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|---|-----------|
| Purpose of and Need for the Plan | 3 |
| Imagining a New Gateway | 3 |
| A Special Place at the Urban Edge | 3 |
| The Planning Area | 5 |
| Foundation for the Future | 9 |
| Park Purpose | 9 |
| Coastal Defense Fortifications and Military Areas | 11 |
| Coastal Systems and Natural Areas | 11 |
| Maritime Resources | 12 |
| Diverse Recreation Opportunities | 13 |
| Other Important Resources and Values | 14 |
| Planning Challenges | 14 |
| Responding to Climate Change and Sea-level Rise | 15 |
| Preserving Gateway's Heritage | 16 |
| Addressing Marine Resources and Water Quality | 17 |
| Engaging New Audiences | 18 |
| Accessing the Park | 19 |
| Providing Appropriate Facilities | 19 |
| Plan Development | 20 |
| New Partners, New Vision | 20 |
| Special Mandates and Administrative Commitments | 22 |
| Servicewide Laws and Policies | 23 |
| Impact Topics | 24 |
| Impact Topics Retained for Further Analysis | 25 |
| Impact Topics Dismissed from Analysis | 28 |
| Related Plans | 29 |
| National Park Service Plans | 29 |
| Other Agency Plans | 31 |
| Next Steps and Plan Implementation | 32 |

Chapter 1: Foundation for Planning



A park, however splendid, has little appeal to a family that cannot reach it . . . The new conservation is built on a new promise—to bring parks closer to the people.

—President Lyndon B. Johnson, 1968



Purpose of and Need for the Plan

Imagining a New Gateway

It was a bold idea: bring national parks closer to people in cities. Forty years later, that bold idea continues to evolve at Gateway National Recreation Area (Gateway; the park), the country's first urban national recreation area. Gateway was established in 1972 with the dream of bringing a National Park Service (NPS) experience to the New York metropolitan area. In the 21st century, the needs and expectations for a national park experience have changed—and so must Gateway.

Today, Gateway is at a crossroads and a new vision is necessary to shape the park's future. This new vision is found in this ~~Draft~~ Final General Management Plan / Environmental Impact Statement (GMP/EIS). Like businesses, schools, and community groups, national park managers make choices each day about where to focus time and money. Often there are competing priorities that make these choices difficult. Is fixing a roof, protecting a beach, or giving a school group tour more important that day? A park's GMP helps guide managers and staff as they balance these choices. It helps park managers focus on what is most important in carrying out a new 20-year vision for Gateway and the mission of the NPS.

Gateway's first GMP was finished in 1979. Almost 35 years later, the world is a different place, with constantly changing ideas and expectations for leisure services and information. New studies have led to a better understanding of the significance of Gateway's natural and cultural resources and current threats. In addition, the needs of visitors are very different today than they were a generation ago. The U.S. population is growing older and more diverse, children are spending less time outdoors, and technology is bringing rapid changes. Recent events such as Hurricane Sandy have brought The increasing body of scientific information regarding climate change and projections of sea level rise, coupled with recent events such as Hurricane Sandy describe a new reality and urgency to find ways to protect, improve, and sustain our natural and cultural resources while still providing a great place to relax and have fun. New opportunities to work cooperatively with New York City have emerged and the value of parks in urban areas to enhance quality of life is finally being recognized.

Gateway needs a new GMP now because new issues and ideas have emerged in recent years that the 1979 GMP does not address because they were not anticipated when the plan was prepared. Many of the 1979 GMP's recommendations were implemented, others are no longer appropriate because of changing conditions and circumstances, and some have not been implemented due to funding limitations. None of the recent NPS policies related to management and planning for all national park units are reflected in the 1979 GMP.

A Special Place at the Urban Edge

Contrast the beauty, simplicity, and grandeur of nature at the edge of the most densely populated place in the nation, the greater New York and New Jersey metropolitan area. See an osprey swoop down to catch a fish for dinner. Enjoy a peaceful boat ride among thousands of acres of islands and open water. Play on miles of beautiful beaches. View the

What is a national park experience?

National parks are here for everyone, and the diversity in the national park system reflects the diversity of who we are as a nation. Visitors who come to national parks find places that represent the country's most significant events, people and natural environments. They find experiences that bring enjoyment, inspiration and a sense of connection to those places through interaction with the natural and historical landscapes, and the associated stories and meanings relevant to our lives today.

oldest operating lighthouse in the nation. Tour the former harbor defense system, which dates back to the 19th century. Walk a historic runway built in 1930. Imagine what it was like to pilot a simple aircraft like the ones used by Amelia Earhart or Howard Hughes. Bike, hike, breathe, reflect, and recreate. These experiences are what the United States Congress had in mind when it created Gateway.

Gateway was established “in order to preserve and protect for the use and enjoyment of present and future generations an area possessing outstanding natural and recreational features.” The park’s establishing legislation was signed into law in October of 1972 and signified the culmination of many years of effort by citizens, planners, activists, the NPS, and members of Congress. The park was created a full century after the establishment of Yellowstone, the nation’s first national park. The national recreation area was a reflection of an ongoing evolution of the national park concept, from a system of parks preserving the natural wonders and scenic masterpieces in relatively remote and secluded areas, to a system that included the development of several urban-edge parks that balanced natural and cultural resources with recreational opportunities. The political climate of the 1960s recognized that a majority of the nation was living in urban areas, where many outdoor recreation opportunities were too distant for regular use. The ability to bring “parks to people” was assisted by a shift in federal policy allowing for federal money to acquire shoreline area for park designation.

Congress envisioned Gateway as a ring of green space and shoreline around the New York Outer Harbor for a water-based outdoor recreation area. The majority of recreation opportunities would focus on beach activities, primarily sunbathing and swimming. The park was created from public lands including U.S. Army and United States Navy installations, New York City parks, and New Jersey state lands.

Park access via public transportation was an important element in the formation of the park, and it was estimated that 10 percent of the U.S. population lived within a 2-hour drive from a Gateway site. The original vision for Gateway included ferry service that would link the park sites, with affordable rates to ensure that the parks are accessible to low-income residents of the region and attractive to large numbers of visitors. Some of the public transportation and water access goals have yet to be realized.

Today, Gateway is composed of 27,025 acres of open bays, ocean, marsh islands, shoreline, dunes, maritime and successional forests, grasslands, mudflats, and open spaces. It includes marinas, greenways, campgrounds, trails, beaches, and picnic grounds within historic landscapes, the remains of important coastal defense works, rare structures from our aviation history, and the oldest continuously operating lighthouse in the United States. Each year millions come to experience the recreational, natural, and cultural opportunities that stretch throughout the coastline of three New York City boroughs and into northern New Jersey.

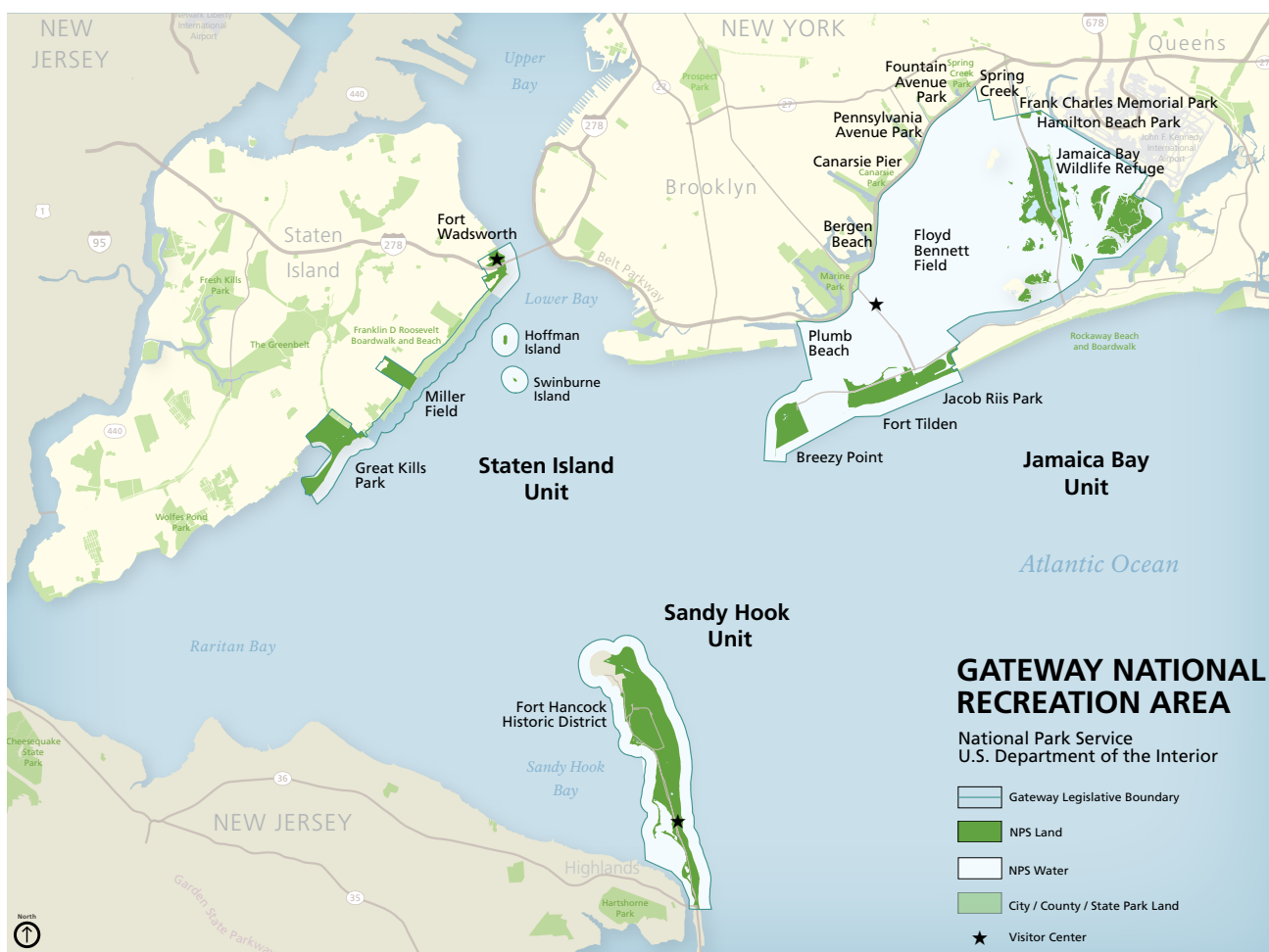


Figure 1-1. Gateway National Recreation Area.

The Planning Area

Gateway covers more than 40 square miles in New York and New Jersey. That is an area nearly twice the size of the island of Manhattan. The park is split into three different areas in Monmouth County, New Jersey, and the New York City boroughs of Brooklyn, Queens, and Staten Island (see figure 1-1).

The legislative boundary for Gateway is 27,025 acres and extends into adjacent waters, including the Atlantic Ocean, Jamaica Bay, Raritan Bay, and Upper and Lower New York Bay. The park manages 21,680 acres of land and waters. An additional 5,345 acres are managed by other federal agencies, owned by New York City, or privately held by entities such as Breezy Point Cooperative, Broad Channel, and Roxbury. The park has three administrative units: the Jamaica Bay Unit, Sandy Hook Unit, and Staten Island Unit. These three distinct geographic areas are linked together by similar types of resources and recreation uses, yet retain distinctive characteristics that make them special.

Sandy Hook Unit

The Sandy Hook Unit is 4,688 acres of land, bay, and ocean waters in Monmouth County, New Jersey (see figure 1-2). Surrounding communities include the boroughs of Atlantic Highlands, Highlands, Monmouth Beach, and Sea Bright along Route 36. Both the NPS and the United States Coast Guard manage areas of the peninsula.

The unit encompasses includes the Fort Hancock and Sandy Hook Proving Ground National Historic Landmark District and natural areas and shorelines adjacent to the Atlantic Ocean and Sandy Hook Bay:

- Fort Hancock and Sandy Hook Providing Ground National Historic Landmark District (Fort Hancock) encompasses the entire Sandy Hook peninsula. Fort Hancock is a former U.S. Army fort that provided coastal defense for New York Harbor from 1895 until 1974. Between 1874 and 1919, Fort Hancock was operated in conjunction with the army's Sandy Hook Proving Ground. Today, over 100 buildings and fortifications remain from this long-term military installation. Historic Coastal defense features include multiple historic batteries and the Nike Missile Radar and Launch Sites. The unit is also the site of the historic Spermaceti Cove Life Saving Station and the Sandy Hook Light National Historic Landmark District Lighthouse, which is the nation's oldest continuously operated lighthouse and has guided ships into New York Harbor since 1764.
- The Sandy Hook peninsula includes miles of beaches and trails, a rare maritime forest, saltmarshes, and opportunities for swimming, fishing, biking, windsurfing, observing wildlife, and other educational and recreational activities.



Figure 1-2. Sandy Hook Unit.

Jamaica Bay Unit

The Jamaica Bay Unit is one of the largest expanses of open space in the region, consisting of over 19,000 acres of land, bay and ocean waters within two boroughs of New York City: Brooklyn and Queens (see figure 1-3).

The unit is divided into the following areas:

- Plumb Beach is a stretch of shoreline, tidal mudflats, low saltmarsh areas, a tidal lagoon, a dune system, and woodland thickets at the entrance to Gerritsen Creek adjacent to the Belt Parkway. This area is a great location for wind-related activities such as windsurfing and kiteboarding and provides important habitat for horseshoe crabs.
- Floyd Bennett Field was New York City's first municipal airport; later it became a World War II naval air station. Today this area includes over 1,300 acres of grassland, saltmarshes, tidal mudflats, a marina, and the former airfield, including a control tower and terminal that is now the William Fitts Ryan Visitor Center (Ryan Visitor Center). Many recreational opportunities are available, including camping, biking, archery, gardening, ice skating, hockey, and gymnastics and other indoor sports.
- Canarsie Pier includes a historic pier used for fishing, picnicking, and community events. The adjacent natural area provides access to the bay for kayaking and boating.

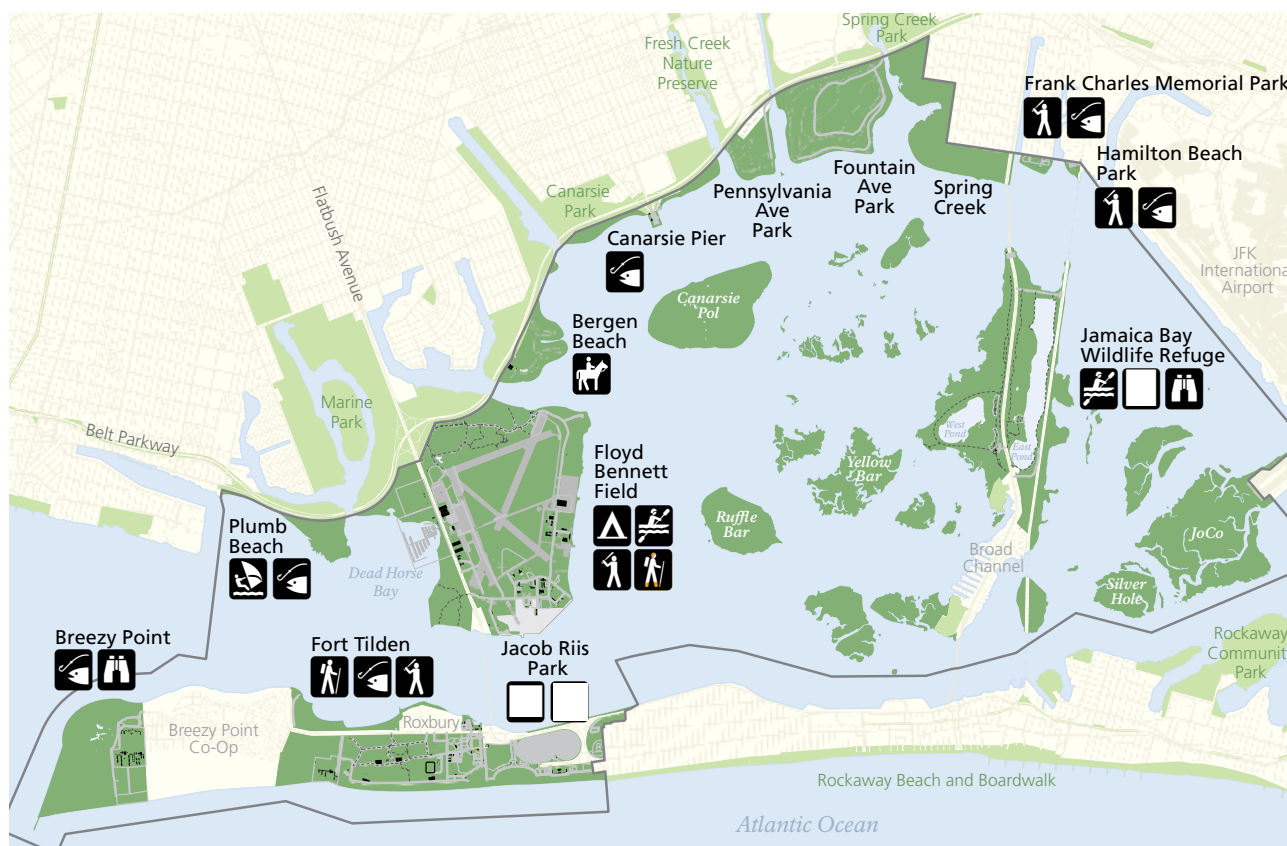


Figure 1-3. Jamaica Bay Unit.

- Bergen Beach is a rich natural area and an equestrian area for riding and boarding horses.
- The Pennsylvania Avenue and Fountain Avenue Parks are capped and sealed landfills that are undergoing transformation into natural areas.
- Spring Creek is an undeveloped wetland and marsh area.
- The Jamaica Bay Wildlife Refuge includes over 12,600 acres of water, saltmarshes, freshwater and brackish water ponds, upland fields and woods, and open bay and islands. It is one of the largest bird habitats in the northeastern United States and is a great place to observe the seasonal bird migration as well as resident species.
- Frank Charles Memorial Park and Hamilton Beach were originally created as municipal parks and include playgrounds and ball fields along with shoreline access for fishing, as well as some sensitive marshlands.
- Jacob Riis Park is a cultural landscape that includes beaches for swimming and sunbathing, basketball courts, paddle tennis, playgrounds, a golf course, a historic bathhouse, and a mile-long cement boardwalk.
- Fort Tilden is a former military site that overlooks the approach to New York Harbor and today includes athletic fields, hiking trails, an arts center, a theater, and an observatory deck on a historic battery offering spectacular views of Jamaica Bay, New York Harbor, and the Manhattan skyline. Dunes, a maritime forest, freshwater ponds, and coastal defense resources including Battery Harris and the Nike Missile Launch Site are also found here.
- The Breezy Point Tip area includes sand dunes, saltmarshes, brackish marshes, and grasslands that offer habitat for many threatened and endangered bird species and also offer excellent fishing opportunities.

Staten Island Unit

The Staten Island Unit encompasses almost 2,974 acres of land and bay waters and four areas, including Fort Wadsworth, Great Kills Park, Miller Field, and Swinburne Island and Hoffman Island, in Staten Island, New York (see figure 1-4):

- Fort Wadsworth includes one of the oldest military sites in the nation, which has controlled the entrance to New York Harbor since the Revolutionary War. Coastal defense resources include Battery Weed, Endicott-era batteries, Fort Tompkins, and the Torpedo-storage Building.
- Great Kills Park includes saltmarshes, beaches, nature trails, a marina, a boat launch, and trails. Visitors to the park enjoy activities including jogging, in-line skating, cycling, boating, beach activities, and birdwatching.



Figure 1-4. Staten Island Unit.

- World War Veterans Park at Miller Field (Miller Field) was built after World War I as a military aircraft field and today includes athletic fields, picnic areas, a community gardens, and the swamp white oak forest.
- Swinburne Island and Hoffman Island are islands off the Staten Island coast and function today as bird nesting areas, with no public access.

Foundation for the Future

A first step in a general management planning effort is confirming the park purpose, its significance, fundamental resources and values, and interpretive themes. The purpose and significance statements are used to guide planning and management decisions to ensure that the resources and values that Congress and the president wanted preserved are the first priority. The following foundation document is grounded in the park's legislation and provides a shared understanding of what is most important about the park.

Park Purpose

The park purpose is a specific reason why Congress established Gateway as a unit of the national park system. The purpose statement provides the most fundamental criteria against



which the appropriateness of all planning recommendations, operational decisions, and actions are tested. The park's purpose is based on interpretation of its authorizing legislation and legislative history.

Park Purpose: Gateway National Recreation Area provides a national park experience in the country's largest metropolitan area. The park preserves a mosaic of coastal ecosystems and natural areas interwoven with historic coastal defense and maritime sites around New York's Outer Harbor. Beaches, marshes, waters, scenic views, and open space offer resource-based recreational opportunities to a diverse public, recognizing the importance to preserve these special places for future generations.

Park Significance

Statements of significance define what makes the park unique—why it is important enough to our cultural heritage to warrant national park designation and how it differs from other parts of the country. These statements are tools for setting resource protection priorities and for identifying appropriate experiences. Each area of the park contains many significant resources, but not all these resources contribute to why the park was designated.

Fundamental Resources and Values

Fundamental resources and values are the park's attributes—its features, systems, processes, experiences, stories, scenes, sounds, smells, opportunities for visitor enjoyment, or others—that are critical to achieving the park's purpose and to maintaining its significance. These fundamental resources and values provide Gateway managers and staff with a focus on what is truly most important about this park. They help focus efforts and funding on the resources and experiences that matter most.

Interpretive Themes

The most important ideas or concepts about Gateway are communicated through the park's interpretive themes. These themes are based on the park's purpose and significance and connect resources to relevant ideas, meanings, beliefs, and values. They describe the key stories and concepts on which the park's educational and interpretive programs are based. Park managers consider these themes when setting priorities for events and activities. The themes also provide direction for planners and designers of the park's exhibits, publications, and audiovisual programs.

Coastal Defense Fortifications and Military Areas

Significance Statement

Forts Hancock, Tilden, and Wadsworth compose one of the largest sets of military installations and distinctive fortifications in the country, dating from pre-Civil War through the 20th century. These installations represent a long period of military presence and served as the defense of New York City, America's largest city.

Fundamental Resources and Values

- Coastal defense resources, including earthworks, associated structures, museum collections, and archeological sites, for the following:
 - **Fort Hancock**
 - Endicott/Taft-era batteries
 - Parade Ground, including Officers' Row, barracks, and cultural landscape
 - Nike Missile Launch and Radar Sites
 - **Fort Tilden**
 - Battery Harris
 - Battery Kessler
 - Construction Battery 220
 - Nike Missile Launch Site
 - **Fort Wadsworth**
 - Battery Weed
 - Endicott-era batteries
 - Fort Tompkins
 - Torpedo-storage Building
- Connections to national defense history



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Interpretive Theme

Two Centuries of National Defense. For over 200 years, places in Gateway were critical to the defense of New York Harbor and played a significant role in the development of the military technologies and strategies used to protect our nation. The changing nature of our national defense reveals stories of triumph, struggle, and everyday life as well as the contrast of innovation and obsolescence. Today, the remaining fortifications, structures, and historic landscapes are a visible reminder of the importance of preparedness and defense then and now.

Coastal Systems and Natural Areas

Significance Statement

Gateway contains an assemblage of coastal ecosystems formed by natural features, both physical and biological, that include barrier peninsulas, estuaries, oceans, and maritime



Gateway contains an assemblage of coastal ecosystems formed by natural features, both physical and biological, that include barrier peninsulas, estuaries, oceans, and maritime uplands.

uplands. The habitats that compose these ecosystems, so rare in such highly developed areas, support a rich biota that includes migratory birds, marine finfish and shellfish, plant communities, and rare, threatened, and endangered species. These features provide opportunities to restore, study, enhance, and experience coastal habitats and ecosystem processes.

Fundamental Resources and Values

- Beaches/dune system at Bergen Beach, Breezy Point Tip, Fort Tilden, Great Kills, Jacob Riis Park, Plumb Beach, and Sandy Hook
- Natural Areas at Breezy Point Tip, Crooke's Point, Floyd Bennett Field, Fort Tilden, Great Kills, Hoffman and Swinburne Islands, Jamaica Bay Wildlife Refuge, and Sandy Hook
- Jamaica Bay waters, including inlets, submerged lands, and Dead Horse Bay
- Sandy Hook maritime forest
- Beach experience, including access to ocean surf
- Direct sensory experience with natural elements
- Public access to bay and ocean shorelines
- Darkness and night sky

Interpretive Theme

The Natural Wonders, Dynamics, and Challenges of an Urban Estuary. The natural resources of Gateway are remarkably diverse given their location in the nation's most densely populated urban area. The mosaic of coastal habitats is a refuge for both rich and rare plant and animal life intrinsically governed by the rhythms, processes, and cycles of nature, yet also continually shaped by people and the surrounding built environment. These resources provide unique and surprising opportunities for experiencing the wildness of the natural world while within the city's limits, and a model for studying, managing, and restoring urban ecosystems.

Maritime Resources

Significance Statement

The maritime resources of Gateway include the oldest continuously operating lighthouse in the United States and one of the first federally sponsored lifesaving station in the country. These resources served to protect ocean commerce and enhance the safety of the busiest American seaport.

Fundamental Resources

- Sandy Hook Lighthouse
- Spermaceti Cove Life Saving Station

Interpretive Theme

Maritime Heritage. Since the days of European exploration and colonization, Sandy Hook has played an important role in facilitating navigation and commerce in and out of New York Harbor. Its maritime resources illustrate the evolution of navigation aids and coastal rescue, in part via the oldest lighthouse in the United States, one of the original lifesaving stations built by the federal government, historic United States Coast Guard structures, and a relatively safe natural harbor that has provided refuge to generations of mariners. Dedicated and heroic individuals ensured that the Sandy Hook Lighthouse served to guide ships in all seasons and under all conditions.



Diverse Recreation Opportunities

Significance

The vast and diverse park resources at the gateway to the most densely populated region of the United States provide an abundance of outstanding recreational and educational opportunities.

Fundamental Resources and Values

- Feelings associated with open space in a high-density area
- Views of New York Outer Harbor
- Recreation experiences including the following:
 - Nature observation such as bird watching, contemplation of physical environment, quiet, astronomy
 - Water-based activities such as surfing, boating, fishing, and swimming
 - Walking/hiking, biking, and horseback riding on trails
 - Picnicking
 - Visiting historic sites

Interpretive Theme

Recreation and Education: Quality of Urban Life for All Visitors. The human need for recreation and renewal has resulted in an evolving history of traditional and innovative uses of the park's lands and waters to improve the quality of urban life. Intrinsically connected to the diverse population of the New York metropolitan area, Gateway's resources provide unique opportunities for outdoor recreation and rejuvenation in a densely populated and largely impacted metropolitan area. It is an outdoor laboratory for learning and discovery, where academic facts and knowledge can be observed in real settings. The park's open spaces and wide horizons offer opportunities for resource-based recreation as well as contemplation and reflection.

Since the days of European exploration and colonization, Sandy Hook has played an important role in facilitating navigation and commerce in and out of New York Harbor.



The human need for recreation and renewal has resulted in an evolving history of traditional and innovative uses of the park's lands and waters to improve the quality of urban life.

Other Important Resources and Values

Many resources and values are determined to be important in their own right even though they are not related to the park's purpose and significance. These resources are particularly important to park management and planning and will be considered during the general management planning process.

- Civil and military aviation history resources at Floyd Bennett Field and Miller Field
- Historic landscape at Jacob Riis Park, including the beaches, boardwalk, and bathhouse
- Pre-contact archeological sites; historic archeological sites related to domestic and Military occupations of park lands, and submerged resources

Planning Challenges

General management planning offers a structured decision-making process that encourages and considers ideas and comments from many different people and groups. Throughout development of the GMP/EIS, the planning team used a variety of scoping techniques to identify the issues related to management of the park, the range of management alternatives that should be considered in the GMP/EIS to address those issues, and the range and nature of impacts that should be used to evaluate and compare alternative management actions. Scoping occurred internally with NPS staff and externally with other public agencies, partner organizations, and interested citizens.

External scoping included public involvement activities that began early and continued throughout the general management planning process. Some of these activities and events include the following:

- The NPS made newsletters and announcements of upcoming events available electronically on the NPS Planning, Environment, and Public Comment (PEPC) website (<http://parkplanning.nps.gov/gate>), which provided opportunities to review the planning team's findings and submit comments electronically through the PEPC system.
- In July of 2009, the NPS hosted five outdoor open houses at the Great Kills Beach Center (Staten Island, New York), Bay 9 at Riis Park (Queens, New York), Sandy Hook Lot D Beach Center (Sandy Hook, New Jersey), Aviator Sports at Floyd Bennett Field (Brooklyn, New York), and the Fort Wadsworth Visitor Center (Staten Island, New York) where visitors could learn about the GMP/EIS planning process and opportunities to participate, including an invitation to attend future public open house workshops.
- In September of 2009, the NPS hosted another six public open houses at the Gateway Marina (Brooklyn, New York), World War Veterans Park at Miller Field (Staten Island, New York), Fort Hancock Chapel (Sandy Hook, New Jersey), Jamaica Bay Wildlife Refuge Visitor Center (Queens, New York), Ranger Station at Floyd Bennett Field (Brooklyn, New York), and the Fort Wadsworth Visitor Center (Staten Island, New York) to provide information about the GMP/EIS planning process and to gather public comments.

- In November 2010, the NPS hosted nine public open houses at Federal Hall National Memorial (New York, New York), Starrett City Brooklyn Sports Club (Brooklyn, New York), Monmouth University (West Long Branch, New Jersey), Brookdale Community College (Lincroft, New Jersey), Kingsborough Community College (Brooklyn, New York), Oakwood Heights Community Church (Staten Island, New York), Monmouth Beach Cultural Center (Monmouth Beach, New Jersey), Jamaica Bay Wildlife Refuge (Queens, New York), and Fort Wadsworth Visitor Center (Staten Island, New York) to gather public comment on a range of preliminary alternative concepts for future management of the park.
- In summer 2012, the NPS hosted six outdoor information sessions and three public open house meetings at Great Kills Beach Center and Education Center (Staten Island, New York), Riis Park Bathhouse (Queens, New York), Sandy Hook Lot D Beach Center and Fort Hancock Chapel (Sandy Hook, New Jersey), and Ryan Visitor Center at Floyd Bennett Field (Brooklyn, New York) to gather comments on four draft management alternatives.
- Press releases for public open house meetings were sent to local newspapers.
- Thousands of newsletters in English, Spanish, Chinese, and Russian were mailed to interested parties and distributed at informational sessions and open house meetings.
- Gateway posted and maintained announcements regarding the status of the GMP/EIS on the park's website and Facebook page.

The types of planning challenges raised through the scoping process varied significantly. Exploring different ways to address the issues was the basis for developing the range of management concepts and the creation of the different management alternatives. The planning challenges are summarized below.

Responding to Climate Change and Sea-level Rise

Climate change refers to changes occurring in the earth's atmospheric, hydrologic, and oceanic systems, which could alter the landscape, natural and cultural resources, and facilities of Gateway. The issues and potential future threats associated with a changing climate have been considered since the early stages of the GMP/EIS process. Gateway staff worked with academic partners to better understand these issues and how Gateway management would need to adapt in the future. *Gateway National Recreation Area: Long-term Resource Management under a Changing Climate* (Columbia University 2009) and *Coastal Geomorphology of the Ocean Shoreline: Natural Evolution and Cultural Modifications, a Synthesis* (Psuty et al. 2009) were developed to inform the GMP/EIS process and acknowledged that Gateway has been experiencing changes due to frequency and intensity of recent storm events.

At least four climate change impacts may significantly affect Gateway: sea level rise, precipitation changes, temperature changes and changes in extreme weather events' frequency or intensity. These four, primary impacts will exert many secondary effects on Gateway, including coastal erosion, damage to park assets, saltwater intrusion, species range

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shifts and interruptions between species migrations and their food sources. These secondary effects will overlap and interact, resulting in three combined impacts throughout the park, including species composition changes, habitat loss and cultural resource damage and loss. Biodiversity loss and recreational infrastructure damage resulting from these combined effects would diminish Gateway's ability to fulfill its mandate to preserve and protect its resources.

The majority of the park's well-known and significant historic buildings, such as the Jacob Riis Park Bath House in Jamaica Bay, Officers' Row at Sandy Hook, and Battery Weed at Fort Wadsworth, are adjacent to the ocean and other water bodies and are vulnerable to sea level rise and coastal storms. Some of these places have already experienced increases in storm flooding. Greater levels of shoreline and dune erosion have been occurring due to human influences and natural forces. Roads, trails, paved paths, and wildlife habitat have already been impacted.



Hurricane Sandy came ashore on October 29, 2012, and caused significant damage to many areas of Gateway bordering the Atlantic Ocean and bays, forcing the closure of the entire park. Hurricane Sandy was the largest Atlantic hurricane on record and produced heavy winds, tidal surge, and rain that resulted in severe flooding and extensive damage in New York City and the Jersey Shore communities. Popular park areas at Jacob Riis Park, Fort Tilden, Jamaica Bay Wildlife Refuge, Great Kills Park, and Sandy Hook received high levels of damage. Park infrastructure elements such as water and sewer systems, telecommunications, electricity, roads, and trails were destroyed. Beaches, snack bars, athletic fields, boating areas, and other popular recreation sites were also damaged. Today, the park is in the recovery phase.

The GMP/EIS provides considerations for climate change, and proposes measures for adapting natural and cultural resources, recreation uses and infrastructure:

- What are the best approaches for managing the potential impacts of sea-level rise and other climate-related changes, including loss of habitats, wetlands, shorelines, historic buildings, and infrastructure?
- How can Gateway serve as a model for sustainability, environmental innovation, and resiliency? adaptation to climate change, including sustainability through innovative facility designs and practices?

Preserving Gateway's Heritage

Gateway possesses more than 800 historic buildings, structures, landscapes, and archeological sites with hundreds of additional individual features that contribute to the character of these special places. When Gateway was established in 1972, the historical significance of its buildings, structures, and landscapes was not clearly understood. Many of these inherited buildings and structures were already in poor condition. Repairing, painting, and other maintenance today is a serious challenge given the resources' numbers and current condition as well as competing funding and staff priorities. From 1982–1995, the park undertook various planning initiatives to focus on the long-term use and preservation

of these resources, but it has not received the funding necessary to implement these plans. The stories of the people and events that are part of Gateway's rich history are represented in the park's museum collections. Museum holdings include over 660,000 objects associated with local military, aviation, and maritime history; pre-contact artifacts dating back to the Woodland Period; archive and manuscript collections (NPS management records, rare books); and natural history collections. Currently the collections are overcrowded in places that do not meet professional museum standards. This contributes to deterioration of the collections and does not allow for access by staff, students, and scholars for academic research.

The GMP/EIS will set priorities for preserving and managing the park's cultural resources in a sustainable manner. The GMP/EIS will consider the following questions:

- What are the best ways to manage the park's cultural resources and landscapes to ensure their preservation?
- How can Gateway identify priorities for addressing the deferred maintenance of cultural resources?
- What partnerships can the park leverage to encourage the long-term protection of Gateway's heritage assets?
- What additional baseline research and documentation of historic structures, cultural landscapes, and archeological inventories is required?
- What are the best approaches to ensure that the park's collections are properly stored and provide access for research, interpretive, and educational opportunities?

Addressing Marine Resources and Water Quality

Two-thirds of Gateway is covered by water—more than 17,500 acres of bay and oceanic waters that are part of larger systems influenced by land uses and activities taking place outside the park. Previous uses of park lands have left a legacy of impacts on the health and ecology of park natural resources. When the park was founded, saltmarshes had been filled, Jamaica Bay had been dredged, and native forests and vegetation had been covered in impervious surfaces. The beaches and bays are prime habitats for birds, shellfish, and plants as well as the most popular visitor areas for all types of water-based recreation. Despite many years of efforts to improve conditions, water quality is still threatened in all units, especially Jamaica Bay. Many activities in adjacent communities contribute to the problem and result in contaminated runoff from streets and sewers, shoreline development, vessel traffic, oil spills, and contaminants exposed during dredging. Degraded water quality hurts fish and wildlife and results in beach closures, shellfish consumption bans, and unsafe conditions for water activities.

Gateway includes 75 acres **miles** of shoreline with 31 miles of ocean beaches, dunes, and water that support habitat and nesting areas for birds, plants, fish, and crabs. The park is required by federal law to protect beach areas for threatened and endangered nesting bird populations. These areas are also favorite sunbathing beaches and places for fishing, surfing,



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and boating. Ocean resources, including natural marine resources and submerged cultural resources, are at risk due to a variety of threats. Natural sediment transport, which affects shoreline and beach dynamics, is affected by activities outside the park boundaries. Most of the park's ocean shoreline is affected by conditions updrift of the park's boundary and the effects of structures at or near the boundary. The presence of engineering structures, both within and external to Gateway, have produced positive and negative results, including erosion and impacts on habitat and navigation channels.

The GMP/EIS will provide direction for preserving and managing the natural resources of the park in a sustainable manner and will provide direction for encouraging collaboration and stewardship. The GMP/EIS will consider the following questions:

- What should be the NPS's role in the restoration of Jamaica Bay, given the complexity of the issues and the interests of other agencies and partners?
- How should Gateway staff work with its partners to improve shoreline and ecological conditions and reduce the persistent threats and influences from adjacent urban development?
- As the fragility of natural resources becomes better understood, what are the best management approaches to ensure the long-term viability of the park's fundamental natural resources?
- How should habitats disturbed by historic land uses and management practices be restored?

Engaging New Audiences

Gateway does not have a strong identity as a unit of the national park system. This makes it difficult to promote experiences consistent with other national parks, and the park is often confused with city and state facilities. Visitors are sometimes unaware of all that Gateway encompasses—that it involves multiple units across two states, that it is an NPS site, and that it contains a collection of unique natural and historic resources. Visitation at Gateway does not reflect the ethnic, racial, or socioeconomic diversity that now characterizes the U.S. population and the communities adjacent to the park. The boom of electronic technology, especially with children and teens, is changing expectations for how the park should provide information and deliver programs. The GMP/EIS will include strategies for promoting a national park experience and engaging new audiences. The GMP/EIS will consider the following questions:

- How should the NPS shape a "national park experience" at Gateway in the midst of the country's largest metropolitan area that engages local, national, and global audiences?
- How can Gateway attract visitors that better represent the diversity of the U.S. population, New York City, and surrounding communities?

- What are the best ways to provide excellent interpretive experiences for all visitors, recognizing a dynamic and changing technological world?

Accessing the Park

Access to Gateway is predominantly automobile dependent. Several areas of the park are not conveniently accessible by public transit. This poses a challenge to many visitors, especially lower-income and transit-dependent populations. Visitors are interested in other options for reaching the park, but there are limited formal designated bike or water routes and few parking or docking facilities to support them. Connections from communities in the region to the park are not adequate. There is a need for improved, safe trail connections between park sites and between park sites and communities to provide seamless, safe, direct access alternatives. The GMP/EIS will address visitor access to and within the park in order to improve visitor experiences and improve connections between park sites and between park sites and the larger community. The GMP/EIS will consider the following questions:

- Given multiple park units and many entrance points, how should visitors be oriented to the entire park?
- What are the most affordable and efficient ways to move and direct visitors to and throughout the park?
- How can Gateway enable and promote existing alternative modes of transportation in order to meet the needs of visitors, make the park more accessible, and reduce greenhouse gas emissions?
- What is the park's role with partners to extend public transportation services, enhance greenway connections, and assist in the promotion of alternative modes to and within Gateway?

Providing Appropriate Facilities

Park resources, visitor safety, and visitor experience have suffered because of the lack of adequate operational facilities in appropriate locations. Over the years, many visitors have expressed concerns about park infrastructure being in a state of decline and inadequate areas for bathrooms, showers, and food service. There is a parkwide demand for more user comforts—shade, playgrounds, benches, bike racks, picnic areas, water fountains, facilities for large family groups, and good food. Although there is a growing interest in water recreation opportunities, there are limited facilities and a need for designated water trails (blowways), lockers, boat rentals, and launch sites.

Park maintenance and public safety functions are scattered throughout the park and are often located at sites and facilities that were not intended for such uses or are not in the optimal location. These operations have been forced to adapt to conditions that do not adequately meet their space, size, function, mobility, and security requirements.





Additionally, Gateway includes hundreds of buildings, both historic and modern, some of which are unused and in poor condition. The upkeep of these structures is a challenge and can be a visual blight on the park's landscape. Gateway strives to be a leader in environmental sustainability. However, park day-to-day operations do not always reflect this value. The GMP/EIS will identify strategies for providing high-quality facilities for both visitors and park operations. The GMP/EIS will consider the following questions:

- What levels and kinds of visitor and operational facilities are appropriate and feasible for the NPS and others to manage?
- How should the park provide better visitor services and experiences?
- Are there unused structures in poor condition or vulnerable to climate change that can be removed from the park?
- How can Gateway be a leader in energy efficiency and sustainability in park operations?

Plan Development

The NPS GMP planning team prepared the GMP/EIS. The GMP planning team generally followed NPS planning program standards presented in the *General Management Planning Dynamic Sourcebook* (NPS 2008b). The GMP/EIS was prepared in accordance with 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 NPS Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision Making* (NPS 2011e), and accompanying Handbook (NPS 2001). A range of reasonable alternatives or approaches to meeting the goals and responding to the planning challenges identified above was developed and analyzed for possible environmental costs and benefits. A general agreement established the City of New York as a cooperating agency in the process of preparing the GMP/EIS. Cooperating agency participation is intended to enable effective communication among government entities and provide relevant information to be used in the forthcoming NPS decision.

New Partners, New Vision

When Gateway was created in the 1970s, the majority of the park land to establish this new unit of the national park system was donated from city and state parks and a transfer of management from other federal agencies. In New York City, road systems like the Belt Parkway created a physical boundary between neighborhoods, city parks, and incredible Gateway resources such as Jamaica Bay. Gateway and New York City have been individually managing thousands of acres of open space, wetlands, shoreline, water, and community recreation areas, with most of these spaces adjacent to each other. As a result, habitat restoration projects, protecting wildlife corridors, and providing recreation services have

been happening independent of each other, without a unified vision for these areas. In 2010, President Obama launched the America's Great Outdoors Initiative and challenged federal agencies to be a great partner with communities to reconnect all Americans to our great outdoors. With more than 60 percent of the American population living in urban areas, urban parks are critical to this effort. As part of this initiative, Secretary of the Interior Ken Salazar challenged the National Parks of New York Harbor and Gateway to become a model for the America's Great Outdoors goal of establishing "a new generation of Great Urban Parks and community green spaces." Secretary Salazar recognized that with its unsurpassed wealth of national, state, and local parks; national historic landmarks; and a working, historical waterfront, New York Harbor offers an opportunity for federal, state, and local partners to work together toward a shared vision for open spaces, historic preservation, environmental restoration, and outdoor education.

In order to achieve these goals in the New York City metropolitan area, greater collaborative efforts among federal agencies, the City of New York, other municipalities, the states of New York and New Jersey, and local partners would be needed. In June 2011, Secretary Salazar and Mayor Michael Bloomberg brought together a group of over 70 public agency and private organization leaders to explore opportunities for greater collaboration and potential strategies to build a stronger urban park experience. From this summit, a bold new idea emerged to begin this new collaboration in Jamaica Bay.

Over the last few years, Gateway and New York City staff members have been exploring ways to break down both the physical and administrative boundaries that separate these park lands around Jamaica Bay. As part of this greater collaboration, this new vision has been integrated into the GMP/EIS and will include ways to achieve the following goals:

- Create a seamless and interconnected network of natural and recreation spaces, including integrated land and water trail systems, community activity areas, and wildlife habitats
- Coordinate habitat restoration, research, and resource management within Jamaica Bay and surrounding parklands in the bay
- Ensure that public transportation and access to and within Jamaica Bay strongly supports existing and new experiential activities, including public transit, pedestrian, bicycle, and ferry access
- Provide unified signs, maps, and marketing wherever possible
- Integrate business practices for maintenance and management as well as public programming and visitor services
- Develop new revenue generation sources and philanthropic support to enable the redevelopment and support the ongoing operations of the federal and city parks without regard to underlying ownership



As part of this initiative, Secretary of the Interior Ken Salazar challenged the National Parks of New York Harbor and Gateway to become a model for the America's Great Outdoors goal of establishing "a new generation of Great Urban Parks and community green spaces."

Special Mandates and Administrative Commitments

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.

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. 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 the park.

The enabling legislation for the park and a list of administrative commitments is provided in Appendix A. Key provisions among the special mandates contained in the park's enabling legislation are presented below.

Conservation and management of wildlife and natural resources in the Jamaica Bay Unit

The Secretary shall administer and protect the islands and waters within the Jamaica Bay Unit with the primary aim of conserving the natural resources, fish, and wildlife located therein and shall permit no development or use of this area which is incompatible with this purpose.

Hunting, fishing, and trapping

The Secretary shall permit hunting, fishing, shellfishing, trapping, and the taking of specimens on the lands and waters under his jurisdiction within the Gateway National Recreation Area in accordance with the applicable laws of the United States and the laws of the States of New York and New Jersey and political subdivisions thereof, except that the Secretary may designate zones where and establish periods when these activities may not be permitted, for reasons of public safety, administration, fish or wildlife management, or public use and enjoyment.

Programs for preservation, restoration, interpretation, and utilization of sites and structures in the Sandy Hook and Staten Island Units

In the Sandy Hook and Staten Island Units, the Secretary shall inventory and evaluate all sites and structures having present and potential historical, cultural, or architectural significance and shall provide for appropriate programs for the preservation, restoration, interpretation, and utilization of them.

Servicewide Laws and Policies

Many park management directives are specified in laws and policies guiding the National Park Service. For example, there are laws and policies about managing environmental quality such as the Clean Air Act, Endangered Species Act, and Executive Order 11990, “Protection of Wetlands”; laws governing the preservation of cultural resources such as the National Historic Preservation Act of 1966, as amended (NHPA), and the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA); and laws about providing public services such as the Americans with Disabilities Act of 1990, as amended (ADA)—to name only a few. In other words, a general management plan is not needed to decide that it is appropriate to protect endangered species, control invasive nonnative species, protect historic and archeological sites, conserve artifacts, or provide for access for persons with disabilities. Laws and policies have already decided those and many other things for Gateway. Although attaining some conditions set forth in these laws and policies may have been temporarily deferred in the park because of funding or staffing limitations, the NPS will continue to strive to implement these requirements with or without a new general management plan. The general management plan is critical in providing guidance on how we comply with laws and policies.

There are other laws and executive orders that are applicable solely or primarily to units of the national park system. These include the 1916 Organic Act that created the National Park Service, the General Authorities Act of 1970, the Redwoods Act of 1978 (relating to the management of the national park system), and the National Park Service Concessions Management Improvement Act of 1998.

The NPS Organic Act (16 *United States Code* [USC], section 1) provides the fundamental management direction for all units of the national park system “[P]romote and regulate the use of the Federal areas known as national parks, monuments, and reservations . . . by such means and measure as conform to the fundamental purpose of said parks, monuments and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”

The National Park System General Authorities Act (16 USC section 1a-1 et seq.) affirms that while all national park system units remain “distinct in character,” they are “united through their interrelated purposes and resources into one national park system as cumulative expressions of a single national heritage.” The act makes it clear that the NPS Organic Act and other protective mandates apply equally to all units of the national park system. Further, amendments state that NPS management of park units should not “derogat[e] . . . the purposes and values for which these various areas have been established.”

The Redwoods Act of 1978 reasserted the systemwide standard of protection established by Congress in the original Organic Act. It stated “Congress further reaffirms, declares, and directs the promotion and regulation of the various areas of the National Park System . . . shall be consistent with and founded in the purpose established by the first section of



the Act of August 25, 1916, to the common benefit of all the people of the United States. The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress.”

The National Park Service Concessions Management Improvement Act of 1998, together with NPS regulations promulgated thereunder, governs the provision of commercial visitor services, called concessions, in the national parks. This law replaced the original National Park System Concessions Policy Act of 1965. The 1998 act, like the 1965 act before it, states that, as a matter of policy, concessions are to be limited to those that are “necessary and appropriate for public use and enjoyment” and are “consistent to the highest practicable degree with the preservation and conservation of the resources and values” of the park. Among other provisions, the new law governs NPS contracting for concession services in the parks, payments from concessioners to the National Park Service in return for the privilege to do business within a unit of the national park system, and the transfer of concessions contracts or permits.

The National Park Service also has established policies for all units under its stewardship. These are identified and explained in a guidance manual entitled *NPS Management Policies 2006*. The alternatives considered in this document incorporate and comply with the provisions of these mandates and policies.

Impact Topics

Understanding the consequences of making one management decision versus another is important to evaluating the GMP alternatives. As a result, NPS GMPs are typically accompanied by an EIS that identifies and analyzes the anticipated impacts of alternative management actions on resources and on park visitors and neighbors. This GMP/EIS includes an analysis of the potential impacts of two action alternatives and the “no-action alternative,” which is a continuation of current management. The alternatives are described in chapter 2.

To focus the environmental analysis, the issues identified during scoping were used to derive a number of impact topics to be analyzed in the GMP/EIS. Impact topics are the park resources and values that could be affected, either beneficially or adversely, by implementing any of the alternatives under consideration. Not all potential impact topics are relevant to the park or to the proposed management actions included in the alternatives. As a result, impact topics are divided into two groups—those that are retained for further analysis in the GMP/EIS and those that are dismissed from further analysis.

Impact Topics Retained for Further Analysis

Consideration of federal laws, regulations, executive orders, *NPS Management Policies 2006* (NPS 2006a), NPS staff knowledge of the park, and the issues and concerns expressed by the public and other agencies during the GMP/EIS scoping process provided the basis for identifying the topics to be retained. Chapter 3: Affected Environment contains a thorough description of the resources and values related to each topic retained for analysis. Chapter 4: Environmental Consequences provides for each topic an analysis of the impacts associated with the three alternatives under consideration.

The impact topics retained for further analysis include soils and geology, air quality, water resources, wetlands and floodplains, marine resources, vegetation, wildlife, species of special concern, cultural resources (historic districts and historic structures, archeological resources, and museum collections), visitor use and experience, the social and economic environment, transportation, park management, operations, and facilities, and sustainability. They are summarized below.

Soils and Geology

Proposed development in some alternatives could result in excavation, grading, and loss of soils, although much of the development would occur on fills with no impacts on natural soils. Stockpiled soils during construction would be subject to erosion and loss. Natural sediment-transport processes have been altered by groins, jetties, and other obstructions; efforts to find joint solutions with neighboring landowners to restore these processes would resupply beaches and dunes along many park sites. Creating wetlands and restoring saltmarsh in Jamaica Bay would add to the supply of natural soils at the park; improving water quality in the bay would also improve the quality of benthic or submerged soils.

Air Quality

Emissions from mobile sources at the park come primarily from individual cars; alternatives include a focus on providing additional alternative transportation and linkages between park sites that is likely to substitute for some of this car traffic and reduce emissions. Additional park amenities could bring additional visitors, and with them, emissions from mobile sources. Construction of amenities and facilities would produce temporary emissions. Use of facilities, including the possibility of an anaerobic digester, could result in emissions from the generation of power or operation of facilities.

Water Resources

Construction of facilities or amenities could result in some erosion of stockpiled soils with short-term increases in turbidity. Increasing collaboration for research and application of findings to include additional agency, academic, private, and non-governmental organization (NGO) partners in improving water quality throughout Gateway in Jamaica Bay would have the potential for dramatic improvements in the quality of water resources.





Wetlands, Floodplains and Flooding

Strong coastal storms would continue to damage park facilities and resources and rebuilding in the coastal zone following Hurricane Sandy would contribute to these economic losses. Adding sand or restoring natural sediment-transport processes would provide some protection and buffering from the damage. Coordinated restoration of saltmarsh habitat in Jamaica Bay would increase wetland habitat and improve its quality; this is expected to increase further if additional partnerships and joint decision making are added. Creating saltmarsh at Floyd Bennett Field in association with the wetlands center or by leaving West Pond breached would benefit brackish or saltwater wetlands. Creating freshwater wetlands or holistically planning for freshwater wetlands throughout park sites would benefit plants and animals that require this habitat.

Marine Resources

Marine and coastal ecosystems are missing some essential elements such as sediment, natural vegetation, and undisturbed wildlife habitat. Restoration of natural transport would improve beach and dune systems, and even beach nourishment would add habitat for marine or intertidal species. Impacts on marine resources at the borrow site include loss of sediment, changed hydrology, and loss of marine life. Creating open-water marine habitat at Floyd Bennett Field would add slightly to available intact habitat. Development of camping or recreational use facilities or amenities in the marine environment or along the shore could displace marine wildlife or require removal of vegetation. Coordinated research and joint decision making to restore Jamaica Bay would improve the marine or brackish habitat in park sites.

Vegetation

Visitor use, including from people on foot, horses, or in oversand vehicles, has the potential for impacts on vegetation from trampling plants or habitat where plants would otherwise grow. Closures or restrictions to protect rare vegetation associations help minimize this damage. Continued efforts to remove invasive species also improve habitat conditions for vegetation. Efforts to control erosion at bay and beach sites, including from beach nourishment or restoring sand transport, would provide additional habitat for some coastal vegetative communities. Creating wetlands at Floyd Bennett Field or Jamaica Bay Wildlife Refuge or restoring saltmarsh islands in Jamaica Bay would provide new habitat for vegetative communities that are an important part of the park's ecosystems.

Wildlife

Visitors disturb wildlife by coming close to individuals, by walking with pets, through boating close to nesting colonies, and in some case simply by being present in the vicinity. Structures and facilities also remove habitat and keep wildlife away through noise, night lighting, and other indicators of human presence. Park management to keep some areas relatively undisturbed allows wildlife to use these areas as habitat; because the area is quite developed, this undisturbed habitat is particularly important. Increasing facilities such as campgrounds in park sites or opening sites now closed to visitors would increase disturbance.

Mowing grasslands, restoring saltmarsh islands, reconnecting potential saltmarsh areas to Jamaica Bay, holistically planning for and building freshwater wetlands, and restoring sand transport would provide substantial new habitat for wildlife at the park.

Species of Special Concern

Visitor use can result in trampling and loss of individual listed plants or keep them from growing in an otherwise suitable habitat. Similarly, listed wildlife is often particularly sensitive to human presence and will only use sites that are in relatively undisturbed condition. Maintaining some park sites in an undisturbed state has resulted in use and breeding by listed shorebirds, terrapins, and wading birds. Opening these sites to more development or visitation would likely eliminate use by some species, and continuing to allow visitation in other sites likely keeps some species from using them. Maintaining grassland habitat and efforts to add to beach or dune habitat through restoration of natural sediment transport would benefit these rare species. The same is true for saltmarsh and freshwater wetland restoration efforts.

Cultural Resources

Alternatives have the potential to affect cultural resources—historic districts and historic structures, archeological resources, museum collections—in both beneficial and adverse ways. Preservation efforts—stabilization, rehabilitation, etc.—for historic districts and structures would result in long-term protection of these resources. However, funding of these preservation efforts is uncertain; if they do not take place, historic resources could be partially or totally lost over time. Additionally, even the provision of funding may not ensure the preservation of these resources. By virtue of proximity to eroding shorelines, over time the effects of sea level rise and storm events may limit or eliminate the ability to restore or maintain many historic structures. Ground disturbance related to development could result in damage or permanent loss of archeological resources. Potential loss of the integrity of historic districts, historic structures, and archeological resources may be decreased in intensity by the implementation of mitigation measures. Museum collections stored in improper environmental conditions and inadequate space could result in a loss of the resource over time.

Visitor Use and Experience

The variety of new and expanded recreational opportunities proposed under the action alternatives, along with enhanced recreation facilities and more interpretive and educational programming, would change the amount of visitor use at Gateway and the type of visitors the park would attract. New and expanded recreational facilities and programming would create more overnight use; increase exposure and enjoyment of the park's natural environments and historic settings, including its coastlines and waters; and create new opportunities to experience the park's natural soundscapes and night skies. Expanded trail networks, overlooks, and access would create more opportunities for scenic viewing and impact the park's visual quality. By encouraging greater use and offering increased opportunities for recreation and exercise, the action alternatives would contribute to the physical health of visitors and to community wellness. Finally, increased visitor use and expanded recreational opportunities could impact visitor safety.



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Proposed improvements in linkages between communities and the park and between park sites would help visitors arrive and move between areas of Gateway.

Social and Economic Environment

Proposed increases in and improvements to visitor facilities, transportation, and amenities would increase use and spending by visitors in the retail and recreational sectors. This increased spending could result in additional jobs from increased business opportunities created in the park by concessioners and nonprofit partners, as well as outside the park to service the increased level of visitation. Increases in operations, concessions, construction, and development could create employment opportunities in the park. State and local governments would collect additional sales tax from increased visitor spending.

Transportation

Proposed improvements in linkages between communities and the park and between park sites would help visitors arrive and move between areas of Gateway. In addition, alternative modes of transportation including bikes, public transit, waterborne transportation, and shuttles would make accessing Gateway and moving through its park lands more convenient. Wayfinding from local transit stops to parks and within parks would be improved throughout Gateway. Transportation information would be incorporated into outreach materials to make reaching the park clearer and more convenient. Bike infrastructure, including bike rentals, bike parking, and bike route mapping, would also be included in all action alternatives. Different types of facilities and media (e.g., kiosks, social media, signs, contact stations) would be employed to create a more welcoming sense of arrival, orient visitors, and increase the visibility of NPS and Gateway resources and recreational opportunities.

Park Management, Operations, and Facilities

Proposed improvements and additions to visitor facilities, amenities, and infrastructure would both directly strain existing staffing and budgets at the park as well as indirectly requiring additional management as visitor use numbers increase. Partnering with New York City to jointly manage several park sites would improve efficiencies and somewhat offset the demand on park staff and budget. Overall management and operational efficiency would also be improved through implementation of sustainable business, energy, and waste management practices. Prioritizing cultural resources that will be maintained, restored, or rehabilitated would free up staff from monitoring and managing those resources that are not fundamental, with improvements in operations as a result. Rehabilitating historic space for administrative, visitor, and partner use would improve operations through both operations and budgets. Consolidating maintenance areas would also improve operations efficiency. Seeking additional collaborative partnerships would improve operations and funding.

Impact Topics Dismissed from Analysis

Impact topics were dismissed from detailed analysis if they were found to be not relevant to the evaluation of GMP/EIS alternatives because either (1) implementing the alternatives would have no effect or a negligible effect on the resource or condition or (2) the resource

or condition does not occur in the park. The impact topics dismissed from detailed analysis in this GMP/EIS include ethnographic resources, environmental justice, prime and unique agricultural lands, wild and scenic rivers, sole or principal drinking water aquifer, sacred sites, and Indian Trust resources.

No changes to ethnographic resources would result from implementing the alternatives, and no adverse impacts on minority or low-income populations (the focus of the analysis under environmental justice) would occur. Benefits in the form of additional access and transportation options would take place, and are analyzed generally for neighboring populations in the “Social and Economic Environment” sections of the GMP/EIS. No sacred sites or Indian Trust resources, prime or unique agricultural lands, wild and scenic rivers, or sole or principal drinking water aquifers exist in the park. Public health and safety is discussed as part of the “Visitor Use and Experience” section.



Related Plans

The NPS has also completed reports and plans for a number of areas within the park and for management of park resources. Various public agencies and governmental bodies have recently completed plans that directly relate to Gateway. The plans that are most important to know about as they relate to this GMP/EIS are discussed in this section.

National Park Service Plans

A Synthesis of Existing Visitor Data and Demographic Trends for the Gateway

National Recreation Area. This document by Mowen, Graefe, and Graefe (2009) provides a synthesis of past visitor studies and an analysis of areawide demographic characteristics and projected trends. Several key findings from this document informed the GMP/EIS process, particularly the findings on population growth and characteristics, visitation trends, and outdoor recreation preferences.

Long-term Resource Management Under a Changing Climate. This report by Kichoff and Stokes (2009) provides information on potential climate change impacts that may significantly affect Gateway. The conclusions and recommendations outlined in this report informed options to protect Gateway’s resources include integrating long-term planning into park operations, monitoring climate sensitive species, implementing adaptive restoration and documenting resources.

Coastal Geomorphology of the Ocean Shoreline, Gateway National Recreation Area: Natural Evolution and Cultural Modifications, a Synthesis.

This study by Psuty et al. (2009) provides a synthesis of the scientific literature pertaining to the geomorphological evolution of the ocean shoreline of the units of Gateway. Additionally, it provides geomorphological data and describes the shoreline conditions as they relate to erosion and cultural manipulation of sediment supply. This document informed the GMP/EIS process, both in its identification of geomorphological issues and analysis of site-specific areas and, in particular, its recommendation for a system-wide approach to sediment management.

A Vision for the Jamaica Bay Estuary: Desired Future Conditions of Natural Resources.

This document provides an overview of Jamaica Bay's current condition, identifies seven major resource areas, provides a framework of desired conditions for each major resource area, and describes potential strategies on how to achieve the desired conditions (NPS 2010b). Many of the recommendations from this document informed natural resource management decisions during the GMP/EIS planning process.

Significant Natural Resources of Gateway National Recreation Area. Lawrence, Roman, and Frame (2010) identify and describe Gateway's most significant natural resources in this document, which helped inform the GMP/EIS process and decision making by providing an understanding of Gateway's significant natural resources and the issues that impact their ecological integrity.

The Shoreside Species of Concern Conservation Plan. (NPS 2007a) provides specific management goals and performance indicators for each of the Sandy Hook Special Status Species, activities to reduce impacts to natural resources from human disturbance (such as through the use of symbolic rope fencing with posts and signs around bird nesting areas), prohibition of certain recreation activities during nesting season (kite flying, kite surfing, fireworks), an updated Integrated Predation Management Program, habitat enhancement opportunities, and an updated biological monitoring program.

Recreation Supply and Demand Analysis. This document (NPS 2011f) provides an analysis of the recreation market supply and demand within and surrounding Gateway. The data and analysis informed the GMP/EIS process and decision making related to recreational planning.

Final Collection Management Plan, Gateway National Recreation Area. The Collection Management Plan (NPS 2009b) provides the park with a tool to assist park managers in prioritizing the needs of its curatorial program. Recommendations are provided related to collection documentation, archives and manuscript collections, archeological collections, collections storage, museum environment, security and fire protection, staffing, and programming and funding sources. The plan indicates that the park's collections should be housed in one facility at Fort Wadsworth. The plan also outlines steps the park can take to improve its curatorial program. One of the highest priorities named in the plan is to accept and manage only collections that have been identified as those within the park's period of significance.

Gateway National Recreation Area, Jamaica Bay Transportation Studies, Development Concept Plan / Environmental Assessment/Assessment of Effect. The Jamaica Bay Transportation Studies (FHWA 2006) proposes improvements to transportation and circulation within the park sites of the Jamaica Bay Unit. At Floyd Bennett Field, suggested vehicular circulation improvements include establishing access at the main visitor entry at what is now the Ryan Visitor Center. Pedestrian and bicycle circulation improvements include establishing a multi-use bicycle connection from Jacob Riis Park to Rockaway Beach Boulevard and improvements to the pedestrian crossing at Riis Landing.

New York Harbor Transportation Strategy, Building Connections to National Parks and other Destinations.

The New York Harbor Transportation Strategy (NPNH 2008) recommends a number of connections to link harborwide destinations through transportation improvements and enhancement of programs. Recommendations for the Jamaica Bay Unit include seasonal shuttle bus connections between mass transit stations/stops and park sites; improved wayfinding, pedestrian, and bicycle signs; and providing guided kayak/canoe tours. It recommends further study and evaluation of Gateway Marina at Floyd Bennett Field for waterborne commuter and visitor access.

Jamaica Bay Greenway Missing Links Study. The Jamaica Bay Greenway Missing Links Study (NPS 2010g) assesses the feasibility of creating a continuous greenway around Jamaica Bay. It identifies the areas where there are gaps in the greenway, provides conceptual planning for potential bicycle routes, and identifies improved connections between park sites and MTA subway stations in Broad Channel and Rockaway.

Other Agency Plans

PlaNYC 2030. PlaNYC (NYCOLTPS 2011) establishes a vision and bold agenda to meet New York City's challenges, prepare for 1 million more residents, strengthen its economy, combat climate change, and enhance the quality of life for all New Yorkers by working toward the vision of a greener, greater New York. PlaNYC complements the GMP/EIS effort in a number of critical areas, particularly in its goals for increasing public space and improving existing parks, improving waterfront access and increasing water-based recreation opportunities, restoring coastal ecosystems and waterways, improving resiliency, and expanding sustainable transportation options.

Vision 2020: New York City's Comprehensive Waterfront Plan. Vision 2020 (NYCDCP 2011) sets the stage for expanded use of New York City's waterfront for parks, housing, and economic development, and its waterways for transportation, recreation, and natural habitats. The 10-year plan lays out a vision for the future with new citywide policies and site-specific recommendations. It provides strategies for implementing many of the long-term goals of PlaNYC, such as improving the quality of the city's waterways, increasing access to the waterfront, and restoring coastal ecosystems. Vision 2020 is accompanied by the New York City Waterfront Action Agenda (NYCEDC n.d.), which outlines a number of specific, high-priority projects to be initiated within three years. The Action Agenda organizes each project under one of the eight goals of Vision 2020. Several sites within and surrounding Gateway at both the Staten Island and Jamaica Bay Units are specifically identified as potential sites for habitat restoration, improved water quality, and increased waterfront access.

Hudson-Raritan Estuary Comprehensive Restoration Plan. This restoration plan (USACE and PA 2009) sets forth a vision and strategy for future ecosystem restoration in the New York/New Jersey Harbor. It was developed in collaboration with federal, state, municipal, NGOs, and other regional stakeholders.

By virtue of recording this selection in a record of decision, this alternative will become the park's new general management plan.

Planning for Jamaica Bay's Future: Final Recommendations on the Jamaica Bay Watershed Protection Plan. The Jamaica Bay Watershed Protection Plan (JBWPP) (NYCDEP 2007) resulted from a bill requiring the New York City Department of Environmental Protection (NYCDEP) to create a watershed protection plan and stewardship strategy for Jamaica Bay. The JBWPP provides an evaluation of the current and future threats to the bay to ensure that environmental remediation and protection efforts are coordinated in a focused and cost-effective manner. The JBWPP contains two volumes: Volume 1, "Jamaica Bay Watershed Regional Profile," a comprehensive reference document for Jamaica Bay, provides information about the Jamaica Bay watershed, water quality, and current ecological status; Volume 2, "Jamaica Bay Watershed Protection Plan," contains the vision for the bay and the issues that need to be overcome to achieve the vision. For each of the issues, objectives for the bay were developed and, for each objective, strategies or actions are identified to address the objective. A number of the objectives identified in the JBWPP directly relate to the GMP/EIS planning effort for the Jamaica Bay Unit, particularly ecological restoration and protection of the saltmarsh islands and other natural areas, increasing public access where appropriate, and educating the public on the importance of the Jamaica Bay watershed.

Next Steps and Plan Implementation

The GMP/EIS will be made available for a 60-day review and comment period to federal, state, and local agencies and all other interested parties, including organizations, businesses, interested individuals and stakeholders, and the general public. Comments will be accepted electronically through the NPS PEPC website or in the form of written letters that must be post-marked by the due date shown on the PEPC website. During the review period, the NPS will hold public meetings where the public will have additional opportunities to provide comments on the management alternatives and impact analysis presented in the draft GMP/EIS.

Once the comment period has closed, the NPS will evaluate all comments received, after which a final GMP/EIS will be prepared. The final GMP/EIS will report reports on the results of agency and public comments on the draft GMP/EIS, including any changes that may have been made as a result of agency and public comment. The final GMP/EIS will be released for a 30-day no-action period. The availability of the final GMP/EIS will be announced to agencies and the public and will be noticed in the *Federal Register*. No sooner than 30 days after the release of the final GMP/EIS, the Northeast Regional Director may sign a record of decision selecting an alternative for implementation as the approved GMP for Gateway. The availability of the signed record of decision will be noticed in the *Federal Register*, after which the NPS would proceed to implement the approved GMP contingent on available funding. By virtue of recording this selection in a record of decision, this alternative will become the park's new general management plan.