Chapter 2: Management Alternatives

Introduction

This chapter of the GMP/EIS presents three alternatives, compares their impacts and costs, and identifes the preferred alternative.

There are many different ways to protect natural areas at Gateway, preserve its historic buildings, and provide fun and educational activities. In a GMP/EIS, these different options to fulfll the park's purpose and achieve a new vision are called management alternatives. Alternatives provide a different focus for the park and emphasize different priorities. All the alternatives meet the park's purpose, laws, and policies—they just do it in different ways.

These alternatives represent the combined planning efforts of NPS staff and the contributions of academic institutions, other government agencies, stakeholder groups, local residents, park users, and interested individuals. Not all ideas and suggestions will be refected in the alternatives; many are specifc actions that could happen as part of implementation of the fnal GMP/EIS.

This chapter of the GMP/EIS presents three alternatives, compares their impacts and costs, and identifes the preferred alternative. Data used to compare their impacts—or what would happen if each alternative was adopted—are summarized from the detailed environmental impact analysis presented in Chapter 4: Environmental Consequences.

The alternatives include a "no-action alternative" in the National Environmental Policy Act (NEPA) that assumes that no new actions would occur (i.e., the continuation of current management direction). This no-action alternative is alternative A. The GMP/EIS also describes and evaluates two action alternatives: alternatives B and C. Each action alternative is comprised of three parts: management zoning; elements common to both action alternatives; and unit-specifc descriptions. Alternative A provides the baseline for comparing the impacts of implementing the action alternatives.

Gateway would continue to follow the applicable laws, policies, and special mandates regardless of the alternatives considered in this GMP/EIS. These laws, policies, and mandates are not repeated in this chapter. However, other aspects of management would differ among the alternatives, and those aspects are the focus of this chapter. The alternatives do not include many details on resource management or visitor use management. More details on how to achieve the desired future would be determined in follow-up implementation plans once it has been decided what those conditions should be.

Developing the Alternatives

As part of the evolutionary process associated with creating alternatives for the GMP/EIS, many concepts have been given serious consideration. Like ftting pieces of a large puzzle together, many ideas have been considered, modifed, rejected, or accepted. The reasons for ultimately accepting or rejecting a concept are varied and sometimes very complex.

Following identifcation of GMP/EIS issues during scoping in summer 2009, the planning team began to consider different and creative ways to address the issues Gateway faces. This exercise resulted in a set of preliminary management concepts that would eventually be shaped into alternatives. These preliminary concepts were presented in fall of 2010

The park will continue working with agencies and landowners to resolve the boundary issues on a case-by-case basis through various legal authorizations. This plan does not preclude future consideration of boundary adjustments should needs or conditions change.

by newsletter and at a series of open houses. With input from interested individuals and stakeholders, and through an iterative process of planning and reviews, the planning team worked to strengthen the preliminary concepts and developed four alternatives. Each alternative expressed a different management scenario and future for Gateway.

In summer 2012, the planning team presented the four alternatives in a GMP/EIS newsletter, hosted a series of open houses, briefed elected offcials and convened a number of stakeholder meetings in order to share the alternatives with local residents, the public, and partners. The planning team used public comments and partner feedback to refne the alternatives. At this stage in the process, the team dismissed alternative D and narrowed the planning effort to the no-action alternative (alternative A) and the two action alternatives (alternatives B and C).

In October 2012, Hurricane Sandy struck Gateway and caused damage to many areas of the park. Following months of recovery efforts and initial damage assessment, the planning team, in conjunction with NPS senior leadership, evaluated the alternatives to determine whether changes were necessary. The group concluded that the vision for each alternative remained intact and Hurricane Sandy recovery efforts would be guided by the new GMP framework.

Potential for Boundary Adjustments

The National Parks and Recreation Act of 1978 requires GMPs to address whether boundary modifcations should be made to park units. Boundary adjustments may be recommended if modifying the boundaries would fulfll any of the following goals:

- To include signifcant resources or opportunities for public enjoyment related to the purposes of the park
- To address operational and management issues such as access and boundary identifcation by topographic or other natural features or roads
- To protect park resources critical to fulfllling park purposes

Issues related to the current boundary and related park operations were explored and evaluated for each area of Gateway. 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. Most of the boundaries between the park lands and residential and commercial properties are not clearly marked.

Specifc minor boundary adjustments were identifed as being needed to correct operational inconsistencies resulting from the park's legislation and encroachments on park lands; however, none of the alternatives in this GMP/EIS propose major changes to the park boundary. The park will continue working with agencies and landowners to resolve the boundary issues on a case-by-case basis through various legal authorizations. This plan does not preclude future consideration of boundary adjustments should needs or conditions change.

Management Concepts for Each Alternative

Each alternative is framed by a management concept, a general theme that directs how management would be focused across the park. Gateway's enabling legislation, the park's resources and recreation opportunities, and the issues and needs that were identifed early in the planning process all helped to shape the following management concepts.

Alternative A: No Action

A no-action alternative is required by the implementing regulation of NEPA and serves as the baseline for evaluating and comparing the other proposed alternatives. Under alternative A, park resources and visitor use would be managed as they are today, with no major change in direction. Decisions would be based on existing conditions and available information, but would continue to lack a comprehensive planning framework that addresses the full range of contemporary and potential future issues. The park's enabling legislation, the management direction established in the 1979 GMP, the Foundation Document and other implementation plans would continue to guide management decision making.

Alternative B: Discovering Gateway – NPS Preferred Alternative

This alternative provides the widest range of activities and most recreational opportunities in dispersed locations throughout the park. New connections would be forged with park lands and communities adjacent to Gateway and nearby. This alternative offers the most instructional programming and skills development and draws people into the park to increase awareness and enjoyment of Gateway's historic resources and the natural environment. Under alternative B, more convenient and affordable park access would be developed through trail connections, bicycle infrastructure, public transit, and waterborne transportation. This alternative prioritizes joint management and operations for visitor services, orientation, programs, and facilities with New York City and other partners.

Alternative C: Experiencing Preserved Places

This alternative provides the most opportunities for independent exploration and "wild" experiences that immerse visitors into natural areas and historic sites and landscapes. This alternative increases the visibility, enjoyment, and protection of coastal resources and focuses resource management on beach and dune ecosystems and coastal defense landscapes. New recreational programming emphasizes low-impact activities that highlight preservation efforts as part of interpretation and education activities and promotes hands-on learning and outdoor skills. This alternative maximizes sustainable operations and concentrates activities, access, and facilities in distinct locations.

Alternative A: No Action

Under alternative A, continuation of current management direction (no-action alternative), the NPS would continue to manage Gateway's resources and visitor use as it does today, with no major change in management direction. Decisions would be based on existing conditions and available information; there would be no comprehensive planning framework to address the full range of contemporary and potential future issues. The park's enabling legislation, the management direction established in the 1979, federal laws, NPS policies, the Foundation Document and other approved plans and projects would continue to guide management of resources, visitor use, facilities, and operations.

Recreation and Visitor Experience

Under alternative A, the visitor experience would remain segmented, with each of the three units independently serving local residents and visitors at specifc locations. Efforts to reopen areas of the park that were damaged by Hurricane Sandy and to provide services and visitor facilities would continue. The ongoing structural assessments and recovery efforts may result in temporary shifts of current management and visitor access. Existing

interpretive, educational, and management programs providing a range of services to visitors would continue, adjusting for Hurricane Sandy limitations. Visitors would continue to enjoy a variety of traditional beach-oriented and other recreational activities at open areas. Gateway would continue to provide comfort stations, lifeguards, food and beverage service, camping, and ferry operations where those services currently exist. Funded planning projects to improve and expand trail systems and camping areas would continue. Existing campsites would remain in their current locations.

The visitor centers at Sandy Hook, Jamaica Bay Wildlife Refuge, and Floyd Bennett Field would continue to provide orientation, information, interpretive programs, and exhibits and serve as both destinations and points of departure for day visitors, tours, and school groups. Traditional ranger-led activities and curriculum-based educational programs would continue to be available. Current efforts to make more people aware of the presence of the park would continue. Gateway's informational website, exhibits, brochures, and other publications would also be available.

Featuring a diversity of districts that range in character from popular beaches to small community parks to an urban wildlife refuge, the Jamaica Bay Unit would continue to ofer a wide range of visitor experiences.

Jamaica Bay Unit

Featuring a diversity of sites that range in character from popular beaches to small community parks to an urban wildlife refuge, the Jamaica Bay Unit would continue to offer a wide range of visitor experiences. Learning opportunities would continue to be characterized by guided and self-guided tours, publications, wayside exhibits, a Junior Ranger program, nature trails, and special programs.

Floyd Bennett Field would continue to provide a large variety of recreational activities, including shoreline fshing, community gardening, archery, hand-propelled watercraft launch/landing, overnight tent and recreational vehicle (RV) camping, biking, cross-country skiing, and birding. At Ecology Village, the NPS would continue to offer day visit and curriculum-based overnight camping programs for school groups, teacher training, and guided trail programs. Concession operations include the marina, a golf driving range, and an athletic center.

The trails at Dead Horse Bay, the North Forty, and Ecology Village would remain open for hiking and nature observation. A portion of the Jamaica Bay Greenway, a 19-mile greenway circumnavigating Jamaica Bay, runs along the east side of Flatbush Avenue and adjacent to the park boundary and provides connections to the rest of the Jamaica Bay Greenway and other New York City greenway systems. Biking would continue along the greenway and historic runways.

The newly renovated William Fitts Ryan Visitor Center (Ryan Visitor Center) in the former control tower /administration building would continue to be open year-round and provide exhibits and a bookstore. The Historic Aircraft Restoration Project (HARP) would continue to be accessible to visitors at Hangar B. The exteriors of Hangars 3 and 4 continue to be featured in interpretive programs. Plumb Beach would continue to be a site for sailboarding, kite sailing, and hand-propelled watercraft (e.g., canoes, kayaks). Other beach uses include sunbathing, beachcombing and wading would continue. No trails would be maintained at the site and visitors would continue to travel along social trails through the dunes.

Canarsie Pier would continue to be used as a fshing pier and promenade. The pier would remain a popular break area for cyclists using the adjacent Jamaica Bay Greenway.

The existing structure would be shared with New York City and serves as maintenance storage. Kayak and bike rental concessions slated to be implemented in the summer of 2013 would be maintained.

Bergen Beach would continue to have horse-related activities provided by a concession-run equestrian center. A number of trails would continue to offer horseback-riding opportunities. Limited equestrian programming would be offered and the facilities would continue to accommodate horse boarding.

Canarsie Pier would continue to be used as a fshing pier and promenade. The pier would remain a popular break area for cyclists using the adjacent Jamaica Bay Greenway. Picnicking and grilling on a frst-come basis would continue in the designated area. Hand-propelled watercraft launch/landing sites would continue to be maintained. Demonstration programs for canoes/kayaks would continue at designated launch/landing sites. Special events would continue to be considered on an as-requested basis.

Frank Charles Memorial Park would continue to be managed as an active recreation area for tennis, baseball/softball, and children's play. Access to shoreline areas would continue to be limited to below the high-tide line for the purposes of fshing only to protect remaining marsh areas.

Hamilton Beach Park would continue to be managed as an active recreation area for children's play and baseball. Shoreline access would continue to be limited to below the high-tide line for the purposes of fshing only to protect remaining marsh areas.

Jacob Riis Park would continue to be managed as a popular beach destination and recreation area. Visitor uses and recreation facilities would be maintained, including a surf-guarded beach in season (Memorial Day to Labor Day) for sunbathing, swimming, and wading. Seasonal NPS evening campfre programs would continue, as would occasional NPS-guided tours and interpretive programming. Other recreational uses would continue, including pitch 'n' putt golf, surf fshing, beachcombing, strolling, cycling on the boardwalk, picnicking, basketball, and hard court sports.

Fort Tilden would continue to provide visitors access to the historic "back fort" area to view the exterior of Battery Harris, the maritime forest, and access to the freshwater pond trail. Biking would continue to be allowed along paved trails. Outdoor recreation opportunities would include fshing, birding, beachcombing, sunbathing, and strolling. The Rockaway Little League would continue to manage and maintain the playing felds, feld house, and associated facilities leased to them by the NPS. The Rockaway Artists Alliance would also maintain its gallery and studio operations. The Rockaway Theater Company would operate out of the former post theater, which includes ticketed performances of live productions. The picnic area would continue to provide group picnicking through permits. Outdoor concerts, picnics/cookouts, and sports tournaments would continue to be managed on a per-event basis.

Recreational activities maintained at Breezy Point Tip would include surf fshing, beach walks, and wildlife viewing. Off-road permits would continue to be offered for beach access for the purpose of fshing during the shorebird nesting off-season. The beach club concessions would continue to provide beach access, pools, and associated amenities to members and day-fee visitors, including fast-food / casual food services, cabanas of various sizes and expenses, and opportunities for catered events.

Sandy Hook Unit

The Atlantic Coast of Sandy Hook would continue to be a draw for millions of visitors for swimming, sunbathing, strolling, beachcombing, and fshing. The popular multi-use path would provide opportunities for walking and biking. Visitors would also continue to take advantage of the open space and natural surroundings for hiking and wildlife observation. Visitor services would be retained to provide orientation at visitor contact stations, food, beverages, and other items. Recreation would be maintained along the bayside, including hand-propelled boating, sailboarding, and windsurfng as well as fshing and birding.

The NPS and its partners would continue to offer free, guided programs that feature Sandy Hook's natural resources and historic maritime and coastal defense structures. Educational and living history programs, wayside exhibits, publications, and a Junior Ranger program would round out learning opportunities at the park unit.

The historic setting around Fort Hancock would continue to be preserved and visitors would continue to have access to the lighthouse and a few coastal defense structures. Guardian Park would remain an area for picnicking. Concerts would continue to be considered on an as-requested basis, as would other special events by permit. Public camping by reservation would continue at the established campground.

Recreational uses at Great Kills would continue to be complemented by educational programming ofered at the Great Kills Education Field Station.

Staten Island Unit

Natural and coastal defense resources within the Staten Island Unit would continue to be interpreted and experienced by visitors through guided and self-guided tours, living history programs, Fort Wadsworth's Mont Sec House tours, classes/workshops, wayside exhibits and publications, and educational programming at Great Kills Education Field Station and ~~the Education Center~~ education facilities at Fort Wadsworth. Additionally, visitors would continue to experience the Staten Island parks through recreation, including walking and biking on trails and greenways, fshing, kayaking, and feld sports.

At Fort Wadsworth, coastal defense touring would continue via scheduled guided programs, living history programs, and self-guided walking tours. The park would remain a stopping point, destination, and starting point for bicycling and cycling groups. The overlook remains open and inviting for vista viewing and interpretation. Local residents would continue to use the park for walking, exercise, and fshing. Public camping by reservation would also be available in its existing location at Camp Hudson.

Miller Field would continue to be managed to accommodate feld sports and sports leagues. The NPS would retain and manage the sports felds. Sports leagues would continue to use the sports felds by permit or as otherwise legally authorized. The trail through the swamp white oak forest would remain open to visitors. The bike path would continue to provide connections to Fort Wadsworth and New York City parks along the eastern shore. The picnic area would continue to be available for use on a permit basis. Fishing, community gardening, basketball, and the playground area would continue to provide additional recreational opportunities.

Many recreational activities, such as walking/jogging, cycling, swimming, hiking nature trails, kayaking, and motorboating, would continue at Great Kills Park. Local residents and formal and informal groups would continue to use the park for walking, exercise routines, wildlife observation, fshing, and astronomy programming. The Great Kills Park swimming beach areas would be available during the summer months. Boating use at the marina would continue with temporary facilities. Recreational uses at Great Kills Park would continue to be complemented by educational programming offered at the Great Kills Education Field Station. Some areas of the park would remain closed until remediation efforts are completed.

Natural Resource Management

Natural resource management programs would continue, many in partnership with federal, state, and local agencies, academic institutions, and non-governmental organizations (NGOs). Existing programs would focus on protecting special-status species, monitoring conditions, mitigating external threats, controlling nonnative species, and restoring habitats impacted by manmade structures or human activities.

Jamaica Bay Unit

The Plumb Beach western shoreline would continue to be monitored for severe erosion resulting from increased storm surges. Gateway would continue to actively work with the New York City Department of Parks and Recreation (NYCDPR) and the U.S. Army Corps of Engineers (USACE) to mitigate erosion and its impact on the infrastructure. Sediment management of the shoreline would also continue. The Plumb Beach dune system would continue to be minimally managed. Horseshoe crab populations would continue to be monitored.

The habitat restoration project at Bergen Beach that was established as part of a New York City Department of Transportation (NYCDOT) mitigation agreement would continue.

The Floyd Bennett Field North Forty would continue to be managed as a natural area with pedestrian access only along established trails. Invasive species would be controlled and native species reestablished when staff and funding become available. Gateway would also continue to work with New York City to reestablish native species as part of the MillionTreesNYC program. Similarly, the grassland area of Floyd Bennett Field would continue to be maintained and mowed in order to provide habitat for migratory and residential birds and small mammals. Natural succession of woody vegetation would continue in other areas of Floyd Bennett Field.

The Jamaica Bay Wildlife Refuge would continue to be managed as an important stopover for migrating birds and an "Important Bird Area of Global Signifcance." The freshwater East Pond at the refuge would continue to be managed by natural resource management staff as an artifcial landscape with the water levels controlled through locks. Gateway would continue to work cooperatively with federal, state, and local agencies to limit the impact to its natural resources within Jamaica Bay. The freshwater West Pond would remain breached, and future repair options would be studied.

Saltmarsh restoration projects would continue, and the park would continue to provide scientifc data and monitoring of water quality and sediment contamination.

The Fort Tilden beach and dune system and upland forest would be managed to allow natural processes to occur. This habitat would be preserved and protected by allowing access only in designated areas and along established trails. Restoration of coastal vegetation would continue where practical and when funding is available. Invasive species would be removed and native species reestablished when staff and funding are available.

The habitat restoration project at Bergen Beach that was established as part of a New York City Department of Transportation (NYCDOT) mitigation agreement would continue.

Sandy Hook Unit

The northern beach and dune system of Sandy Hook would continue to be managed as a natural area with visitor access only along established trails. The piping plover protection would be maintained. The holly forest would be managed as a protected and preserved area, with visitor access limited to ranger-guided trail walks. The maritime forest within Sandy Hook's interior would continue to follow natural succession and be managed as a

natural area, with access allowed along established trails only. The recreational swimming beaches would continue to be actively managed for beach recreation while protecting and maintaining the beach and dune habitat would remain a priority.

Staten Island Unit

The Fort Wadsworth beach and shoreline continues to be managed to allow natural processes to occur. Offshore, Hoffman and Swinburne Islands would remain off limits to visitor access and would continue to be managed as bird and wildlife habitat.

The dune system at Miller Field would continue to be managed with native coastal vegetation planting when funding is available. Crooke's Point would continue to be managed as a natural area with access allowed along established trails. Invasive species would continue to be removed and native species reestablished when staff and funding are available. The NPS would continue to work with New York City to reestablish native species as part of the MillionTreesNYC program. Monitoring and beach erosion control on the northern Great Kills Park shoreline would continue.

Museum collections and archives would continue to be moved from Sandy Hook and consolidated with collections currently maintained in their current location at Fort Wadsworth.

Cultural Resource Management

Historic structures and cultural landscapes would continue to be managed through maintenance and repair where feasible and when funding becomes available. Existing programs providing basic protection to the park's cultural resources would continue to operate in a manner consistent with applicable federal and state laws and NPS policies. Vegetation would continue to be removed from some coastal defense fortifcations on a limited basis, while others would continue to decay by natural processes. Many vacant buildings throughout Gateway would continue to deteriorate. The Sandy Hook Lighthouse, Battery Weed, and select fundamental coastal defense and maritime structures would be preserved. Museum collections and archives would continue to be moved from Sandy Hook and consolidated with collections currently maintained in their current location at Fort Wadsworth.

Jamaica Bay Unit

Select historic structures and landscapes at Jacob Riis Park, Floyd Bennett Field, Riis Landing and Fort Tilden would continue to be maintained for visitor services and park operations. Battery Kessler, Battery Harris, and Construction Battery 220 would continue to become overgrown with vegetation. The Nike Missile Launch Site would remain a maintenance yard. These and other coastal defense resources would not be interpreted on site.

Sandy Hook Unit

The NPS would continue to explore the most appropriate methods for the maintenance, stabilization, and restoration of the buildings at Offcers' Row. The Fort Hancock 21st Century Advisory Commission would continue to provide advice on the development of a reuse plan and on matters relating to future uses of the Fort Hancock Historic District.

The History House, part of Offcers' Row, would remain open to the public. Similarly, the unit's fundamental maritime resource, the Sandy Hook Lighthouse, would continue to be maintained in good condition. Battery Potter, Battery Gunnison, and Mortar Battery would continue to be maintained, stabilized, and interpreted as funding is available. However, Batteries Morris, Urmston, and Peck, Nine-Gun Battery, and Batteries Arrowsmith, Kingman, and Mills would continue to decay in place. Maintenance of the Nike Missile Launch and Radar Sites would occur as funding is available. The Sandy Hook Proving Ground would continue to be maintained through mowing and shrub removal.

Staten Island Unit

Batteries Duane and Weed and Fort Tompkins would continue to be stabilized and preserved as funding becomes available. Batteries Catlin, Bacon, Turnbull, Barbour, Hudson, Mills, Dix, Upton, Barry, Richmond, and Ayres would be left unmanaged. Vegetation removal by goats would continue on select batteries and landscapes.

Transportation and Operations

Existing operation and transportation infrastructure would be maintained at current locations. Maintenance functions, equipment, and facilities damaged as a result of Hurricane Sandy would continue to be evaluated and possible replacement and relocation explored. Gateway visitors would continue to be automobile dependent and people without cars would continue to be reliant on limited direct bus and ferry service.

Jamaica Bay Unit

Floyd Bennett Field would remain accessible by automobile from Flatbush Avenue, by New York City Metropolitan Transportation Authority (MTA) bus, by boat at the marina, at the landing by hand-propelled craft by permit, and by non-motorized means via the adjacent Jamaica Bay Greenway. The refuge trails and visitor center would remain accessible by car, the Jamaica Bay Greenway, the MTA buses, and the nearby elevated train station at Broad Channel. Fort Tilden would remain accessible by automobile and bicycle via New York City right-of-way (Rockaway Point Boulevard) and one MTA bus route. The NPS would also maintain ferry access to Riis Landing.

Maintenance facilities would remain at current locations: the Nike Missile site (Fort Tilden), Building 258 (adjacent to Ecology Village), the Building 97 warehouse (adjacent to Hangar B), and the Fort Tilden Wharf warehouses. Primary trail maintenance responsibilities would remain with the Jamaica Bay Unit maintenance operations.

The former landflls at Pennsylvania Avenue and Fountain Avenue would continue to be managed by New York City with no public access. Efforts to revegetate the areas would continue. The park would continue working with New York City on the transfer of the former landfll areas to the NPS. Following the transfer, the NPS would evaluate the potential of opening the former landflls to limited public use.

The New York City Sanitation Department would continue to occupy facilities at Floyd Bennett Field and, in return, provide sanitation services for the New York units of the park. The New York Police Department would continue to occupy facilities and a portion of one runway at Floyd Bennett Field. Development of a gas transfer station in the Floyd Bennett Field hangars would continue to be explored, with no public access permitted.

Sandy Hook Unit

Most visitors would access the unit by car, although seasonal ferry service would continue to be provided to Fort Hancock from Manhattan. Boaters would continue to access Sandy Hook at Horseshoe Cove and cyclists would enter via the entrance road and multi-use path. ~~The South Maintenance Area would continue to be located on portions of the Nike Missile site.~~

Staten Island Unit

Fort Wadsworth would remain accessible by automobile, MTA bus, bicycle, and on foot. Miller Field would continue to be accessible by automobile, MTA bus, Staten Island Rapid Transit (New Dorp Station), bicycle, and on foot via New York City right-of-way (New Dorp Lane). Miller Field would continue to serve as a regular starting point and rest area for tour cycling by groups. Great Kills Park would remain accessible by car. MTA bus service continues along Hylan Boulevard, and Staten Island Rapid Transit is available at Bay Terrace Station. Pedestrian and bicycle access would continue along the multi-use trail parallel to Buffalo Street. Access by boat would continue via the marina and boat launch. Maintenance facilities would remain at current locations at Fort Wadsworth and Great Kills Park.

Management Zones

Each day, Gateway staff members make hundreds of decisions that infuence how facilities and resources like buildings and beaches are cared for. Should a grassy area be mowed or allowed to grow wild for wildlife habitat? Should a new segment of trail be paved for bikes or left as a natural surface for walking? In order to help guide the appropriate locations and types of use for these activities in a big park, Gateway staff relies on GMP management zones. These zones give people an understanding of where certain activities are and are not allowed. They also tell park managers where development can and cannot be added and the intensity of management that is appropriate in different parts of the park.

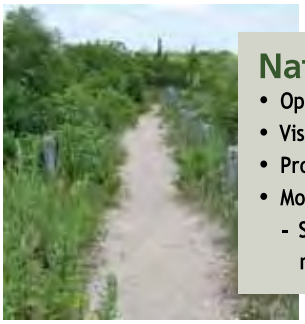
Management zones are descriptions of desired conditions for park resources and visitor experience in different areas of the park. The type, size, and location of the different zones correspond to that specifc alternative. While some zones in the action alternatives are the same in terms of their location, what may actually happen in each zone would vary among the alternatives. Not all activities and facilities appropriate in a management zone may be allowed or constructed everywhere a management zone occurs. Management zoning does not preclude NPS law and policy. Because the management zones describe new alternatives, they have not been applied to alternative A. The management zones developed for the action alternatives are described below and further defned in table 2-1. Following the defnitions, a set of management zone maps, charts, and narrative descriptions are used to describe each of the action alternatives in detail.

Marine

- Waters managed to protect and enhance the ocean and bay environments and provide opportunities for water-based visitor use and recreation.
- Activities are regulated to protect elements of the natural environment, prevent visitor conficts and enhance public safety
- Use levels would be expected to range from low to high and would be infuenced by adjacent zones and time of year.

Recreation

- Park areas that accommodate a variety of recreation activities for fun, learning and physical activity.
- These areas offer a broad range of outdoor, educational, and interpretive experiences.
- High use levels would be expected especially during the summer months. Encounters with other people would be common.
  - Community Activity Subzone - This subzone supports large group gatherings such as sports leagues, community activities and special events. These places require more intensively managed facilities and landscapes.
  - Active Beach Subzone - This subzone offers traditional summer beach activities including swimming and sunbathing.



Natural

- Open, undeveloped areas managed to preserve natural resources while allowing for the enjoyment of the outdoors and nature.
- Visitors would enjoy the quiet, solitude, and sense of connection inspired by the natural world.
- Programs and facilities would facilitate nature study, interpretation and other passive activities.
- Moderate use would be expected at centralized activity areas and points of entry.
  - Sensitive Resource Subzone - These natural areas receive the highest level of protection, scientifc investigation and monitoring and are sites for current and future restoration efforts. Public access is restricted to minimize impacts.

Historic

- These areas include fundamental and historic sites, structures and cultural landscapes linked to Gateway's history.
- Resources in these areas are the focus of interpretation and preservation projects and are managed to ensure the long-term protection of their historic integrity.
- Visitor use would be managed to minimize impacts on the resources while providing opportunities to learn about their associated events and history through tours and interpretive media.
  - Ruins Subzone - This subzone contains historic structures and landscapes in very poor condition. These structures and landscapes are allowed to decay naturally. Some areas may be improved for interpretation. The majority of these areas would be fenced to limit public access or stabilized for safety.

Developed

- These areas support visitor and administrative functions of the park and its partners.
- Infrastructure and facilities support maintenance, orientation, education, interpretation, lodging and transportation.
- Visitor aAccess would vary throughout this zone with some areas receiving intensive visitor use and others having limited or no public access.

Table 2-1. Management Zones for the Action Alternatives.

	Marine	Recreation
Zone Concept	Waters would be managed to protect and enhance the ocean and bay environments and provide opportunities for water-based ~~visitor~~ use and recreation. Adjacent zones may infuence the levels of public access and restrictions for boating and other ~~visitor~~ uses (e.g., motor boating near Jamaica Bay Wildlife Refuge islands)	These are active park areas that accommodate a variety of activities for fun, learning, and physical activity. These areas offer a wide range of educational, interpretive, and recreational opportunities to enjoy and appreciate the park's resources. Two special zones that can accommodate more intensive use and larger groups of people are identifed as the following subzones: Active Beach Subzone: Sites along the ocean and bay shorelines for traditional summer beach activities, including swimming and sunbathing, are located in this subzone. Lifeguards are present during the summer months. Community Activity Subzone: This subzone supports community-related activities and events such as sports leagues, gardening, festivals, ~~and~~ other larger group gatherings and appropriate commercial activities. Locations identifed in this subzone would require more intensively managed facilities and landscapes.
Recreation and Visitor Experience	The marine environment offers natural sounds, tranquility, closeness to nature, and a sense of remoteness and self-reliance. Visitor use would be controlled to ensure that activities and their intensities are compatible with protecting resource integrity. Access and recreational use would be limited or restricted within certain sensitive marine areas, such as Spermaceti Cove. Use levels would be expected to range from low to high and would be infuenced by adjacent zones and time of year (e.g., from fshing in solitude to thousands of people swimming in Sandy Hook waters). Outstanding views of natural, cultural, and scenic resources would be a highlight of this zone. Natural sounds would be audible and would enhance the visitor experience in this zone. The natural soundscape would often be mixed with sounds from human activity, visitor use, and boat traffc. Dark night skies and natural lightscapes would enhance the visitor experience in this zone. Outdoor lighting would provide appropriate illumination for safety and visitor expectation while minimizing light pollution.	These areas would be conveniently accessed and a broad range of visitor services, facilities, and programs would support varied recreation uses and appeal to a diversity of visitors. Outstanding views of natural, cultural, and scenic resources would be an integral part of the visitor experience of this zone. High levels of use in centralized activity nodes would be expected, leading to the likelihood of high rates of encounters among visitors. In particular, the Active Beach Subzone would be very busy in the summer. Encounters with other people would be common. These zones would accommodate a spectrum of group sizes, with the Community Activity Subzone specifcally developed to accommodate large groups. ~~of visitors~~. Natural sounds would be audible and would enhance the visitor experience in this zone. The natural soundscape would often be mixed with sounds from human activity and visitor use. In some areas, the soundscape would be affected by development. During times of low visitation, including nighttime and off-peak times, the natural soundscape could predominate, with occasional noise-free intervals. Dark night skies and natural lightscapes would also enhance the visitor experience in this zone. Outdoor lighting would provide appropriate illumination for safety. Only essential lights would be installed, and they would be operational only when needed. ~~Visitor a~~Access would include a system of multiple transportation modes that are highly interconnected to allow for convenient access to and within the zone. Motorized access would be available on local and park roads. Greenways, bike paths, and sidewalks would link the zone to adjacent neighborhoods and connect Recreation Zones among the park areas. Additionally motorized and water-based shuttles may provide access to central nodes within the Recreation Zone. Visitor access and recreational use would be compatible with plans for managing threatened and endangered species.

Natural	Historic	Developed
These are open, undeveloped areas managed to preserve natural resources while allowing for the enjoyment of the outdoors and nature. These areas allow for a wide range of experiences, including resource-based recreation opportunities and immersion in a backcountry type of setting where one feels a sense of remote retreat from the urban environment. Areas containing fundamental natural resources that are sensitive to impacts from visitors and other external threats are designated as a Sensitive Resources Subzone. Sensitive Resources Subzone: This type of area would receive the highest level of natural resource protection, restoration projects, scientifc investigation, and monitoring. Public access is controlled to minimize impacts on sensitive habitats and wildlife.	These areas include historic and fundamental sites, structures, and cultural landscapes linked to Gateway's history. Resources in these areas are the focus of interpretation and preservation projects and are managed to ensure the long-term protection of their historic integrity. Historic areas containing cultural resources in very poor condition where preservation projects are not feasible are designated as a Ruins Subzone. Ruins Subzone: Areas where historic structures and landscapes decay naturally, returning to their component elements by the forces of nature (e.g., wind, rain, ice). These historic structures and landscapes would be stabilized for safety or fenced to limit public access.	These areas support visitor, administrative, and maintenance functions of the park and its partners. Infrastructure and facilities support maintenance, orientation, education, interpretation, lodging, commercial uses, and transportation.
Visitors would enjoy the quiet, solitude, and sense of connection inspired by the natural world. Visitors would have opportunities to directly experience the natural resources and solitude primarily from trails and beaches. Visitor use would be controlled to ensure that activities and their intensities are compatible with protecting resource integrity. Programs and facilities would facilitate nature study, interpretation, and other nature-dependent activities. Through opportunities to experience a wild setting and explore natural areas, visitors would gain an understanding and appreciation of the signifcance of the park's natural resources (including marine) and the potential threats to those resources. Moderate use would be expected at centralized activity areas and points of entry (e.g., trailheads) with use levels dropping in the interior of these zones. Particularly in the interior of this zone, the natural quiet would remain substantially free of human intrusions relative to the park's urban surroundings. Natural sounds would occasionally be mixed with sounds from human activity and visitor use. Dark night skies and natural lightscapes would be integral to the visitor experience in this zone and management would preserve and, where possible, restore natural nocturnal lightscapes. Only essential lights would be installed, and they would be operational only when needed. Outdoor lighting would provide minimal visibility and would be concentrated at the perimeter of the Natural Zone (e.g., trailheads), thereby minimizing light pollution. Trails and access routes would be developed and maintained through the Natural Zone and would be highly managed (i.e., restrictions on access) to protect resources. Non-vehicular access would be the primary mode of transportation throughout the zone and several of the Natural Zone areas would only be accessible via trail. Limited motorized access would be allowed along the zone perimeter and restricted to established administrative roads and park roads. Very limited interior motorized access would be available, primarily for administrative use on established park roads. Within the Sensitive Resource Subzone, visitor access would be highly restricted and controlled to ensure that activities and levels of use are compatible with and do not detract from resource protection measures. Visitor experiences would be primarily guided, by permit only, and/or associated with a stewardship, interpretive, and/or educational program.	This zone would provide distinct visitor opportunities and experiences through a range of historic settings. Visitor use would be managed to minimize impacts on the historic resources while providing opportunities to learn about their associated events, signifcance, and history through tours and interpretive media. There would be opportunities for learning about the history and signifcance of the park through self-guided discovery and interpreted tours. A high level of visitor orientation and interpretive services would be available in this zone. Communication of interpretive themes would occur through a broad array of interpretive methods. In more restricted areas, interpretive media and interpreted views would still allow the visitor to experience the historic integrity and character-defning features of the cultural resources. Use levels would be dependent on chosen adaptive uses and location of outside spaces. Some interior spaces will be closed to the public and others will only be open via guided tours or on a limited basis. Group sizes could be limited based on facility capacities and/or experiential objectives. Visitors would have varying degrees of access to the park's cultural resources. In open areas of the Historic Zone, visitors would immerse themselves in historic settings. Vehicular access and non-vehicular access such as trails would be provided to and throughout the zone. Shuttle access may occur in congested areas. Within the Ruins Subzone, visitors would have limited or no direct access to these places. Visitors may experience these resources through waysides, multimedia, and off-site programs. Limited guided tours may be given of certain areas.	Visitor access would vary throughout this zone. Visitor use would be focused on orientation, educational, interpretive, and transportation areas. Public access to most maintenance and operations areas would be highly restricted or prohibited. Visitor experience would primarily be related to interpretation and education and may include contact stations, exhibits, interpreted trails, kiosks, and media; outdoor and indoor educational activities; and/or guided programming. The zone will also serve to orient visitors to the recreation opportunities found throughout the park. This would include trip planning and transportation system orientation, interpretation of the park's features and resources, and food, lodging, and other visitor comforts. When historic or natural resources of interest are present in the Developed Zone, limited tours and/or interpretive and educational programming may be offered. Communication of interpretive themes, especially related to sustainable operations, would complement associated activities. This zone would accommodate a spectrum of group sizes. Use levels would range from low in park maintenance areas to high in centralized activity nodes. Encounters with other people and park staff would range from infrequent to common. Motorized access would be available on park roads. Greenways and bike paths would be part of trail systems and link to other zones. The greatest numbers of truck, equipment, and vehicles may be present. Additionally, motorized and water-based shuttles may provide access to central transportation nodes.

Table 2-1. Management Zones for the Action Alternatives (continued).

	Marine	Recreation
Appropriate Types of Activities	Water-based recreation opportunities are widely available. These could include swimming, wading, recreational fshing, boating, canoeing, surfng, kiteboarding, snorkeling, and windsurfng. Gateway's waters also offer a range of educational and interpretive programming. This could include low-impact activities such as kayak and boat excursions with opportunities for marine-based nature observation (e.g., bird and mammal watching). Activities are regulated to protect elements of the natural environment, prevent visitor conficts, and enhance public safety.	A wide range of visitor activities could occur in this zone, including the following: • Beach activities such as walking along shore, swimming, sunbathing, splashing in waves, relaxing, and viewing the ocean horizon • Land-related and trail-based activities such as camping, picnicking, biking, hiking, walking, running, horseback riding, sightseeing, and bird and wildlife viewing • Other kinds of activities, such as exploring historic sites; participating in interpretive and stewardship programs, classes, and workshops; nature study; photography; and artistic endeavors
Appropriate Types of Facilities	Facilities would be limited to support water-based recreation and interpretation, research, and restoration activities and could include foating docks, piers, mooring feld, designated water trails, and interpretive features such as buoys and signs. Most facility development to support water-based activities, such as a boathouse or launch sites, would occur on the land adjacent to the Marine Zone. Boat launches and park marinas provide access for boat users, including motorized watercraft. Additionally, water-based transportation such as water taxis and ferries provide visitor access to the Marine Zone. Personal watercraft would be prohibited. Commercial ~~services~~ activities in the marine zone may include water-based tours, boatels, and fshing guides as well as water taxis, ferries, or other water-based transportation services.	Recreation and other facilities necessary to welcome, orient, and support visitors would be concentrated in this zone. A broad range of visitor services, facilities, amenities, and programs would support varied recreation experiences and appeal to a diversity of visitors. Within the Community Activity Subzone, facilities would be sited and scaled to accommodate large groups of visitors. Facilities could include the following: • Interpretive and/or educational facilities, including visitor center/contact stations and interpretive kiosks • Recreational facilities, such as designated trails and trailheads, including designated hiking and biking trails; boardwalks, picnic facilities, shade structures, boat docks, designated non-motorized boat launch sites, fshing platforms, and temporary boat tie-ups; horse stables; a range of designated camping areas; indoor and outdoor recreation facilities (e.g., courts, ball felds); and entertainment venues • Support facilities such as overnight lodging facilities, food and beverage services, large event gathering areas, picnic facilities, restroom facilities, parking areas, equipment rentals, transportation facilities (multimodal hubs, bike paths, roads), and overlooks A variety of commercial services may also be available, including equipment rentals, guides, food and beverage services, recreation instruction, tours, competition/events, overnight accommodations, and retail.

Natural	Historic	Developed
Activities would be low impact and primarily natural resource-based, such as the following: • Beach activities such as walking, surf fishing, and picnicking ~~and kite-fying~~. • Land-related and trail-based activities such as camping, picnicking, biking, hiking, walking, running, horseback riding, sightseeing, bird and wildlife viewing, astronomy, and stewardship activities • Other kinds of activities, such as participating in interpretive and stewardship programs, tours, and photography; artistic endeavors; nature observation and study; and scientifc research of the park's habitats, wildlife, and waters. Communication of interpretive themes would most often occur outside or at the entry to this zone through printed and digital media and information kiosks. A low to moderate level of guided/unguided interpretive services, such as tours, would be available in this zone.	Recreational activities would be primarily resource-based and could include the following: • Interpretive and educational activities such as interpretive tours, programs, and special events; viewing historic structures, artifacts, and cultural landscapes; architecture study; photography; artistic endeavors; scientifc research of collections, structures, and landscapes; educational experiences focused on topics at cultural resources sites within historic settings; and stewardship "hands on" historic preservation programming • Land-related and trail-based activities such as walking, sightseeing, biking, programmatic camping, and picnicking In addition, special and organized events such as presentations, performances, and historic celebrations would be allowed. Measures would be taken to mitigate impacts on resources and other visitors during these events.	This zone would accommodate a variety of activities and more intensive use depending on the location; activities could include the following: • Land-related and trail-based activities such as walking, sightseeing, biking, camping, and other compatible uses • Interpretive and educational activities, such as interpretive tours, programs and special events, and stewardship programming
Development would be limited to those facilities needed to facilitate natural immersion, such as access routes (e.g., trails), natural resource protection measures (e.g., fences), and observation or visitor safety features (e.g., signs). Most development is concentrated at the edge of the zone at entry points. Roads, parking, and limited comfort facilities would be located on the periphery of the zone. Additional facilities and services could include trails (hiking and biking); blinds and overlook platforms; benches; tents, platforms, and other camping support; equipment rentals (e.g., canoes, binoculars); picnic tables; shade structures; trailheads with kiosks and comfort areas; and non-motorized boat launch sites. Within the Sensitive Resources Subzone, some visitor facilities such as trails and signs could be necessary to control visitor access and protect sensitive habitat or species. Any new development would be temporary to support resource protection and restoration.	Development would primarily entail rehabilitation or adaptive reuse of historic structures to protect and/or interpret cultural resources or to provide essential visitor services. Any new development needed to accommodate visitors (e.g., trails, signs, parking) would be sensitive to the cultural resources' character and blend with the historic setting. Buildings may be leased for compatible uses. The following types of facilities could be provided: visitor contact stations; historic house and aviation museums; interpretive kiosks; trails or paths; gathering places for interpretive programs; lodging; transportation support, such as shelters, restrooms, and parking; and picnic tables. Commercial services may be available and could include food and beverage services, retail, equipment rentals, and guided tours.	Development patterns would include a blend of rehabilitated historic structures and modern facilities to support park administration, maintenance, and operations as well as partners. Additionally, partner-run facilities and ~~permitted~~ authorized development would fall within this zone. Facilities could include educational and interpretive facilities; transportation centers, stops, shuttles, and greenways; restrooms; food and beverage services; overnight accommodations; trails and trailheads; picnic facilities; and equipment rentals. Facilities needed to accommodate operations and maintenance functions and support could include administrative offces, maintenance buildings/yards, storage, garages, roads and parking, utility management, renewable energy facilities, and treatment facilities.

Table 2-1. Management Zones for the Action Alternatives (continued).

	Marine	Recreation
Natural Resources	The protection and restoration of marine resources and their systems, processes and values would be a management priority. Aquatic and benthic resources are maintained in a near-natural condition, supporting healthy interaction among, human, plant and wildlife communities. Natural conditions predominate and there is a low tolerance for resource modifcations or degradation. Impacts on water and sediment quality from park activities would be minimal. The NPS will work collaboratively with regulatory agencies to improve degraded water quality.	Natural resources provide distinct visitor opportunities and experiences through a range of park settings. The natural elements of these park settings would help defne and locate visitor opportunities, services, and facilities. The natural physical processes of marine and coastal areas would be left unimpeded to the extent possible and these habitats would be protected from visitor use impacts. Native vegetation and vegetative communities would be preserved to the greatest extent possible. Species that can withstand and support intense visitor use may be desired in developed areas or areas that receive high levels of trampling. Native wildlife and wildlife habitat would be protected from visitor use impacts to the greatest extent possible and wildlife watching opportunities would be available. Species of special concern and their habitats would be managed to support species requirements. Park managers would continue established conservation measures to protect and enhance habitat for wildlife and species of concern, such as providing symbolic fencing with posts and signs around nesting birds, predator removal, closures, buffer zones, prohibition of certain recreational activities during breeding season (kite fying, kite surfng, freworks) and visitor education. Active Beach Subzone: Beaches would be groomed and mechanically raked to support more intensive visitor use.
Cultural Resources	Submerged (e.g., shipwreck remains) and archeological resources would be managed to protect integrity while ensuring public safety. Limited management of vegetation along the coastline would maintain views from the water to historic settings within the park. Vegetation may need to be cleared around select coastal defense or maritime resources in order to maintain views from the Marine Zone of the fundamental cultural resources.	Cultural resources would help defne recreation opportunities and provide a venue for educational and interpretive activities and programs. Historic structures would be stabilized or rehabilitated based on condition and suitability for recreational, educational, and visitor use. Cultural landscape elements may be adapted to accommodate visitor use, education or park and partner operations, while preserving those features that convey historical, cultural, or architectural values.

Natural	Historic	Developed
The protection and restoration of natural resources and their systems, processes, and values would be a management priority in the Natural Zone. This zone would retain its natural, wild, and dynamic characteristics and ecological functions. The natural resources would be managed to preserve resource integrity while providing low-impact visitor uses. The natural shoreline processes occurring in this zone would be left unimpeded except when action is required for park safety. Throughout the park, the habitat mosaic of these Natural Zones would support a diversity and abundance of rare and native plant communities. Native vegetation and vegetative communities would be preserved to the greatest extent possible, with the goal of conserving native biodiversity. Rare and unique habitats would receive additional protection and would be enhanced where possible. Additionally, species of special concern and their habitats would be proactively managed to support species requirements, including recovery actions. In disturbed and degraded areas exhibiting quality habitat potential, efforts would be made to restore natural functions and processes. Park managers would continue established conservation measures to protect and enhance habitat for wildlife and species of concern, such as providing symbolic fencing with posts and signs around nesting birds, predator removal, closures, buffer zones, prohibition of certain recreational activities during breeding season (kite fying, kite surfng, freworks) and visitor education. In the Sensitive Resources Subzone, resources would be managed to preserve their fundamental values while being monitored and often studied for scientifc purposes. External threats to resources would be aggressively addressed.	The natural elements of cultural landscapes and historic settings would be managed to maintain the historic scene and to protect and preserve cultural resources and their associated values and characteristics. The preservation of cultural resources would be predominant over natural resource values. Natural resource objectives may be pursued in collaboration with, and where they complement, cultural resource objectives. Vegetative communities and patterns that contribute to cultural resource values and/or tolerate high levels of visitor use would be maintained. Vegetation may appear more "groomed" in this zone to meet cultural resource goals. Views are a character-defning feature of many cultural landscapes and historic settings. In the Historic Zone, a range of views would be protected to ensure that visitors fnd opportunities to experience the expansive New York Harbor views from Gateway's defensive and maritime structures. Selective management of vegetation would be necessary to maintain views that contribute to cultural landscapes. Within the Ruins Subzone, natural processes are allowed to occur unimpeded by management.	Natural resources would be managed to accommodate operational uses/ activities and to facilitate sustainable maintenance operations. Development footprints would be limited to protect habitat and reduce impacts on historic settings. The intrusion of maintenance and operational activities on the surrounding park setting would be minimized through planning, design, screening, native plantings, and noise reduction efforts. Impacted areas within the zone would be restored to the greatest extent possible. There would be minimal protection and management of viewsheds. Views of maintenance yards and operational facilities would be screened from visitors' view. Sounds from human activity, visitor use, and park operations would predominate. During those times when activity associated with park operations is low, the natural soundscape could predominate, with occasional noise-free intervals. Dark night skies would be preserved to the greatest extent possible while operational needs and uses are accommodated. Outdoor lighting would provide adequate illumination for visibility while minimizing light pollution.
Cultural resource management would complement natural resource management objectives and not confict with the biological integrity of natural resources. Cultural landscapes would be allowed to gradually revert to a more natural state, except where important landscape resources can be preserved without compromising natural resource values. Select views from coastal defense structures may be maintained in order to allow visitors to experience coastal views and to understand the structures' historic context.	Select historic structures and fortifcations would be managed for preservation. Changes to the historic setting would be allowed for basic visitor services or conveniences, such as walkways to provide safe visitor access and historic resource protection. Management actions would preserve these resources while making them readily visible and accessible to visitors. Cultural landscapes would be managed to preserve their physical attributes and their use when that use contributes to their historical signifcance. Elements may be adapted to accommodate visitor use or education or park and partner operations, while preserving those features that convey historical, cultural, or architectural values. Within the Ruins Subzone, cultural resources would be documented.	Most historic structures found in this zone would be rehabilitated for adaptive reuse for the purposes of park operations, maintenance, and administration or partner use. Historic structures not suited for adaptive reuse would be stabilized or, depending on their condition, removed. Cultural landscapes would be rehabilitated for appropriate contemporary use of the landscape while preserving those features that convey historical, cultural, or architectural values. Some of these historic structures and settings would be used for public enjoyment on a limited basis while others would be used by partners and/or park operations.

Desired Conditions Common to Both Action Alternatives

There are a number of overall desired future conditions and management approaches that would guide the park regardless of the action alternative selected. These desired conditions guide actions taken by NPS staff on such topics as natural and cultural resource management, park facilities, and visitor use management.

Climate change is expected to result in many changes to the Atlantic coast, including the northeastern coast of the United States. Both historical trends and future projections suggest increases in temperature, precipitation levels, accelerated rates of sea-level rise and intensity of weather events, such as storms, should be expected.

Desired conditions articulate the ideal conditions the National Park Service is striving to attain. The term "desired conditions" is used interchangeably with goals. Desired conditions provide guidance for fulflling the park's purpose and for maintaining the park's signifcance on a parkwide basis. The actions could be used by the National Park Service (and/or its partners) to achieve the desired conditions. These common ideas and actions will be taken under both the two action alternatives.

Responding to Climate Change

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

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

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

- *Executive Order 11988* (1977) requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modifcation of foodplains and to avoid direct and indirect support of foodplain development.

- *Executive Order 13653* (2013) directs federal agencies to prepare for the impacts of climate change by undertaking actions to enhance climate preparedness and resilience.

- *Executive Order 13514* (2009) establishes an integrated strategy towards sustainability in the Federal Government and makes reduction of greenhouse gas emissions a priority for Federal agencies.

- *Secretarial Order 3289, Amendment 1* (2010) directs each bureau and offce of the Department to consider and analyze the potential climate change impacts when undertaking long-range planning exercises.

- Department of the Interior *Climate Change Adaptation Policy* (523 DM1) outlines a set of principles and provides guidance for integrating climate change adaptation strategies into policies, planning, programs and operations.

- *NPS Management Policies 2006 §9.1.1* guides sustainable facility planning and development.

- *NPS Climate Change Response Strategy* (NPS, 2010) outlines a four-prong approach to addressing climate change: science, adaptation, mitigation, and communication.

- *NPS Climate Change Action Plan* 2012-2014 (NPS, 2012) details actions and recommendations to implement the climate change response strategy.

- *NPS Green Parks Plan* (NPS, 2012) defnes a collective vision and a long-term strategic plan for sustainable management of NPS operations including reducing greenhouse gas emissions and adapting facilities at risk from climate change.

The park's Geographic Information System (GIS) program has been working with partners since 2008 to document and model the potential effects of climate change, specifcally sea-level rise, storm surge and fooding, at Gateway and nearby national park sites. Park staff are engaged in discussions with academic institutions and NYC agencies as part of regional climate change initiatives. The GIS team has been documenting natural and cultural resource impacts and changes from key storm events such as the Nor' Easter of 2010, Hurricane Irene in 2011, and Hurricane Sandy in 2012. Since Hurricane Sandy, the GIS team has worked to develop elevation maps and apply Federal Emergency Management Agency (FEMA) guidance to assist in the recovery efforts, including the ABFE's (advisory base food elevation) for the NYC area. A series of Surface Elevation Tables (SET's) are in place and being monitored throughout the park. Efforts are currently underway to collect and analyze frst foor elevation data for all buildings at Gateway, the frst initiative of this kind in the national park system. This data will assist future resource management initiatives and facility planning.

Management Strategies

The general management plan describes the approach that the park would take to mitigate and adapt to the effects of climate change ~~and~~ during the next 20 years. Many opportunities exist for Gateway to incorporate climate change adaptation into long-term planning across its three park units at Sandy Hook, Staten Island and Jamaica Bay. Specifc options to protect Gateway's resources include integrating long-term planning into park operations, monitoring observed and projected climate trends, conducting climate-related

The general management plan describes the approach that the park would take to mitigate and adapt to the efects of climate change during the next 20 years.

National parks can demonstrate how to minimize their contribution to global warming through practices such as energy efciency and use of renewable energy.

vulnerability assessments for fundamental resources and values, monitoring climate sensitive species, and implementing ~~adaptive restoration~~ a range of adaptive management actions.

Strategies for Visitor Facilities and Park Operations

Gateway's highest visitor use areas are in coastal environments and are vulnerable to future sea-level rise and storm surges. Climate change will result in signifcant 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 GMP are analyzed and implemented at site-specifc levels. Factoring in sea level rise, these analyses will infuence the type, design, location, and ultimate feasibility of park facilities and developments. When developments do occur, site-specifc design will provide an outstanding opportunity for the park to teach through example – to demonstrate forward thinking, innovative designs, fexibility, and readiness for change in response to sea level rise.

Coastal resiliency will be incorporated into any new developed areas and adaptively reused structures and facilities. While the action alternatives propose a range of facility additions and renovations to expand recreational opportunities, proposed facility investments will be evaluated using the following climate change strategies prior to project approvals to ensure the long-term sustainability of these investments. Future plans and studies (see table 2-11) would provide technical data and resource information to support the following strategies:

- Find creative solutions to limit impacts from future flooding, storm surge and other impacts on existing visitor and operations facilities. When these facilities are no longer viable to retain and use, transition to moveable and portable facilities or other means to continue to offer visitor services.

- ~~Retain existing visitor and operations facilities and fnd creative design solutions to limit impacts from future fooding, storm surge and other impacts. When these facilities are no longer viable to retain and use, transition to moveable and portable facilities.~~

- Continue to provide a range of experiences by transitioning recreational use away from locations where changes in resource conditions no longer support such uses.

- Remove existing visitor facilities and discontinue recreational uses where continued use is unsafe, infeasible, or undesirable due to changing environmental conditions.

- Avoid or minimize additions of new infrastructure, construction of high value assets or major investments in facility renovations within coastal food or storm surge zones.

- Substantial facility investments within the FEMA 100-year floodplain, including an adjustment for projected sea level rise by year 2100, should be avoided to the extent possible. Essential improvements within these food-prone areas, such as rehabilitation of historic structures or provision of necessary facilities for beach access and recreation, will be carefully evaluated to determine whether facilities should be elevated, made

portable, hardened or otherwise made resilient to potential fooding. Any decision to proceed with substantial improvements within the food zone as adjusted for sea level rise will be documented in a foodplain statement of fndings per EO 11988.

• ~~When considering facility investments within the FEMA 100-year floodplain (based on the Advisory Base Flood Elevation), evaluate risk (and cost/beneft), depending on their location and food zone category. This could be a high level scan, examining the FEMA ABFE food zones, and considering whether constructing or investing in the facility makes sense for the NPS or any other source/partner.~~

- Transition wastewater and sewage treatment systems to more sustainable systems and facilities.

- Keep utilities and critical systems and infrastructure out of food zones.

- Use up-to-date policy guidance to respond to changing conditions.

National parks can demonstrate how to minimize their contribution to global warming through practices such as energy effciency and use of renewable energy. Because emissions from visitor driving are estimated to contribute the highest percentage of the park's emissions, park staff and partners would assist in reducing visitor greenhouse gases by providing opportunities for alternative transportation options. The park will reduce the CO2 emissions of NPS and partner operations, increase the use of renewable energy and other sustainable practices, and reduce visitor emissions by lessening dependency on personal automobiles. Specifc actions that the park would pursue:

- Test, use, and promote carbon-neutral energy, innovations, and infrastructure for NPS and partner operations.

- Consolidate park operations to reduce energy consumption.

- Construct and operate visitor facilities with the highest sustainability standards possible (e.g. more mobile/temporary structures).

- Use biodegradable/recycled resources and zero waste options.

- Upgrade/retroft vehicle feets and machinery for low emissions.

- Reduce vehicle miles traveled by Gateway staff and visitors who work in and use the park.

- Integrate climate change mitigation into all NPS business, operations, and management practices.

- Pursue Leadership in Energy and Environmental Design (LEED) certifcation for rehabilitated buildings as educational topic and as sustainable practice.

Strategies for Responding to Changing Conditions

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

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

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

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

- Build resiliency of natural coastal resources to sea level rise and other effects of climate change.

- Restore key ecosystem features and processes, and protect key cultural resources to increase their resiliency to climate change. By reducing other types of impacts on resources, the overall condition of the resources could more easily recover from or resist the impacts of climate change.

- Reduce current and future stressors to the resource and the environment; this would improve the condition of the resource and build resiliency in the ecosystem that would help to minimize future adverse effects of climate change.

- Reduce habitat fragmentation and increase habitat connectivity and movement corridors.

- Give highest priority to preserving cultural resources and artifacts in situ, coupled with sustainable efforts (intervention techniques) to mitigate and reduce ~~any~~ stressors that might adversely affect the resource. As warranted to protect from loss due to sea level rise

and storm events, implement strategies to relocate or document cultural assets, or remove artifacts to safe locations.

Engage the Scientifc Community and Visitors in Climate Change

Gateway would continue to collaborate with a variety of academic and scientifc institutions, non-proft organizations and agencies on research and projects to fnd creative solutions for the long-term preservation of natural and cultural resources. Climate change science would be one of the focus areas of the new Jamaica Bay Science and Climate Resilience Institute (JBSCRI). This new Institute would play a major role in promoting scientifc investigations of urban marine ecosystems, using Jamaica Bay as a functioning "laboratory." The Institute would help coordinate the many existing research and restoration efforts already underway in the bay on the part of multiple agencies and organizations, and more widely sharing the results of their research. Applied research conducted at the Institute would inform future park planning, development and resource management. Gateway will explore with partners, the development of a facility or campus for the Institute at Floyd Bennett Field or Fort Tilden.

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

Cooperative Stewardship and Marine Resources

Two-thirds of Gateway is covered by water—more than 17,500 acres of bay and oceanic waters that are part of larger systems infuenced by land uses and activities taking place outside the park. The long-term management of natural resources and ecological processes within these waters will not be sustainable without the control of contaminant inputs and other human-caused disturbances.

Water Quality Enhancements

Elimination and control of pollution sources that cause degradation to the park's ecosystems is perhaps the most critical of desired conditions. These sources include effuents from wastewater treatment plants (WWTPs), combined sewage outfalls (CSOs), nonpoint runoff, atmospheric deposition and landfll leachates. Elimination or reduction of these contaminants would reduce nutrient pollution and long-term accumulation of contaminants in sediments and biota. These actions would have the widest infuence on enhancing the recovery of Jamaica and Raritan Bays to a fully functioning ecosystem. Water quality levels should be attained that would eventually support and sustain fsh and wildlife habitats and populations. This level of attainment would also support visitor contact recreational activities including bathing, fshing, and shellfshing. Nutrient removal with additional reduction of contaminants, including pharmaceutically active compounds, would beneft the entire ecosystem by providing increased ~~DO~~, dissolved oxygen, reduced algal blooms and turbidity, decreased organic loading, and reduced pathogen levels.

The desired future condition for Gateway waters and sediments is an estuary free of chemical contaminants, such that less than 1 percent of the aquatic animal species will experience adverse biological efects manifested by abnormal physical, behavioral, biological and population responses.

A more natural shoreline that maximizes ecosystem functions such as habitat for wildlife, connectivity between the bay and upland habitats, and natural processes such as sediment transport and shoreline migration would be Gateway's goal

Desired conditions also include the control, inhibition and prevention of invasive exotic aquatic species, including harmful algal and sea lettuce (*Ulva* spp.) blooms. The estuary should be maintained as a refuge for proliferation and reproduction of aquatic biota at all trophic levels. To further aid overall water quality, borrow pits (dredge holes) should be flled to a depth that would improve levels of dissolved oxygen estuary-wide,, especially where anoxic or hypoxic conditions exist.

Sediment Contaminants

The desired future condition for Gateway waters and sediments is an estuary free of chemical contaminants, such that less than 1 percent of the aquatic animal species will experience adverse biological effects manifested by abnormal physical, behavioral, biological and population responses. Presently, about 10 to 50 percent of the aquatic species are affected, as approximated by Effects Range Low (ERL) and Effects Range Median (ERM) levels of contaminants and numerous contaminants research reports.

Gateway would take the lead in calling for reductions and elimination of these sources of contamination. Primary actions should include decreasing contaminants and nutrients from wastewater treatment plant effuents, decreasing input of contaminated surface runoff from the Jamaica Bay and Raritan Bay watersheds, cessation of sewage discharge from combined sewer outfalls, decrease air pollution to lessen contaminant deposition, and restoration of clean freshwater sources feeding into the bay.

Estuarine Shorelines

A more natural shoreline that maximizes ecosystem functions such as habitat for wildlife, connectivity between the bay and upland habitats, and natural processes such as sediment transport and shoreline migration would be Gateway's goal. Achieving this goal will require the removal of hard structures wherever possible and restoration of natural shoreline features, including salt marsh, estuarine beach, and freshwater wetlands. In addition, alternative "soft" solutions would be identifed and implemented in areas where shoreline protection is necessary. The primary focus for softening of the shoreline should occur on NPS and private property within park boundaries. Currently 30% of the shoreline along Jamaica Bay within park boundaries is human modifed. Partnerships should also be advanced to soften shorelines along the primary creeks and bay shoreline that is not within park boundaries. Additional strategies would be:

- identify and prioritize other suitable sites, methodologies and partners for shoreline restoration/rehabilitation along other areas of shoreline,

- road and parking area could be redesigned and rehabilitated with permeable pavement to provide visitor access to the area,

- remove hard structures wherever possible and restore natural shoreline features, including salt marsh, estuarine beach, and freshwater wetlands,

- identify and implement alternative "soft" solutions in areas where shoreline protection is necessary.

Salt Marshes

Salt marshes will provide for sustainable and ecologically functioning salt marsh islands and fringing salt marshes. Some strategies to achieve this condition would be:

- Develop a system for prioritizing marshes for restoration,

- Adopt shared goals for marsh preservation, restoration and the elimination/management of anthropogenic causes of marsh loss, working with residents, organizations and partner agencies,

- Pursue research to understand and eliminate and/or manage human-related stressors and causes of marsh loss. Direct research at understanding future effects of sea level rise and global climate change on the sustainability of marshes,

- Pursue salt marsh restoration as a method of increasing our understanding of the causes of marsh loss as well as the processes and functions of marsh islands in an urban setting,

- Continue to develop and evaluate construction methods that are ecologically sound and cost effective. Continue benefcial use of dredge materials and explore mechanisms to couple restoration and dredge projects and cost-effectively obtain dredge materials.

Estuarine Benthic Habitats

The ultimate littoral-zone restoration objective is to re-establish self-sustaining benthic communities of Eastern Oysters, Eelgrass, and Bay Scallops, along with their numerous indigenous species. As these natural estuarine communities develop, they are likely to include more than 150 species of invertebrate animals, plants, and micro-organisms. Some strategies would be:

- Improve water quality, rebuilding shell beds at multiple locations throughout the bay, replanting key species (Eelgrass, Eastern Oysters, Bay Scallops) at sub-tidal depths in numerous locations, and restricting human disturbance at those sites,

- Develop a sustained, multi-partnership effort to achieve ecosystem restoration goals, including acquiring public and private funding, as well as innovative means of reducing current costs restoration.

Estuarine and Marine Finfsh and Shellfsh Communities

Finfsh and shellfsh communities in Gateway waters should refect and sustain a high level of species richness, appropriate diversity and sustainable populations of each species. Healthy and robust fsh and shellfsh communities are dependent on healthy estuarine ecosystems with a complete assemblage of habitats and species throughout the food web. A key goal would be to achieve a sustainable fshery, representative of and supported by a biologically productive mid-Atlantic region estuarine habitat complex.

Healthy and robust fsh and shellfsh communities are dependent on healthy estuarine ecosystems with a complete assemblage of habitats and species throughout the food web.

Table 2-2. Summary of Natural Resource Conditions.

Desired Conditions	Examples of Future Actions
Δ The park's fundamental natural resources obtain a higher degree of ecological integrity and resilience to changing climatic conditions, their associated natural processes continue unimpeded to the greatest extent possible. Δ Natural resource management, conservation, restoration, and research focus on fundamental natural resources that are adapting to changing ecological and climatic conditions. ~~sustainable levels of extraction by park visitors, and new scientifc information.~~ Δ Gateway NRA is a leader in the study of urban ecology and collaboration with external Δpartners to protect fragile ecosystems in the urban context and in demonstrating practical approaches for climate change adaptation and sustainability. Δ Internal and external human impacts on Gateway's resources are monitored and harmful effects minimized, mitigated, or eliminated in coordination with partners. Δ Gateway expands and improves the inventory, monitoring, and understanding of its natural resources so as to have the best possible science based information available to guide management decisions. Δ Threatened and endangered species and habitat are protected to the greatest extent possible and other particularly sensitive species and biotic communities are closely monitored and protected. Δ Extractive uses of natural resources by hunting, fshing and trapping are regulated to maintain ecological integrity, recreational values and the sustainability of target populations.	Δ Promote research to increase understanding of Gateway resources, natural processes, and human interactions with the environment with emphasis on fundamental resources. Δ Continue to participate in and encourage ongoing partnerships with local, state, and federal agencies, and nongovernmental organizations in programs that have importance within and beyond park boundaries. Δ Continue to monitor water quality and quantity within a local and regional context, and expand monitoring as needed to more fully understand the status and trends of ground and surface water. Δ Participate in local, state, and national water quality remediation and watershed planning programs. Δ Update strategies for water resources management as needed to refect changing resources and management issues. Δ Continue to inventory wetlands so that important wetland communities can be identifed and protected. Δ Provide education and outreach programs to highlight conservation and management issues facing the park and related lands and encourage partners who are able to assist with ecosystem stewardship. Δ Continue to assess human-related threats to water quality and quantity. Δ Continue to eradicate invasive nonnative plants in the park. Work with local, state, and other federal agencies, private landowners, and visitors to minimize introduction and the spread of invasive nonnative plant species into the park and the region. Δ Continue cooperative management of threatened and endangered species within and outside the national park to stabilize or improve the status of these species. Δ Strive to preserve populations and habitats of migratory species inhabiting the park, and cooperate with external partners . Δ Continue to educate visitors and the public about wildlife issues and concerns. Δ Manage extractive uses of natural resources by hunting, fshing and trapping to maintain sustainable populations of the target species and provide rewarding visitor experiences. Δ Continue toocollect baseline data regarding disturbance toothtreatened and endangered speecies, such as data on disturbance levels from authorizeed activities, unauthorized intrusions, visitation levels, staffng levels.

Table 2-2. Summary of Natural Resource Conditions (continued).

Desired Conditions	Examples of Future Actions
	Δ Continue with monitoring and conservation measures for threatened and endangered species, such as providing symbolic fencing with posts and signs around nesting birds, predator removal, closures, buffer zones, prohibition of certain recreational activities during breeding season (kite fying, kite surfng, freworks) and visitor education. Δ Continue to review the effectiveness of conservation measures for threatened and endangered species and adapt and revise the conservations measure as conditions change. Δ Continue to consult with USFWS on conservation measures for threatened and endangered species for site specifc planning efforts and natural resource management plans. Δ Continue to work with USFWS to update resource management plans for threatened and endangered species (such as the Shoreside Plan) as needed to refect changing conditions.
Conditions Specifc to Marine Resources	
Δ Coastal and maritime ecosystems including the Jamaica Bay waters are protected, studied and restored. Δ Recreational uses are compatible with resource protection goals. Visitors to the marine zone avoid physical impacts and conserve the aesthetic and ecological values of shoreline areas and marine habitats. Δ Visitors possess knowledge and awareness to safely pursue recreational opportunities and protect the resources they enjoy.	Δ Work to protect the values of marine and estuarine resources, including preservation of fundamental physical and biological processes. Δ Improve marking and signage of channels and boundaries for sensitive zones and other fragile areas. Δ Expand boater outreach and education programs to protect submerged and shoreline vegetation and wildlife while allowing a wide range of recreation opportunities and reasonable recreational access. Δ Require ~~commercial services providing~~ entities providing activities such as kayak and boat excursions, camping, and hiking to avoid damaging fragile shoreline and marine areas and avoid disturbance of wildlife. Δ Work with partners to develop and disseminate a Jamaica Bay Map and Guide to provide boaters with information on the unique ecology and wildlife of the Bay as well as zones, regulations and stewardship of marine resources. Δ Identify lands/waters outside the national park where ecological processes and human use affect park resources or are closely related to park resource management considerations; initiate joint research, monitoring, management actions, agreements, or partnerships to promote resource conservation.

To attain the desirable level of estuarine ecosystem health and productivity requires comprehensive actions that include:

- eliminating the current levels of chemical and nutrient input,
- improving sediment chemistry to a point where contaminant bioaccumulation would be eliminated or at least substantially reduced,
- restore portions of the bay that are not supporting benthic / nekton communities due to chronically low levels of dissolved oxygen (hypoxia), and in some areas, anoxia,
- working with local, state and federal authorities, ensure the appropriate levels of fshing to maintain sustainable populations and outstanding recreational fshing opportunities.

Marine and Estuarine Resource Management Plan

A science-based plan would be developed to identify baseline and desired conditions to improve management of fsh and shellfsh resources, submerged aquatic vegetation and marine species, working closely with state, local and federal partners and the public. The plan would evaluate user capacity and identify types and levels of marine recreational uses necessary to improve the quality of park resources, reduce crowding and conficts between uses, and provide a full range of visitor experiences. Visitor surveys and direct input from stakeholders will inform the plan.

Preserving Heritage: A Sustainable Future for Cultural Resources

To date, Gateway has not had a comprehensive approach for the management and repair of cultural resources. Cultural resources, which include the majority of the physical structures in the park, were repaired when funding became available; uses found when outside entities expressed interest in the building. With more than 550 historic structures and landscapes spread across three units, preventative maintenance was completed on some, but not all of the structures. This disjointed approach left the majority of the resources vacant, in poor condition and in need of major capital repair projects. The park determined that prioritization of these resources was necessary to guide cultural resource management and GMP decisions.

Prioritization Process

In order to guide GMP decisions, the planning team determined that a prioritized list of resources was necessary to inform future preservation efforts, funding, maintenance and business leasing efforts. Using a variety of information sources, a group of park and NPS staff with expertise in history, historic architecture, conservation, cultural landscapes and business services, created a process to evaluate over 330 structures and associated landscapes that are contributing resources to the park's nine National Register Districts (see the "Cultural Resources – Historic Districts and Structures" section of Affected Environment for a complete description). Eight factors were used to evaluate and prioritize the park's resources. These include the following:

- Fundamental Resource
- National Register Status
- National Register Level of Signifcance
- Condition
- Uniqueness to Gateway
- Visibility
- Potential Use
- Vulnerability to Future Storm Events

Numerical points were assigned to each criterion and totaled for a score. Depending on that score, each resource was placed in one of three bands: preserve, stabilize, or ruin. The bands are defned as follows:

- **Preserve:** Actions will be taken to maintain and preserve these structures. Efforts will be made to maintain these structures in their current condition or move these structures into good condition through preservation or rehabilitation by NPS or partners. ~~These structures will be utilized for operations, visitor services, and interpretation.~~ These structures would be used to support visitor programs, interpretation, operations and appropriate commercial uses.

- **Stabilize:** Structures where actions will be taken to render an unsafe, damaged, or deteriorated property stable while retaining its present form. Minimal efforts will be made to maintain the structure in its current condition. Unless a use and/or funding is found, the structure may fall into disrepair.

- **Ruin:** Structures in poor condition where one or more of the basic structural elements has been lost and due to this condition are without viable reuse options. Resources may be removed or fenced off to keep from being a safety hazard; no work will be done to better the condition of the resource.

Under all the alternatives, the structures in very poor condition that the NPS has placed in the ruin band would remain as ruins and continue to decay naturally by the forces of nature. Some of these resources are zoned in the Ruin Subzone. Others may be part of another zone and removed from the landscape in keeping with the intention of that management zone. Gateway would prioritize documentation of these structures and, in some cases, use interpretive media to convey information about their signifcance and former use.

The contributing structures and landscapes priority band may change as data used to evaluate these resources is updated. As condition information and national register nominations are updated and/or new nominations are prepared, the list of resources and the priority band will be updated. The priority band may change.

Table 2-3. Future Conditions for Cultural Resources at Gateway.

Desired Future Conditions	Examples of Future Actions
Cultural Resource Management	
Δ Locations where cultural resource management is a priority are identifed, and at these locations human and natural impacts on cultural resources are monitored, minimized, or eliminated. Δ Visitors and park staff recognize and understand the value of the park's military and maritime history and resources within their local and national context. Δ Cultural resource managers look beyond the park's borders and take into account resources found within the regional context (including other units of the National Parks of New York Harbor) and encourage scholarly research of Gateway's ties to the region. Δ Sea level rise models as well as current climate change science inform cultural resource management. Δ Research and documentation of the park's cultural resources are aligned with its purpose, signifcance and fundamental resources and values. Δ Through ongoing investigation, study, and scholarly research, Gateway expands and improves the inventory, monitoring, and cataloging of its cultural resources so as to have the best possible information available to guide management decisions.	Δ Conduct scholarly research and use the best available scientifc information and technology for making decisions about management of park cultural resources. Δ Continue to collect information to fll gaps in the knowledge and understanding of the national park's cultural resources, to assess status and trends, and to effectively protect and manage cultural resources. Δ Build partnerships focused on the preservation, maintenance, and interpretation of fundamental cultural resources. Δ Update and keep current the park's Cultural Landscape Inventory and ~~List of Classifed Structures,~~ list of Classifed Structures and other cultural resource inventories.
Historic Structures	
Δ Finding viable uses for historic structures is emphasized and the adaptive use of historic structures for park needs is encouraged before building new infrastructure. Δ Historic buildings and cultural landscapes are managed to produce income that offsets the cost of their ongoing maintenance.	Δ Reduce impacts of natural resources on cultural resources (i.e. remove vegetation) Δ Pursue ~~options for~~ leasing or other alternative authorities for use of fundamental historic structures to help preserve these through adaptive re-use in the face of limited funding. Δ Prepare historic structure inventories and reports and implement actions as appropriate. Δ Monitor, inspect, and manage identifed and evaluated historic structures to enable long-term preservation of historic features, qualities, and materials. Δ Create design guidelines and/or historic structure reports for specifc areas in the national park to preserve architectural and character-defning features. Δ Conduct preservation maintenance and other approved treatments of historic structures in a manner that maintains, to a high degree, the integrity of historic materials and fabric.

Table 2-3. Future Conditions for Cultural Resources at Gateway (continued).

Desired Future Conditions	Examples of Future Actions
Historic Structures (continued)	
	Δ Document and demolish non-fundamental cultural resources in a poor, degraded state that do not provide natural resource value.
Cultural Landscapes	
Δ Cultural landscapes are preserved to retain a high degree of integrity.	Δ Prepare cultural landscape inventories and reports and amend existing reports as needed. Δ Monitor, inspect, and manage identifed and evaluated cultural landscapes to enable long-term preservation of historic features, qualities, and materials. Δ Create design guidelines and/or cultural landscape reports for specifc developed areas in the national park to preserve character-defning features. Δ Implement actions identifed in cultural landscape reports. Δ Collaborate with park natural resource staff to develop cultural landscape preservation strategies that complement activities to manage vegetation and natural processes.
Museum Collections	
Δ A scope of collections refective of the park's purpose is maintained, protected, and made available to support scholarly research and interpretation. Δ Gateway's museum collection is properly inventoried, curated, protected, and preserved. Δ Provisions are made for appropriate access to the collection by NPS staff and the public for their use in exhibits, interpretation, resource management, and research.	Δ Acquire, develop, and preserve museum collections that document the history, resources, and signifcance of the national park. Remove those items that do not belong. Δ Maintain high standards for museum practices and ensure accountability for park collections. Δ Continue to research, document, and catalog the museum collection, which serves as an interpretive and management resource for park staff and the public. Δ Develop traditional and web-based exhibits to make collections more accessible. Δ Use existing and emergent technologies for collections access and management. Δ Upgrade facilities and staffng to better protect the park's collection of archeological and historic artifacts.

Table 2-3. Future Conditions for Cultural Resources at Gateway (continued).

Desired Future Conditions	Examples of Future Actions
Archeological Resources	
Δ Archeological resources and submerged cultural resources would remain in situ and undisturbed, unless removal of artifacts or intervention into cultural material is justifed by preservation treatment, protection, research, interpretation, or development requirements. Δ Signifcant archeological and other scientifc data threatened with loss from the effects of natural processes, human activities, preservation treatments, park operations, or development activities would be recovered, recorded, or otherwise preserved.	Δ Conduct suffcient research to identify and evaluate park archeological resources and assess condition and potential threats. Δ Continue long-term monitoring of archeological sites to measure deterioration from natural and human sources and to evaluate the effectiveness of management actions to protect resources and mitigate impacts. Δ Preserve and protect archeological resources by eliminating and avoiding natural and human impacts, stabilizing sites and structures, monitoring conditions, and enforcing protective laws and regulations. Δ Make decisions that promote preservation of archeological resources in place. Δ Carry out required consultation and legal compliance and consider concerns raised. Δ Include information about archeological resources, as appropriate, in interpretive and educational programs for the public.
Ethnographic Resources	
Δ Ethnographic resources having cultural importance for tribes and other groups are identifed and protected. Δ Opportunities remain for tribal members and traditionally associated people to access culturally important places in the park.	Δ Consult with the culturally associated Delaware Nation, Delaware Tribe and Stockbridge-Munsee Community on program and resource management planning Δ Conduct park programs and activities in an way that respects the beliefs, traditions, and other cultural values of those who have ancestral or historic ties to park lands. Δ Identify and document, through studies and consultations, traditional cultural properties and other ethnographic resources, traditionally associated people and other affected groups, and such groups' cultural affliations to park resources. Δ Recognize the sensitivity of ethnographic resources and associated data and providdee confdentiality to the extent possible under the law. Δ Collaborate with traditional cultural expperts to develop a park strategy for ethnographic resources.

The criteria defnitions and a list of the evaluated resources and their bands are found in Appendix B. Additional information about the resources and National Register districts is detailed in the "Cultural Resources – Historic Districts and Structures" section of chapter 3.

Future cultural resource management at Gateway would be guided by the desired future conditions described in the management zone chart and in Table 2-3 as well as specifc guidance at individual park areas. In each alternative, fnding viable contemporary uses for historic structures and cultural landscapes would be a priority preservation strategy for Gateway. The park would pursue public-private partnerships that assist with the preservation and reuse of these places for a wide variety of uses including visitor services, administrative and partner needs, recreational business opportunities or compatible private use.

Under both alternatives, NPS and its partners would make a concerted efort to raise awareness of Gateway's recreational opportunities and natural and cultural resource and to recruit a broader array of users to visit the park.

Improving Visitor Experience

Both alternatives focus on improving the visitor experience at Gateway in several ways. There would be an emphasis on improving communications, promotions, and wayfnding in order to raise the visibility of Gateway, to recruit new audiences and to improve visitors ability to navigate to and through the park. Additionally, both alternatives expand on the existing park experiences by providing more opportunities for multi-day excursions and overnight stays within the park.

Enhanced Communications, Outreach & Wayfnding

Under both alternatives, NPS and its partners would increase efforts to raise awareness of Gateway's recreational opportunities and natural and cultural resources and to recruit a broader array of users to visit the park. As listed in table 2-4, creative communications campaigns employing innovative technologies as well as traditional outreach channels would target visitors and potential visitors from a diversity of socio-economic and cultural backgrounds. Educational, interpretive, recreational and volunteer stewardship programs would be expanded in both alternatives and will be important tools for increasing visitor understanding and appreciation of the park's signifcance and its resources.

Orientation and wayfnding is another challenge both alternatives would address. Through more frequent and more visible signs, the visibility of Gateway's park lands would be increased for passerbys and neighboring residents. Additionally, orientation kiosks with maps and park information would be located at key locations and would reveal that Gateway's individual park lands are part of a much larger network of protected park lands within the NYC metropolitan area. Traditional signs at entrances and along roads would be complemented by technological-based information sources (e.g. gps-enabled apps, websites, social media) geared toward facilitating more convenient and clearer navigation of Gateway's resources.

Multiple-day Experience

Gateway is a large park with thousands of acres spread out among three units in two states with additional adjacent park lands managed by local and state agencies. All of these places provide a variety of things to see and do that cannot be experienced in a single day. The

Learn-to-Camp. This would be camping in an instructional setting where visitors would gain skills and confdence related to camping and other outdoor activities.

alternatives will propose different types of camping and lodging, varied use levels, and a range of supporting facilities. ~~that may be appropriate~~. In the future, Gateway will work with partners to ~~develop~~ explore and offer a variety of overnight accommodations such as camping, youth and elder hostels, eco-friendly lodges and small inns, where appropriate and feasible at each unit. These overnight lodging facilities will be similar to those found in other national parks throughout the country.

As part of this general management plan effort, NPS staff and partners developed options for camping to be tested as part of the GMP/EIS alternatives. The options represent initial recommendations for camping at Gateway, based on the best information available at the time of planning and will require further planning, analysis, consultation and compliance. This information was derived from multiple sources, including the GMP/EIS alternative concepts and management zones, site visits and preliminary site analysis, and input received during two planning workshops and at summer 2012 public open house meetings.

The initial camping recommendations within the GMP/EIS would require further analysis, site planning, consultation and compliance. Camp sites would be appropriately sited to avoid impacts to threatened and endangered species. Access and trails to/from camp site areas would be defned, controlled, and signed, to limit disturbance to threatened and endangered species and other resources. Educational materials concerning threatened and endangered species would be provided at camp site areas. In areas of the park, that have threatened and endangered species, beach camping would not be permitted during breeding season (March 15- September 1). The park would continue protection measures for threatened and endangered species, such as providing symbolic fencing with posts and signs around nesting birds, establishing buffer zones, and prohibiting certain recreational activities during breeding season.

The camping program at Gateway is intended to provide a variety of opportunities for visitors. Proposed camping options range from primitive tent camping in remote backcountry areas to facilities for recreational vehicles that may offer full utility hookups. Staying overnight in permanent or semi-permanent structures (e.g., cabins, tent-cabins, or yurts) may be pursued. This range of camping opportunities would enable new campers to gain confdence and skills as they camp in different parts of the park, and allow experienced campers to "get away from it all" in the "urban wildlands" of Gateway. The following section describes a range of camping types to be offered at Gateway. The camping options presented in this plan use these defned types, exploring different confgurations for their placement within Gateway's three units. Where mentioned, "campsite living space" refers to the area in which a camper would sleep, cook, and eat. Amenities within this space would include a tent pad, fre pit/grill, and picnic table.

Programmatic Camping

Programmatic camping would consist of guided or ranger-led camping activities that emphasize interpretation and education on a variety of natural and cultural resources. Equipment and supplies may be provided to campers depending on the program.

- **Learn-to-Camp.** This would be camping in an instructional setting where visitors would gain skills and confdence related to camping and other outdoor activities. Educational experiences for beginner campers to those with advanced skill sets would be offered, enabling a large cross-section of participants to be included.

- **Historic.** This would entail camping in a historical setting where camping or other living quarters would have existed during a historical period of signifcance. Examples might include camping in historic forts or parade grounds. Storytelling, artifacts, architectural character, interpretive exhibits, and interactive programs would bring to life the history of the site for participants. Interpretive programs and events would be integral to the camping experience.

- **Natural.** This type of camping that would immerse participants in a natural setting and promote the learning of outdoor skills, natural history, and environmental stewardship. Organized activities might focus on natural resources. Interpretive programs would be integral to the camping experience. Examples might include overnight canoe/kayak programs, dune camping, etc.

- **Permanent or Temporary Campsites.** These programs would be offered on an occasional basis. The character of campsites would vary, depending on the program. In some instances permanent tent pads or platforms might be provided, while in others (for instance, a historically signifcant setting), campers might pitch a tent in a feld and avoid leaving a lasting mark.

- **Moderate Services and Amenities.** Where appropriate, services provided might include vault or fush toilets, showers, and areas for interpretive programs.

Backcountry camping would appeal to self-reliant visitors seeking opportunities for solitude and a nature-based camping experience.

Designated Backcountry/Beach Camping

Backcountry camping would appeal to self-reliant visitors seeking opportunities for solitude and a nature-based camping experience. Beach camping opportunities may vary. In some instances beach camping may offer the high probability of solitude, while in other places it may facilitate the enjoyment of recreational activities such as fshing, in the company of others. Where threatened and endangered species have historically existed, beach camping will be seasonal and will occur outside of breeding season and will not be located within threatened and endangered species habitat.

- **Moderate to High Opportunities for Solitude.** Backcountry campers would expect minimal levels of interaction with other visitors and largely unmodifed natural or natural-appearing environment. Opportunities for solitude may vary from one beach camping experience to another.

- **Highly Self-Reliant Campers.** Campers would carry everything they need (including tents, food, and water) and follow Leave No Trace principles.

- **Designated, Dispersed Campsites.** Campsites would be designated to prevent resource impacts and would be widely spaced to promote opportunities for solitude in

the backcountry and in some beach camping. Spacing between designated campsites may vary from approximately one to four campsites per acre, but each campsite would occupy a small area.

- **Most Remote Access.** Backcountry campers would hike or paddle to the designated campsite from a parking lot / trailhead or boat launch. Distances would vary, but would be expected to be greater than one-quarter mile. The recreational activity of accessing the campsite would be an integral part of the backcountry experience. In some instances, beach camping could require just a short walk from the parking area.

- **Primitive, Designated Campsites.** Visitors would be required to camp at designated sites, which would be marked by a stake or similar method. Resource conditions would be monitored, and from time to time campsites could be relocated to prevent or limit impacts. ~~Seasonal closures to protect bird nesting sites would probably be implemented.~~

- **Motorized Use Prohibited.** Motorized use would not be permitted.

- **Limited Services and Amenities.** Services and amenities would be minimal and might include a marker, vault toilets (at parking or perhaps at the campsite), and limited signage (e.g., directional signs or informational signs at the trailhead that focus on site resources).

Walk-in Tent Camping

Walk-in tent camping would require visitors to walk a short distance from their vehicles or parking lot to a designated tent campsite within a campground. Walk-in tent campers would typically see, hear, and possibly interact with other tent campers close by.

- **Moderate Opportunities for Solitude.** Campers would expect moderate to high levels of interaction with other visitors and, as feasible and appropriate, a natural-appearing environment. The fully pedestrian environment might encourage visitor interactions but also would limit the impact of modern development on solitude.

- **Self-reliant Campers.** Campers would carry everything they need (including tents, food, and water) to their campsites and follow Leave No Trace principles.

- **Concentrated Campsites.** Spacing between campsites might vary to promote differing levels of solitude and privacy; however, in general the walk-in campsites would be concentrated to limit the development footprint. The density of campsites might range from approximately 15–60 campsites per acre.

- **Moderately Remote Access.** Campers would walk a short distance from a parking lot/ trailhead (approximately 50–300 feet). Campers would therefore enjoy a moderate degree of separation from roads, parking, and other developments.

- **Improved Campsites.** Campgrounds would be modestly improved, with accessible walkways leading to campsites. Campsites would include designated tent pads and living spaces.

- **Motorized Use Prohibited.** Motorized use within walk-in camping areas would not be permitted. Parking would be consolidated at the edges of the campground.

- **Moderate Services and Amenities.** Where appropriate, services and amenities might include: vault or fush toilets, showers, or picnic facilities. Campsites would include designated tent pads and living spaces.

RV Park

The recreational vehicle (RV) park would allow for high-density RV camping. Utility hookups or dump stations might be provided.

- **Low Opportunities for Solitude.** Campers would expect moderate to high levels of interaction with other visitors and, as feasible and appropriate, a natural-appearing environment. The immediate setting may resemble a large parking lot, but it would be adjacent to more natural areas.

- **Consolidated Sites.** Parking stalls would be in close proximity to one another. Appropriately sized stalls would accommodate RVs. Visitors might stay within their vehicle or park it for several days while staying overnight in other areas of the park or outside the park.

- **Moderate Services and Amenities.** Where appropriate, available services and amenities might include: vault or fush toilets, showers, and a camp store. The RV park might be in a central location within the park, where some services might be available nearby. Electric or other hookups might be provided.

Drive-in (Vehicle Access) Campground

"Drive-in" campsites allow for a traditional designed campground experience for tent and RV campers. Visitors would park their vehicles at their campsites, which typically would be arranged around a campground loop drive.

- **Low Opportunities for Solitude.** Campers would expect moderate to high levels of interaction with other visitors, and a designed environment, but one that is still scenic and natural-appearing, as feasible and appropriate.

- **Developed Campsites.** Campsites would be arranged around designed loop roads, allowing campers to park their vehicles right at the campsite. Within the campground, loops might be designated for different types of camping (e.g., RV, tent, or a combination of both). An accessible, internal pedestrian circulation network would also be provided.

- **Moderate to High Services and Amenities.** Where appropriate, services and amenities might include: vault or fush toilets, showers, interpretive/educational areas, playgrounds, utility hookups, and/or a camp store. The campground might be in a centrally located position in the park so some of these amenities might be available nearby.

- **Tent.** Campsites would include a parking area that could accommodate up to two standard-size vehicles (probably a back-in spur) and a living space. Campers would pitch their tents on assigned tent pads.

- **RV.** Campsites would include a parking area that could accommodate a recreational vehicle and condensed living space. Pull-through parking would be preferred in order to safely accommodate large vehicles.

Structural Camping

The types of structures would vary but all would provide some degree of shelter, privacy, convenience, and comfort for campers. Depending on site factors, campers could drive up to the structure or take a short walk to the structure. Typically, this experience would require minimal camping equipment or supplies.

- **Low to Moderate Opportunities for Solitude.** Depending on location and other factors, campers would expect moderate to high levels of interactions with other visitors and, as feasible and appropriate, a natural-appearing environment.

- **Shorter Access to Limited Motorized Access.** Access may vary. Campers may walk a short or moderate distance to access some camping units or enjoy direct access by vehicle to camping units.

- **Moderate Services and Amenities.** Campers would stay overnight in shelters which may include lean-to shelters, yurts, moveable or permanent cabins, or tent-cabins. Where appropriate, other services and amenities may include: vault or fush toilets, showers, or educational/interpretive areas. Camping equipment (sleeping bags, stoves, etc.) may be provided by the operator.

Future visitor use and experiences at Gateway would be guided by the desired future conditions described in the management zone chart and in Table 2-4 as well as specifc guidance at individual park areas. Table 2-4 provides desired conditions and examples of future actions to improve visitor use and experience at Gateway.

Table 2-4. Visitor Use and Experience.

Desired Conditions	Examples of Future Actions
Communications and Outreach	
Δ Visitors from a diversity of socio-economic and cultural backgrounds learn about Gateway's resources, fnd convenient access to and through the park, and enjoy a wide variety of recreational, stewardship and educational opportunities. Δ Park-related messaging and media respond to evolving social conditions, staying current and relevant to visitors and changing audiences. Δ Outreach efforts build and sustain relationships with schools, organizations, partners, and neighboring communities. Δ Awareness of the park's mission and fundamental resources increases among partners and a diversity of audiences.	Δ Utilize print media, social media and digital media to more broadly disseminate information about Gateway's recreational opportunities, programming and resources. Δ Work with partners to increase visibility and understanding of NPS and Gateway's resources through joint outreach, programming, communication and cross-promotions. Δ Develop interpretive media supportive of park purpose, signifcance, and interpretive themes that is relevant to a more diverse audience and recruits more interest in Gateway. Δ Actual and virtual interpretive programs are designed to appeal to a broad audience and increase visitor understanding of and appreciation for the park's resources. Δ Continue to educate staff, visitors, and the public about park interpretation/education programs. Δ Link programming and activities to school science and history curricula in NY/NJ Δ Stay informed of changing visitor demographics and preferences to effectively tailor programs for visitors. Δ Continue to promote improved pre-trip-planning information and orientation for park visitors through the park's website and other media. Δ Work with local communities and partners to provide services inside and outside park boundaries, where appropriate.

Table 2-4. Visitor Use and Experience (continued).

Desired Conditions	Examples of Future Actions
Visitor Experience	
Δ Visitors enjoy an NPS experience that is consistent with the purpose, signifcance, fundamental resources, and values of Gateway. Park management prioritizes its focus and shapes the visitor experience to provide opportunities for the use and enjoyment of resource-based recreation, historic landscapes and sites, educational and interpretive activities, open spaces, and natural areas. Δ The recreational needs of the diverse audiences of the surrounding communities are identifed and used to inform management decisions regarding facility development and visitor services. Δ Interpretive and educational programs increase visitor understanding and appreciation of the park's signifcance and its resources. Δ Gateway is a regional and national learning laboratory offering abundant feld learning experiences. Curriculum-appropriate, place-based educational programming inspires student understanding and is regularly updated to refect current scholarship. Δ ~~Visitor services and~~ Facilities and programs are appropriately scaled and sensitively located to meet the needs of visitors, minimize impacts on park resources, and facilitate enjoyable, safe, and educational visits to the park. ~~Accessible f~~Facilities and programs enable visitors of all abilities to enjoy the park. Δ Natural soundscape and dark night skies are preserved within Gateway and the sounds of modern society and light pollution are minimized in order to provide visitors a unique nature experience in such a highly developed urban context. Δ Views of New York Outer Harbor and ocean horizon are protected. Δ Sports-related activities are used as a foundation for a broader national park experience. Δ Collaborative partnerships with non-proft and private partners expand the park's capacity to protect park resources and provide high quality recreation opportunities, interpretive and educational programming, and other visitor experiences.	Δ Hands on environmental stewardship and cultural resource preservation programming provide opportunities to learn about the park's habitats and ecological systems as well as its history and signifcance. Δ Cooperate with partners, other governmental agencies, educational institutions, and other organizations to enrich interpretive and educational opportunities locally, regionally, and nationally. Δ Build on ongoing place-based learning experiences that link traditional science and history classrooms with resources found at Gateway ~~(e.g., OPEX – operation explore)~~ Δ Develop and update a long-range interpretive plan, with emphasis on providing information, orientation, and interpretive and education services in the most effective and engaging manner possible. Δ Create and implement an education strategy plan that outlines goals and actions for providing curriculum and place-based education programs. Δ Explore management and maintenance of athletic felds and sports leagues by a third party.

Table 2-4. Visitor Use and Experience (continued).

Desired Conditions	Examples of Future Actions
Orientation, Access, and Wayfnding	
Δ Visitors are informed and oriented before they arrive and throughout the visit. They enjoy a safe and comfortable experience at the park, and navigate clearly among the districts and units. Δ Public access to and within Gateway is made more convenient through a combination of ferry services, busses, subway, and non-motorized modes such as walking, biking, and human powered boats. Δ Gateway is accessible via non-motorized/human-powered modes including bicycle, foot-powered and watercraft. A multitude of opportunities to experience the units and districts of Gateway via non-motorized/ human-powered modes are available. Δ Many technologies are used to provide an effective orientation, wayfnding, and communication system that guides visitors easily between and within the park's districts.	Δ Through improved signage, branding, virtual connections and a signifcantly increased ranger presence, make visitors more aware that Gateway is administered by the NPS Δ Provide information kiosks, brochures, maps and digital media that showcases Gateway's parklands as part of a broad network of public lands within the New York City metropolitan area. Δ Increase the visibility of Gateway and improve wayfnding through a unifed and comprehensive sign system Δ Expand on efforts to tie into regional water-based transportation systems (e.g., New York City water trail, ~~NPNYHC ferry planning~~) Δ Continue to support and plan enhanced regional trail linkages including flling gaps in current facilities and expanded connectivity to New York City greenways. Promote these regional trails (greenways) as recreation corridors (e.g., Belt Parkway) Δ Improve wayfnding from local transit stops to parks Δ Implement traveler information system (TIS) to include parking management system (PMS), highway advisory system (HAR), and variable message signs (VMS)
Facilities, Services and Operations	
Δ Facilities and related development are the minimum necessary to serve visitor program needs and protect park resources. Δ Visitor and administrative facilities are as compatible as possible with natural processes and surrounding landscapes, aesthetically pleasing, and functional. Δ ~~Commercial services in the park are limited to those that are necessary and appropriate and that are compatible with the park purpose.~~ Δ Staff housing is suffcient to ensure an adequate level of protection for park resources, visitors, employees, and government property, and to provide necessary services. Δ Gateway is a leader in sustainability. Decisions regarding NPS operations, facilities management, and development —from initial concept through design and construction—refect principles of resource conservation and sustainability. Δ Staffng and volunteer and partner support is adequate to meet the park's management objectives.	Δ ~~Work to make the park appear more cared for overall~~ Δ Improve facilities that welcome visitors to the park and improve the sense of arrival and visibility of the NPS and its park units Δ Actively pursue the adaptive re-use of ~~fundamental~~ historic structures. Δ Implement the PAMP and reduce the number of non-fundamental assets that the park must maintain Δ Integrate NPS asset management practices into decision making and planning. Build, modify, and/or maintain facilities according to projected funding levels and defned park priorities. Δ Consider removal of facilities that do not meet minimum NPS criteria and/or are not cost effective to maintain. Δ Continue to strive to provide affordable housing in or near the park for emergency response staff and seasonal and entry-level employees. Δ Continue to provide overnight accommodations in the park for volunteers and partner organizations.