

CHAPTER FOUR: ENVIRONMENTAL CONSEQUENCES





ENVIRONMENTAL CONSEQUENCES

I. Introduction and Methodology

The discussion of environmental consequences, or impacts, is intended to provide an analysis of the effects reasonably expected from the adoption of each alternative. This chapter describes the potential impacts of the General Management Plan (GMP) alternatives on the affected environment of the National Monument and describes proposed mitigation measures associated with the alternatives.

Impacts were evaluated at a level that would allow decisions about the overall management objectives of each alternative to be made. Environmental consequences—for the cultural, natural, and socioeconomic environments—were evaluated as specifically as possible using Council on Environmental Quality (CEQ) regulations including type, context, duration, and intensity and DO-12: Conservation Planning, Environmental Impact Analysis and Decision-Making and its accompanying handbook. The CEQ implements the National Environmental Policy Act of 1969 (NEPA). Specific actions would require further site-specific environmental assessment in compliance with NEPA and other applicable laws and policies.

To assess the impacts of proposed actions on cultural resources within the National Monument as well as provide salient descriptive information

for the previous chapter, a review was made of relevant resource materials, such as the *Governors Island Preservation and Design Manual*, the Historic Structure Reports for Fort Jay and Castle Williams, the *Archeological Overview and Assessment Report*, and the *Cultural Landscape Inventory*. Numerous meetings, conversations and consultations occurred with NPS cultural resources experts, who also reviewed and commented on the GMP at multiple junctures. Also, numerous site visits and staff consultations occurred throughout the GMP process.

To assess the impacts of proposed actions on natural resources, this GMP often draws upon consultations with NPS natural resources experts; the 1998 Final Environmental Impact Statement prepared by the General Services Administration (GSA FEIS), which evaluated the impacts of a range of land use options for the island once transferred from federal ownership; and the Ellis Island Development Concept Plan and Draft Environmental Impact Statement (DCP DEIS). Data from that GSA FEIS and DCP DEIS was verified and updated as necessary and consultation letters sent to New York State Department of Environmental Conservation and US Fish and Wildlife. Analyses in this GMP are based on the management alternatives described in Chapter 2.

To estimate the impacts of past, current, and possible future actions for the cumulative impacts assessments, consultations with GIPEC occurred through conference calls, meetings, and a review of their current reports and web site.

A. Agency Consultation for Natural and Cultural Resources

The NPS is required to consult with relevant state and federal agencies that have jurisdiction by law or special expertise. The NPS has consulted with numerous state and federal agencies as reported in Chapter 5: Consultation and Coordination. The NPS will continue to consult with these agencies, and with the public, through the completion of the Final GMP and its subsequent implementation.

Future Agency Consultation

This Draft Environmental Impact Statement (DEIS) has been prepared to satisfy the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended. NEPA procedures have been used to inform the public about possible undertakings with the potential to affect properties listed on or eligible for listing on the National Register of Historic Places. This was done in conjunction with the Advisory Council on Historic Preservation's regulatory provisions on coordination with NEPA (1995 programmatic agreement with the NPS).

This DGMP/EIS is a programmatic statement. The proposed action and alternatives consist of a basic management framework for decision making; therefore, site-specific details and recommendations are not always included. Consequently, the DEIS presents an overview of potential impacts relating to the proposed

program for each alternative. In the future, if NPS determines that specific actions called for by the approved plan require further consultation with the SHPO or additional analysis of impacts, more detailed environmental assessments (EAs) of impacts may be prepared. These documents would be tiered to this environmental impact statement.

B. Overarching Guiding Regulations and Policies—Statutory Requirements

Five primary laws guide the development of this EIS:

Antiquities Act of 1906, as amended (16 USC 431-433)

Authorizes the President of the United States to declare national monuments, historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest.

National Park Service Organic Act of 1916 (16 USC 1-4, et seq.)

To promote and regulate the use of national parks, monuments, and reservations, by such means and measures as to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the land in such manner as will leave them unimpaired for the enjoyment of future generations.

The National Historic Preservation Act of 1966, as amended (16 USC 470)

To protect and preserve historic districts, sites, structures, archeological, architectural, and cultural resources. Section 106 and Section

110 of the act require consultation with the State Historic Preservation Office and the NPS to nominate all eligible resources under its jurisdiction to the National Register of Historic Places.

The National Environmental Policy Act of 1969

Public Law 91–190 established a broad national policy to improve the relationship between humans and their environment, and sets out policies and goals to ensure that environmental considerations are given careful attention and appropriate weight in all decisions of the Federal Government. This is the legislation which requires and guides the preparation of this EIS.

National Parks and Recreation Act of 1978 (The Redwoods Act)

Requires that general management plans be developed for each unit in the national park system, and that the plans include, among other things, measures for preserving the area's resources and an indication of the types and intensities of development associated with public use of a given unit.

A listing of additional relevant laws, regulations, and policies that guide NPS and National Monument management is provided in the sections below.

C. Structure of Chapter

Impacts are predicted according to five major resource categories: cultural resources—with topics that include historic resources, cultural landscape, collections and archives, and archeology; natural resources—with topics that include air quality, water quality, and aquatic life and their habitats; visitor experience; administration and operation; and the socioeconomic environment.

For each resource category and/or topic, the following information is provided:

Laws and Policies

A description of the relevant laws, regulations, policies, and guidelines associated with each resource, and how the park is complying with them.

Definitions of Intensity Levels

A discussion of impact intensity and the definition of differing levels of impact including negligible, minor, moderate, or major impact. Intensity levels vary by resource category.

Impact Assessment for Each Alternative, Including Mitigation Measures

An assessment of the potential impacts—environmental consequences—of each alternative on the specific resource type. Alternatives are evaluated using the defined intensity scale and in consideration of impact duration, short– versus long–term. If adverse effects or impacts are anticipated, relevant mitigation measures that would be implemented as part of the alternative are discussed for each resource topic.

Cumulative Impacts

An assessment of the cumulative impacts associated with each alternative is then presented. Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non–federal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative impacts can be direct (caused by the action and in that specific time and place) or indirect (caused by the action but the impacts are felt at a later time or a different place), and they can be positive or negative.

In assessing cumulative impacts, the following assumptions have been made and are based on 2004-5 build-out scenarios developed by GIPEC:

- ◆ Full island build-out development could generate several million visitors a year;
- ◆ Full island build-out development could generate 46,720 roundtrip (RT) ferry trips per year:
24 vehicle ferry trips per day x 365 days x 2 ferries = 17,520 RT runs + 20 passenger ferry trips per day x 365 days x 4 ferries = 29,200 RT runs = 46,720 RT ferry trips a year.
- ◆ Full island build-out development could decrease impervious surface, leading to improved water quality and decreased water quantity runoff, based on Quitclaim Deed requirements for specific amount of park lands.

Impairment of Park Resources and Values

NPS Management Policies, 2006 requires analysis of potential effects to determine whether or not actions would impair park resources. The fundamental purpose of the national park system, established by the Organic Act (16 USC 1-4) and reaffirmed by the General Authorities Act of 1970, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values. However, the laws do give NPS the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values.

Although Congress has given the NPS the management discretion to allow certain impacts within parks, that discretion is limited by the

statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values. An impact to any park resource or value may constitute an impairment, but an impact would be more likely to constitute an impairment to the extent that it has a major or severe adverse effect upon a resource or value whose conservation is:

1. necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
2. key to the natural or cultural integrity of the park; or
3. identified as a goal in the park's GMP or other relevant NPS planning documents.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessionaires, contractors and others operating in the park.

In this "Environmental Consequences" section, a determination on impairment is made in the conclusion section of the impact analysis for each impact topic related to natural and cultural resources. Impairment determinations are not made for socioeconomic topics, or visitor use and experience (unless impacts are resource based) because impairment findings relate back to park resources and values, and these impact areas are not generally considered to be park resources or values and, according to the Organic Act, cannot be impaired in the same way that an action can impair park resources and values.

II. Impact Topics Retained for Analysis Under Each Alternative

A. Cultural Resources

Laws and Policies

The cultural resource management policies of the National Park Service are derived from numerous historic preservation and other laws, proclamations, Executive Orders, and regulations. Taken collectively, they provide the Service with the authority and responsibility for managing cultural resources in every unit of the national park system so that those resources may be preserved unimpaired for future generations. Cultural resource management would be carried out in a manner consistent with legislative and regulatory provisions, and with implementing policies and procedures such as the Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act (63 CFR 20497–508).

National Historic Preservation Act (NHPA) 1966

Section 106 of NHPA requires federal agencies to consider the impacts of their proposals on historic properties, and to provide state historic preservation officers, tribal historic preservation officers, and, as necessary, the Advisory Council on Historic Preservation a reasonable opportunity to review and comment on these actions.

Provisions for compliance with NHPA have been codified in the *Governors Island Preservation and Design Manual* (2003). Section 110 of NHPA requires that government agencies inventory their historic properties and evaluate them according to the criteria of the National Register of Historic Places.

Determination of Eligibility for Listing on the National Register of Historic Places

In order for a structure, building, or landscape to be listed on the National Register of Historic Places, it must be associated with an important historic context, i.e. possess significance—the meaning or value ascribed to the structure or building—and have integrity of those features necessary to convey its significance, i.e. location, design, setting, workmanship, materials, feeling, and association.

Potential impacts to cultural resources either listed on or eligible to be listed on the National Register of Historic Places were identified and evaluated in accordance with the Advisory Council on Historic Preservation’s regulations implementing Section 106 of the National Historic Preservation Act (36 CFR 800, Protection of Historic Properties) by:

1. determining the area of potential effects;
2. identifying cultural resources present in the area of potential effects that are National Register listed or eligible;
3. applying the criteria of adverse effect to affected resources; and
4. considering ways to avoid, minimize, or mitigate adverse effects.

Under the Advisory Council’s regulations a determination of adverse effect or no adverse effect must be made for affected National Register listed or eligible cultural resources. An adverse effect occurs whenever an action alters directly or indirectly any of the characteristics of

a cultural resource that qualify it for inclusion on the National Register, i.e. diminishing the integrity (the extent to which a resource retains its historic appearance) of the resource's location, design, setting, materials, workmanship, feeling, or association. Adverse effects also include reasonably foreseeable effects caused by the alternatives that would occur later in time, be farther removed in distance or be cumulative (36 CFR 800.5(a)(1)). A determination of no adverse effect means there is an effect, but the effect would not meet the criteria of adverse effect (36 CFR 800.5(b)).

In this General Management Plan, the criteria for characterizing the severity or intensity of impacts to National Register listed or eligible archeological resources, prehistoric or historic structures, and cultural landscapes (there are no cultural resources designated traditional cultural properties in Governors Island National Monument) are the Section 106 determinations of effect: adverse effect or no adverse effect. Beneficial effects are not recognized under Section 106.

Archeological Resources Protection Act of 1979

This act further codifies the federal government's efforts to protect and preserve archeological resources on public lands by stiffening criminal penalties, as well as instituting civil penalties, for the unauthorized collection of artifacts. Additionally, it establishes a permit system for the excavation and removal of artifacts from public lands, including their final disposition, as well as confidentiality provisions for sensitive site location information where the release of such information may endanger the resource.

Director's Order #28: Cultural Resource Management

This Director's Order was issued pursuant to the National Park Service Organic Act, and requires the NPS to protect and manage cultural resources in its custody through a comprehensive program

of research, planning, and stewardship and in accordance with the policies and principles contained in the *NPS Management Policies*. The order also requires the NPS to comply with the substantive and procedural requirements described in the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* and with the 1995 Servicewide Programmatic Agreement with the Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers.

1995 Programmatic Agreement

This Service-wide programmatic agreement is between the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers. The agreement spells out that Section 106 compliance is the responsibility of park superintendents and staff, and that training where necessary should be undertaken; at least one staff person at each park shall be the 106 coordinator; and each park should have a formal set of cultural resources advisors. The agreement lists examples of undertakings that would undergo internal NPS review without the need for collaboration with the SHPOs and the Council such as routine maintenance. Where undertakings are not routine, they will be reviewed in accordance with 36 CFR Part 800 and, where appropriate, enter into programmatic or memoranda of agreements with SHPOs specific to a project or a plan.

1996 Programmatic Agreement

Among the U.S. Coast Guard, the General Services Administration, the Advisory Council on Historic Preservation, the New York State Historic Preservation Officer, the City of New York and the National Trust for Historic Preservation. This agreement was drafted prior to the transfer of Governors Island and states that all activities that include the island's "closure and disposal" shall be in accordance with Section 106 and Section 110 guidelines. Stipulations include the disposal

agency—later to be GSA—shall consult with the Council, the SHPO, the City, the National Trust and the Coast Guard in developing a *Governors Island Preservation and Design Manual* to establish minimum standards for actions within the Historic District.

Documents related to the Sale and Transfer of Governors Island
(see Special Mandates section in Chapter One)

Sale and Transfer of Governors Island, January 31, 2003. These documents include:

- Waiver and consent Agreement among the U.S.A./General Services Administration (GSA), the State of New York, the City of New York, and GIPEC.
- Contract for Sale, Quitclaim Deed and Bill of Sale between the USA/ GSA and the National Trust for Historic Preservation
- Contract for Sale, Quitclaim Deed and Bill of Sale between the USA/ GSA and GIPEC
- Governors Island Aids to Navigation Easements by the National Trust and GIPEC to the USA/U.S. Coast Guard
- Donation Contract, Donation Deed and Donation Bill of Sale between the National Trust and the USA/National Park Service
- Memorandum of Understanding between the USDOJ/NPS and GIPEC
- Memorandum of Agreement between the US Coast Guard and GIPEC

Presidential Proclamations 7402, January 19, 2001, and 7647, February 7, 2003.

These establish the Governors Island National Monument and define its purpose, the historic significance of its resources, its boundary, and NPS management role.

January 28, 2003, *Governors Island Historic District Preservation and Design Manual (Manual)*

This three-part Manual was developed to guide the preservation and reuse of the historic district, which includes the National Monument. The Manual consists of Part One: Preservation and Design Standards; Part Two: Design and Development Guidelines; and Part Three: Building and Property Summary Sheets.

1. National Monument Historic Structures

A historic structure is a constructed work, usually immovable by nature or design, consciously created to serve some human activity. Examples include buildings and monuments, dams, millraces and canals, stockades and fences, defensive works, temple mounds and kivas, ruins of all structural types, and outdoor sculpture.

Governors Island National Monument historic structures include Fort Jay and Castle Williams (and their constituent components), and Building 107. NPS also has an easement in Building 140, which is a contributing Category 2 property (see Chapter Three for category definitions).

Definitions of Intensity Levels for Historic Structures

Negligible

Impact is at the lowest levels of detection—barely perceptible and not measurable. For purposes of Section 106, the determination of effect would be no adverse effect.

Minor

Adverse impact: impact would be perceptible but would not affect the character-defining features of a National Register of Historic Places eligible or listed structure or building. For purposes of Section 106, the determination of effect would be no adverse effect.

Beneficial impact: stabilization/preservation of character-defining features in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, to maintain existing integrity of a structure or building. For purposes of Section 106, the determination of effect would be no adverse effect.

Moderate

Adverse impact: impact would alter a character-defining feature(s) of the structure or building but would not diminish the integrity of the resource. For purposes of Section 106, the determination of effect would be no adverse effect.

Beneficial impact: rehabilitation of a structure or building in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, to make possible a compatible use of the property while preserving its character-defining features. For purposes of Section 106, the determination of effect would be no adverse effect.

Major

Adverse impact: impact would alter a character-defining feature(s) of the structure or building, diminishing the integrity of the resource to the extent that it is no longer eligible to be listed on the National Register. For purposes of Section 106, the determination of effect would be adverse effect.

Beneficial impact: rehabilitation or restoration in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and in keeping with *NPS Management Policies* 5.3.5.4, to accurately depict the form, features, and character of a structure or building as it appeared during its period of significance. For purposes of Section 106, the determination of effect would be no adverse effect.

Impairment

A major, adverse impact to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents.

Alternative A: No-Action Continuation of Current Management Practices

Impact Analysis

Under the no-action alternative, hazardous materials in the forts would be abated and the structures would be preserved, allowing the public a minimum level of access to the resources in the early years. Preservation would include basic repairs and maintenance such as the repair

of structural deficiencies in walls, doorways and stairwells.

The non-contributing, non-historic Building 513 and Building S-251 would be demolished, thereby restoring historic viewsheds and the relationship between the two forts and with the harbor. Building 107 would continue to be used as the NPS administrative headquarters and its unfinished space would be completed for use as additional administrative space. The easement in Building 140 would continue to be maintained and used as a visitor contact station/bookstore.

All actions would follow the *Governors Island Preservation and Design Manual* and the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and would not alter the character-defining features or diminish the integrity of the structures.

Taken collectively, these actions would have minor beneficial impacts on historic structures, and would constitute no adverse effect under Section 106.

Cumulative Impacts of Alternative A on Historic Structures

Since the National Monument is within the NHL District, any actions taken by GIPEC or future property owners or operators within the historic district will be subject to the guidelines in the *Governors Island Preservation and Design Manual*. Using GIPEC's full-build out scenario, such as the "Innovation Island" concept as an example, and assuming all parties respect the guidelines in the Manual, the cumulative impacts of future actions by those parties on the National Monument are not expected to contribute negatively to the National Monument's historic structures.

Conclusion

Alternative A would have minor beneficial impacts

on historic structures and would constitute no adverse effects under Section 106; there would be no negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, Alternative A is not likely to result in impairment to historic structures.

Actions Common to All Action Alternatives

Impact Analysis

The actions that are Common to All action alternatives B, C and D include those described in "No-Action" plus additional actions that will rehabilitate the forts and cultural landscape to accommodate public visitation, exhibit space, operations, temporary housing, and all the accompanying safety and access requirements such as ADA. See Chapter Two for descriptions of the alternatives.

The integrity and character-defining features of the contributing historic structures would be rehabilitated in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and the *Governors Island Preservation and Design Manual*.

The non-contributing, non-historic Buildings 513 and S-251 would be demolished, thereby restoring historic viewsheds and the relationship between the two forts and with the harbor.

Building 107 would continue to be used as the NPS administrative headquarters.

The easement in Building 140 would continue to be maintained and used as a visitor contact station and bookstore.

Taken collectively, these actions would have moderate beneficial impacts on historic structures and would constitute no adverse effects under Section 106.

Cumulative Impacts of Actions Common to All Action Alternatives on Historic Structures

Since the National Monument is within the NHL District, any actions taken by GIPEC or future property owners or operators within the historic district will be subject to the guidelines in the *Governors Island Preservation and Design Manual*. Using GIPEC’s full-build out scenario, such as the “Innovation Island” concept as an example, and assuming all parties respect the guidelines in the Manual, the cumulative impacts of future actions common under all the action alternatives on the National Monument are not expected to contribute negatively to the National Monument’s historic structures.

Conclusion

The actions Common to All action alternatives would have moderate beneficial impacts on historic structures and would constitute no adverse effects under Section 106; there would be no negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to historic structures.

Alternative B: Governors Island History Center

Impact Analysis

In Alternative B, the fortifications would be fully rehabilitated for public and operational uses. Castle Williams would be rehabilitated to become the island’s History Center. Exhibits, multi-media presentations, lectures, tours, programs and special events would take place throughout the structure. In Fort Jay, the barracks would be rehabilitated to reflect military domestic life and for oral histories and research.

Taken collectively, these actions would have moderate beneficial impacts on historic resources

and would constitute no adverse effect under Section 106.

Cumulative Impacts of Alternative B on Historic Structures

No additional cumulative impacts to historic structures beyond those explained under “common to all” are anticipated as a result of implementing this alternative.

Conclusion

Alternative B would have moderate beneficial impacts on historic structures and would constitute no adverse effects under Section 106; there would be no negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to historic structures.

Alternative C: Island Collaborative

Impact Analysis

In this alternative, key portions of the forts and fort infrastructure would be rehabilitated by NPS and used by NPS for its operations. NPS would retain key portions of both forts for visitor access and interpretation. Key portions would include one or more barracks in Fort Jay, the courtyards of both forts, and several casemates and rooftop of Castle Williams.

Other rehabilitation would be done by a lessee or partner. In some cases, the lessee or partner would provide its own public programs or supplement those developed by NPS. In those cases, the public could have access to these fort areas as well. Taken collectively, these actions would have moderate beneficial impacts on historic resources and would constitute no adverse effects under Section 106.

Cumulative Impacts of Alternative C on Historic Structures

No additional cumulative impacts to historic structures beyond those explained in “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

Alternative C would have moderate beneficial impacts on historic structures and would constitute no adverse effects under Section 106; there would be no negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to historic structures.

Alternative D: Harbor Partnership

Impact Analysis

As in Alternative B, this alternative proposes full rehabilitation of the forts by NPS for use as a Harbor Center. Castle Williams would be the island’s exhibition and interpretive center with multi-media exhibits and programs. Fort Jay barracks would be rehabilitated for use as a harbor research center—a place for National Park Service’s fellowship and residential programs for scholars, scientists, and artists.

Unlike Alternative B, the rehabilitation and programming would be accomplished in collaboration with one or more non-profit partners who share common goals and similar missions with NPS.

Taken collectively, these actions will have moderate beneficial impacts on historic resources and would constitute no adverse effects under Section 106.

Cumulative Impacts of Alternative D on Historic Structures

No additional cumulative impacts to historic structures beyond those explained in “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

Alternative D would have moderate beneficial impacts on historic structures and would constitute no adverse effects under Section 106; there would be no negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to historic structures.

2. Cultural Landscape

The cultural landscape of the National Monument contributes to its significance. Its major components include the *glacis*, mature trees, grassy open spaces, water views and its setting within the larger campus-like character of the historic district.

The 2003 *Cultural Landscape Inventory* considers the overall National Monument landscape to be in fair condition: “No major developments or subtractions have significantly marred the landscape, but deferred maintenance has caused some resources to deteriorate since the Coast Guard discontinued active military activities on the island in 1996. Some hedge rows are missing individual shrubs, creating a noncontiguous appearance. Lawn areas are in need of fertilization, seeding, thatching, and aeration. Some masonry staircases and retaining walls are in need of repointing. Additionally, selected fence sections, curb lengths, and areas of asphalt need replacing.”

Definitions of Intensity Levels for Cultural Landscapes

Negligible

Impact is at the lowest levels of detection, barely perceptible and not measurable. For purposes of Section 106, the determination of effect would be no adverse effect.

Minor

Adverse impact: impact is perceptible but would not affect the character–defining features of a National Register of Historic Places eligible or listed cultural landscape. For purposes of Section 106, the determination of effect would be no adverse effect.

Beneficial impact: preservation of character–defining features in accordance with the *Secretary of the Interior’s Standards for the Treatment of Historic Properties*, to maintain existing integrity of the cultural landscape. For purposes of Section 106, the determination of effect would be no adverse effect.

Moderate

Adverse impact: impact would alter a character–defining feature(s) of the cultural landscape but would not diminish the integrity of the landscape. For purposes of Section 106, the determination of effect would be no adverse effect.

Beneficial impact: rehabilitation of a landscape or its features in accordance with the *Secretary of the Interior’s Standards for the Treatment of Historic Properties*, to make possible a compatible use of the landscape while preserving its character–defining features. For purposes of Section 106, the determination of effect would be no adverse effect.

Major

Adverse impact: impact would alter a character–defining feature(s) of the cultural landscape, diminishing the integrity of the resource to the extent that it is no longer eligible to be listed on the National Register. For purposes of Section 106, the determination of effect would be adverse effect.

Beneficial impact: rehabilitation or restoration in accordance with the *Secretary of the Interior’s Standards for the Treatment of Historic Properties* and in keeping with *NPS Management Policies*, 5.3.5.2, to accurately depict the features and character of a landscape as it appeared during its period of significance. For purposes of Section 106, the determination of effect would be no adverse effect.

Impairment

A major, adverse impact to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park’s general management plan or other relevant National Park Service planning documents.

Alternative A: No-Action Continuation of Current Management Practices

Impact Analysis

Under the no–action alternative, there would be selective removal of some minor non–contributing features, such as non–historic trees, and earthwork grading to correct drainage problems. Lighting may be improved in a few areas for visitor safety. All actions would be in accordance with the Secretary’s Standards and the *Governors Island*

Preservation and Design Manual. Continuing with current management practices would have minor adverse impacts on the cultural landscape; this would constitute no adverse effect under Section 106.

Cumulative Impacts of Alternative A on the Cultural Landscape

As with historic structures, any actions taken by GIPEC, or third parties by permit, within the district area will be subject to the guidelines in the *Governors Island Preservation and Design Manual.* The cumulative impacts of future actions by those parties on the National Monument could potentially contribute negative impacts to the National Monument's cultural landscape—particularly the *glacis* and the covered defile—if carrying capacity thresholds and limits on visitor use cannot be agreed upon.

There are no physical demarcations separating GIPEC and NPS portions of the *glacis*—the most prominent feature of the cultural landscape. Without a formal agreement as to limits on visitor use, the *glacis* could experience minor to moderate adverse cumulative impacts if visitor use is uncontrolled; this would constitute no adverse effect under Section 106.

Assuming a GIPEC full-build out scenario, such as their “Innovation Island” concept used in their 2006 Transportation Plan, the cumulative impact on the National Monument's views, walkways, historic trees, and landscaping for all the alternatives would likely have little or no negative impacts on these components of the cultural landscape, and could have the potential for moderate to minor beneficial impacts once GIPEC and/or other property operators in the district occupy historic buildings and rehabilitate landscape features. This would constitute no adverse effect under Section 106.

Conclusion

Alternative A would have minor adverse impacts on the cultural landscape and would constitute no adverse effects under Section 106. If limits on visitor use can not be agreed upon with GIPEC, there could be negative cumulative impacts to the cultural landscape; however, assuming GIPEC adheres to the guidelines in the Manual—even with a full-build out scenario—there would likely be no negative cumulative impacts. Based on the above analysis, these actions are not likely to result in impairment to the cultural landscape.

Actions Common to All Action Alternatives

Impact Analysis

Actions on the cultural landscape which are Common to All the action alternatives include modifications to the *glacis*, such as selective removal or replacement of fencing, removal of non-historic trees and other vegetation that are blocking important views, and re-grading to remove former golf features.

Improvements to the cultural landscape around Castle Williams would include repairing existing paths and roadways within the National Monument and removing parking lot 504.

Improvements to the cultural landscape around Fort Jay would include rehabilitating the main entrance and former barbican site.

The removal of non-historic or non-contributing structures will help to restore important viewsheds from the forts to the harbor and the relationship between the two forts by removing obstructions along the original covered defile. The covered defile may be rehabilitated or interpreted by a new path that follows a similar alignment as the original.

Other landscape actions which may occur under the action alternatives include resurfacing roads, repairing retaining walls, paths, railings, and other contributing or safety features. Protection and enhancement of contributing features would extend to important vegetation such as mature trees. Interpretive waysides would highlight important features and relationships within the National Monument. All actions will be consistent with the *Governors Island Preservation and Design Manual* and Secretary's Standards, will be cognizant of archeological resources, and would use the appropriate methods for their protection.

The only new construction would be a small shelter/visitor contact station adjacent to the NPS dock (102).

Taken collectively, the common actions would go a long way to help the visitor understand the historic relationships between the two forts and the forts and the harbor. The actions would have moderate beneficial impacts and would constitute no adverse effect under Section 106.

Cumulative Impacts of Actions Common to All Action Alternatives on the Cultural Landscape

Any landscape or cultural resource actions taken by GIPEC or future property owners or operators within the district area will be subject to the guidelines in the *Governors Island Preservation and Design Manual*. The cumulative impacts of future actions by those parties on the monument could potentially contribute negative impacts to the monument's cultural landscape—particularly the parade grounds and the covered defile—if NPS and GIPEC cannot agree on carrying capacity thresholds and limits and types of visitor use.

There are no physical demarcations separating GIPEC and NPS portions of the *glacis*—the most prominent feature of the cultural landscape. Without a formal agreement as to limits on

visitor use, the *glacis* could experience minor to moderate adverse cumulative impacts if visitor use is uncontrolled; however, for purposes of Section 106, this would constitute no adverse effect.

Assuming a GIPEC full-build out scenario, such as their "Innovation Island" concept used in their 2006 Transportation Plan, the cumulative impact on the National Monument's views, walkways, historic trees, and landscaping for all the alternatives would likely have little or no negative impacts on these components of the cultural landscape, and could have the potential for moderate to minor beneficial impacts once GIPEC and/or other property operators in the district occupy historic buildings and rehabilitate landscape features. This would constitute no adverse effect under Section 106.

Conclusion

Collectively, actions Common to All the action alternatives would have moderate beneficial impacts on the cultural landscape and would constitute no adverse effect under Section 106. If limits on visitor use can not be agreed upon with GIPEC, there could be negative cumulative impacts to the cultural landscape; however, assuming GIPEC adheres to the guidelines in the Manual—even with a full-build out scenario—there would likely be no negative cumulative impacts. Based on the above analysis, these actions are not likely to result in impairment to the cultural landscape.

Alternative B: Governors Island History Center

Impact Analysis

Alternative B would not go much beyond the common actions to the cultural landscape; actions would still constitute moderate beneficial impacts and have no adverse effect under Section 106.

Cumulative Impacts of Alternative B on the Cultural Landscape

No additional cumulative impacts to the cultural landscape beyond those explained in “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

Alternative B would have moderate beneficial impacts on the cultural landscape and would constitute no adverse effect under Section 106; there would be no negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to the cultural landscape.

Alternative C: Island Collaborative

Impact Analysis

The only additional actions above and beyond “Common to All” to the cultural landscape that would occur under Alternative C would entail creating new waysides outside the National Monument for purposes of interpreting the historic district. The actions would have moderate beneficial impacts and would constitute no adverse effect under Section 106.

Cumulative Impacts of Alternative C on the Cultural Landscape

No additional cumulative impacts to the cultural landscape beyond those explained in “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

Alternative C would have moderate beneficial impacts on the cultural landscape and would constitute no adverse effect under Section 106; there would be no negative cumulative impacts as

a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to the cultural landscape.

Alternative D: Harbor Partnership

Impact Analysis

Similar to Alternative C, this alternative would also create new waysides outside the National Monument for purposes of interpreting the historic district and island. The actions would have moderate beneficial impacts and would constitute no adverse effect under Section 106.

Cumulative Impacts of Alternative D on the Cultural Landscape

No additional cumulative impacts to the cultural landscape beyond those explained in “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

Alternative D would have moderate beneficial impacts on the cultural landscape and would constitute no adverse effect under Section 106; there would be no negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to the cultural landscape.

3. Archeology

The federal archeology program is a general term that includes interpretation programs, collections care, scientific investigations, protection efforts, and public education and outreach efforts. The program covers activities on federal and tribal land, as well as federally financed, permitted, or licensed actions on non-federal land. Authorities, regulations, and guidelines define

these activities to preserve, properly treat, and protect archeological sites and objects, such as the Archeological Resources Protection Act of 1979, as amended (Public Law 96–95) and the National Historic Preservation Act, especially Sections 106 and 110. The archeological work involves the identification, evaluation, and nomination of historic properties to the National Register of Historic Places. The foundation for these activities and programs was laid by the Antiquities Act of 1906, 16–USC 431–433.

Any ground–disturbing actions taken by the NPS or others on NPS property will necessitate archeological supervision and appropriate methods to catalog, treat and preserve found artifacts, using NPS guidelines and standards. *The Archeological Overview and Assessment Report*, completed in 2003, will be a guiding document indicating known and potential archeologically sensitive areas. There are over 50 known sites within the NHL District, most of which are within the National Monument boundary. All the known archeological sites are within the original landform. The Archeological Sites Management Information System (ASMIS) is a database that keeps information on location, type, and status of archeological sites and resources along with recommendations for protection and future archeological investigations. Before any action is taken, an archeological review will be scheduled where archeologists will be given the opportunity to review engineering plans and drawings to determine if an archeological identification survey (hand–excavated testing) is needed. During construction, archeological monitoring will ensure that proper procedures are followed for minimal disturbance, such as appropriate construction staging areas, as well as procedures if archeological resources are found.

Definitions of Intensity Levels for Archeology

Negligible

Impact is at the lowest levels of detection, barely measurable, with no perceptible consequences, either adverse or beneficial, to archeological resources. For purposes of Section 106, the determination of effect would be no adverse effect.

Minor

Adverse impact: disturbance of a site(s) is confined to a small area with little loss of important information potential. For purposes of Section 106, the determination of effect would be adverse effect.

Beneficial impact: preservation of a site(s) in its natural state. For purposes of Section 106, the determination of effect would be no adverse effect.

Moderate

Adverse impact: disturbance of the site(s) would not result in a substantial loss of important information. For purposes of Section 106, the determination of effect would be adverse effect.

Beneficial impact: stabilization of the site(s). For purposes of Section 106, the determination of effect would be no adverse effect.

Major

Adverse impact: disturbance of the site(s) is substantial and results in the loss of most or all of the site and its potential to yield important information. For purposes of Section 106, the determination of effect would be adverse effect.

Beneficial impact: active intervention to preserve the site. For purposes of Section 106, the determination of effect would be no adverse effect.

Impairment

A major, adverse impact to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents.

Alternative A: No-Action Continuation of Current Management Practices

Impact Analysis

The continuation of current management practices would include basic repairs or replacements to utility infrastructure such as storm water, sanitary sewers, electric, gas, and telecommunications. In addition to infrastructure repairs, ground-disturbing actions would include the demolition of Buildings 513 and S-251.

Although most of these areas have been previously surveyed or previously disturbed, there is still potential for archaeological discoveries or damage. Archeological reviews, surveying, and monitoring would be employed for all proposed actions. These actions would likely have the potential to cause negligible to minor adverse impacts on archeological resources and would constitute no adverse effect under Section 106.

Cumulative Impacts of Alternative A on Archeological Resources

Part II of the *Governors Island Preservation and Design Manual*—the Design and Development Guidelines—acknowledges that there are multiple areas within the district that are potentially archeologically sensitive. All ground-disturbing actions—such as building demolition, new

construction, tree planting or removal of large trees and shrubs, new utility lines outside existing trenches—that take place within the historic district are subject to review by the SHPO and NYC Landmarks Preservation Commission.

The SHPO and NYC Landmarks Preservation Commission review processes for archeological resources in the historic district and NPS's review process for the National Monument would assure that ground-disturbing actions taken by any property owner or lessee within the historic district would comply with guidelines to monitor and mitigate sites for the potential of finding archeological resources.

There would be no additional cumulative impacts on archeological resources within the National Monument from potential future actions by NPS and others within the historic district; there would continue to be a potential for negligible to minor adverse impacts—with no adverse effect under Section 106.

Conclusion

Alternative A has the potential to have negligible to minor adverse impacts on archeological resources in the National Monument with no additional cumulative impacts; under Section 106 this would constitute no adverse effect. Based on the above analysis, these actions are not likely to result in impairment to archeological resources.

Actions Common to All Action Alternatives

Impact Analysis

In addition to those actions under A there would be the removal of asphalt and the re-landscaping of the parking area near Castle Williams, rehabilitation of the covered defile or the development of a new pedestrian path connecting Fort Jay and Castle Williams, rehabilitating the asphalt area at the east gate of Fort Jay, selective

removal of non-contributing features such as fencing and trees, and the construction of a small visitor shelter/contact station adjacent to the NPS dock (102).

These actions would be short-term in duration with construction and rehabilitation activities monitored by an archaeologist. For example, construction activities in the vicinity of Castle Williams and Andes Road where there is a greater likelihood of unearthing archeological resources would be carefully surveyed before construction and monitored throughout the duration of any project. The AOA report and other archaeological data would be used as references with additional field verification and testing. Archeological reviews, surveying, and monitoring would be employed for all proposed actions; and all necessary and appropriate mitigation measures recommended would be utilized.

Even with the review and monitoring process described above, these actions have the potential to cause minor to moderate adverse impacts on archeological resources and would constitute an adverse effect as described under Section 106.

Cumulative Impacts of Actions Common to All Action Alternatives on Archeological Resources

Part II of the *Governors Island Preservation and Design Manual*—the Design and Development Guidelines—acknowledges that there are multiple areas within the historic district that are potentially archeologically sensitive. All ground-disturbing actions—such as building demolition, new construction, tree planting and removal of large trees and shrubs, new utility lines outside existing trenches—that take place within the historic district are subject to review by the SHPO and NYC Landmarks Preservation Commission (LPC).

The SHPO and NYC LPC review processes for archeological resources in the historic district and NPS’s review process for the National Monument would assure that ground-disturbing actions taken by any property operator within the historic district would comply with guidelines to monitor and mitigate sites for the potential of finding archeological resources.

There would be no additional cumulative impacts on archeological resources within the National Monument from potential future actions by NPS and others within the historic district; there would continue to be a potential for minor to moderate adverse impacts—with adverse effects under Section 106.

Conclusion

Actions Common to All the action alternatives have the potential to have minor to moderate adverse impacts on archeological resources in the National Monument with no additional cumulative impacts; under Section 106 this would constitute an adverse effect. Based on the above analysis, these actions are not likely to result in impairment to archeological resources.

Alternative B: Governors Island History Center

Impact Analysis

Same as “Common to All”; no additional actions that cause ground disturbance would be initiated under Alternative B.

Cumulative Impacts of Alternative B on Archeological Resources

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

The actions in Alternative B would be the same

as those under “Common to All”, having the potential to have minor to moderate adverse impacts on archeological resources in the National Monument with no additional cumulative impacts; under Section 106 this would constitute an adverse effect. Based on the above analysis, these actions are not likely to result in impairment to archeological resources.

Alternative C: Island Collaborative

Impact Analysis

Same as “Common to All”; no additional actions that cause ground disturbance would be initiated under Alternative C.

Cumulative Impacts of Alternative C on Archeological Resources

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

The actions in Alternative C would be the same as those under “Common to All,” having the potential to have minor to moderate adverse impacts on archeological resources in the National Monument with no additional cumulative impacts; under Section 106 this would constitute an adverse effect. Based on the above analysis, these actions are not likely to result in impairment to archeological resources.

Alternative D: Harbor Partnership

Impact Analysis

Same as “Common to All”; no additional actions that cause ground disturbance would be initiated under Alternative D.

Cumulative Impacts of Alternative D on Archeological Resources

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

The actions in Alternative D would be the same as those under “Common to All,” having the potential to have minor to moderate adverse impacts on archeological resources in the National Monument with no additional cumulative impacts; under Section 106 this would constitute an adverse effect. Based on the above analysis, these actions are not likely to result in impairment to archeological resources.

4. Collections and Archives

A Collections Management Plan is needed for Governors Island National Monument. The archive of federal records that document the earlier Army and Coast Guard development of the island is a large and important collection of drawings, maps and plans of buildings and landscape. There is also a growing collection of other materials being developed for interpretive, facilities maintenance, and administrative purposes. Material in the public realm could also be an important addition to the archive. The NPS is consulting with collections and archival experts about how to handle the volume and type of artifacts that can potentially be a part of the National Monument’s and island’s collection under each of the alternatives.

Collections and archives that are not traditional cultural properties—prehistoric and historic objects, artifacts, works of art, archival documents, and natural history specimens—are generally ineligible for listing on the National Register and

are not subject to Section 106 of the National Historic Preservation Act; however, these resources are preserved under *NPS Management Policies* and the NPS Museum Handbook.

Definitions of Intensity Levels for Collections and Archives

Negligible

Effect is at the lowest levels of detection—barely measurable—with no perceptible consequences, either adverse or beneficial, to museum collections.

Minor

Adverse effect: would affect the integrity of few items in the museum collection but would not degrade the usefulness of the collection for future research and interpretation.

Beneficial impact: stabilization of the collection.

Moderate

Adverse effect: would affect the integrity of many items in the museum collection and diminish the usefulness of the collection for future research and interpretation.

Beneficial impact: preservation of the collection.

Major

Adverse effect: would affect the integrity of most items in the museum collection and destroy the usefulness of the collection for future research and interpretation.

Beneficial impact: active intervention to build and preserve the collection.

Impairment

A major, adverse impact to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; (2) key to the natural or cultural

integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents.

Alternative A: No-Action Continuation of Current Management Practices

Impact Analysis

Under current management practices, the NPS would acquire and maintain only minimal articles such as pertinent publications, maps, era postcards, and photographs for the purposes of basic research, public information materials and exhibits depicting the history of the island. Other items that would be included in the collection under this management alternative would be any archeological artifacts that may be unearthed during maintenance activities by the NPS. The park would safeguard these materials on the island but not seek special climate-controlled conditions for them.

In 2006, the National Archives and Records Administration (NARA) became the custodian of the Army and Coast Guard federal records pertaining to the island's structures, utilities and grounds. Other materials developed by the NPS or its consultants and contractors would be stored in Building 107, which functions as the Monument headquarters. There is a potential to incur minor adverse effects in the short-term on current and future collections, with no guarantee of preventing future degradation. Under this alternative, a Collections Management Plan would be developed and likely recommend that NPS refuse most donations, cease acquiring new items, and only provide limited access to the artifacts due to the lack of adequate storage, display facilities or climate-controlled environment.

Under this alternative, there would be minor adverse impacts to the National Monument's collections and archives.

Cumulative Impacts of Alternative A on Collections and Archives

No additional cumulative impacts beyond those identified in the impact analysis are anticipated to collections and archives as a result of implementing this alternative.

Conclusion

Alternative A would have minor adverse impacts on collections and archives, with no additional negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to collections and archives.

Actions Common to All Action Alternatives

Impact Analysis

For all action alternatives, the NPS would complete a Collections Management Plan (CMP) that guides the development of a collections program. The plan would define the scope of the collection and the physical conditions necessary for optimal archiving or exhibit. The plan would also outline guidelines for public access for those objects not on exhibit and requested for research purposes.

The CMP would include guidelines for preservation of the archive and public access and would encourage collaboration with national and NY State organizations and institutions regarding shared exhibits, research projects, and the temporary exchange or loan of artifacts.

At minimum, each of the action alternatives would provide adequate space and environmental conditions for the paper or otherwise delicate

artifacts on hand and any acquired or accepted. The space could be in an on- or off-island NPS facility, a space shared with an on-island partner, or a combination of these options.

These actions would likely have moderate to major beneficial impacts on collections and archives in the long-term due to stabilizing objects, improving curation, and removing major threats of future degradation.

Cumulative Impacts of Actions Common to All Action Alternatives on Collections and Archives

No additional cumulative impacts beyond those described in the impact analysis are anticipated to collections and archives as a result of implementing these actions.

Conclusion

Actions Common to All the action alternatives would have moderate to major beneficial impacts on collections and archives; there would be no additional negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to collections and archives.

Alternative B: Governors Island History Center

Impact Analysis

With the focus of most NPS activities on and within the boundaries of the National Monument, the Governors Island History Center would house the National Monument's—and potentially the larger island's—collections and those non-fragile archival materials not already at the National Archives. The History Center would become a place for the public as well as scholars to visit and research all aspects of island history. The NPS would actively seek and accept artifacts that are within the scope of the Collections Management Plan.

Having a dedicated, environmentally controlled space that can accommodate the general public and scholars alike, and which would employ appropriate preservation practices, would have major beneficial impacts on collections and archives in the long-term.

Cumulative Impacts of Alternative B on Collections and Archives

No additional cumulative impacts to collections and archives beyond those explained in the impact analysis are anticipated as a result of implementing this alternative.

Conclusion

Alternative B would have major beneficial impacts on collections and archives in the long-term with no negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to collections and archives.

Alternative C: Island Collaborative

Impact Analysis

In this alternative, the NPS would not go beyond the common actions to acquire, store and manage collections and archives. The minimum standards set under the Collections Management Plan would be followed, but the National Monument would not seek to amass a large collection. Rather, collaboration with other organizations and institutions to temporarily exchange or conduct joint exhibits would be encouraged.

Alternative C would have moderate to major beneficial impacts on collections and archives in the long-term.

Cumulative Impacts of Alternative C on Collections and Archives

No additional cumulative impacts to collections and archives beyond those explained in “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

Alternative C would have moderate to major beneficial impacts on collections and archives in the long-term with no negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to collections and archives.

Alternative D: Harbor Partnership

Impact Analysis

Similar to Alternative B, the Governors Island Harbor Center would house collections and archives for education, research, and interpretive purposes—albeit with a broader focus of not just island history, but also the history, ecology, and defense of New York Harbor.

Dedicated, environmentally controlled space would be coordinated and designed with NPS partners. Some collections and archives may be best suited in spaces outside the National Monument, either elsewhere on the island or in the region. The NPS would ensure partners follow Collections Management Plan guidelines to ensure the integrity of resources. This alternative would have policies for current and future collections and archives which would enrich the opportunities for historians, scientists, educators, students, and visitors to learn about the island, the harbor, the region, and similar areas around the world, leading to major beneficial impacts to collections and archives in the long-term.

Cumulative Impacts of Alternative D on Collections and Archives

No additional cumulative impacts to collections and archives beyond those explained in the impact analysis are anticipated as a result of implementing this alternative.

Conclusion

Alternative D would have major beneficial impacts on collections and archives in the long-term with no negative cumulative impacts as a result of foreseeable future actions. Based on the above analysis, these actions are not likely to result in impairment to collections and archives.

5. Summary of Impacts on Cultural Resources by Alternative

Alternative A: No-Action Continuation of Current Management Practices

Under the No-Action Alternative, a minimum level of access to the resources would be achieved through the abatement of hazardous materials and resource preservation and maintenance actions.

Removal of non-contributing structures (513 and 251) and features would restore historic viewsheds and relationships and open more of the National Monument for public recreation. Building 107 and the easement in Building 140 would continue to be used as in their current capacities, as administrative headquarters and contact station/bookstore, respectively.

Under current management practices, the National Archives and Records Administration (NARA) would be the custodian of the Army

and Coast Guard federal records pertaining to the island's structures, utilities and grounds, and the NPS would only acquire and maintain articles such as pertinent publications, maps, era postcards, and photographs and would complete a CMP. The park would not seek special climate-controlled conditions for its collections and archives, but would store them in Building 107, National Monument headquarters.

Archeological reviews, surveying and monitoring would be employed for all proposed actions; and all necessary and appropriate mitigation measures recommended would be utilized.

All actions would follow the *Governors Island Preservation and Design Manual*, the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, and *NPS Management Policies*.

Actions Common to All Action Alternatives

The integrity and character-defining features of contributing structures and the cultural landscape would be rehabilitated in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, the *Governors Island Preservation and Design Manual*, and NPS management policies and procedures and other applicable federal and state laws and regulations.

The forts would be rehabilitated to differing degrees depending on short- and long-term intended uses. Non-contributing features and structures, including Buildings 513 and 251, would be demolished. Other actions would include removal of the asphalt parking lot adjacent to Castle Williams, rehabilitation of the asphalt area at the main gate of Fort Jay, selective removal or replacement of fencing, and removal of non-historic trees that are blocking important views. The covered defile between Fort Jay and Castle Williams may be rehabilitated or interpreted by a

new path that follows a similar alignment as the original. A small visitor shelter/contact station would be constructed adjacent to the NPS dock (102).

Archeological reviews, surveying, and monitoring would be employed for all proposed actions; and all necessary and appropriate mitigation measures recommended would be utilized.

Taken collectively, the common actions would go a long way to help the visitor understand the historic relationships among the forts and the harbor. All actions would be cognizant of archeological resources, and would use the appropriate procedures for their protection.

The NPS would complete a Collections Management Plan (CMP) that guides the development of a collections program. The plan would define the scope of the collection and the physical conditions necessary for optimal archiving or exhibit and would outline guidelines for public access. The National Archives and Records Administration (NARA) would continue to be the custodian of the archives of Army and Coast Guard building plans, maps and drawings.

These actions would have beneficial impacts that range from minor to major on the National Monument and would constitute no adverse effect under Section 106.

Alternative B: Governors Island History Center

In Alternative B, the forts would be fully rehabilitated for public and operational uses. Castle Williams would be rehabilitated to become the island's History Center and showcase exhibits, multi-media presentations, lectures, tours and special programs. One or more of Fort Jay's barracks would be rehabilitated to reflect military domestic life and for exhibits and presentations

that would interpret various aspects of the history of the island. NPS would continue to use Building 107 as its administrative headquarters. Actions to the cultural landscape would not go much beyond those described under "Common to All." Impacts to archeological resources would also not differ from those under "Common to All."

The Governors Island History Center would house the National Monument's and potentially larger island's collections and archives. The Center would become a place for the public as well as scholars to visit and research all aspects of island history. The NPS would actively seek and accept artifacts that are within the scope of the Collections Management Plan.

These actions would have beneficial impacts that range from minor to major on the National Monument and would constitute no adverse effect under Section 106.

Alternative C: Island Collaborative

In this alternative, key portions of both forts would be rehabilitated by NPS for operational and interpretive purposes and to ensure public access. Key portions would include, at the minimum, one barrack and courtyard of Fort Jay, and several casemates, courtyard and the rooftop of Castle Williams. Other sections of the forts would be rehabilitated by NPS partners or lessees.

The only additional actions to the cultural landscape that would occur under Alternative C would entail creating new waysides outside the National Monument for purposes of interpreting the historic district. Impacts to archeological resources would not differ from those under "Common to All."

In this alternative, the NPS would not go beyond the common actions to acquire, store and manage collections and archives. The minimum standards set under the Collections Management Plan would be followed, but the National Monument would not seek to amass a large collection. Rather, collaboration with other organizations and institutions to temporarily exchange or conduct joint exhibits would be encouraged.

Collectively, these actions would have moderate beneficial impacts on the National Monument and would constitute no adverse effects under Section 106.

Alternative D: Harbor Partnership

As in Alternative B, this alternative proposes full rehabilitation of the forts by NPS for use as the Harbor Center. Castle Williams would be the island's exhibition and interpretive center with a variety of temporary and permanent exhibits, public programs and special events. Fort Jay barracks would be rehabilitated for use as a harbor research center—a place for National Park Service fellowship and residential programs for scholars, scientists, and artists. NPS would collaborate with one or more partners to design and manage the spaces and programs. Impacts to archeological resources would not differ from those under “Common to All.”

Unlike Alternative B, the rehabilitation and programming would be accomplished in collaboration with one or more non-profit partners who share common goals and similar missions with NPS.

Some collections and archives may be best suited in spaces outside the National Monument, either elsewhere on the island or in the region. The NPS would ensure partners follow Collections Management Plan guidelines to protect the integrity of these resources.

These actions would have beneficial impacts that range from moderate to major on the National Monument and would constitute no adverse effect under Section 106.

B. Natural Resources

Laws and Policies

Analogous to the previous section regarding cultural resources, NPS is also steward of some of the nation's most important and unique natural and ecological resources which are protected under various laws, proclamations, Executive Orders, and regulations. Governors Island National Monument contains no rare, threatened, or endangered species; however, natural resources within its boundaries must be protected in accordance with the following:

NPS Organic Act (16 USC 1)

The Act directs parks to conserve wildlife unimpaired for the enjoyment of future generations. It is interpreted by the agency to mean that native animal life should be protected and perpetuated as part of the park's natural ecosystem. Natural processes are relied on to control populations of native species to the greatest extent possible; otherwise they are protected from harvest, harassment, or harm by human activities. According to *NPS Management Policies*, the restoration of native species is a high priority (sec. 4.1). Management goals for wildlife include maintaining components and processes of naturally evolving park ecosystems, including natural abundance, diversity, and the ecological integrity of plants and animals.

Clean Air Act, 1977 [P.L. 95-95; 91 Stat. 685]

The primary objective of the Clean Air Act is to establish federal standards for various pollutants and to provide for the regulation of polluting emissions via state implementation plans. In addition, the amendments are designed to prevent significant deterioration in certain areas where air quality exceeds national standards, and to provide for improved air quality in areas which do not meet federal standards known as “non-attainment” areas.

NPS Management Policies, 2006

NPS Management Policies state that potential impacts of agency actions will also be considered on state or locally listed species. The National Park Service is required to control access to critical habitat of such species, and to perpetuate the natural distribution and abundance of these species and the ecosystems upon which they depend.

Specific laws and policies relevant to impact analysis are addressed under each resource topic.

1. Air Quality

To facilitate implementation of the air quality provisions of the 1977 Clean Air Act amendments, Congress established a classification scheme for the entire United States, classifying areas as Class I, II, or III air quality areas. Class I areas receive the highest degree of protection, with only a small amount of certain kinds of additional air pollution allowed. Mandatory Class I areas were designated by Congress and include international parks, national wilderness areas or national memorial parks larger than 5,000 acres, or national parks larger than 6,000 acres that were in existence (or authorized) on August 7, 1977. All other units of the National Park Service, including Governors Island, are Class II areas which are allowed only a moderate

increase in certain air pollutants. No Class III areas—where a large amount of new air pollution would be allowed—were designated by Congress, but a process was established for re-designating Class II areas to more protective Class I or the less protective Class III status. Only states or Native American governing bodies have authority to re-designate areas.

The fundamental mission of the 1916 NPS Organic Act includes the mandate to protect air quality in all units of the national park system. Accordingly, *NPS Management Policies* makes no distinction in the level of air quality protection afforded to Class I versus Class II NPS units.

Good air quality is a resource in all NPS units, and many park resources and values are dependent on good air quality. Air pollution can impair visibility, injure vegetation, erode buildings and monuments, acidify water, leach nutrients from soil, and affect visitors’ health and enjoyment. In order to prevent or remedy these harmful effects, the NPS monitors and manages air resources of NPS units.

NPS Management Policies further state that the Service would seek to perpetuate the best possible air quality in parks to (1) preserve natural resources and systems; (2) preserve cultural resources; and (3) sustain visitor enjoyment, human health, and scenic vistas. The Service would assume an aggressive role in promoting and pursuing measures to protect these values from the adverse impacts of air pollution. In cases of doubt as to the impacts of existing or potential air pollution on park resources, the Service would err on the side of protecting air quality and related values for future generations (4.7.1).

In addition, NPS would:

1. Inventory the air-quality-related values associated with each park;
2. Monitor and document the condition of air quality and related values;
3. Evaluate air pollution impacts, and identify causes;

4. Minimize air pollution emissions associated with park operations, including the use of prescribed fire and visitor use activities; and
5. Ensure healthful indoor air quality in NPS facilities (4.7.1).

National Monument managers would be guided by these management policies and would work with other island parties to encourage the development of consistent and compatible policies island-wide.

The pollutants of concern for this General Management Plan and EIS are those associated with ferry emissions, car emissions and from short-term construction activities, and include carbon monoxide (CO), and the constituents of “smog” or ozone, hydrocarbons, and oxides of nitrogen.

Definitions of Intensity Levels for Air Quality

Negligible

The impact is at the lower levels of detection; adverse or positive impacts are likely to be less than about 1% change from “No-Action”.

Minor

The impact is slight but detectable; no standards are violated. Adverse or positive changes are likely to be in the 1–10% range.

Moderate

The impact may exceed standards on a local and short-term basis, or is readily apparent. Adverse or positive changes are likely to be in the 10–20% range.

Major

The alternative would result in sustained exceedances of air quality standards, or contribute to an obvious and permanent adverse change or improvement in local or regional conditions.

Impairment

The impact is so sustained and severe that the integrity of the resource will be lost park-wide, and the resource is either important to park purposes or is one whose protection has been spelled out as a reason for creating the park.

Alternative A: No-Action Continuation of Current Management Practices

Impact Analysis

Mobile sources, such as the ferries operating between mainland points and Governors Island, are likely to have the largest impact on air quality. NPS staff and visitors to the National Monument would access the island on ferries operated by GIPEC and/or private operators. Assuming a 3-4 month public season and restricted access to National Monument buildings, the number of visitors to the National Monument would likely constitute a small fraction of overall ridership to the island. In 2006, GIPEC’s ferries made 11 roundtrips on weekdays and 5 roundtrips on weekends. The NPS would continue to maintain a few vehicles on the island, including several electric vehicles. Maintenance and repair activities, including removal of hazardous materials, would continue to require the operation of service vehicles and short-term operation of construction vehicles on the island.

The impact from these activities would be negligible in the short- and long-terms.

Cumulative Impacts of

Alternative A on Air Quality

Actions in this alternative would not lead to a decrease in air quality for the region. Additional ferry service operations in a region as large as that of New York Harbor would add negligible amounts of emissions to current air quality

conditions. The most intense construction activities related to the National Monument—with their associated increase in truck traffic and demolition debris—would be short in duration. Once the National Monument is fully operational, no NPS activities or operations would contribute to a decrease in air quality. Use of electric vehicles, limits on other vehicles, an increase in vegetation and the NPS commitment and advocacy of green operations on the entire island will further ensure no decreases to air quality. The level of GIPEC’s development for the non-Monument portion of the island is unknown at this time. However, the GSA FEIS maximum development option found that on-island air quality would not be diminished if vehicle use were restricted. Mitigation measures recommended in GSA’s FEIS included dispersing parking and ferry access points among multiple mainland sites.

Conclusion

Alternative A would have negligible impacts on air quality in the short- and long-terms. No additional cumulative impacts to air quality beyond those explained in the impact analysis are anticipated as a result of implementing this alternative. Based on the above analysis, these actions are not likely to result in impairment to air quality.

Actions Common to All Action Alternatives

Impact Analysis

Under all action alternatives, annual visitation to the National Monument would increase from 15,000 to approximately 500,000 when all building and landscape rehabilitation has been accomplished. Visitors would be served by numerous ferries and an island-wide transportation system. Maintenance and rehabilitation in the National Monument, including removal of hazardous materials, would

require the operation of construction and service vehicles on the island. The NPS would also continue to operate a small number of vehicles for its operations. The NPS and GIPEC are committed to minimizing the use of cars on the island, and incorporating best practices and sustainable technologies to meet transportation needs. Depending on the type of redevelopment and attractions elsewhere on the island, many visitors, potentially millions, will come to the island for purposes other than visiting the National Monument. However, NPS anticipates many of these visitors will “incidentally” visit the National Monument during their time on the island. The NPS dock (102) would provide guaranteed access for visitors to the National Monument and supplement access provided by GIPEC.

The impact from stationary air quality sources would be negligible in the short-term. Impacts would be negligible to minor beneficial in the long-term due to the removal of hazardous materials. Impacts from mobile sources would also be negligible in the short- and long-terms.

Cumulative Impacts of Actions Common to All Action Alternatives on Air Quality

None of the actions proposed in the action alternatives would lead to a decrease in air quality for the region.

Additional ferry service operations in a region as large as that of New York Harbor would add negligible amounts of emissions to current air quality conditions. The most intense construction activities related to the National Monument—with their associated increase in truck traffic and demolition debris—would be short in duration. Once the National Monument is fully operational, no NPS activities or operations will contribute to a decrease in air quality. Use of electric vehicles, limits on other vehicles, an increase in vegetation and the NPS commitment and advocacy of

green operations on the entire island will further ensure no decreases to air quality. The level of GIPEC's development for the non-Monument portion of the island are unknown at this time. However, the GSA FEIS maximum development option found that on-island air quality would not be diminished if vehicle use were restricted. Mitigation measures recommended in GSA's FEIS included dispersing parking and ferry access points among multiple mainland sites.

Conclusion

Actions Common to All the action alternatives would have negligible impacts on air quality in the short- and long-terms. No additional cumulative impacts to air quality beyond those explained in the impact analysis are anticipated as a result of implementing these "Common to All" actions. Based on the above analysis, these actions are not likely to result in impairment to air quality.

Alternative B: Governors Island History Center

Impact Analysis

This alternative would not likely create new sources of emissions; however, there may be 10% more visitors than the "Common to All" figure of 500,000, bringing the number up to 550,000. The increase in visitors would likely be accommodated on the same number of ferries and other vehicles as in "Common to All." The impact from stationary air quality sources would be negligible in the short- and long-terms. Impacts from mobile air quality sources would also be negligible in the short- and long-terms.

Cumulative Impacts of Alternative B on Air Quality

No additional cumulative impacts beyond "Common to All" are anticipated as a result of implementing this alternative.

Conclusion

Alternative B would have negligible impacts on air quality in the short- and long-terms from both stationary and mobile sources. No additional cumulative impacts to air quality beyond those explained in the impact analysis are anticipated as a result of implementing this alternative. Based on the above analysis, these actions are not likely to result in impairment to air quality.

Alternative C: Island Collaborative

Impact Analysis

No activities in addition to those described in "Common to All" would be undertaken. The impact from stationary air quality sources would be negligible in the short- and long-terms. Impacts from mobile air quality sources would also be negligible in the short- and long-terms.

Cumulative Impacts of Alternative C on Air Quality

No additional cumulative impacts beyond "Common to All" are anticipated as a result of implementing this alternative.

Conclusion

Alternative C would have negligible impacts on air quality in the short- and long-terms from both stationary and mobile sources. No additional cumulative impacts to air quality beyond those explained in the impact analysis are anticipated as a result of implementing this alternative. Based on the above analysis, these actions are not likely to result in impairment to air quality.

Alternative D: Harbor Partnership

Impact Analysis

This alternative would not likely create new sources of emissions; however, there may be 15% more visitors than the “Common to All” figure of 500,000, bringing the number up to 575,000. The increase in visitors would probably be accommodated on the same number of ferries and other vehicles as in “Common to All.” The impact from stationary air quality sources would be negligible in the short- and long-terms. Impacts from mobile air quality sources would also be negligible in the short- and long-terms.

Cumulative Impacts of Alternative D on Air Quality

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

Alternative D would have negligible impacts on air quality in the short- and long-terms from both stationary and mobile sources. No additional cumulative impacts to air quality beyond those explained in the impact analysis are anticipated as a result of implementing this alternative. Based on the above analysis, these actions are not likely to result in impairment to air quality.

2. Water Quality

The U.S. Environmental Protection Agency has developed national recommended ambient water quality criteria for approximately 120 priority pollutants for the protection of both aquatic life and human health (through ingestion of fish/shellfish or water) (US EPA 1999a). These criteria have been adopted as enforceable standards by most states. *NPS Management Policies, 2006*

state that the Park Service will “take all necessary actions to maintain or restore the quality of surface waters and ground waters within the parks consistent with the Clean Water Act and all other applicable federal, state, and local laws and regulations” (sec. 4.6.3).

Simply stated, a water quality standard defines the water quality goals of a waterbody by designating uses to be made of the water, by setting minimum criteria to protect the uses, and by preventing degradation of water quality through review and selective permitting of discharges into surface waters.

Clean Water Act of 1972, as amended 33 USC 1251-1387

The purpose of the Act is to “restore and maintain the chemical, physical and biological integrity of the Nation’s waters.” The U.S. Army Corps of Engineers has been charged with evaluating Federal actions that result in the potential degradation of the waters of the United States and issuing permits for actions consistent with the Clean Water Act. All regulations would be adhered to by NPS.

NPS Management Policies, section 4.6.3

The policies state “The Service will determine the quality of park surface and groundwater resources and avoid, wherever possible, the pollution of park waters by human activities occurring within and outside of parks.”

Director’s Order #77-2: Floodplain Management

This DO supports the intent of Executive Order 11988 by stating the Service will protect and preserve the natural resources and functions of floodplains; avoid the long and short term environmental effects associated with the occupancy and modification of floodplains; avoid direct and indirect support of floodplain development and actions that could adversely

affect the natural resources and functions of floodplains or increase flood risks; restore, when practicable, natural floodplain values previously affected by land use activities with floodplains.

Water Quality and Quantity

Runoff volumes and pollutant loads for “existing conditions”—42% of Governors Island is impervious land—were calculated for the GSA FEIS for conventional pollutants, coliform bacteria and heavy metals. These numbers were assumed as baseline in analyzing the alternatives. It was determined that stormwater pollutant loadings for the “Maximum Development Option” in the GSA FEIS would decrease from existing conditions because overall impervious surface would also decrease. This option in the GSA FEIS proposed a high residential density, a hotel, golf course, retail uses and 20 acres of parkland for the south end of the island. By comparison, any of the alternatives proposed by GIPEC will require adherence to the Quit Claim Deed which requires at least 40 acres of parkland, primarily south of Division Road, thereby allowing increased water infiltration and decreased pollutant loadings.

Definitions of Intensity Levels for Water Quality

Negligible

The impact is slight but detectable locally or in the short-term, or is at the lower levels of detection in the long-term or regionally.

Minor

The impact is readily apparent locally or in the short-term, or slight but detectable in the long-term or regionally.

Moderate

The impact may exceed standards in the short-term, or is readily apparent, but does not exceed standards, regionally or in the long-term.

Major

The project will result in impacts that exceed New York standards for water quality in the long-term or permanently.

Impairment

Chemical or physical changes to water quality would be detectable and would be substantially and frequently altered from the historical baseline or desired water quality conditions and/or water quality standards. The impacts would involve deterioration of the park’s water quality and aquatic resources over the long term, to the point that the park’s purpose could not be fulfilled, or resources could not be experienced and enjoyed by future generations.

Alternative A: No-Action Continuation of Current Management Practices

Impact Analysis

This alternative would decrease impervious surface by about 3.5 acres—or about 16% of the total National Monument property—by eliminating Buildings 513, 251, and impervious areas such as the parking area near Castle Williams. Replacing asphalted areas with vegetation would decrease and filter runoff, and improve the quality of the water being discharged into the harbor.

A soil erosion and sedimentation plan would be prepared prior to major construction activities and implemented with NPS oversight. Water quality would be monitored as necessary and best practices utilized during operations and construction to ensure that runoff from storm events and construction activities is adequately treated before being discharged. Since storm and sewer drains are interconnected island-wide, NPS would collaborate with GIPEC and its facility management team to coordinate policies and best practices.

The associated actions under this alternative—removal of hazardous materials, basic maintenance, and the selective removal of non-contributing features—could have some short-term minor negative impacts on the quality of water discharged into the harbor from storm events. Best practice mitigation measures—such as sediment traps, temporary storm drain diversions, and temporary swales—would be utilized during construction as appropriate.

In the long-term, however, there could be minor improvements in the quality of run-off discharged into the harbor due to the decrease in impervious surface and the increase in natural landscape treatments.

Cumulative Impacts of Alternative A on Water Quality

With an estimated 42% of Governors Island being of impervious surface, and the requirements of the Quit Claim Deed for GIPEC to develop a 40-acre park south of Division Road, and NPS's actions further decreasing impervious surface, it can be concluded that over the long-term run-off water quality would increase and run-off water quantity would decrease.

Conclusion

Alternative A would decrease impervious surface by about 16% within the National Monument. Some short-term negative impacts could result to water quality run-off during construction; however, over the long-term water quality would increase and run-off water quantity would decrease. Based on the above analysis, these actions are not likely to result in impairment to water quality.

Actions Common to All Action Alternatives

Impact Analysis

As in Alternative A, the action alternatives will decrease impervious surface by about 3.5 acres—or about 16% of the total National Monument property—by eliminating Buildings 513, 251, and impervious areas, such as the parking area near Castle Williams. Replacing asphalted areas with vegetation will decrease and filter runoff and improve the quality of the water being discharged into the harbor.

A soil erosion and sedimentation plan will be prepared prior to major construction activities and implemented with NPS oversight. Water quality will be monitored as necessary and best practices utilized during operations and construction to ensure that runoff from storm events and construction activities is adequately treated before being discharged. Since storm and sewer drains are interconnected island-wide, NPS will collaborate with GIPEC and its facility management team to coordinate policies and best practices.

The associated actions under this alternative—removal of hazardous materials, basic maintenance, and the selective removal of non-contributing features—could have some short-term minor negative impacts on the quality of water discharged into the harbor from storm events. Best practices mitigation measures—such as sediment traps, temporary storm drain diversions, and temporary swales—will be utilized during construction as appropriate.

In the long-term, however, there could be minor improvements in the quality of run-off discharged into the harbor due to the decrease in impervious surface and the increase in natural landscape treatments.

Cumulative Impacts of Actions Common to All Action Alternatives on Water Quality

With an estimated 42% of Governors Island being of impervious surface, and the requirements of the Quit Claim Deed for GIPEC to develop a 40-acre park south of Division Road, and NPS's actions further decreasing impervious surface, it can be concluded that over the long-term run-off water quality will increase and run-off water quantity will decrease.

Conclusion

As in Alternative A, all the action alternatives would decrease impervious surface by about 16% within the National Monument. Some short-term negative impacts could result to water quality run-off during construction; however, over the long-term water quality would increase and run-off water quantity would decrease. Based on the above analysis, these actions are not likely to result in impairment to water quality.

Alternative B: Governors Island History Center

Impact Analysis

No additional actions that would have an impact on water quality and quantity beyond those described in "Common to All" would be taken.

Cumulative Impacts of Alternative B on Water Quality

No additional cumulative impacts beyond "Common to All" are anticipated as a result of implementing this alternative.

Conclusion

This alternative—as in all the action alternatives—would decrease impervious surface by about 16% within the National Monument. Some short-term negative impacts could result to water quality run-off during construction; however, over

the long-term water quality would increase and run-off water quantity would decrease. Based on the above analysis, these actions are not likely to result in impairment to water quality.

Alternative C: Island Collaborative

Impact Analysis

No additional actions that would have an impact on water quality and quantity beyond those described in "Common to All" would be taken.

Cumulative Impacts of Alternative C on Water Quality

No additional cumulative impacts beyond "Common to All" are anticipated as a result of implementing this alternative.

Conclusion

This alternative—as in all the action alternatives—would decrease impervious surface by about 16% within the National Monument. Some short-term negative impacts could result to water quality run-off during construction; however, over the long-term water quality would increase and run-off water quantity would decrease. Based on the above analysis, these actions are not likely to result in impairment to water quality.

Alternative D: Harbor Partnership

Impact Analysis

No additional actions that would have an impact on water quality and quantity beyond those described in "Common to All" would be taken.

Cumulative Impacts of Alternative D on Water Quality

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

This alternative—as in all the action alternatives—would decrease impervious surface by about 16% within the National Monument. Some short-term negative impacts could result to water quality run-off during construction; however, over the long-term water quality would increase and run-off water quantity would decrease. Based on the above analysis, these actions are not likely to result in impairment to water quality.

3. Aquatic Life and Their Habitats

The GSA FEIS and the Ellis Island DCP were consulted to gain information about aquatic life present in New York Harbor.

Aquatic life is affected by water quality. In the above analysis regarding water quality, it was demonstrated that all the alternatives will be decreasing impervious surface which will decrease the quantity of run-off and improve the quality of run-off. The decrease in impervious surface and associated increase in vegetation could potentially improve the quality of run-off water in the immediate vicinity of the island in the long-term.

Aquatic life and their habitats can also be affected by turbidity from the disturbance of marine sediments. There is a potential for such disturbance when the NPS dock (102) undergoes repair and a floating dock is installed, although it will be localized and short-term. Pier rehabilitation will be sensitive to aquatic life and the pier can potentially become habitat for some benthos and finfish species.

Definitions of Intensity Levels for Aquatic Life and Their Habitats Negligible

The impact to non-protected aquatic life and their habitats is slight but detectable locally or in the short-term, or is at the lower levels of detection in the long-term or regionally. No protected species are affected.

Minor

The impact to non-protected aquatic life and their habitats is readily apparent locally or in the short-term, or slight but detectable in the long-term or regionally. No habitat critical for protected species is affected or other habitat is available nearby. Only non-breeding animals of concern are present, or proposed mitigation to breeding animals will fully offset impacts to these individuals.

Moderate

The impact to non-protected aquatic life and their habitats is severe locally or in the short-term, or readily apparent regionally or in the long-term. Local loss of protected species may occur, but regional populations are not affected in a readily detectable way. Actions may interfere with activities necessary for survival or breeding on an occasional or short-term basis, but are not expected to threaten the continued existence of the species in the park.

Major

The impact to non-protected aquatic life and their habitats is severe regionally or in the long-term. The loss of local protected species affects regional populations in a readily detectable way. Mortality or other effects are expected on a regular basis and could threaten continued survival of the species in the park.

Impairment

A permanent adverse change in aquatic life and their habitats would occur in a substantial portion of their occurrence in or near the park. The change would be highly noticeable, could not be mitigated, and would affect these resources to the point that the park's purpose could not be fulfilled and enjoyment of the aquatic life or their habitat resource by future generations would be precluded.

Alternative A: No-Action Continuation of Current Management Practices

Impact Analysis

The associated actions under this alternative—elimination of Buildings 513, 251, and impervious areas, such as the parking area near Castle Williams; the repair of NPS dock (102); and the installation of a floating dock—could have some short-term minor negative impacts on water quality which could potentially have minor localized negative impacts to some aquatic life and their habitats in the vicinity of NPS dock (102).

Pier and dock repair activities could temporarily increase turbidity by disturbing suspended sediments, which can have the potential to negatively impact aquatic life and their habitats in the short-term. Using pier repair best practices, NPS will minimize negative impacts to aquatic life and their habitats. Mitigation, such as silt curtains, would be used to minimize impacts to marine sediments if and where appropriate.

The increase in dock availability after repairs, the installation of a floating dock, and the improved quality of run-off can potentially increase some benthos and finfish species that prefer underpier habitats. Under this alternative there is the potential for negligible beneficial impacts to aquatic life and their habitats in the long-term.

Cumulative Impacts of Alternative A on Aquatic Life and Their Habitats

It is anticipated that GIPEC will make repairs to their existing docks and piers and/or install new docks and piers. Depending on the extent of their actions, they could potentially negatively affect water quality—and aquatic life and their habitats—in localized areas around the island in the short-term in minor to moderate amounts. For the long-term, however, water quality should improve, or at least revert to pre-construction levels, as NPS decreases the amount of impervious surface within the National Monument.

Conclusion

All the alternatives will decrease impervious surface, repair NPS dock (102), and install a floating dock. In the short-term, these construction and repair activities could have some minor negative impacts on aquatic life and their habitats in the localized area.

In the long-term, however, with an increase in vegetation and an improvement in water quality, the localized area and its associated aquatic life and habitats should improve or at least revert to pre-construction and repair conditions over the long-term. Based on the above analysis, these actions are not likely to result in impairment to aquatic life and their habitats.

Actions Common to All Action Alternatives

Impact Analysis

As in Alternative A, the associated actions under this alternative—elimination of Buildings 513, 251, and impervious areas, such as the parking area near Castle Williams; the repair of NPS dock (102); and the installation of a floating dock—could have some short-term minor negative impacts on water quality which could potentially have minor localized negative impacts to some

aquatic life and their habitats in the vicinity of NPS dock (102).

Pier and dock repair activities could temporarily increase turbidity by disturbing suspended sediments, which can have the potential to negatively impact aquatic life and their habitats in the short-term. Using pier repair best practices, NPS will minimize negative impacts to aquatic life and their habitats. Mitigation, such as silt curtains, would be used to minimize impacts to marine sediments if and where appropriate.

The increase in dock availability after repairs, the installation of a floating dock, and the improved quality of run-off can potentially increase some benthos and finfish species that prefer underpier habitats. There is the potential for negligible beneficial impacts to aquatic life and their habitats in the long-term.

Cumulative Impacts of Actions Common to All Action Alternatives on Aquatic Life and Their Habitats

It is anticipated that GIPEC will make repairs to their existing docks and piers and/or install new docks and piers. Depending on the extent of their actions, they could potentially negatively affect water quality—and aquatic life and their habitats—in localized areas around the island in the short-term in minor to moderate amounts. For the long-term, however, water quality should improve, or at least revert to pre-construction levels, as NPS decreases the amount of impervious surface within the National Monument.

Conclusion

All the alternatives will decrease impervious surface, repair NPS dock (102), and install a floating dock. In the short-term, these construction and repair activities could have some minor negative impacts on aquatic life and their habitats in the localized area.

In the long-term, however, with an increase in vegetation and an improvement in water quality, the localized area and its associated aquatic life and habitats should improve or at least revert to pre-construction and repair conditions over the long-term. Based on the above analysis, these actions are not likely to result in impairment to aquatic life and their habitats.

Alternative B: Governors Island History Center

Impact Analysis

No additional actions beyond those described in “Common to All” would be taken that would have additional impacts on water quality or aquatic life and their habitats.

Cumulative Impacts of Alternative B on Aquatic Life and Their Habitats

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

All the alternatives will decrease impervious surface, repair NPS dock (102), and install a floating dock. In the short-term, these construction and repair activities could have some minor negative impacts on aquatic life and their habitats in the localized area.

In the long-term, however, with an increase in vegetation and an improvement in water quality, the localized area and its associated aquatic life and habitats should improve or at least revert to pre-construction and repair conditions over the long-term. Based on the above analysis, these actions are not likely to result in impairment to aquatic life and their habitats.

Alternative C: Island Collaborative

Impact Analysis

No additional actions beyond those described in “Common to All” would be taken that would have additional impacts on water quality or aquatic life and their habitats.

Cumulative Impacts of Alternative C on Aquatic Life and Their Habitats

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

All the alternatives will decrease impervious surface, repair NPS dock (102), and install a floating dock. In the short-term, these construction and repair activities could have some minor negative impacts on aquatic life and their habitats in the localized area.

In the long-term, however, with an increase in vegetation and an improvement in water quality, the localized area and its associated aquatic life and habitats should improve or at least revert to pre-construction and repair conditions over the long-term. Based on the above analysis, these actions are not likely to result in impairment to aquatic life and their habitats.

Alternative D: Harbor Partnership

Impact Analysis

No additional actions beyond those described in “Common to All” would be taken that would have additional impacts on water quality or aquatic life and their habitats.

Cumulative Impacts of Alternative D on Aquatic Life and Their Habitats

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

All the alternatives will decrease impervious surface, repair NPS dock (102), and install a floating dock. In the short-term, these construction and repair activities could have some minor negative impacts on aquatic life and their habitats in the localized area.

In the long-term, however, with an increase in vegetation and an improvement in water quality, the localized area and its associated aquatic life and habitats should improve or at least revert to pre-construction and repair conditions over the long-term. Based on the above analysis, these actions are not likely to result in impairment to aquatic life and their habitats.

C. Visitor Experience

NPS Management Policies, 2006 state that the enjoyment of park resources and values by the people of the United States is part of the fundamental purpose of all parks and that the NPS is committed to providing appropriate, high-quality opportunities for visitors to enjoy the national parks. Because many forms of recreation may not be suitable for a national park setting, the NPS would therefore seek to:

- ◆ provide opportunities for forms of enjoyment that are uniquely suited and appropriate to the superlative natural and cultural resources found in a particular unit

- ◆ defer to local, state, and other federal agencies; private industry; and non-governmental organizations to meet the broader spectrum of recreational needs and demands that are not dependent on a national park setting.

Unless mandated by statute, the NPS would not allow visitors to conduct activities that:

- ◆ would impair park resources or values;
- ◆ would create an unsafe or unhealthy environment for other visitors or employees;
- ◆ are contrary to the purposes for which the park was established; or
- ◆ would unreasonably interfere with the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park.

Visitor Experience, Resource Protection, and Carrying Capacity

In a 2001 report published by the National Recreation and Park Association, carrying capacity is defined as “the supply or prescribed number of appropriate visitor opportunities that would be accommodated in an area” (from *Visitor Capacity on Public Lands and Waters: Making Better Decisions*). NPS also defines it as “the type

and level of visitor use that can be accommodated while sustaining the desired resource and visitor conditions in the park” (*National Park Service Management Policies, 2006*, page 100).

The ultimate carrying capacities for Fort Jay, Castle Williams and *glacis* have not been determined due to the start-up nature of the National Monument, and lack of information about future redevelopment of the larger island and future visitation levels. However, each resource would have its own thresholds and tolerances. Identifying indicators—measurable physical or social variables (Appendix C: Analysis of Carrying Capacity)—would help NPS staff to monitor and address unacceptable impacts to National Monument resources and visitor experiences. The staff would utilize the GMP to facilitate the decision-making process to achieve desired resource conditions while balancing for visitors’ educational and interpretive experiences. NPS would use the best available natural and social science to identify indicators and standards to formulate policy in regards to carrying capacity. The greater the potential for significant impacts or consequences to NPS resources and values, the greater the level of study and analysis needed to support the decision.

Carrying capacities for Fort Jay and Castle Williams are unlikely to be reached in the life of this GMP; however, use of the *glacis* could potentially reach its threshold or tolerance level sooner than the forts. Monitoring the *glacis* and developing a management policy with GIPEC will

Anticipated Future Yearly Visitation				
Alternative A: No Action	Common to All Action Alternatives	Alternative B	Alternative C	Alternative D
seasonal only	base	+10%	+0%	+15%
20,000+	500,000	550,000	500,000	575,000

be critical in preserving the *glacis* while providing an appropriate amount of public use. Monitoring would include assessing resource conditions on a regular basis and documenting those conditions over time and after special events that constituted a concentrated use of the *glacis*. NPS policies and guidelines for the *glacis* will have to evolve, with its partners, as visitation increases and condition resources are monitored over time. Only after such monitoring can inferences be made between level of visitation and resource conditions—informing policies and guidelines.

NPS anticipates a baseline of 500,000 visitors per year to the National Monument when the forts and landscapes are fully rehabilitated and open for public visitation. With 500,000 as a base for “Common to All,” Alternative B would experience a 10% increase, Alternative C, no increase and Alternative D a 15% increase.

Definitions of Intensity Levels for Visitor Experience

Negligible

Visitors would not likely be aware of the impacts associated with changes proposed for visitor use and enjoyment of park resources.

Minor

Visitors would likely be aware of the impacts associated with proposed changes; however, the changes in visitor use and experience would be slight and likely short-term. Other areas in the park would remain available for similar visitor experience and use without derogation of park resources and values.

Moderate

Visitors would be aware of the impacts associated with proposed changes. Changes in visitor use and experience would be readily apparent and likely long-term. Other areas in the park would remain available for

similar visitor experience and use without derogation of park resources and values, but visitor satisfaction may be measurably affected (visitors could be either satisfied or dissatisfied).

Major

Visitors would be highly aware of the impacts associated with proposed changes. Changes in visitor use and experience would be readily apparent and long-term. Certain activities/visitor experiences would no longer be available within the park, and visitor satisfaction would likely be affected.

Alternative A: No-Action Continuation of Current Management Practices

Impact Analysis

Visitor surveys and comments indicate that most visitors to Governors Island do not differentiate between NPS and GIPEC properties, programs or events. Surveys and comments between 2003 and 2006 reflect visitors’ overall positive experiences within the National Monument and Historic District. Most frequent complaints are about lack of basic visitor facilities: restrooms, potable water, benches, food, and ability to tour building interiors. Most visitors are also aware of NPS and GIPEC improvement plans: in particular, to remove hazardous materials, rehabilitate the historic buildings, make several of the buildings accessible to the public, remove “excess” structures, restore views and provide waterfront recreation opportunities.

Continuation of current management practices of seasonal visitation in the short-term would have minor to moderate adverse impacts on the visitor experience as public expectations of having year-round access to National Monument resources are unmet. In the long-term, there would be year-

round access to National Monument resources with mostly self-led and some ranger-led programs, having minor to moderate beneficial impacts to the visitor experience.

Cumulative Impacts of Alternative A on the Visitor Experience

The continuation of current management practices would have an improvement on the visitor experience incrementally over time and as funds become available. Hazardous material remediation and resource preservation and repairs will allow for increased access to resources. The addition of waysides and other interpretive media will facilitate self-exploration. As the island is redeveloped with more public attractions, visitation will significantly increase, and will require NPS to increase its collaborations with on- and off-island parties to provide visitors with a good experience.

Conclusion

Alternative A would have short-term minor to moderate adverse impacts on the visitor experience as public expectations of having year-round access to National Monument resources are unmet. In the long-term, there would be year-round access to National Monument resources with mostly self-led and some ranger-led programs, having minor to moderate beneficial impacts to the visitor experience. Cumulative impacts to the visitor experience over time would likely result in additional beneficial impacts as the island becomes more developed by others.

Actions Common to All Action Alternatives

Impact Analysis

Collectively, the improvements that would be undertaken—rehabilitation of the forts, including ADA accessibility improvements, the demolition of non-historic or non-contributing structures

to restore viewsheds and the original relationship between the forts, new exhibits, development of a new shelter/contact station, dock repair, installation of a floating dock, and overall increase in visitor amenities and services—would have major beneficial impacts on the visitor experience in the long-term. The rehabilitation efforts would allow for safer and greater access to the resources; new programs would attract more visitors, who would stay longer, and enjoy their visit more. Visitation would be year-round, with some seasonal fluctuation.

In the short-term, visitation would likely continue to be seasonal, and major portions of the National Monument would be inaccessible before and during demolition and rehabilitation activities. This would likely lead to short-term minor adverse impacts to the visitor experience.

Cumulative Impacts of Actions Common to All Action Alternatives on the Visitor Experience

The implementation of any of the alternatives would constitute an improvement on the visitor experience. Hazardous material remediation and resource preservation and rehabilitation will allow for increased access to resources. The addition of waysides and other interpretive media will facilitate self-exploration. As the island is redeveloped with more public attractions, visitation will significantly increase, and will require NPS to increase its collaborations with on- and off-island parties to provide visitors with a good experience.

Conclusion

Under all the action alternatives the visitor experience would have minor adverse impacts in the short-term as visitation would have to continue to be seasonal as demolition and rehabilitation activities are completed. Once improvements have been made, there would be major beneficial impacts on the visitor experience.

Cumulative impacts to the visitor experience over time would likely result in additional beneficial impacts as the island becomes more developed by others.

Alternative B: Governors Island History Center

Impact Analysis

Under this alternative, the NPS would offer additional exhibits and programs to visitors within the boundary of the National Monument. The NPS would seek to make all areas of the forts accessible to the public as part of the History Center. These actions would have major beneficial impacts on the visitor experience over the long-term.

Cumulative Impacts of Alternative B on the Visitor Experience

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

Under all the action alternatives the visitor experience would have minor adverse impacts in the short-term as visitation would have to continue to be seasonal as demolition and rehabilitation activities are completed. Once improvements have been made, there would be major beneficial impacts on the visitor experience. Cumulative impacts to the visitor experience over time would likely result in additional beneficial impacts as the island becomes more developed by others.

Alternative C: Island Collaborative

Impact Analysis

In this alternative, NPS would not necessarily offer additional exhibits and programs within the National Monument above those proposed under “Common to All.” NPS would lease out portions of the forts to non-profit organizations, who may or may not provide additional public access or programs. While some portions of the forts may not be accessible to the public, NPS would retain key sections—such as Castle Williams’s courtyard, roof and several casemates, and one or more barracks and courtyard of Fort Jay—which would be part of the visitor experience. This alternative would also extend the NPS interpretive and educational programs beyond the boundary to include the whole island. The NPS would collaborate with GIPEC and other island parties to develop a network of interpretive paths, kiosks, and orientation points around the island. The improvements would have moderate to major beneficial impacts on the visitor experience over the long-term.

Cumulative Impacts of Alternative C on the Visitor Experience

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

Under all the action alternatives the visitor experience would have minor adverse impacts in the short-term as visitation would have to continue to be seasonal as demolition and rehabilitation activities are completed. Once improvements have been made, there would be major beneficial impacts on the visitor experience. Cumulative impacts to the visitor experience over time would likely result in additional beneficial impacts as the island becomes more developed by others.

Alternative D: Harbor Partnership

Impact Analysis

Like Alternative B, this alternative would offer additional exhibits and programs to visitors. The NPS would seek to make all areas of the forts accessible to the public as part of the Harbor Center. Similar to Alternative C, this alternative would also extend the NPS interpretive and educational programs beyond the boundary, to include the entire island and harbor. The NPS would collaborate with others to develop a network of interpretive paths, kiosks, and orientation points around the island, and at ferry debarkation points on the mainland. The scope and variety of experiences for visitors would be the greatest under this alternative. The improvements would have major beneficial impacts on the visitor experience over the long-term.

Cumulative Impacts of Alternative D on the Visitor Experience

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

Under all the action alternatives the visitor experience would have minor adverse impacts in the short-term as visitation would have to continue to be seasonal as demolition and rehabilitation activities are completed. Once improvements have been made, there would be major beneficial impacts on the visitor experience. Cumulative impacts to the visitor experience over time would likely result in additional beneficial impacts as the island becomes more developed by others.

Summary of Impacts on the Visitor Experience

While visitors currently express a positive overall experience when they come to the National Monument, there is the expectation that there will be more to see and do in the coming years, as well as the ability to access the resources year-round. All the alternatives will include the removal of hazardous materials and Buildings 513 and 251. Those two actions alone will go a long way in improving the visitor experience by providing greater access to resources, more recreational areas and restoring historic viewsheds. Alternative B is likely to offer the most public access to the fort interiors. Alternatives C and D actions will offer greater access to the resources than exists today, but less than B, as some fort spaces would be made available to non-profit organizations or partner organization and potentially not accessible to the public. However, C and D will more than make up for any decrease in fort access through their island- and harbor-wide programming.

D. Administration and Operations

National Monument staff are responsible for the quality of the visitor experience, increasing productivity and controlling costs, and for assuring that programs are managed with integrity and in compliance with applicable law.

The NPS uses performance management measures and standards to set goals and track accomplishments for all National Parks and central offices. Service-wide strategic plans, annual performance plans, and annual performance reports are prepared, distributed, used, and analyzed for management accountability. These performance measures and standards are based on the Government Performance and Results Act of 1993 (GPRA).

Administrative and operational activities and programs are geared toward preserving resources and providing for public enjoyment in a safe environment. These activities include:

- ◆ Facilities Management
- ◆ Transportation
- ◆ Interpretation and Education
- ◆ Recreational and Special Uses
- ◆ First Amendment Uses
- ◆ Accessibility for Persons with Disabilities
- ◆ Commercial Services
- ◆ Visitor Safety, Security, Law Enforcement, Emergency Evacuations
- ◆ Overflights and Aviation Uses
- ◆ Natural and Cultural Studies Research and Collection Activities

It is anticipated that capital improvements, staff and operational costs will be phased over the life of this plan. The implementation of the approved plan will depend on future funding and Servicewide priorities. The approval of a GMP does not guarantee that funding and staffing needed to implement the plan will be forthcoming. Full implementation of the GMP could be many years into the future.

Definitions of Intensity Levels for Administration and Operations

Negligible

No measurable impact to park operations.

Minor (increase/decrease)

Park operations would be affected, but the impact would not be perceptible by visitors. To the normal observer, such impacts would not be apparent. This would involve levels of increase or decrease in the park's budget and current staffing of 1–3% with a corresponding level of workload increase/decrease.

Moderate (increase/decrease)

Park operations would be measurably affected, and the impacts would be noticeable to visitors. This would involve levels of increase or decrease in the park's budget between 4–6 % and an increase or decrease in personnel of 4–6%. Impacts would include providing more/diminishing visitor services, protection and emergency response services, facility maintenance, administrative support, and curatorial services.

Major (increase/decrease)

Park operations would be extensively affected, and visitors would be aware of changes. This would involve levels of increase or decrease in the park's budget of greater than 7% and an increase or decrease in personnel of greater than 7%. Impacts would be providing more/diminishing visitor services, protection and emergency response services, facility maintenance, administrative support, and curatorial services.

Alternative A: No-Action Continuation of Current Management Practices

Impact Analysis

The NPS would maintain a core staff of approximately seven full-time employees to manage programs for resource preservation and public enjoyment. Approximately six seasonals would be hired for the public visitation season.

There would be minor increases in the park's current budget and staffing under this alternative, with imperceptible effects on the visitor; budget and staffing would not likely fluctuate by more than 3%.

Cumulative Impacts of Alternative A on Administration and Operations

As the island is redeveloped with additional public attractions and is at a full operating capacity, implementing Alternative A, the no-action alternative, with a minimal staff and seasonals will become significantly more difficult. Currently, Governors Island National Monument contracts out all of its grounds-keeping, custodial, repair and maintenance projects. The National Monument also contracts out for its architectural and engineering studies, plans, specifications and resource assessments. Annual assessments are made to the National Monument's annual operating budget to cover IT, contracting and human resource assistance provided by the Washington and Northeast Regional offices and other parks. Even with a strong volunteer program and additional partnership programs, a fully redeveloped island with multiple attractions and significantly increased visitation will require additional NPS staff to maintain current levels of service and to protect resources.

Conclusion

There would be minor increases in the park's current budget and staffing under this alternative, with imperceptible effects on the visitor; budget and staffing would not likely fluctuate by more than 3%. Over the long-term, additional NPS staff will be required to maintain current level of service and protect resources.

Actions Common to All Action Alternatives

Impact Analysis

In all action alternatives, the NPS would develop, implement, and assess a full complement of programs and activities to achieve the goals for the National Monument. The increased scope and complexity of operations due to increased visitation and coordination with numerous

other organizations on and off the island would necessitate substantial growth of budgets and staff. Full-time park staff would increase to approximately 20, with varying number of seasonal hires, and different types of staff expertise needed, depending on the alternative.

There would be a major impact to administration and operations with an increase in budget and personnel of more than 7% under all the action alternatives.

Cumulative Impacts of Actions Common to All Action Alternatives on Administration and Operations

There are no additional cumulative impacts anticipated as a result of implementing any of the action alternatives.

Conclusion

There would be a major impact to administration and operations with an increase in budget and personnel of more than 7% under all the action alternatives with no additional cumulative impacts to the same.

Alternative B: Governors Island History Center

Impact Analysis

Under this alternative, National Monument staff would likely have the least amount of interaction with other island organizations, but are likely to have more interaction with history-related organizations and individuals throughout the region. The programs and activities anticipated under this alternative would have a major impact—an increase—on the National Monument's administration and operations, with increases of more than 7% in budget and personnel. The implementation of this alternative would require approximately 20 full-time employees and 6 seasonals.

Cumulative Impacts of Alternative B on Administration and Operations

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

There would be a major impact to administration and operations with an increase in budget and personnel of more than 7% under this alternative with no additional cumulative impacts to the same.

Alternative C: Island Collaborative

Impact Analysis

Like Alternative B, the National Monument would require approximately 20 full-time employees, however, no seasonals would be required as result of the nature of the visitor experience. A staff person dedicated to partnerships and leasing would be required for the successful implementation of this alternative.

There would be a major impact—an increase—on administration and operation with an increase in budget and personnel of more than 7% under this alternative.

Cumulative Impacts of Alternative C on Administration and Operations

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

There would be a major impact to administration and operations with an increase in budget and personnel of more than 7% under this alternative with no additional cumulative impacts to the same.

Alternative D: Harbor Partnership

Impact Analysis

As in Alternative C, the National Monument would require approximately 20 full-time employees, including partnerships and leasing manager(s). Like Alternative B, approximately six seasonal guides would be required during the peak public season to supplement the visitor services offered by NPS and its partners.

There would be a major impact—an increase—on administration and operation with an increase in budget and personnel of more than 7% under this alternative.

Cumulative Impacts of Alternative D on Administration and Operations

No additional cumulative impacts beyond “Common to All” are anticipated as a result of implementing this alternative.

Conclusion

There would be a major impact to administration and operations with an increase in budget and personnel of more than 7% under this alternative with no additional cumulative impacts to the same.

E. Socioeconomic Environment

In summer 2005, 11,500 people visited Governors Island National Monument and made a positive economic impact to the city, based on the National Park Service’s Money Generation Model 2. The Money Generation Model 2 was prepared by Michigan State University for NPS and allows national park sites to estimate the economic impacts related to visitation at their

sites. To estimate a breakdown of visitor origins and average visitor expenditures at Governors Island NM, this study used visitor profile data from a nearby national park, Gateway National Recreation Area, located in New York Harbor in New York and New Jersey. Visitor assumptions for Gateway NRA should be similar to Governors Island NM, since, at least initially, they both serve a predominantly local population, compared with Statue of Liberty National Monument, which attracts many non-local visitors.

Direct expenditures, or direct effects, are those changes in sales, income and jobs that receive visitor spending directly. Indirect expenditures, or secondary effects, are changes in sales, income and jobs that are a result of the circulation of the initial spending.

For Gateway National Recreation Area, indirect expenditures were 16% of total expenditures.

Using the model and a base number of 11,500 visitors, visitors to Governors Island National Monument spent an estimated \$253,666 in 2005 in the New York City area for meals, rooms, shopping, and services. The breakout of expenditures by categories of visitor follows.

As visitor spending circulates through the local economy, secondary effects created an additional \$40,587 in economic impacts and the potential for an estimated six new jobs. The total economic impact of direct and secondary spending was \$294,253, a negligible contribution to the local economy.

The gross city product of New York City was \$457 billion in 2006 and the New York gross metropolitan region product was \$901 billion (Wikipedia.com).

Definitions of Intensity Levels for the Socioeconomic Environment

Negligible

An action that would have a very small impact—less than 1%—on the regional and local economy. The results of such actions would have no measurable effect on the socioeconomic environment.

Minor

Minor impacts—1% to 10%—adverse or beneficial would result from actions with relatively small effects. The action would affect only a small sector of the economy, and would require significant effort to measure. The consequences of such action would not be readily apparent.

Moderate

An action that would measurably impact a relatively small sector of the socioeconomic environment—by 11% to 15%—or would alter the relationship between sectors of the economy. Adverse impacts would not prove significant enough to threaten any economic sector, and beneficial impacts would not result in major structural shifts.

Major

Major impacts—over 15%—to the regional and local economy would become readily apparent in the form of beneficial or adverse shifts in the socioeconomic structure. In certain cases, entirely new economic sectors would be created, or established sectors eliminated. Major impacts would reverberate throughout the socioeconomic environment, significantly altering existing conditions, in beneficial or adverse ways.

2005 Visitation							
	Visitors	Parties	Expenditure/ Party Night	Direct Expenditures	Indirect Expenditures (16% of direct)	Total Expenditures	Potential New Jobs Created
Overnight (5% of visitors)	575	288	\$ 229	\$65,952			
Non-local Day-trippers (15%)	1,725	862	47	\$40,514			
Local Day-trippers (80%)	9,200	4,600	32	\$147,200			
Total	11,500	5,750		\$253,666	\$40,587	\$294,253	6

Alternative A: No-Action Continuation of Current Management Practices

Impact Analysis

Although visitation figures have already exceeded this number, Alternative A is estimated to attract 15,000 visitors, who would spend \$330,750 and have a total economic impact of \$383,670, with a potential to create up to nine new jobs.

Visitors and visitor expenditures over the current base would continue to increase, but the overall impact on the New York City local and regional economy would be negligible.

Cumulative Impacts of Alternative A on the Socioeconomic Environment

No additional cumulative impacts to the socio-economic environment are anticipated as a result of implementing the no-action alternative.

Conclusion

Alternative A would continue to see increases in visitors and visitor expenditures, but the impact on the New York City local and regional economy would be negligible.

Actions Common to All Action Alternatives

Impact Analysis

All the action alternatives are estimated to attract 500,000 or more visitors, who would spend \$11,025,000 with a total economic impact of \$12,789,000 and a potential to create up to 312 new jobs. The increase in visitors and visitor expenditures over the current base would be substantial, with an ultimate visitation increase of over 43 times the 2005 number. However, with New York City's enormous overall economy, this would still be a negligible contribution to the local and regional economy.

Alternative A: No-action

	Visitors	Parties	Expenditure/ Party Night	Direct Expenditures	Indirect Expenditures (16% of direct)	Total Expenditures	Potential New Jobs Created
Overnight (5% of visitors)	750	375	\$ 229	\$85,875			
Non-local Day-trippers (15%)	2,250	1,125	47	\$52,875			
Local Day-trippers (80%)	12,000	6,000	32	\$192,000			
Total	15,000	7,500		\$330,750	\$52,920	\$383,670	9

Cumulative Impacts of Actions Common to All Action Alternatives on the Socioeconomic Environment

The GSA FEIS's three most intensely developed options—Academic with Casino, Mixed-Use, and Maximum Development—would generate from \$966 million to \$1.1 billion in the local economy and require 1,594 to almost 6,000 employees to operate.

The next three most intensely developed options—Re-Use, Academic and Recreation—would generate \$250–398 million dollars into the local economy and require 452–1,557 employees to operate.

A full build-out under the island's deed restrictions, may best be compared to a combination—an averaging—of GSA FEIS's Mixed Use and Academic options, generating \$697 million into the local economy and requiring over 1,070 jobs to operate (the GSA FEIS calculated the number of jobs to run the island under each of the alternatives, not the number of jobs generated into the regional economy as a whole).

Cumulatively, impacts from a full build scenario of the island would have a minor impact on the local economy and a negligible impact on the regional economy.

Conclusion

The National Monument alone would have a negligible impact on the local and regional economies. Factoring in the entire island's full build out potential, Governors Island as a whole could have a minor impact on the local economy; the impact to the regional economy would be negligible.

Alternative B: Governors Island History Center

Impact Analysis

Alternative B is estimated to attract 550,000 visitors, who would spend \$12,127,500 with \$14,067,900 in total economic impacts, generating up to 343 new jobs.

The increase in visitors and visitor expenditures over the current base attendance would be substantial, with an ultimate visitation increase

Common to All Action Alternatives and Alternative C							
	Visitors	Parties	Expenditure/ Party Night	Direct Expenditures	Indirect Expenditures (16% of direct)	Total Expenditures	Potential New Jobs Created
Overnight (5% of visitors)	25,000	12,500	\$ 229	\$2,862,500			
Non-local Day-trippers (15%)	75,000	37,500	47	\$1,762,500			
Local Day-trippers (80%)	400,000	200,000	32	\$6,400,000			
Total	500,000	250,000		\$11,025,000	\$1,764,000	\$12,789,000	312

of over 47 times the current level. However, with New York City's enormous overall economy, this would still be a negligible contribution to the local and regional economy.

Cumulative Impacts of Alternative B on the Socioeconomic Environment

No additional cumulative impacts beyond "Common to All" are anticipated as a result of implementing this alternative.

Conclusion

The National Monument alone would have a negligible impact on the local and regional economies. Factoring in the entire island's full build out potential, Governors Island as a whole could have a minor impact on the local economy; the impact to the regional economy would be negligible.

Alternative C: Island Collaborative

Impact Analysis

Same as "Common to All."

Cumulative Impacts of Alternative C on the Socioeconomic Environment

No additional cumulative impacts beyond "Common to All" are anticipated as a result of implementing this alternative.

Conclusion

The National Monument alone would have a negligible impact on the local and regional economies. Factoring in the entire island's full build out potential, Governors Island as a whole could have a minor impact on the local economy; the impact to the regional economy would be negligible.

Alternative B							
	Visitors	Parties	Expenditure/ Party Night	Direct Expenditures	Indirect Expenditures (16% of direct)	Total Expenditures	Potential New Jobs Created
Overnight (5% of visitors)	27,500	13,750	\$ 229	\$3,148,750			
Non-local Day-trippers (15%)	82,500	41,250	47	\$1,938,750			
Local Day-trippers (80%)	440,000	220,000	32	\$7,040,000			
Total	550,000	275,000		\$12,127,500	\$1,940,400	\$14,067,900	343

Alternative D: Harbor Partnership

Impact Analysis

Alternative D is estimated to attract 575,000 visitors, who would spend \$12,678,750 with a total economic impact of \$14,707,350 and a potential to create up to 359 new jobs.

The increase in visitors and visitor expenditures over the current base attendance would be major and beneficial, with an ultimate visitation increase of 50 times the current amount. Even with New York City's enormous overall economy, this could make a minor beneficial contribution to the local economy.

Cumulative Impacts of Alternative D on the Socioeconomic Environment

No additional cumulative impacts beyond "common" are anticipated as a result of implementing this alternative.

Conclusion

The National Monument alone would have a negligible impact on the local and regional economies. Factoring in the entire island's full build out potential, Governors Island as a whole could have a minor impact on the local economy; the impact to the regional economy would be negligible.

Summary of Impacts on the Socioeconomic Environment

The action alternatives B, C and D would attract 500,000 to 575,000 visitors who would generate up to \$14.7 million in total economic impacts; with 312–359 jobs created as a result of implementing the alternatives. The preferred alternative, D, with its potential for creating over \$14.7 million dollars in positive economic impacts to the region and a potential to generate up to 359 new jobs would be a small yet not insignificant beneficial addition to any potential full island build-out scenario.

Alternative D							
	Visitors	Parties	Expenditure/ Party Night	Direct Expenditures	Indirect Expenditures (16% of direct)	Total Expenditures	Potential New Jobs Created
Overnight (5% of visitors)	28,750	14,375	\$ 229	\$3,291,875			
Non-local Day-trippers (15%)	86,250	43,125	47	\$2,026,875			
Local Day-trippers (80%)	460,000	230,000	32	\$7,360,000			
Total	575,000	287,500		\$12,678,750	\$2,028,600	\$14,707,350	359

Summary of Economic Impacts of Each Alternative			
GMP Alternative	Visitors	Total Expenditures	Potential New Jobs Created
Alternative A	15,000	\$383,670	9
Alternative B	550,000	\$14,067,900	343
Alternative C	500,000	\$12,789,000	312
Alternative D	575,000	\$14,707,350	359



Detail of the Battery Maritime Building. Daniel C. Krebs.