques. It also implies operational sustainability that supports cost-effective and efficient management of the Seashore. These same practices also ensure that seashore operations and facilities achieve a level of resiliency that enables them to more effectively respond to both gradual and extreme changes in environmental conditions.

All of the proposed alternatives subscribe to and support the practice of sustainable planning and design, including but not limited to sound energy practices, affirmative green procurement practices, stormwater management, and waste minimization. The Seashore would encourage suppliers and contractors to follow sustainable practices and address sustainable practices in any programs and operations. Although some adverse impacts would occur during construction, overall there would be beneficial impacts relating to energy use and conservation. However, the adverse impacts would be short-term, and the benefits would be negligible in comparison to improved energy use and conservation within the Seashore as a whole. Therefore, the impact topic of energy, conservation potential, and sustainability was dismissed from further analysis.

► ENVIRONMENTAL JUSTICE

All federal agencies are required to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations (Executive Order 12898). This impact topic was eliminated from further evaluation because none of the alternatives presented in this document would result in disproportionately high adverse environmental effects on minority or low-income communities. There would be no air or water pollution effects that would affect human health. Economic impacts from employment, associated income, and construction are expected to be modest, but beneficial. There would be no change in land use in the surrounding area that could affect minority or low-income communities.

► PUBLIC HEALTH AND SAFETY

Providing a safe and healthy park experience is always central to NPS planning. This is especially true when new developments are planned and new programs or patterns of use are introduced. The alternatives in this draft GMP/EIS incorporate all appropriate steps to ensure the safety of NPS staff, the visiting public, and any contractors. No actions are proposed that would increase health and safety risks to either NPS staff or visitors. Therefore, the impact topic of public health and safety is dismissed from further analysis.