

Draft
Site Management Plan
Environmental Assessment

May 8, 1995 Team/Region Review

Fort Wadsworth
GATEWAY

National Recreation Area • New York

SUMMARY

Fort Wadsworth, on Staten Island, New York, is within the boundary of the National Park Service's Gateway National Recreation Area. Fort Wadsworth is significant within the national context of coastal defense and for the protection it provided our nation's most important harbor. The site represents the evolution in philosophy and technology of American military strategy from 1800 through to the 1970s when technological advances in weaponry rendered coastal defense a less pressing military concern.

Fort Wadsworth was identified in the 1972 legislation that established Gateway National Recreation Area. At that time Fort Wadsworth was an active military installation under the jurisdiction of the U.S. Army, and the 1972 legislation stated that Fort Wadsworth would be transferred to the National Park Service (NPS) when the military vacated the site. After the army vacated the site, the U.S. Navy occupied the site until the naval station was decommissioned in August 1994. The navy still owns and has been managing the site in a caretaker capacity since August 1994 pending transfer of portions of the site. Expectations are that in 1995 most of the site will be transferred to the National Park Service and some portions of the site will be retained by units of the U.S. Army Reserve and the U.S. Coast Guard. However, the details of this transfer and the actual transfer have not yet taken place.

In preparation for implementing the 1972 legislative directions, the Park Service has located the Staten Island unit superintendent and a small administrative and maintenance staff at the site, and some funds have been delegated to the site to direct the planning and transition efforts and prepare the site for initial visitor use. After the transfer, the Park Service will seek funding to do even more to make the site available to visitors and preserve and protect the resources, and plans need to be made for further protection, preservation, and visitor use of the site.

The purpose of this *Site Management Plan / Environmental Assessment* is to describe alternatives for this longer-range plan. The document describes two alternatives for site management and analyzes and compares the potential effects of implementing each alternative on the site and neighboring communities. This plan will provide policy direction and guidance for visitor use, cultural and natural resource management, appropriate levels of development, and operations at Fort Wadsworth for the next 20 years.

ALTERNATIVE 1: A LIVING HISTORY MUSEUM (THE PREFERRED ALTERNATIVE)

Alternative 1 features programs, services, and management actions that are designed to facilitate interpretation of Fort Wadsworth's important story. To enhance visitor understanding of the site's past, all major fortifications would be preserved or rehabilitated and interpreted to represent their most recent period of historic significance, allowing cultural resource management and interpretation of the most notable developments in the evolution of the fortifications and all significant aspects of coastal and harbor defense.

To bring to life the stories of Fort Wadsworth, educational exhibits and programs would employ military objects, personal effects, and quotes from soldiers and their families. During times of peak use, visitors would encounter costumed interpreters, observe reenactments of historic military

activities, and engage in living history programs to learn about the lives of Fort Wadsworth's historic occupants.

A comprehensive program serving regional schools and organized groups would be the focus of weekday interpretive activities. An emphasis on general public programming would occur on weekends. During weekends, park staff would be augmented with volunteer reenactors depicting activities experienced by soldiers stationed at Fort Wadsworth.

Although this alternative does not focus on increasing onsite recreational opportunities, such uses as walking, birding, biking, kite flying, a gymnasium, and other informal athletic activities would be available to the public. Fishing would be allowed during daylight hours. Public access to the beach would be allowed, but swimming would continue to be prohibited. Indoor concerts, lectures, theater performances, and other small community-based cultural activities would be allowed in the chapel (building 203) under a special use permit, possibly on a reimbursable basis. Reenactments would be allowed by special use permit, consistent with other visitor use activities. A bicycle route through the fort, using existing roadways, would be established, as would a pedestrian route. The tradition of starting the New York Marathon from Fort Wadsworth would continue.

Under this alternative, visitors would benefit from greatly expanded opportunities to learn of Fort Wadsworth's significant contributions to the defense of New York Harbor and its adjacent coasts. Recreational activities for visitors would be somewhat expanded, offering some opportunities that had only been available to military personnel, and visitor access to the site would be improved. Alternative 1 continues the National Park Service's effort to preserve and protect all historically significant structures at Fort Wadsworth so that they may be safely used by visitors and staff.

ALTERNATIVE 2: A PROTECTED CULTURAL RESOURCE (CONTINUATION OF EXISTING TRENDS)

This alternative represents a continuation of the existing trends after completion of the initial actions; no additional actions would be proposed under this alternative — except those necessary to preserve historic structures — reflecting a condition of economic uncertainty.

Under this alternative, visitors would continue to find educational opportunities at Fort Wadsworth, and they could continue to learn of the fort's significant contributions to the defense of New York Harbor at the visitor center. Access to the site would not be changed. Educational exhibits would continue to be only in the visitor center, and the outdoor wayside exhibits would be retained. Except for Battery Weed and Fort Tompkins (where there would be public restrooms), no other fortifications would be open to visitors. Opportunities for additional exploration, other than Fort Tompkins and Battery Weed, would be severely limited. Interpretive tours and other programs would continue to be provided as funding and staffing allowed.

Fort Tompkins would continue to be protected, but no further interpretation or exhibits would be added. The improved Fort Tompkins overlook would be retained.

Battery Weed would continue to be protected, and there would be no new interpretive exhibits. The Battery Weed seawall would be restored, and the dock would be preserved. The Mont Sec Avenue homes would remain in their current use (for military and NPS housing). The chapel would be preserved and remain closed. All other structures would be continue to be preserved.

Available recreational activities would continue to include scenic viewing at an improved harbor overlook, saltwater fishing, and touring the site. Public access to the beach and swimming would continue to be prohibited. The start of the New York City Marathon would continue at the site.

Under this alternative visitor opportunities for education and exploration provided under the initial actions remain; there would be no expansion. This would result in far fewer educational opportunities than alternative 1. Opportunities for additional exploration would be severely limited. Recreational activities for visitors would be somewhat expanded. Visitor access to the site would not be improved under this alternative. Alternative 2 provides maintenance of all historic structures but does not attempt to enhance the visitor experience over the initial actions already undertaken.

The *Draft Site Management Plan / Environmental Assessment* will be available for formal public review for 30 days. During this review period, the team will accept written and oral comments on the alternatives. The Park Service will carefully review all comments and incorporate them, as appropriate, in the final *Site Management Plan / Environmental Assessment*. After its approval, the plan will be implemented over the next 20 years as funding and other contingencies allow. Comments on the draft *Site Management Plan / Environmental Assessment* should be received no later than _____. Comments should be submitted to:

Superintendent, Staten Island Unit
Gateway National Recreation Area
26 Miller Field
Staten Island, NY 10306
(718) 448-7056

For additional information, please contact site NPS staff at the above address.

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BACKGROUND AND INTRODUCTION

ESTABLISHMENT OF THE SITE

Fort Wadsworth, along with several other NPS Staten Island sites (Miller Field, Great Kills Park, and Hoffman and Swinburne Islands), comprise the Staten Island Unit of Gateway National Recreation Area (see Region map). Congress established Gateway National Recreation Area in 1972 as America's first urban national recreation area. The recreation area's primary purpose is "to preserve and protect for the use and enjoyment of present and future generations an area possessing outstanding natural and recreational features" (Public Law 92-592, 85 stat 1308; see appendix A). The outstanding features of Gateway National Recreation Area include miles of ocean and bay beach, thousands of acres of marshes and grasslands, and an abundance of nationally significant structures and landscapes that were the setting for historic events and activities.

PURPOSE AND NEED FOR ACTION

Fort Wadsworth was identified in the 1972 legislation that established Gateway National Recreation Area. In 1972 Fort Wadsworth was an active military installation under the jurisdiction of the United States Army. The 1972 legislation stated that Fort Wadsworth would be transferred to the National Park Service (NPS) when the military vacated the site. After the army vacated the site, the U.S. Navy occupied Naval Station New York at Fort Wadsworth from 1987 until the Naval Station's closure on August 31, 1994. The navy still owns and has been managing the site in a caretaker capacity since August 1994 and will continue to do so pending transfer of portions of the site. Expectations are that most of the site will be transferred to the National Park Service and some portions of the site will be retained by units of the U.S. Army Reserve and the U.S. Coast Guard. However, the details of this transfer and the actual transfer have not yet taken place.

In preparation for implementing the 1972 legislative directions, the Park Service has located the Staten Island unit superintendent and a small administrative and maintenance staff at the site, and some funds have been delegated to the site to direct the planning and transition efforts and prepare the site for initial visitor use. The National Park Service is undertaking a number of initial actions at the site to guide stabilization of historical and cultural resources, ensure appropriate development of interpretive facilities, and establish visitor services to allow the public to use and enjoy the site until further plans (described below) can be developed. These actions are detailed in the "Initial Actions" section. Because these initial actions would have no significant impacts, environmental assessment documents (an environmental assessment or environmental impact statement) are not needed for these actions (see "Appendix B: Memorandum of Categorical Exclusion").

After the transfer and initial actions have been completed, the Park Service will seek funding to do more to improve interpretation and educational programs, make more of the site available to visitors, and preserve and protect the resources. Plans need to be made for accomplishing this further visitor use and protection and preservation of the resources. The purpose of this *Site Management Plan* is to describe alternatives for this longer-range plan — alternative 1, the Park Service's preferred alternative 1 (the site as a living history museum) and alternative 2 (a protected cultural resource/continuation of existing trends after the completion of the initial actions) — and

[illegible]

the impacts of implementing these alternatives.

SITE HISTORY

Fort Wadsworth is considered one of the oldest military installations in the nation. The site occupies 226 acres on the northeastern shore of Staten Island on the Narrows of New York Harbor. The NPS portion of the property will consist of approximately [REDACTED] acres of land and will be bordered on the west by approximately [REDACTED] acres of land to be operated by the U.S. Army Reserve and the U.S. Coast Guard.

Fort Wadsworth's strategic location was first recognized by the Dutch during their occupation of New York beginning in 1663. A location naturally suited for the defense of New York Harbor, the geography of the Narrows formed a gatelike entrance to what would become the most important port in the country.

Fort Wadsworth has been used intermittently as a military fortification for nearly two centuries. Although a shot was never fired in anger from its fortifications, its imposing presence was integral to the success of the country's coastal defense. Fort Wadsworth's historic resources are testimony to the development of U.S. coastal fortifications, the evolution of firearms and weaponry, and the importance of having secured the "gateway to America."

In 1979 the U.S. Army decided to vacate Fort Wadsworth because it no longer needed the property for military purposes. Four years later, after the last of the army servicemen had been relocated, the U.S. Navy selected the site as its New York homeport. In late 1993, as part of a congressionally mandated military downsizing effort, the navy closed Fort Wadsworth as a military base. Currently the National Park Service is overseeing the transition of a portion of Fort Wadsworth from military installation to national park system unit as per the 1972 legislation that established Gateway National Recreation Area (see later "Initial Actions" section for more detail).

SITE DESCRIPTION

The portion of the site to be owned by the National Park Service includes two major Civil War era fortifications that are listed on the National Register of Historic Places — Battery Weed and Fort Tompkins. Twelve other batteries and numerous military-related structures on the site date from the 1850s to the 1900s. Site structures include a wide variety of facilities typically found on military bases, such as housing, barracks, offices, maintenance/storage facilities, post exchange (PX), and ancillary support facilities.

Fort Tompkins

Fort Tompkins was originally designed and built as a fortified barracks in support of Battery Weed. Built of granite and brick with an earth-over-metal roof, the fort is a prime example of the architectural "era of stone fortifications." The fort is constructed on the same site as an earlier sandstone fortification. Construction of the first fort began in 1814; construction of the fort standing today began in 1859 and was completed in 1876.

Battery Weed

Battery Weed, constructed of granite slabs, is an important example of military architecture of the mid-19th century. At that time Battery Weed was one of the most powerful forts on the eastern seaboard. Now Battery Weed stands at the water's edge on the Narrows, empty of all armaments. In 1864, between 140 and 150 cannons were mounted in Battery Weed, and it was garrisoned by a large force from the Fifth Regiment, New York Volunteers Artillery. The battery was named after Captain Stephen H. Weed, of the U.S. Volunteers, who was killed in the Battle of Gettysburg, Pennsylvania. Construction began in 1847 and ended during the Civil War.

The Endicott-Era Batteries

Fort Wadsworth's 12 Endicott-era (1885-1905) batteries were constructed under the direction of Secretary of War William C. Endicott as part of the reconstruction of America's coastal defense system. Constructed between 1895 and 1905, the batteries are significant examples of Endicott-era emplacements for 12-inch breech-loading rifles, mounted on disappearing carriages. There are portions of these structures that are associated with the batteries that date to the Civil War period.

Mont Sec Avenue (Officers' Row)

Mont Sec Avenue and its associated 11 residential structures represent a cohesive streetscape, both architecturally and through its association with Fort Wadsworth as the location of officers' housing. The stately row homes along the avenue lined with London plane trees date from the late 19th century into the 1930s. (Building 103 dates from the 1870s.)

Nonhistoric Structures

Nonhistoric structures also exist within the NPS boundary, including the recently constructed three-story brick building 120, three multiunit 1990s residential structures on New Mexico Court, and numerous ancillary support structures.

A towering presence that dwarfs the military fortifications is the Verrazano Narrows Bridge, which was begun in 1959 and finished in 1964. The bridge bisects the site and spans the Narrows, connecting Staten Island to Brooklyn. In addition to spectacular views of the bridge, the site offers dramatic views of the New York Harbor and the New York City skyline. Particularly sweeping views can be seen from the Fort Tompkins Road overlook and from Battery Weed's grass-covered barrette tier.

Natural Features

The site's major landform is a bluff that rises from sea level to an elevation of 150 feet. Battery Weed is at the toe of the slope, with Fort Tompkins at the highest point. Estuarine wetlands exist along the confluence of the uplands and the Narrows. Bordering the site's eastern and southern

edges is a natural sandy beach. A diversity of native and nonnative vegetation has taken hold throughout the site, with ages varying from recent plantings to trees that are 150-200 years old.

SIGNIFICANCE OF FORT WADSWORTH

Fort Wadsworth is significant within the national context of coastal defense and specifically for the protection it provided our nation's most important harbor. Coastal defense, or more accurately the defense of vital harbors, has been one of the most persistent and powerful themes of American military history by any measure of effort, expenditure, and emphasis. The Fort Wadsworth site represents the evolution in philosophy and technology of coastal fortification systems in the United States from 1800 through to the 1970s. The fort and site were constructed to work with other fortifications in the area, including Fort Hamilton, Castle Clinton, Fort Gibson, Castle Williams, Fort Wood, Fort Hancock, and Fort Tilden. Fort Tompkins and Battery Weed (on the Fort Wadsworth site) are particularly significant because they are remarkably well preserved. The other batteries and support structures at Fort Wadsworth are valuable to explain the interdependence and progression of various firearms and weaponry. Fort Wadsworth is also one of the finest locations within the New York metropolitan area to see and interpret the geography of the harbor and the growth of the metropolitan area. A more detailed description of the site's significance and its place in history is in appendix C.

SITE PURPOSE

The purpose of the Fort Wadsworth site, which was derived from an analysis of Gateway National Recreation Area legislation and the fort's resource values, is to

- preserve and protect an area possessing outstanding historical features for the use and enjoyment of present and future generations
- preserve and interpret the historical and cultural resources of Fort Wadsworth that are associated with U.S. coastal defense systems
- preserve and interpret the site's natural history within the context of the Hudson-Raritan Estuary, a region of interconnected human and natural systems within the greater New York metropolitan area
- underscore and ensure the relationship of Fort Wadsworth to the importance of New York Harbor and the growth of the New York metropolitan area

PLANNING BACKGROUND AND METHODS

GENERAL MANAGEMENT PLAN

In August 1979 the National Park Service completed a *General Management Plan* for Gateway National Recreation Area that includes broad recommendations for managing Fort Wadsworth. The plan recommends that Fort Wadsworth be developed and managed as a "gateway village" or an activity center that, in addition to fulfilling the functions of a traditional NPS visitor center complex, supports an assortment of activities that in some way provide insight into the relationship of people to their environment. The 1979 plan emphasizes preserving and adaptively reusing historic resources to support appropriate gateway village enterprises. Such enterprises could include educational facilities, classrooms, laboratories, gymnasiums, day camps, hostel units, playgrounds, day care centers, restaurants, and residences for NPS staff. The plan indicates that important cultural resources and the remaining natural landscapes are to be managed to perpetuate their intrinsic characteristics and values. The plan emphasizes that every effort will be made to avoid simply duplicating or supplementing recreational opportunities already available in the region.

The 1979 plan states that the National Park Service would undertake more detailed site planning, specifically a development concept plan, upon transfer of Fort Wadsworth from the Department of Defense to the National Park Service. Because the site has been extensively developed since the approval of the *General Management Plan*, (with nearly \$200 million invested in the site, reflected in its new buildings, infrastructure, and other improvements), the Park Service determined that a site management plan would be prepared rather than a development concept plan. Emphasis in this *Site Management Plan / Environmental Assessment* is on the programmatic and adaptive reuse of the site and existing buildings as opposed to new development for such purposes.

SITE MANAGEMENT PLAN

The *Site Management Plan / Environmental Assessment* will provide policy direction and guidance for visitor use, cultural and natural resource management, appropriate levels of development (if any), and operations at Fort Wadsworth for the next 20 years after the completion of the initial actions (see "Initial Actions" section) that are underway at the site.

Site management planning for Fort Wadsworth began in 1993. At that time Gateway National Recreation Area's general superintendent began meeting with military and community leaders and with representatives from the private sector to discuss issues pertaining to NPS management and occupancy of Fort Wadsworth.

In 1994 a planning team, composed of professionals skilled in the fields of military history, landscape architecture, architecture, environmental analysis, cultural resource management, historic preservation, and interpretation, was assembled for the fort.

The first formal planning team meeting was held in May 1994. During this meeting the purpose of the Fort was defined, its significance was determined, and planning issues were identified. Following that meeting the planning team coordinated a series of "scoping" meetings, designed to solicit concerns and desires of interested citizens and community leaders regarding development,

management, and preservation of the site. Discussion at the meetings focused on issues related to cultural and natural resource management and interpretation, recreation, and regulatory requirements.

During 1994 the National Park Service, with the support of consultants, gathered data on the historical, natural, and cultural resources of Fort Wadsworth. (These studies are described in appendix D of this document.)

To explain the planning process and describe the site's purpose and significance to a broad audience, the planning team distributed an informational newsletter in spring 1995 to over 150 residents and institutions in the greater New York City metropolitan area.

Based on the public comments gathered from the various meetings and information available from the research projects, the planning team identified two alternatives for the future of Fort Wadsworth. The two alternatives, and the potential environmental impacts of their implementation, are the focus of this document.

INTERPRETIVE THEMES

Based on the site significance, the 1972 enabling legislation, and the site resources, the planning team identified the following primary and secondary themes to guide visitor interpretation at Fort Wadsworth. These interpretive themes define what the Park Service believes that each visitor should learn about the site.

1. As a significant component of the American coastal defense system, Fort Wadsworth represents the evolution of America's concept of national defense.

The commercial importance of New York City and its harbor prompted the development of the fortifications at Fort Wadsworth as well as other New York and New Jersey locations, making New York Harbor one of the best defended regions in the nation.

The development and obsolescence of Fort Wadsworth fortifications illustrate the measure/countermeasure evolution of coastal defenses, as well as the erratic political support for these defenses and the resistance of a large bureaucracy to rapid change.

The transformation of Fort Wadsworth from a military base to a national park system unit represents the latest phase in our concept of national defense — the decreased reliance on domestic military bases for national security.

2. Geologic forces, especially the Pleistocene epoch glaciers and the formation of the Hudson River, created the natural environment that attracted European settlers and provided ideal locations for defense of New York Harbor.

The Hudson River, with its associated estuary and wetlands, provided both transportation and sustenance, which led to the growth and development of New York City as the nation's preeminent city.

The Narrows, located along the glacial moraine, is a constriction at the entrance into the harbor that provided high ground and an ideal site from which to defend New York Harbor.

- 3. Fort Wadsworth, with its splendid panoramic views of Manhattan, the Hudson River, Raritan Bay, and the open ocean, provides a link between the largest city in the country and the natural marine environment.**

Fort Wadsworth is within the Hudson-Raritan Estuary, an area of diverse wildlife that offers new opportunities for public involvement in learning about and helping to preserve the Hudson-Raritan estuarine ecosystem.

GOALS AND OBSTACLES

To provide a foundation for planning, the team developed goals for managing Fort Wadsworth and, at the same time, identified potential obstacles to attaining those goals.

Resource Protection

Goal. Historic resources — presented in a manner appropriate to the historic periods being interpreted — are preserved, rehabilitated, or otherwise protected, and their further deterioration is abated. Site managers, working with neighboring communities, provide a secure environment in which visitors can enjoy the protected resources.

Obstacles. Historic structures are dispersed throughout the fort; many are hidden from view by landforms and vegetation. The National Park Service must actively protect these features from all potentially destructive activities, such as illegal entry and vandalism. Additionally, the National Park Service must minimize any impacts on the integrity of historic structures that are open to the public.

Vandalism and trespassing occur throughout the site. The National Park Service must ensure the security of tenants, visitors, and staff and their property.

Visitor Experience

Goal. Innovative interpretive programming provides a variety of site experiences that are easily accessible to all types of visitors. Visitors come away with a greater understanding and respect for the historical, cultural, and natural resources of Fort Wadsworth and New York Harbor and the connection of these resources to other Gateway National Recreation Area resources and stories. Cooperative efforts of site managers and other partners yield exciting educational programs and provocative interpretive exhibits.

Obstacles. Although many local people are visually familiar with Battery Weed, which is clearly visible from Brooklyn and the Verrazano Narrows Bridge, the fort's resources have long been locked away behind gates guarded by military personnel. Few people, other than military and local

history buffs, understand the importance of Fort Wadsworth's history or the magnificence and variety of its military architecture.

Little is known about the potential clientele for Fort Wadsworth's interpretive services. When the army was operating a museum at Fort Tompkins, before 1979, schoolchildren were its predominant clientele during the week and tourists were predominant on weekends. Also, there is a perception that Fort Wadsworth is remote from Manhattan. This may result in difficulty attracting non-Staten-Island visitors to the site.

There is a general lack of recognition among many populations of the existence or significance of Gateway National Recreation Area and Fort Wadsworth. The historic significance of Fort Wadsworth is under pressure from requests to accommodate additional recreational activities and infrastructure, especially for the local population.

Very few artifacts original to the site remain at Fort Wadsworth. Most objects known to be connected with the fort are exhibited at Fort Hamilton in Brooklyn. The small number of available site-related objects pose challenges for interpretation and the development of a site museum.

Fort Tompkins and Battery Weed are dwarfed by the Verrazano Narrows Bridge, which spans the Narrows from Staten Island to Brooklyn. Bisected by the bridge, the site is directly beneath and adjacent to the bridge access ramp and toll plaza. The proximity of the bridge exposes visitors to noise and emissions associated with bridge

Adaptive Reuse of Structures

Goal. All Fort Wadsworth structures administered by the National Park Service are fully used for purposes that are compatible with the preservation and interpretation of the Fort's historic resources. Military fortifications are protected, preserved, and used for interpretation. Other historic structures, such as the infantry battalion barracks (building 210) and Mont Sec Avenue houses, are adaptively reused for appropriate purposes. The revenue generated from permitting tenants to use historic and nonhistoric structures on a reimbursable basis may help cover maintenance and utility costs.

Obstacles. Few of the structures at Fort Wadsworth are accessible to visitors with disabilities and meet the criteria set forth in the *Uniform Federal Accessibility Standards* and the Americans with Disabilities Act. Also, no structures have been developed in accordance with sustainable design principles. The buildings must be brought into compliance with applicable NPS regulations before they can be adaptively reused.

Visitors' requirements for access to the Fort's historic resources must be balanced with tenants' requirements for security and privacy. The potential for use conflicts (i.e., among residences, maintenance facilities, offices) must be mitigated.

Circulation and Access

Goal. Traveling to Fort Wadsworth, by land and by sea, is a memorable experience. A wide range of affordable transportation modes, including frequent ferry service, is available and accessible to

visitors, including those whose mobility is impaired. Visitors can also bicycle to Fort Wadsworth, Miller Field, and Great Kills on well-marked, safe bicycle paths. Once on site grounds, visitors are able to stroll, bicycle, or take frequent alternative-fuel shuttles to tour site resources.

Obstacles. Access to Fort Wadsworth via mass transit is extremely limited; there is no subway or ferry service to the fort, and portions of existing bicycle routes on Staten Island are dangerous. Private vehicle and limited bus access are the only means by which a visitor can easily get to Fort Wadsworth.

In the future, tenants from a variety of military and other agencies will occupy Fort Wadsworth's office buildings and residences. Many significant historic features are very close to the residences. Providing a visitor circulation system that inspires a sense of exploration but discourages public access to areas that primarily support other activities will present a challenge to site managers.

RELATIONSHIP OF THIS PLAN TO LOCAL AND REGIONAL PLANS

The recommendations proposed in this *Draft Site Management Plan / Environmental Assessment* are consistent with numerous planning studies conducted by the New York City Department of City Planning and the Office of the Borough President. Specifically, the increased public access, provision of public open space, and designation of pedestrian and bicycle routes recommended in the preferred alternative support proposals contained in the *New York Comprehensive Waterfront Plan*, the *North Shore Esplanade Plan for Staten Island, New York*, *A Greenway Plan for New York City*, and the *Staten Island Bikeway and Cultural Trail*.

INITIAL ACTIONS

NPS-OWNED PORTIONS OF THE SITE

In 1993 Congress appropriated Department of Defense funds to facilitate Fort Wadsworth's transition from military installation to a national park system unit. (The impacts of these actions do not require environmental assessment because there would be no significant impacts from the actions and they have been categorically excluded from National Environmental Policy Act procedures; see appendix B.) The funding has supported completion of this *Site Management Plan / Environmental Assessment* and the studies described in appendix D.

Mainly, however, as per laws and NPS policy and regulations, the funding has been obligated for a various initial activities to guide stabilization of historic and cultural resources, ensure appropriate development of interpretive facilities, and establish visitor use services so the public can use and enjoy the site until the longer-range plans can be implemented. Such activities include establishing offices and maintenance facilities, making resources accessible and safe for visitors, providing interpretive exhibits and other media that will convey the significance of the historic structures, and doing some additional studies to gather more information. Some of these activities have been completed.

Specifically, the funding has been/is being used to implement the following physical improvements to support public use (see Existing Conditions/Initial Actions map). The visitor center is scheduled to be completed in the summer of 1996; the other items will be completed by early 1997.

- Development of a visitor center in the rotunda and adjacent areas of building 120, which will include a visitor information desk, restrooms, a video, orientation and interpretive exhibits, a sales area for the bookstore, and special program space.
- Rehabilitation of infantry battalion barracks (building 210) to provide administrative office space for the Staten Island Unit, U.S. Park Police, and some functions of Gateway National Recreation Area, including a centralized parkwide library, archives, natural resources offices and laboratory, cultural resources offices, and collections management facility and the Interpretation and Community Outreach and Planning and Professional Services Divisions for all of Gateway National Recreation Area
- Improvements to enhance accessibility of administrative offices, historic resources, and visitor facilities.
- Repair of deteriorating roads.
- Mitigation of pedestrian hazards, including deteriorating sidewalk and crosswalk conditions and other extant ground obstructions that could result in injury.
- Installation of wayside exhibits and directional signs.
- Stabilization of cultural resources, concentrating on graffiti removal, and abatement of safety hazards, including lead paint and asbestos, hazardous waste cleanup, and the removal of underground storage tanks and associated soils.

Existing Conditions/Initial Actions

- Enhancements at Fort Tompkins road overlook.
- Provision of tours of historic resources as funding and staffing allow.
- Provision of maintenance facilities in the Seabee complex.
- Completion of a vegetation management plan, to guide treatment of the cultural landscape, and a sitewide archeological study
 (Note: The vegetation management plan will outline ways in which the historic, open character of the landscape could be re-created, describe ways to limit vegetative succession, minimize erosion, and ensure visitor safety with minimal impact on historic resources.)

Once all these actions have been completed, the National Park Service will seek funding to accomplish the implementation of its preferred alternative 1 (a living history museum) as set out in detail in "The Alternatives" section of this *Site Management Plan*. If funding is not secured, alternative 2 (a protected cultural resource/continuation of existing trends) would be implemented. Alternative 2 proposes no new actions in addition to what has been done to implement the initial actions just described.

COMPATIBLE DEVELOPMENT FOR NON-NPS OWNED PORTIONS OF FORT WADSWORTH

By the very nature of its facilities and associated historic uses, Fort Wadsworth has and will continue to function as a community. Throughout its history, the fort has sustained its own housing, office spaces, maintenance areas, and food services, and has supported other services typically within a military base. Most of these land uses will continue; the Coast Guard will continue to use the site for residences and possibly office space, and the Army Reserve will continue to use the site for training and office space. With the transfer of land to the National Park Service, however, the fort's natural and cultural resources become the basis for new types of land uses — cultural and natural resource preservation and interpretation. The main access points, primary roads, bridge easement, and utilities will be within the portion of lands to be transferred to the National Park Service.

Until the closure of Naval Station New York on August 31, 1994, the fort had been administered by a single landowner. Now, several landowners will operate within the boundaries of Fort Wadsworth, resulting in an amalgam of uses. The National Park Service recognizes the need to broadly define compatible levels of development and land uses so that all landowners will be encouraged to operate as a community and the potential for use conflicts (e.g., between residences and public access) will be minimized. [Note: MGScott will decide if this statement remains or is deleted: This issue of operating as a community and ensuring that the site is managed as a whole becomes even more important when one considers that the entire site is in the Gateway National Recreation Area boundary and that the properties may all eventually be transferred to the National Park Service for inclusion in the site area. Site superintendents offer the following goals to all landowners within the fort to consider and adopt:

- Discourage additional fencing to maximize the open feeling of the site and minimize emphasis on specific boundaries within the fort. To soften the appearance of existing barriers, vines,

shrubs, or other vegetation should be planted near or on existing fences, such as those around the reserve center.

- Consider planting additional vegetation to separate potentially incompatible land uses, such as private residences and historic resources that are accessible to the public.
- Discourage additional paving. Open space on Staten Island and throughout New York City is at a premium, and the maximum use of existing paved surfaces should be explored.
- Preserve and manage sensitive habitats, such as the stand of native oaks outside of the NPS boundary, to ensure their continued vigor.
- [MGS] Scott will decide if this statement remains or is deleted: Evaluate the need for lodging on Staten Island when the Navy Lodge amortizes its capital investment. If, at that time, adequate lodging facilities exist outside the fort on Staten Island, consider removing the lodge and restoring the site to an open grassy area.

Pursuant to objectives noted above, the National Park Service will provide advice and professional expertise to other tenants, particularly in the areas of land use planning, cultural and natural resource management, and specification of landscape materials that are appropriate to the site. The Park Service would discourage additional development beyond existing land uses and building footprints.

THE ALTERNATIVES

This section of the document describes the Park Service's alternative proposals for visitor use and NPS management of Fort Wadsworth. The planning team framed four alternatives — a living history museum, a protected cultural resource, an active recreation site, and, a natural history site. After analyzing the alternatives, the team concluded that two — a living history museum and a protected cultural resource — fulfill the site's purpose as outlined in its enabling legislation and provide for resource preservation, a quality visitor experience, and safe, effective, site operation. The team also determined that the two other alternatives — an active recreation area and a natural history site — do not enhance the primary significance of the Fort Wadsworth and rejected them from further consideration.

Alternative 1 — A Living History Museum — is the National Park Service's preferred alternative. It calls for restoring cultural resources to their historic appearance and, in times of peak visitation, using costumed interpreters to bring to life the fort's vast military history.

Alternative 2 — A Protected Cultural Resource (Continuation of Existing Trends) — recommends the implementation of no additional elements beyond those described in the "Initial Actions" section, except those necessary for preserving historic structures, reflecting a condition of economic uncertainty.

Alternatives 3 and 4, and the reasons for their rejection as nonviable options, are described in greater detail in the later "Alternatives Considered but Rejected" section of this document.

ALTERNATIVE 1 — A LIVING HISTORY MUSEUM (THE PREFERRED ALTERNATIVE)

Concept

Fort Wadsworth is significant within the national context of coastal defense, and specifically for the protection it provided our nation's most important harbor. The site represents the evolution in philosophy and technology of American military strategy from 1790s to the 1970s when technological advances in weaponry rendered coastal defense a less pressing military concern. Alternative 1 features programs, services, and management actions that are designed to facilitate interpretation of this important story.

To enhance visitor understanding of the site's past, all major fortifications would be preserved and rehabilitated and interpreted to represent their most recent period of historic significance. This would allow cultural resource management and interpretation to embrace the most notable developments in the evolution of the fortifications and all significant aspects of coastal and harbor defense, including the Nike missile period.

To bring to life the stories of Fort Wadsworth, educational exhibits and programs would employ military objects, personal effects, and quotes from soldiers and their families. During times of peak use, visitors would encounter costumed interpreters, observe reenactments of historic military activities, and engage in living history programs to learn about the lives of Fort Wadsworth's historic occupants.

A comprehensive program serving regional schools and organized groups would be the focus of weekday interpretive activities. An emphasis on general public programming would occur on weekends. During weekends, park staff would be augmented with volunteer reenactors depicting activities experienced by soldiers stationed at Fort Wadsworth.

Under this alternative, natural resources would be managed according to NPS regulations and appropriate laws. Interpretation of natural resources would focus on their relationship to the military defense of the harbor.

Visitor Experience and the Historic Structures

Entry. The visitor vehicular entrance to the site would be through the fort's main gate on New York Avenue, at the north end of the site. To ensure appropriate visitor welcome, the guardhouse there would be staffed by NPS personnel.

Also, the National Park Service would work with partners to establish ferry service to Fort Wadsworth and other Gateway National Recreation Area units. Visitors arriving by ferry would disembark at the upgraded Battery Weed dock and be greeted by NPS personnel stationed in a new structure at the dock. Although this service would build on the existing commuter service, it would not be structured to serve commuters. Visitors would be encouraged to walk to the site's designated visitor areas and explore the resources that are available to them. For those unable or unwilling to walk, an alternative-fuel shuttle service would be provided. Shuttles would also be provided at times of high visitation, such as on weekends, to transport visitors to significant site features. Parking would not be available near the dock; all visitor parking would be adjacent to the visitor center in building 120 (described below). Also, visitors would be encouraged to carpool, and many would arrive by bus.

The fort grounds, including vehicular, bicycle, and pedestrian access points, would be open during daylight hours and closed to all but residents and those attending special functions at night.

Visitor Center. Visitors could begin their explorations at a visitor center in the rotunda and adjacent areas of the first floor of building 120 (see Alternative 1 map). Here, through audiovisual media, interpretive exhibits, and printed materials, visitors would learn of the primary themes of Fort Wadsworth and the opportunities available at the site. Basic services, such as restrooms and a cooperating association bookstore, would also be in the center. Visitor parking would be available adjacent to the building.

Fort Tompkins. Once at Fort Tompkins, which would be rehabilitated and interpreted to reflect its use during the late 19th century, visitors would see museum exhibits and interpretive media in rehabilitated casemates that place Fort Wadsworth's military use into context. Visitors would be able to peruse blueprints, ledgers, and other artifacts and exhibits that illustrate how the use and physical structures of Fort Wadsworth have changed in step with military advancements. Visitors could join a ranger-led tour to venture into the damp, narrow, stone passageways of the counterscarp gallery and then examine the rehabilitated barracks and offices. (The counterscarp gallery extended around three sides of the fort to protect it from land attack. Within the counterscarp gallery, soldiers were able to shoot through slots in the wall into the dry moat area between the wall and the fort, and the soldiers in the fort could also shoot into this area, thus placing attackers in a deadly cross fire.)

Alternative 1

Alternative 1

During periods of high visitation, visitors would encounter interpreters costumed in the artillery uniforms of the late 19th century, who would describe what life and military service was like at that time. Based on further research, short skits, role-playing, and reenactments would also portray how people lived at Fort Tompkins and what their motivations were for serving their country. Several areas within the structure would be modernized to provide museum and office space or for restoration to enhance visitor understanding. Should its location be discovered, a portion of the tunnel from Fort Tompkins to water level would be opened for ranger-led tours.

Some casemates would be rehabilitated for use by school groups and others for a museum and interpretive media. Other casemates and offices would be interpreted as furnished exhibits. On weekends, reenactors would use selected casemates as mess and bunk areas. Visitors would be able to walk the reseeded parade grounds (thus returning them to a more historic appearance) and read wayside exhibits to find out more about Fort Tompkins and the site in general.

Protective fencing would be installed where required to control visitor access. The dry moat would be cleaned and opened for a small distance for the public to see the moat and get the feeling of what the moat and counterscarp gallery were for. The graffiti would be removed. Missing or deteriorated building elements, such as windows, railings, and staircases, would be repaired or replaced, and roofs would be repaired to halt ongoing water damage. Benches would be installed adjacent to interpretive signs along the top of the slope east of Fort Tompkins.

Battery Weed. Visitors would be encouraged to tour Battery Weed, which would be rehabilitated, cleaned of graffiti, and interpreted to reflect its use during the turn of the century. One side of the guardhouse would be furnished to convey period use. During periods of high use, visitors would interact with costumed interpreters dressed in circa 1900s uniforms. The other side would be rehabilitated to house a visitor orientation area, with restrooms, exhibits, and interpretive materials that put Battery Weed's military use into context. Interpreters' offices would be on the second floor of the guardhouse.

Inside Battery Weed, visitors would be able to examine, in their original positions, numerous reproduction Rodman guns and flank howitzers. Reproduction coastal artillery would also be mounted on the sod-covered barbette tier. For safety, self-guided access would be limited to the lower level of Battery Weed; all upper level access would be through guided tours.

A section of the former moat on the landward side of Battery Weed would be reestablished, bricks and concrete would be removed from all casemate windows, metal shutters would be restored/repared/replaced, and the door at the main entrance would be replaced. The lighthouse, guardhouse, and the magazine roofs would be restored.

Endicott-era Batteries. Based on available documentation, one Endicott-era battery (probably Battery Catlin) would be rehabilitated to its appearance in the 1890s, complete with reproduction armaments, and opened for access by guided tour only (including signs and railings). Following an informal trail south of the Verrazano Narrows Bridge, visitors would be able to see other Endicott-era batteries, preserved in their current state. Guided tours to see Battery Hudson might be offered. All batteries would be secured from unauthorized access and would be preserved. Periodic maintenance would be done to halt or lessen on-going deterioration.

Mont Sec Avenue (Officers' Row). The historic residential setting of Mont Sec Avenue would be retained, and visitors would be encouraged to stroll down its officers' row. One Mont Sec Avenue home (building 114) would be rehabilitated and interpreted by costumed interpreters to depict how officers and their families lived in the 1890s. (Building 114 was chosen for this use based on extent of original fabric, available documentation, and ease of access for visitors.)

Homes on the north side of Mont Sec Avenue would be rehabilitated to provide bed-and-breakfast style accommodations for visitors (concessioner operated, with parking for guests in back of the structures). Building 109 would be rehabilitated for use as the "officers' club" restaurant (concessioner operated) where visitors would dine al fresco while enjoying sweeping views of New York Harbor, possibly with waitpeople attired in military dress and updated menus of the era. (The interior has been significantly altered, but some architectural features remain, such as a colonial revival mantel and some woodwork, and would be retained.)

The structures on the south side of the street would be used to house military/NPS employees. The deteriorated asphalt shingle siding (installed ca. 1950) on south side buildings 111-114 would be removed so that damage could be assessed and the original wood siding and decorative trim could be restored. These four buildings would remain the only nonbrick structures on the street.

The interior layouts and architectural features of all Mont Sec Avenue homes would be preserved and protected.

Torpedo Building. The torpedo (storage) building (building 147) would be preserved. The south end lower level would be rehabilitated to provide basic services and restroom space for visitors and staff. A roof, windows, and doors would be added, and utilities would be extended to the building.

Stable (Building 309) — A section of building 309 would be restored to tell the story of the historic role of the U.S. Cavalry.

Carriage House (Building 352). Visitors would be able to have lunch or a snack in the rehabilitated carriage house (building 352). Limited parking would be nearby. (The building has been significantly altered from its historic appearance.)

Miscellaneous Buildings. Building 140 (the Rod and Gun Club), building 339 (the seaplane hangar), building 406 (house), and building 404 (the gate house at the west entrance) would be stabilized, preserved, and used for appropriate site-related purposes.

Other Site Recreational Opportunities

Although this alternative does not focus on increasing onsite recreational opportunities, such uses as walking, birding, biking, kite flying, a gymnasium, and other informal athletic activities would be available to the public; currently they are only available to military personnel and their families. Dining at the former officer's club restaurant would be a new opportunity for residents, visitors, and the community.

Fishing would be allowed during daylight hours. Permits would be required for those who wish to park vehicles near specified fishing access points (Seabee Park and along the old jetty (or Range)

road). Those who wish to hand carry fishing equipment to the site without a vehicle would be allowed to fish without a permit.

Public access to the beach would be allowed. Swimming would continue to be prohibited due to the dangerous currents and the poor water quality of the Narrows. Kayaks and other small craft such as row boats would be allowed to pull up on shore south of the bridge; however, no docks or other facilities would be provided specifically for pleasure boats. Visitors would be directed to use established paths and roadways and would be directed away from wetland areas to avoid trampling the sensitive vegetation. Only passive recreation would be permitted in the ecologically sensitive (wetland) areas of the beach and adjacent area. New signs indicating an ecological reserve would include information relative to natural features, vegetation, and wildlife.

The baseball field would be operated by the Coast Guard for use by site residents. The picnic area at Seabee Park would be primarily for use by site residents, and the name of the park would be restored to its traditional name, Caruso Park. Group picnicking for visitors would be continued primarily at Miller Field.

Indoor concerts, lectures, theater performances, and other small community-based cultural activities would be allowed in the chapel (building 203) under a special use permit, possibly on a reimbursable basis. Site managers would evaluate the feasibility of holding outdoor performances behind the chapel (where noises from the bridge are least intrusive). If outdoor performances prove to be unintrusive to area residents, site managers might allow such outdoor performances to occur under a permit. Permit authorization would be evaluated based on the compatibility of the proposed activity with the scale of available facilities, with residential uses, and with the interpretation and preservation of Fort Wadsworth's resources.

Reenactments would be allowed by special use permit, consistent with other visitor use activities. Gun demonstrations would require preapproval by the unit superintendent to ensure that proper safety regulations would be followed and that the demonstrations would be consistent with the fort's interpretive program. In keeping with Gateway National Recreation policy, the placement of additional monuments would be prohibited.

The National Park Service, in consultation with New York City planning officials, would establish a bicycle route through Fort Wadsworth using existing roadways. The Fort Wadsworth route would connect two existing bicycle routes on Staten Island. Bicycle access to the site would be provided via the New York Avenue gate on the north side of the site, and a new bicycle path would be provided between South Beach and U.S.S. Carolina Road on the south side of the site. These two paths would connect on New York Avenue and the road in front of Fort Tompkins. A dangerous portion of an existing connecting route along Capodanno Boulevard would be eliminated. In addition, the Park Service would encourage and support the development and enhancement of pedestrian and bicycle links throughout Staten Island (including the investigation of links across the Verrazano Narrows Bridge) through programs such as the Rivers and Trails Conservation Assistance program.

The National Park Service would establish a pedestrian path through the site on existing routes. Pedestrian access would be provided via the New York Avenue gate and would be limited to day use.

The gymnasium would continue to be operated as a gym, managed by a federal agency or nonprofit group, for the Staten Island community. Community meeting rooms would also be managed by the nonprofit group. Rooms below the gymnasium could function as a workout space for fort residents.

The tradition of starting the New York Marathon from Fort Wadsworth would continue because it is an important, annual, international event that has been associated with the property for over 25 years.

The presentation of events that would enhance the site and visitor experience would be considered on a case-by-case basis.

Cultural Landscape

Several of the batteries are overgrown with mature trees, and several critical sight lines (critical for understanding the military use of Fort Wadsworth) are covered with dense vegetation. These areas include the slope from the overlook east of Fort Tompkins down to the torpedo building and the areas between the batteries and the shoreline. Clearing of the batteries would be done according to the recommendations of the vegetation management plan (see "Additional Research" section below).

Pavement would be removed from Range Road, south of Seabee Park, and replaced with gravel. An informal trail south of the bridge would be developed using existing pavement to the greatest extent possible. The development of community gardens would not be allowed because of the high lead content in the soil.

Additional topsoil and ground cover would be brought in to cover hazardous tree roots and repair damaged lawns. The use of pesticides and other landscaping-related chemicals would be kept to a minimum. Shade trees would be planted adjacent to parking areas and nonhistoric structures to improve visitor comfort and energy efficiency.

Archeological testing and/or monitoring would be done for any ground-disturbing activities.

Additional Research

A number of studies have been completed to obtain information needed for managing the site and preparing the site for initial visitor use. These include a *Cultural Resource Report* (expected to be completed in June 1995), information concerning graffiti removal (NPS North Atlantic Regional Office, Judy Jacobson, architectural conservator, memo on "Treatment Report for Test Applications of Graffiti Removal" dated 2/2/95), an *Interim Interpretive Plan* (NPS 1995__), and a *Woody Plant Inventory* (NPS 1995__). Details of these studies are in appendix D. A vegetation management plan and a sitewide archeological study will also be completed as part of the initial actions effort. Several additional studies and reports would be required before the preferred alternative could be implemented. The list of studies includes, but is not limited to, historic structure reports for Mont Sec homes and the Endicott-era batteries and historic furnishings plans to guide placement of furnishings in historic structures

NPS Operations and Administration

Leasing. Currently, the National Park Service has authority to lease historic structures to others through the Park Service's historic leasing program. A bill has been introduced in Congress that would authorize the Park Service to lease nonhistoric structures to tenants and retain revenues generated from leasing within the park unit. Should this bill become law, nonhistoric structures at Fort Wadsworth would be leased for compatible and appropriate uses. Site managers would develop a leasing management plan that establishes appropriate criteria and suitable uses. In addition, the unit superintendent would manage the lease program.

Offices/Museum Collection. Except for the installation of an access ramp, the exterior of the infantry battalion barracks (building 210) would generally retain its current appearance after rehabilitation. The interior has been significantly altered during its history and would be totally redesigned for administrative use. Some functions of Gateway National Recreation Area and Staten Island Unit administration would be moved to portions of building 210. Space would also be used in this building for storing Gateway's museum collection, and collections management and curatorial staff offices; NPS training courses; conferences and meetings; natural resource laboratories and offices; offices for the Interpretation and Community Outreach and Planning and Professional Services Divisions; offices for staff working in the areas of cultural resources and natural resources; a library; park archives; and other NPS offices. Space might be available to others on a reimbursable basis. Under this alternative, the remainder of the building not rehabilitated as part of the initial actions (half of the second floor and all of the third floor) would be rehabilitated for above uses.

Housing. Under this alternative homes on Mont Sec Avenue not used for interpretation, lodging, a restaurant, or other visitor uses would be used to house permanent military/NPS employees. New Mexico Court structures and buildings 118 and 119 would also be used as permanent staff housing for NPS employees. The playground (tot-lot) near New Mexico Court would be restored for residents' use. The National Park Service would work with the Coast Guard to accommodate housing for NPS seasonal employees in the bachelors' enlisted quarters.

Removal of Nonhistoric Structures. To reduce annual operating costs, several nonhistoric structures that are not easily adapted for other purposes and that are in fair to poor condition would be removed. These structures include, but are not limited to, buildings 354 (the police station), 355 (ammo storage), and 435 A and 435 B (housing). If no appropriate use for the theater (building 205) and the post exchange/commissary (building 206) are identified, they will also be removed. Before their removal, the Park Service would develop a plan for the northwest quadrant of the site that would include recommendations regarding the restoration of the landscape in this area. THIS MAY CHANGE—KEEP REDLINE

Maintenance Facilities. Maintenance operations would be in the Seabee complex (buildings 301, 302, 303, 304, and 310). Recent siding materials would be removed, and the original brick exterior would be repaired so that the buildings would recover much of their historic appearance. The interiors would be modified as necessary to facilitate NPS use. Building 305 would be rehabilitated for use as offices for NPS maintenance staff. Under a permit from the Park Service, the Coast Guard would use building 306 for housing Coast Guard maintenance activities. Most of the stable (building 309) would be renovated for use by U.S. Park Police horses and for kennels.

Collections. The current museum collection at Fort Wadsworth is composed mainly of archeological objects that do not lend themselves to display or interpretation. In addition, the site owns only one object relating to coastal defense — the last flag flown over the fort. An aggressive collection policy would be established to locate and obtain fort-related objects for interpretive purposes.

Staffing. To operate the site, the National Park Service intends to employ about 81 permanent employees and 34 seasonal employees. This number includes law enforcement personnel, maintenance workers, interpretive rangers, and historic preservation specialists.

NPS Employee Access. Site managers would negotiate with TriBorough Bridge and Tunnel Authority to allow toll-free bridge access to site employees. This could be accomplished by using existing access ramps from the Verrazano Narrows Bridge into a secured parking lot.

Utilities. Additional water or sewer connections and a pumping facility would be anticipated under this alternative beyond those covered in the "Initial Actions" section. This new utility line (from Fort Tompkins to Battery Weed) would be buried to allow for a more accurate historic landscape.

Cleanup of Hazardous Substances, Pollutants, and Contaminants

Problems associated with such conditions or materials would have been alleviated by work done under the initial actions. If any further hazardous substances are found, they would be addressed as per legal and NPS requirements.

Costs and Implementation Strategy

The following costs would be incurred to implement alternative 1

TABLE 1. COSTS FOR IMPLEMENTING ALTERNATIVE 1

	Gross Construction Costs	Construction Planning Costs	Total Project Costs
Ft. Tompkins			
lead paint abatement	\$393,000	\$20,000	\$413,000
exhibit/film room	554,000	28,000	582,000
exhibit and installation	655,000	33,000	688,000
restoration of parade ground	341,000	17,000	358,000
Battery Weed			
extend infrastructure	216,000	11,000	227,000
gatehouse restoration	131,000	7,000	138,000
stairwell roofs	33,000	23,000	35,000
exhibits	460,000	23,000	483,000
Dock/seawall improvements (to be pursued through transportation grants)	4,450,000	223,000	4,472,000
Batteries stabilization	1,180,000	59,000	1,240,000
Mont Sec housing			
windows	230,000	12,000	242,000
ADA	426,000	21,000	447,000
renovate exterior of 111-114	314,000	16,000	340,000
renovate one building to support interpretation exhibits	328,000	16,000	344,000
	524,000	26,000	550,000
Building 109 conversion ^b (includes parking lot conversion)	721,000	36,000	757,000
Torpedo building			
reroof	79,000	4,000	83,000
install toilets	157,000	8,000	165,000
preservation/rehabilitation	328,000	16,000	344,000
Building 352 conversion ^b (includes lift to second floor)	125,000	6,000	131,000
Building 309 (stable)			158,000
Demolition (including restoration plan and reseeded)			
354/355	197,000	10,000	207,000
206?	197,000	10,000	207,000
435A and B?	328,000	16,000	344,000
theater	197,000	10,000	207,000

Graffiti removal			275,000
Reproduction Rodmans	ea @ 50,000		275,000
Pavement removal at Range road replace with gravel			207,000
Building 210 rehab			2,549,000
Trail to different batteries			83,000
301/305 rehab			149,000
TOTAL COSTS^c			\$11,340,000
Total site annual operating budget	\$5,500,000		\$5,500,000

a To be provided through transportation grants.

b May involve concessioner/funding participation for improvements.

c The costs of the dock and seawall and buildings 109 and 352 have assumed funding by non-NPS sources.

ALTERNATIVE 2 — A PROTECTED CULTURAL RESOURCE (CONTINUATION OF EXISTING TRENDS)

Concept

This alternative represents a continuation of the existing trends after completion of the initial actions summarized below (see "Initial Actions" section for more detail):

- developing a visitor center in the rotunda and adjacent areas of building 120, and provide a visitor information desk, restrooms, a video orientation, interpretive exhibits, a bookstore/sales area, and special program space
- rehabilitating the infantry battalion barracks (building 210 for office space and a centralized library/laboratory/collections management)
- improving visitor safety and accessibility to offices and resources
- repairing roads and installing exhibits and directional signs
- stabilizing cultural resources and removing graffiti and hazardous materials
- enhancing the Fort Tompkins overlook
- providing tours (as funding and staff allow)
- providing maintenance facilities in the Seabee complex
- completing a vegetation management plan and a sitewide archeological study

No additional actions would be proposed under this alternative, except the restoration of the seawall and the preservation of the dock that must be done to preserve historic structures, thus reflecting a condition of economic uncertainty.

Visitor Experience and Historic Structures

Under this alternative, visitors would continue to find educational opportunities at Fort Wadsworth. The fort's contributions to the defense of New York Harbor and adjacent coasts would continue to be interpreted at the visitor center in building 120 where visitors would continue

to get information about the fort, its significance, and its major themes. There would be no ferry access to the site or shuttle system within the site under this alternative. Automobile access would be limited to the visitor center, except for the disabled who could park near the Ft. Tompkins overlook and Battery Weed.

Educational exhibits would continue to be only in the visitor center, and existing outdoor wayside exhibits would be retained. There would be no comprehensive museum. Except for Battery Weed and Fort Tompkins (where there would be public restrooms), no other fortifications would be open to visitors. Opportunities for additional exploration, other than Fort Tompkins and Battery Weed, would be severely limited. Interpretive tours and other programs would be provided as funding and staffing allowed.

Fort Tompkins would continue to be protected. No further interpretation or exhibits would be added. The Fort Tompkins overlook would be retained.

Battery Weed would continue to be protected, and there would be no new interpretive exhibits. The Battery Weed seawall would be restored, and the dock would be preserved.

Mont Sec Avenue homes would remain in their current use (for military and NPS housing).

Buildings 109, 140, 339, 352, 354, 355, 404, and 406 would be preserved and remain closed.

All other structures would be continue to be preserved.

Other Site Recreational Opportunities

Recreational activities provided for after the completion of the initial actions would continue, including scenic viewing at an already improved harbor overlook, saltwater fishing, and touring the site. Public access to the beach would continue to be prohibited, as would swimming (due to dangerous currents and poor water quality). Kayaks and other small watercraft would continue to be allowed to pull up on shore; however, no docks or other facilities would be provided for boats. The ballfield would continue to be operated by the U.S. Coast Guard for use by site residents. The picnic area at Seabee Park would continue to be reserved primarily for the use of site residents, and group picnicking would continue to be primarily at Miller Field. The chapel would be closed. The start of the New York City Marathon would continue at the site.

Cultural Landscape

All landscaping, foundation plantings, and grass areas would be maintained, but no additional clearing or plantings would be done.

Archeological testing and/or monitoring would be done for ground-disturbing activities.

Additional Research

Historic structure reports for Mont Sec homes and the Endicott-era batteries might be done. Historic furnishings plans would not be done under this alternative. Other research could be undertaken if funding became available. (The vegetation management plan and sitewide archeological survey would have been completed under the initial actions.)

NPS Operations and Administration

Building 210 would continue to contain administrative offices and the Gateway museum collection, as described in alternative 1.

Major maintenance activities would continue to take place at the Seabee complex.

An aggressive collection policy would be the same as described in alternative 1.

To operate the site, the National Park Service intends to employ about 81 permanent employees and 24 seasonal employees. This number includes law enforcement personnel, maintenance workers, interpretive rangers, and historic preservation specialists.

Employee access from the Verrazano Narrows Bridge would be the same as described in alternative 1.

No new utility lines or connections would be needed.

Cleanup of Hazardous Substances, Pollutants, and Contaminants

Problems associated with such conditions or materials will have been alleviated by work done under the initial actions. If any further hazardous substances are found, they would be addressed as per legal and NPS requirements.

Costs and Implementation Strategy

The total annual operating budget for the NPS site would be about \$5 million. There would be no additional costs beyond normal site operations after implementation of the initial actions.

ALTERNATIVES CONSIDERED BUT REJECTED

During the Fort Wadsworth planning process, two other alternative concepts were considered but rejected as nonviable options for the following reasons.

Alternative 3 — Fort Wadsworth as an Active Recreation Site

The opportunities for active recreation at Fort Wadsworth were examined within the context of the site's purposes, significant historic resources, and the suitability of increasing recreational opportunities and the accompanying impacts on the resources. Providing for more active recreation

at the fort was also considered in the context of the recreational facilities and opportunities available elsewhere in the Staten Island Unit and at other units of Gateway National Recreation Area. Potential activities and support facilities examined included ballfield sports, swimming, fishing, musical and theatrical performances, horseback riding and stables, community gardens, and formal picnic areas.

The use of Fort Wadsworth for active recreation would be incompatible with the purpose of preserving and interpreting the fort's significant historic and cultural resources. Few recreational facilities exist, and there are no suitable locations for additional development of facilities or for parking areas. Open unstructured space is scarce — the site is dense with historic military architecture, administrative support buildings, and housing. Where space is arguably present, its proximity to structures makes active recreational use problematic and impractical. Swimming is not appropriate due to dangerous currents. Under the preferred plan fishing would be accommodated on a permit basis where it does not impact the historic resources. Also, the existing ballfield would continue to be used as such but would be managed by the U.S. Coast Guard. Unstructured recreational activities that currently exist would be allowed to continue, and facilities would be improved as appropriate as described in alternative 1. For many years, the staging and start of the New York Marathon has occurred at Fort Wadsworth — and this would continue under the alternative 1. Furthermore, Gateway National Recreation Area and the Staten Island Unit provide a wide diversity of recreational opportunities — far greater than what could be supported at Fort Wadsworth.

Alternative 4 — Fort Wadsworth as a Natural History Site

The natural resources of Fort Wadsworth have been profoundly impacted by nearly two centuries of human development, including a marked growth in the built environment during the late 1980s. Research has uncovered no significant floral or faunal populations. Many of the natural features of the site that survived military activities were forever altered by the construction of the Verrazano Narrows Bridge and access roadways.

The geological story is integral to understanding the military significance of Fort Wadsworth and would be interpreted in the preferred alternative's educational exhibits and programs — in particular at the visitor center and at various locations where the military importance of the physical features is clear (such as the steep slope below Fort Tompkins). Other sites within Gateway National Recreation Area and the Staten Island Unit provide substantially better opportunities to communicate the important natural history themes of Gateway National Recreation Area and the natural resource preservation mission of the National Park Service.

Use of the Mont Sec Avenue Homes

In both alternatives above, consideration was given to using Mount Sec homes for office space, but this idea was rejected because of the lack of space for parking and the desire to preserve the residential character of the neighborhood.

AFFECTED ENVIRONMENT

This section describes the environment that would be affected by the implementation of the alternatives described above.

CULTURAL FEATURES

Historic Structures

The historic resources at Fort Wadsworth are associated with the defense of New York Harbor. Fort Wadsworth itself (the site) was an integral part of a series of harbor fortifications that protected the country's most important port for nearly 200 years. No longer necessary to the defense of the harbor or the country, the naval station at Fort Wadsworth was decommissioned in 1994 and its historic resources are expected to be turned over to the National Park Service for interpretation and preservation. (See appendix E for a list of structures on Fort Wadsworth.)

Fort Tompkins (Building 137). The extant Fort Tompkins is constructed on the same site as an earlier fortification built by the state of New York. It was begun in 1859 and completed in 1876. The five-sided structure has one side that faces the channel. The granite walls surround a parade ground. A counterscarp wall was constructed on the four landward sides of the fort, but the south wall no longer remains, having been shortened by the construction of Battery Duane.

Battery Weed (Building 151). The earliest remaining structure at the fort is Battery Weed, begun in 1847 and completed between 1861 and 1864. The structure, a half-hexagon shape with a central parade ground, was constructed of ashlar granite blocks. It has three tiers of casemates and a fourth barbette tier with gun emplacements. Circular granite staircases — of astonishingly perfect spirals — provide access between tiers. The battery juts out into the water. In the center of the structure is a two-story guardhouse and large door through which the battery is entered. A moat originally surrounded the battery, but it has been filled in.

Seawall and Dock. The north dock and seawall are at the water's edge just north of Battery Weed. The L-shaped dock juts out into the water. The seawall, which is in poor condition, follows the perimeter of Battery Weed. The seawall functioned as the exterior side of the moat that once surrounded the battery. Both the dock and seawall are constructed of granite blocks similar in appearance to those of Battery Weed.

Endicott Batteries (buildings 133 Battery Duane; 155 Battery Catlin; 315 Battery Upton; 316 Battery Bacon; 316A Battery Turnbull; 317 Battery Hudson; 318 Battery Mills; 319 Battery Dix; 320 Command Post; 321 Battery Barry; 421 Battery Richmond; and 422 Battery Ayres). These batteries and a command post represent the Fourth System of American military defense (see appendix C). Made of concrete, brick, and extensive earthen construction, these structures were a response to the failure of the Third System to defend against the newly developed rifled, brick- and stone-penetrating artillery. Visually, they have nothing in common with the batteries and forts they replaced. They featured breech-loading, disappearing guns that were designed to protect the defenders and that (when compared to the Third System) "could fire projectiles that, caliber for caliber, were four times as heavy to effective ranges two to three times as great; and they could do so with remarkably increased armor-penetration ability and accuracy" (Lewis 1993,

page 76). The batteries varied in the number of guns mounted, types of materials used, and length of service.

Mont Sec Avenue (Officer's Row) (Buildings 101, 102, 103, 106, 107, 110-115 Officer Housing; 104, 105, 116, 117 garages). Mont Sec Avenue was the officer's housing for the fort beginning in the 1870s and continues to the present day. There are 10 duplexes and one single-family residence. Four of the duplexes (111-114, built ca. 1890) are Italianate in style, asbestos shingle over the original clapboard, and 2½ stories. Building 103 (ca. 1870s), a duplex that was originally clapboard with a mansard roof but now brick faced, was originally the captain and surgeon's quarters. Buildings 101, 102, 106, 107, 110 (all duplexes), and 115 are brick structures that were constructed by the Works Progress Administration in the 1930s. The garages are simple enclosed sheds behind the structures that serve multiple structures. The avenue is a scene of continuity and visual uniformity, with mostly brick structures and equal, repeated setbacks on both sides of the street.

Building 109 (Officer's Club). Originally constructed between 1871 and 1882, the headquarters structure has been periodically added to over the years. Today it is a 1½-story structure with a brick facade that was probably added in the 1930s and a large columned porch area facing south. Today it is the naval caretaker's office.

Building 147 (Torpedo Storage Building). This building is a long, rectangular, two-story structure with a gabled roof. The first story is of rusticated granite, the second is brick. It has metal windows and doors and a corrugated roof and window shutters. It was built into the hillside above Battery Weed and served as storage for the "torpedoes" or mines that were used to protect the harbor. The building was gutted by fire sometime in the last two decades.

Building 210 (Infantry Battalion Barracks). Building 210 was constructed in 1929 as a three-story barracks with four main entrances and simple Art Deco detailing along the facade. It is a long, thin structure, approximately 400 feet long and 40 feet deep. Enclosed porches were tucked in the rear elevations between the two end U-shaped spans of building ends. Sometime after 1960 the barracks was converted to office use and the windows were replaced.

Building 352 (Carriage House). The carriage house is a two-story building with a rectangular plan and gabled roof. It has red vinyl siding with red and dark brown trim. Multigray-tone asphalt shingles cover the roof. Windows are one-over-one aluminum sash. It appears to have been a noncommissioned officers club built over the site of an earlier stable that was constructed on the site in 1921.

Seabee Complex (Buildings 301, 302, 303/304, 305, 309, 310). Six buildings comprise the Seabee complex, and most date from the late 1930s WPA era (building 305 dates to 1900). The complex provided a support function for the fort, serving as garages, motor pools, a motor dispatch, storage facilities, a stable, and associated offices. It appears to have been built as a planned complex. The exteriors of each building retain their core massing although siding materials and fenestration patterns have been altered.

House (Building 406). This structure was constructed sometime before 1895 and before military incorporation into the fort. It is a two-story building with a cruciform plan and hipped roofs with shallow inclines. Two of the spaces between arms have been filled in with one-story enclosed

rooms. The foundation is of brick and sandstone, and the elevations have been covered with blue vinyl siding. Two ceramic chimney pots are set on a central chimney stack.

Gatehouse (Building 404). The west gatehouse was constructed in 1939. The building is no longer used as a gatehouse.

Archeological Resources

A systematic archeological inventory of Fort Wadsworth has not been undertaken. However, based on limited archeological testing completed by the navy in support of the environmental impact statement for the homeport and archeological work undertaken in the area surrounding Fort Wadsworth, there is a reasonably high likelihood of prehistoric and pre-Fort Wadsworth era archeological resources remaining on fort grounds.

The earliest prehistoric resources found on Staten Island are from the Archaic period (ca. 6,000–1,000 B.C.). No major Archaic period sites have been identified in the immediate Fort Wadsworth vicinity, although some Archaic cultural materials have been recovered from the later Woodland period (1,000 B.C. – A.D. 1600) contexts. Woodland sites, the most common archeological sites on Staten Island, have been identified near Fort Wadsworth — near Arrochar Station and at the Walton-Stillwell House just west of the fort.

Pockets of prehistoric cultural strata and materials, notably in the southwestern section of the reservation, have been identified on the fort grounds. Such resources are anticipated elsewhere on the property, especially on minimally disturbed, flat terrain within approximately 1,000 feet of the southeast shoreline. There is no clear evidence of 17th-century Dutch-American settlement within the fort limits, but there is a possibility that one — or possibly two — such farmsteads were established on the Doddman/Kingdom and Walton land parcels that are now part of the fort. One later colonial farmstead, in the hands of the Van Deventer family in the mid- to late-18th century, was apparently focused in the southwest part of the fort and may coincide with the earlier Doddman/Kingdom or other properties. Remains of a series of signaling beacons, reportedly installed in the mid-1750s, may also survive inland from Battery Hudson.

Within the military period (here defined as from just before the American Revolution through World War II), limited archeological traces may survive of the fort, shoreline batteries, more beacons, a possible redoubt, and other installations established by the British between 1780 and 1783. The integrity of such resources is likely to have been compromised by later military construction, but their total removal is unlikely. No substantive new construction was conducted on Staten Island as part of the American First System seacoast fortification program, and military archeological data from this period are unlikely to be identifiable. Second System evidence, however, may survive in the form of buried remains of the fortifications of the first Forts Richmond and Tompkins, Battery Hudson, Battery Morton, and other related support structures — all of which emerged through a building program that extended from 1808 to at least 1817. Later redevelopment of the site has resulted in the reconstruction or removal of these features (for instance with the creation of Battery Weed on the site of Fort Richmond), but subsurface remains are still likely to be found. Portions of the Civil War North Cliff and South Cliff Batteries have been incorporated into later Endicott fortifications. These Endicott batteries are substantially intact, and some reflect World War II era modifications.

Numerous 19th century residential properties were formerly in the southwestern and western sections of the present-day fort that were acquired by the U.S. Army during later expansions of the reservation. Although some of these have certainly been entirely removed, others may be partially intact belowground. Finally, although outside the scope of the current study, it should be noted that post-1850 military and nonmilitary archeological resources are also likely in various locations, including in direct association with currently standing structures.

Museum Collections

The Gateway National Recreation Area museum collection, which is being moved to building 210 of the Fort Wadsworth site under the initial actions, is comprised of artifacts from all three units of Gateway — Jamaica Bay/Breezy Point District, Staten Island Unit, and Sandy Hook Unit. The objects in the collection primarily relate to the military aspects of the Gateway units. Among these items are archeological and natural resource items, architectural drawings, architectural fragments, archives, furniture, firearms, insignia, magazines, maps, medals, newspapers, Nike missiles, personal adornment, photographs, posters, projectiles, and uniforms.

Although most of these items did not originate at Fort Wadsworth, most of the military items relate to coastal defense, which was the primary mission of Fort Wadsworth. The items that originated at Fort Wadsworth include a 40,000-piece archeological collection, some signs, metal tracks, architectural drawings, and archives.

NATURAL FEATURES

Vegetation

The portion of the Fort Wadsworth property to be acquired by the National Park Service consists of  acres of the 226-acre site. Most of the site is covered by landscaped areas — buildings, roads, parking areas, and other impervious surfaces — with a small amount of natural area (such as lawns, fields, forest lands, wetlands, and tallgrass lands).

Developed Areas. The lawns are primarily Kentucky bluegrass, and foundation and landscaping plantings consist primarily of yews, azaleas, short barberry, and junipers. Tree species are dominantly red oak, pin oak, Norway spruce, and sycamore. The overall condition of the lawns, landscaping materials, and trees are good. Many of the foundation plantings have outgrown their locations, some of the lawn areas are rough, and many tree roots are exposed. Many of the parking areas are unshaded.

Natural Areas. There are 3 acres of coastal tallgrass vegetation and 5 acres of coastal beach wetlands. Most of the trees and understory occupy the steep slopes facing the bay and around the forts and batteries. Much of this vegetation either obscures the lines of sight that were important from a military perspective or covers the historic batteries. The tree species are primarily red and white oak, sycamore, black locust, hickory, box elder maple, and black cherry. The understory vegetation consists mostly of blackberry, shrub and vine honeysuckle, greenbrier, wild grape, tree-of-heaven, wormwood, and sumac. There is also a small area adjacent to the beach in the southwest corner of the property that consists of black locust and sassafras, with some understory consisting of the same general types of vegetation found on the slopes and around the batteries.

The general condition of this vegetation is poor, consisting of few straight trees and a dense tangle of brush and vines. A number of isolated mature trees provide shade for visitors.

The tallgrass area inland from the sand beach is dominated by American beachgrass and seaside goldenrod. The bay side grasses consist mainly of salt meadow cordgrass, coastal panicgrass, cocklebur, and a number of annuals. Landward of the herbaceous vegetation, trees such as cherry and locust are invading.

Wildlife Habitat

Although no formal fauna inventory has been conducted by the Park Service, such an inventory was undertaken by the U.S. Navy in its 1992 *Natural Resources Management Plan*. Based on that plan and field observations by NPS staff, a variety of species were found on the site.

Songbirds are the dominant wildlife on Fort Wadsworth, inhabiting the tree and shrub habitat. Gray squirrels, raccoons, woodchucks, cottontail rabbits, striped skunks, and a few ring-necked pheasants also inhabit the grassy areas adjacent to the beach. In addition, the grassland areas and wetlands contain several species of shorebirds and ducks, including the spotted sandpiper, great blue heron, and mallard ducks.

Threatened and Endangered Species

The peregrine falcon nests on the Verrazano Narrows Bridge, which bisects the site. The peregrine falcon is on the federal and state of New York list of endangered species. Other than occasional transient individuals, there are no other endangered species in the vicinity of Fort Wadsworth (see appendix F).

The short-nosed sturgeon is listed as endangered by the National Marine Fisheries Service and is known to exist in the Hudson River Basin, which ends in New York Harbor.

Agricultural Lands/Soils

Because of the previous disturbance of most of the soils onsite, it is only possible to describe the soils to a general grouping level. The dominant soils characteristics include deep, well, and moderately well-drained medium-textured soils. These soils are generally forming in reddish fill that is dominantly loam or silt loam. In some places the fill overlies sandy loam or loamy sand deposits at depths greater than 3 feet. Most of the site is moderately well-drained, and the permeability rate is moderate to moderately slow. The clay content ranges from 12%–30%.

Historically, there was some agricultural use on Fort Wadsworth, but any vestiges of such uses have long since disappeared during two centuries of military use.

Wetlands, Floodplains, and Water Quality

There are no streams, lakes, or ponds on Fort Wadsworth. Marine wetlands are along the confluence of the uplands and the Narrows and Lower Bay. Some wet spots show on existing soils maps, but they are essentially poorly drained and would not be considered hydric soils. Although there is groundwater below the property, it is not used in any way. Drinking water is obtained from the New York City Water Authority.

The only flooding to occur on the site is from tidal action. The highest tide ever recorded by the National Oceanographic and Atmospheric Administration's Datum Plane Section personnel occurred in 1960 when the ocean reached a level of 8.5 feet above mean sea level, which is represented as a contour line on the U.S. Geological Survey topographic maps.

The coastal wetlands along the east property line are of poor quality because there is sand and cobbles rather than plants. These palustrine emergent wetlands are also poor quality because their small size limits functioning. The areas immediately upland of the beach are intermittently inundated by storm tides and contain a diversity of plants, both facultative wet and facultative upland, including American beachgrass, coastal panicgrass, seaside goldenrod, and Japanese bamboo. This vegetation and a number of shrubs protect the upper beach area from erosion.

The New York State Department of Environmental Conservation has classified the upper and lower New York bays as class I waters. This classification means that the best use of these waters is secondary contact recreation, which includes minimal water contact and improbable ingestion of water. According to this state department classification, although coliform counts are acceptable for swimming, the extreme currents, urban wastes that often wash ashore, and a significant accumulation of refuse and timbers that wash ashore effectively preclude use of the beach area for active recreation.

Climate and Air Quality

The climate around New York City is humid-continental, with an extended frost-free period and reduced extremes in temperature caused by ocean influences. Air quality for New York City is often in nonattainment of EPA standards for many air emissions related to mobile and stationary sources. Because the site is near a primary roadway (the Verrazano Narrows Bridge), it is unlikely that any NPS operations will improve or exacerbate this situation.

Gateway National Recreation Area is a mandatory class II air quality area. (The designation is not an indication of how clean the air is but refers to the level of air quality protection.) The Clean Air Act mandated that all areas of the country be designated class II areas, with the exception of national parks over 5,000 acres and federal wilderness areas over 6,000 acres that are mandated to be class I areas.

Topography and Geologic Resources

Fort Wadsworth is in the Atlantic Coastal Plain physiographic province. The landforms have largely been created by glacial activity. The eastern side of Staten Island contains the remnants of the Harbor Hill terminal moraine, which dominates the site. The site's major landform is the bluff that rises from sea level to an elevation of 150 feet. Most of the batteries are on the slopes of the bluff, with Battery Weed at the toe of the slope and Fort Tompkins at the highest point. From the

area around Fort Tompkins, the land drops gradually to the west to a flat level surface that is approximately 100 feet above sea level; this flat land constitutes the remainder of the site.

The geologic history of the site shaped the development of the military's use of the area. The Narrows and adjacent high ground constitute the most significant geological remains of the last glacial period. These types of features are not often found in such close proximity. It is the proximity of these landforms that led the military to develop a strong defense and deterrent capability, which was effective because a shot was never fired in anger at Fort Wadsworth.

ASBESTOS, UNDERGROUND STORAGE TANKS, AND HAZARDOUS WASTE

As part of the transition from a military facility to a national recreation area, the Park Service and the U.S. Navy will address all issues related to pollution abatement and control. As part of the work covered under the transition and initial actions, asbestos abatement and control, hazardous waste cleanup, and the removal of underground storage tanks and soils will be accomplished. Problems associated with such conditions or materials will have been alleviated.

The New York State Department of Environmental Conservation is overseeing the navy's current cleanup of hazardous substances, pollutants, and contaminants at Fort Wadsworth. The navy's cleanup plans must conform to applicable federal and state laws and regulations and must also be approved by the Department of Environmental Conservation. The National Park Service is monitoring the navy's cleanup of hazardous substances, pollutants, and contaminants.

THE NEIGHBORHOOD AND THE SOCIOECONOMIC ENVIRONMENT

Noise and Traffic

The main street near Fort Wadsworth is Bay Street, a two-way road that parallels the shoreline from the St. George Ferry terminal on the north to Fort Wadsworth on the south. The area south of Fort Wadsworth is connected to Bay Street by Father Capodanno Boulevard, which becomes Lilypond Avenue near the Verrazano Narrows Bridge toll plaza. The __ bus route runs along Bay Street through the fort, between the St. George Ferry terminal and Father Capodanno Boulevard, with stops every few blocks. At St. George, the Staten Island Ferry provides frequent services (20–30 minute intervals) between Staten Island and the south ferry terminal on Manhattan. There are also numerous bus lines between different Staten Island neighborhoods and St. George, as well as frequent bus service between Fort Wadsworth (at the Bay Street/School Road intersection) and downtown Manhattan.

Land Use

Portions of the site are to be used (after transfer) by the National Park Service as a national recreation area, by the U.S. Army Reserve as a training facility, and by the U.S. Coast Guard as housing and offices. The surrounding community consists of single-family homes, apartment buildings, and condominium complexes. A number of small to moderate size commercial establishments are near the site.

Utilities

The site is served by existing utilities, including water, sewer, and electrical lines.

Visitor/Resident Use

Past Use/Visitor Experience. As a military base operated by the army and, after October 1, 1987, the navy, visitor use has not been of primary importance in the operation of Fort Wadsworth. The base's open spaces (lawns, woodlands, and beaches) and the constructed recreational facilities (gymnasium and theater) were primarily for the use of the military personnel and their families. Public access to the fort has varied widely during its long history, often based on America's state of war or peace and the perceived military role of the fort. Guidebooks from the late 19th century tout Fort Wadsworth as "a good place to go for a summer's jaunt." Visitors were allowed to stroll the fort's paths and picnic on its bluffs, watching the ships pass through the Narrows. Scenic viewing was then, as now, one of the most important recreational activities on the fort. Other important recreational activities on the base included lawn tennis, ocean swimming, and saltwater fishing (which has frequently been recorded as outstanding).

Public educational use of Fort Wadsworth greatly increased when, in 1966, the U.S. Army created the Fort Wadsworth Museum in a portion of Fort Tompkins. Interest in this museum was demonstrated by the attendance at the opening ceremony of more than 1,500 people. The museum was open to the public every afternoon. Interpretation at the museum examined the history of Fort Wadsworth, harbor defense, historic engagements of the U.S. Army, and the army's and the fort's role in the New York area. Military historians working for the army provided a limited menu of educational programs to many school and organizational groups. The army operated the museum until 1979 when most of its artifacts and displays were moved to the new Harbor Defense Museum at Fort Hamilton across the Narrows.

Beginning in late 1979, the National Park Service began operating the significantly diminished museum in Fort Tompkins in anticipation of the transfer of the base from the army to the Park Service in October 1980. During their one-year tenure of the historic core of Fort Wadsworth during this transitional period, NPS rangers developed new interpretive programs, leading dozens of school groups and numerous other visitors through the historic fortifications. Evening campfire programs were highly attended.

With the departure of the Park Service in 1980 and the subsequent transfer of the base to the navy, visitor access to the fort was severely curtailed. Except for the occasional historic reenactment program or the staging of large recreational events, such as the New York City Marathon, visitor access to Fort Wadsworth has remained limited.

Current Recreational Use. The beach and upland portions of the property are currently used by military personnel and their families for unstructured recreational activities, including picnicking, walking, birding, biking, kite flying, and informal athletic activities. The beach and jetty are used for shore fishing, but the jetty's outer end is in disrepair. There are tot-lots throughout the housing area. One softball field is used for football and soccer. The field is poorly drained and has an uneven surface. There is one tennis court, a handball court, and a picnic area. Several grassed slopes are suitable for winter activities such as sledding and tobogganing.

Other recreational facilities available for the site's current occupants are a gymnasium (although it is currently closed pending transfer), a ballfield, and a picnic area at Seabee Park (formerly known as Caruso Park).

ENVIRONMENTAL ASSESSMENT

INTRODUCTION

This *Site Management Plan / Environmental Assessment* contains two alternatives for the management, development, and use of Fort Wadsworth. Both fulfill the site's purpose as outlined in the 1972 enabling legislation for Gateway National Recreation Area and both provide for resource preservation, a quality visitor experience, and safe, effective site operation. Alternative 1, a living history museum, is the National Park Service's preferred alternative. It calls for restoring cultural resources to their historic appearance and, in times of peak visitation, using costumed interpreters to bring to life the fort's vast military history. Alternative 2, a protected cultural resource, represents a continuation of existing trends that will exist after completion of the initial actions that are currently being undertaken to allow for visitor use of the site. No additional actions would be implemented under this scenario of economic uncertainty except for the restoration of the seawall and the preservation of the dock, which must be done to protect historic structures.

The environmental assessment section of this *Site Management Plan* analyzes the potential impacts on cultural and natural resources and the socioeconomic environment that could result from implementing alternatives 1 (a living history museum) and 2 (a protected cultural resource) described in "The Alternatives" section of this document.

This document and environmental assessment have been developed in accordance with the National Environmental Policy Act of 1969 (NEPA), 42 USC 4321 et seq.; the Council on Environmental Quality's NEPA regulations, 40 CFR 1500 et seq.; the U.S. Department of the Interior's *Departmental Manual*, Part 516 DM 6, Appendix 7, which contains the National Park Service's NEPA regulations; NPS-12, which contains the National Park Service's NEPA compliance guidelines; the 1979 *Final General Management Plan / Environmental Impact Statement for the Gateway National Recreation Area* and that plan's *Interpretive Prospectus*.

ALTERNATIVE 1 — IMPACTS ON VISITOR EXPERIENCE AND HISTORIC STRUCTURES

Impacts on the Visitor Experience and Site Recreational Opportunities

Under this alternative, visitors would benefit from greatly expanded educational opportunities at Fort Wadsworth. Visitors would be able to learn of the fort's significant contributions to the defense of New York Harbor and its adjacent coasts. All major fortifications would be preserved or rehabilitated and interpreted to represent their most recent period of historic significance. These fortifications would be open to visitors through ranger-led tours. Comprehensive educational exhibits and programs would provide insights into the concepts and methods of coastal defense as well as open a window into the lifestyles of the fort's historic occupants and the evolution of its cultural landscape. During times of peak use, visitors would encounter costumed interpreters, and observe reenactments of historic events and other living history programs.

Major projects would include a visitor center in building 120, a Fort Wadsworth museum in Fort Tompkins, a furnished officer's home on Mont Sec Avenue, outdoor educational exhibits, and reproduced weaponry in a number of historic fortifications.

The visitor center would provide an easily accessible central location where visitors could get information about the fort and its significance, the major themes of the fort, and opportunities for additional learning and exploration. The museum would provide a more in-depth educational experience and allow visitors to examine objects, exhibits, and other media relating to Fort Wadsworth and coastal/harbor defense.

Visitor access to the site would be improved through the establishment of a ferry service linking the fort to Manhattan and other Gateway National Recreation Area units. Access through the site would be improved with the installation of directional/orientation signs, the development of bicycle path, and the establishment of a shuttle system that would operate during times of high visitation.

New site recreational activities under this alternative — dining at a restaurant in the officer's club (building 109), use of the gymnasium, a bicycle and pedestrian path through the site, and public access to the beach — would offer new opportunities to site visitors and residents, some of which had been available only to military personnel and their families. Swimming would continue to be prohibited due to dangerous currents and poor water quality. Allowing kayaks and other small watercraft to pull up on shore south of Battery Weed would also offer new opportunities for recreation (however, no docks or other facilities would be provided for pleasure boats). No effects would be associated with continuing Coast Guard management of the ballfield or onsite resident use of the picnic area at Seabee Park, or from continuing the start of the New York City Marathon at the site.

Allowing expanded community-based cultural activities, including indoor concerts and theatrical performances, in the chapel and possibly limited outdoor concerts in the open area between the chapel and the bachelor's enlisted quarters would be a beneficial change for site and community residents.

Effects on Historic Structures

Work proposed for historic structures falls within one of four categories: preservation, rehabilitation, restoration, or reconstruction.

- **Preservation** maintains the existing integrity and character of the structure by arresting deterioration. It includes both maintenance and stabilization.
- **Rehabilitation** improves the utility or function of a historic structure, through repair or alteration, to make possible a compatible contemporary use while preserving those portions or features that are important in defining its significance.
- **Restoration** accurately presents the form, features, and character of a historic structure as it appeared at a specific period.
- **Reconstruction** entails reproducing the form, features, and character of a nonsurviving historic structure, or any part thereof, as it appeared at a specific time and place.

Each of these treatments implies that the subject structure would survive into the future, that deterioration would be arrested, and that its significant features would remain when the work has been completed. Each of these treatments might result in the loss of historic fabric.

Fort Tompkins. The rehabilitation of Fort Tompkins to provide adequate preservation and allow visitor use and safety would result in the loss of considerable deteriorated historic fabric such as plumbing, electrical systems, iron railings and architectural details, rotted woodwork, and damaged plaster. Additional historic fabric could be lost in repairs to the roof to halt water leakage and in spaces to be modernized for museum and office use.

Battery Weed. The rehabilitation of Battery Weed would be limited to actions that would preserve the battery and enhance its interpretation for visitors. There would be some loss of historic fabric during repair of the barbette tier to halt water damage, during restoration of the lighthouse, guardhouse wall, and the magazine roofs, and during repair or replacement of the metal shutters, and during the addition of required features to ensure visitor safety (such as electrical systems) or actions to control access to the structure. The installation of reproduction guns should have little or no physical impact on historic fabric.

The restoration of the seawall near Battery Weed would ensure the preservation of Battery Weed and the historic shoreline configuration around it. The rehabilitation of the dock would allow it to continue to serve its historic function. However, its appearance would be modified somewhat to allow modern shuttle craft to dock and to provide the appropriate level of safety for users, including an all-weather structure and ranger office.

Restoring a section of the moat around Battery Weed would disturb and remove some soil and add to the visitors' understanding of how the seawall and moat protected Battery Weed.

Endicott Era Batteries. All but one of the Endicott batteries would undergo preservation treatment to lessen or halt currently severe ongoing deterioration. Such treatment might result in the loss of historic fabric and would not provide the level of safety required for visitor access. One battery would be rehabilitated or restored to provide visitors with an understanding of the battery's purpose and how it operated. Deteriorated fabric would be replaced in kind. Additional safety measures such as signs and railings could result in minor loss of historic fabric.

Mont Sec Avenue. The deteriorated asphalt shingle siding (installed ca. 1950) would be removed from buildings 111-114 so that the original wood siding and detail could be restored and the original appearance of the structures could be recaptured. Other structures on the street that were faced with brick during the 1930s would not be restored to their earlier appearance so the street would reflect only the era of the late 1930s to 1950. This would limit interpretation of Mont Sec Avenue to late within the period of the fort's historic significance. Access for the physically disabled would require some alteration of the landscape; however ramp placement would be to the rear of the buildings to lessen the visual impacts.

The rehabilitation of building interiors for modern use could result in some loss of original fabric, although significant historic features would be preserved.

Building 109 has been significantly altered since it was constructed. Remnants of historic fabric remain such as a colonial revival mantel and woodwork. These would be incorporated into the rehabilitation effort. A kitchen would be added at the rear of the building to avoid visual intrusion on the front view of the structure. An access ramp would also be required.

Torpedo Building. Most of this structure would undergo preservation treatment to ensure its existence into the future. Some deteriorated or fire-damaged historic fabric would be removed during the preservation/stabilization of this structure. The lower floor on the south side would be rehabilitated for restrooms, resulting in some additional loss of historic fabric.

Building 309 (stable). The restoration of a section of this building would allow visitors to understand historic uses of the building and the site by the U.S. Calvary.

Building 352. This structure has been significantly altered from its historic appearance both on the exterior and the interior. Rehabilitation for a food concession would not restore its historic appearance but would attempt to preserve any significant historic fabric that remains.

Seabee Complex. Some historic fabric might be lost when the existing exterior siding is removed. The structures would regain much of their historic appearance following this work.

Building 210. Half of the second floor and all of the third floor of building 210 would be rehabilitated for NPS administrative use. The structure has been significantly altered on the interior, so little significant fabric is expected to be damaged.

Other Buildings. The stabilization of buildings 140 (the Rod and Gun Club), 339 (the seaplane hangar), 406 (a house), and 404 (the gate house) would ensure their preservation until some use can be determined.

The overall effect of proposals outlined for structures in this plan would not be adverse. All historic structures would undergo actions to ensure their future preservation and use. Removal of, or damage to, historic fabric would be limited to the minimum necessary to make the structures function properly in their new roles, meet visitor and staff safety requirements, and ensure their continued preservation. No significant character-defining features would be removed or lost.

Impacts on the Cultural Landscape

An open landscape, cleared for maintaining historic site views that were important for military reasons, would allow visitors to experience broad, unobstructed views of the Narrows, similar to those of the site's historic occupants.

ALTERNATIVE 1 — IMPACTS ON ARCHEOLOGICAL RESOURCES AND MUSEUM COLLECTIONS

Impacts on Archeological Resources

Impacts on archeological resources from implementing alternative 1 would be minimal. With the exception of access ramps, reseeding of the parade ground inside Fort Tompkins, road work on the Range road, and restroom installation in the torpedo storage building, ground-disturbing activities would be minimal. Archeological testing and/or monitoring would precede any ground disturbance to ensure that any such resources were identified before construction and measures were implemented to preserve them.

Impacts on the Museum Collections

The collections will have already been moved to Fort Wadsworth in the initial actions. Building 210, where the collection is stored, has climate controls and room for expansion of the collection, can accommodate the weight of a compact storage system, and has a separate room that accommodates architectural drawings and makes them more accessible to researchers. There would be no further impacts on the collection from implementing this alternative. An active collections policy would enhance the collection and interpretive opportunities.

ALTERNATIVE 1 — IMPACTS ON NATURAL FEATURES

Impacts on Vegetation

To preserve and rehabilitate historic structures (including Fort Tompkins, Battery Weed, and the Endicott batteries) and return the site to a condition that is representative of a coastal defense formation, much of the vegetation within these structures and adjacent to them would be cleared. Clearing, erosion control measures (possibly plantings), and measures to limit vegetation succession and ensure visitor safety, which would be done in accordance with the vegetation management plan, would help accomplish this and would enhance the visitors' experiences.

Impacts on Wildlife Habitat

Some wildlife habitat might be lost as a result of implementing the vegetation management plan. The grassland and wetland area species would not be impacted because there would be no vegetation management in these areas. Species planted as a result of the vegetation management plan would have wildlife food and cover value.

Impacts on Threatened and Endangered Species

The only potential impacts on the peregrine falcons under this alternative would be the sounds of weapons being fired during historic reenactments. Because blanks would be used, which are no more startling than the typical vehicle backfire that the falcons hear from bridge traffic, no impacts on falcons would be expected under this alternative.

Activities related to rehabilitating the dock and reconstruction of the seawall and associated increases in harbor traffic (due to ferry service) would not have any significant impact on short-nosed sturgeon.

Impacts on Agricultural Lands/Soils

Developing the informal trail south of the Verrazano Narrows Bridge and establishing a pedestrian route through the site would likely result in increased pedestrian traffic and, potentially, soil compaction on dirt spur trails. However, directing visitors to use established paths and roadways would minimize this potential impact.

Impacts on Wetlands, Floodplains, and Water Quality

Directing visitors away from environmentally sensitive wetland areas would help limit vegetation trampling.

Rehabilitating the dock and restoring the seawall would involve some disturbance to the bank and harbor floor, but this would be minimized through compliance with Army Corps of Engineers permit directives.

Allowing only passive recreation in the ecologically sensitive areas of the beach and adjacent area and providing new signs indicating an ecological reserve would help protect natural features, vegetation, and wildlife.

Impacts on Air Quality

Increased visitor use and employee activities would involve the presence of more buses and cars. However, the number of fossil-fuel-burning vehicles might decrease from current military use levels. Because alternative-fuel shuttles would be used to transport visitors onsite, the effect on air quality would be minimal. Buses used to transport visitors to the site would not be allowed to idle for prolonged periods of time, thereby minimizing any impacts on air quality.

Impacts on Topography and Geologic Resources

Improvements to structures and landscapes under this alternative would not alter the terrain, beyond the possible removal of vegetation. Some minor grading might occur in association with historic restoration activities. There would be no impacts on geologic resources.

ALTERNATIVE 1 — CARE OF ASBESTOS, UNDERGROUND STORAGE TANKS, AND HAZARDOUS WASTE

As part of the transition from a military facility to a national recreation area, the Park Service and the U.S. Navy will have addressed all issues related to pollution abatement and control. As part of the work covered under the transition and initial actions, asbestos abatement and control, hazardous waste cleanup, and the removal of underground storage tanks and associated soils will have been accomplished. Problems associated with such conditions or materials will have been alleviated. As yet undiscovered problem areas would be cleaned up according to laws and regulations.

ALTERNATIVE 1 — IMPACTS ON THE NEIGHBORHOOD AND THE SOCIOECONOMIC ENVIRONMENT

Impacts on Noise and Traffic

Noise levels might increase during reenactments. During peak visitor use times, adjacent residents might be impacted by increased traffic. However, encouraging visitors to carpool, ride the bus, and take the ferry would minimize vehicle trips into and out of the site.

Impacts on Land Use

The presence of a national park system unit would be expected to draw tourists to Fort Wadsworth. The tourists and park staff would be expected to stimulate retail and commercial activities in the surrounding community. Property values might also increase due to the existence of the park.

Impacts on Community Relations

Concession-related activities and site activities under this alternative might provide additional jobs to area residents. The presence of tourists would likely continue to have positive impacts on local businesses.

Most of the benefits to the community would have occurred with the completion of the initial actions. The transition from a military installation to a civilian, tourist-oriented use could be expected to continue to have positive impacts on the surrounding community. Fewer infrastructure improvements would be needed than with a highly concentrated military population, and incidents of arrests should continue to decrease relative to the number of such incidents adjacent to military bases.

Some members of the community might be disappointed because active recreational activities, such as baseball, soccer, and volleyball, would not be increased. They might also be disappointed because community gardens would not be allowed (because of the high lead content in the soil). However, community opportunities to attend concerts, theatrical performances, lectures, and community meetings would be improved.

Some jobs might have been created by the opening and development of the park under the initial actions, which might have been filled by area residents, consistent with Department of the Interior hiring regulations. Some additional jobs might be created under this alternative, which, if consistent with hiring regulations, might be filled by area residents.

Impacts on Utilities

Additional water and sewer connections associated with restrooms in the torpedo building would not impact the site because they would be buried. This connection would have no impacts on water quality.

ALTERNATIVE 1 — IMPACTS ON NPS OPERATIONS AND ADMINISTRATION

With increased staff and adequate onsite maintenance facilities and staff housing, the site should be more easily and efficiently managed. Adequate permanent staff housing would be onsite. The removal of some nonhistoric structures would alter the site's appearance.

UNAVOIDABLE ADVERSE IMPACTS OF ALTERNATIVE 1

This section outlines the primary unavoidable adverse environmental impacts that are likely to result from implementing preferred alternative 1. Where possible, mitigating measures that offset these impacts to varying degrees are presented. A number of mitigating measures have been incorporated into previous sections.

Shoring the seawall would require the placement of some fill in the form of pilings, coffer dams, or other temporary support structures. The permanent placement of cobble and boulder-protected riprap would constitute filling; however, it would provide for the long-term stabilization of the foundation of Battery Weed. Any filling necessary in this work would not add to the aggregate amount of filled area, nor would the existing footprint of the dock be enlarged.

The rehabilitation of the dock would require the removal of the free-standing timber piles. Because these timbers have been in place for a substantial length of time, it is possible that they are saturated with hazardous compounds that accumulate in the sediments of most major harbors and river deltas in highly urbanized areas. Sediments would also be disturbed, along with fish habitat. In the process of removing any contaminated materials, the Park Service would comply with the requirements of Resource Conservation and Recovery Act and any other applicable requirements of federal, state, and local laws and regulations.

ALTERNATIVE 2 — IMPACTS ON VISITOR EXPERIENCE AND HISTORIC STRUCTURES

Impacts on the Visitor Experience and Other Site Recreational Opportunities

Under this alternative visitor opportunities provided under the initial actions for education and exploration would remain; there would be no expansion. Visitors would continue to benefit from some educational opportunities at Fort Wadsworth. Visitors would continue to be able to learn of the fort's significant contributions to the defense of New York Harbor and its adjacent coasts at the visitor center in building 120. Only Battery Weed would be rehabilitated and interpreted to reflect military use. Educational exhibits would be limited to those in the visitor center and the outdoor wayside exhibits; there would be no comprehensive museum. Except for Battery Weed and public restrooms in one portion of Fort Tompkins, no other fortifications would be open to visitors, resulting in far fewer educational opportunities than under alternative 1. Interpretive tours and other programs would be provided as funding and staffing allowed, diminishing the opportunities to learn about the concepts and methods of coastal defense, the lifestyles of the fort's historic occupants, and the evolution of its cultural landscape.

The visitor center would provide an easily accessible central location where visitors could get information about the fort, its significance, and its major themes. Opportunities for additional exploration would be severely limited.

There would be no ferry access to the site under this alternative. Access through the site would continue with the existing directional/orientation signs. There would be no shuttle system, and automobile access would be limited to the visitor center, except for the disabled, who could park near the overlook and Battery Weed.

Recreational activities, including scenic viewing at the already improved harbor overlook and saltwater fishing, would continue. Swimming would continue to be prohibited (due to dangerous currents and poor water quality), as would public access to the beach.

Kayaks and other small watercraft could continue to pull up on shore south of Battery Weed (however, no docks or other facilities would be provided for pleasure boats). No effects would be associated with continuing Coast Guard management of the ballfield, onsite resident use of the picnic area at Seabee Park, or continuing the start of the New York City Marathon at the site. The chapel would not be open for community-based cultural activities, thereby perhaps lessening opportunities for resident and neighborhood use. No outdoor concerts would be permitted.

Effects on Historic Structures

Continued use of building 210 for administrative purposes would minimize potential for structural problems to go unnoticed and thereby contribute to its protection and preservation. However, NPS office, conference area, and meeting room space would be limited because half of the second and all of the third floor would not be rehabilitated.

Graffiti could be expected to increase on historic structures.

The overall effect of this alternative would not be adverse because all significant historic resources, including the dock and seawall, would continue to be preserved.

Impacts on the Cultural Landscape

Vegetation would continue to obstruct historic views.

ALTERNATIVE 2 — IMPACTS ON ARCHEOLOGICAL RESOURCES AND MUSEUM COLLECTIONS

Impacts on Archeological Resources

Impacts on archeological resources from alternative 2 would be minimal. Archeological testing and/or monitoring of all ground disturbance would ensure that there would be no effect on such resources.

Without clearing, tree roots and other vegetation could eventually have an adverse effect on archeological resources.

Impacts on Museum Collections

Impacts on the museum collections would be the same as described in alternative 1.

ALTERNATIVE 2 — IMPACTS ON NATURAL FEATURES

Impacts on Vegetation

Under this alternative, all landscaping, foundation plantings, and grass areas would be maintained, and no additional clearing or plantings would occur. No adverse impacts would result from implementing this alternative.

Impacts on Wildlife Habitat

Implementing this alternative would not involve any clearing of vegetation or alteration of physical features; therefore, no adverse impacts on wildlife habitat would result.

Impacts on Threatened and Endangered Species

No impacts on threatened or endangered species would result from implementing this alternative.

Impacts on Agricultural Lands/Soils

Implementing this alternative would not cause any adverse impacts on agricultural lands or soil characteristics on the site.

Impacts on Wetlands, Floodplains, and Water Quality

No impacts on wetlands, floodplains, or water quality would result from implementing this alternative. Restoring the seawall would involve some disturbance to the bank and harbor floor, but this would be minimized through compliance with Army Corps of Engineers permit directives. Continuing to allow only passive recreation in the ecologically sensitive areas of the beach and adjacent area would help protect natural features, vegetation, and wildlife. Some vegetation trampling could occur in environmentally sensitive areas.

Impacts on Air Quality

Implementing this alternative would not cause any adverse impacts on area air quality.

Impacts on Topography and Geologic Resources

No impacts on topography or geologic resources would result from implementing alternative 2.

ALTERNATIVE 2 — CARE OF ASBESTOS, UNDERGROUND STORAGE TANKS, AND HAZARDOUS WASTE

As part of the transition from a military facility to a national recreation area, the Park Service and the U.S. Navy will have addressed all issues related to pollution abatement and control. As part of the work covered under the transition and initial actions, asbestos abatement and control, hazardous waste cleanup, and the removal of underground storage tanks and associated soils will have been accomplished. Problems associated with such conditions or materials will have been alleviated. As yet undiscovered problem areas would be cleaned up according to laws and regulations.

ALTERNATIVE 2 — IMPACTS ON THE NEIGHBORHOOD AND THE SOCIOECONOMIC ENVIRONMENT

Impacts on Noise and Traffic

Although noise and traffic levels would have increased after the park is open to the public, there would be no additional impacts from implementing this alternative.

Impacts on Land Use

The impacts on land use, the stimulation of retail and commercial activities, and property values would be the same as described in alternative 1 except that there would be fewer NPS staff to stimulate commercial and retail activities.

Impacts on Community Relations

No additional jobs for area residents would be expected under this alternative. The presence of tourists would likely continue to have positive impacts on local businesses.

Most of the benefits to the community would have occurred with the completion of the initial actions. The transition from a military installation to a civilian, tourist-oriented use could be expected to continue to have positive impacts on the surrounding community. Fewer infrastructure improvements would be needed than with a highly concentrated military population, and incidents of arrests should continue to decrease relative to the number of such incidents adjacent to military bases.

Some members of the community might be disappointed because active recreational activities, such as baseball and volleyball, would not be increased. They might also be disappointed because community gardens would not be allowed (because of the high lead content in the soil).

Some jobs might have been created by the opening and development of the park under the initial actions, which might have been filled by area residents, consistent with Department of the Interior hiring regulations. No new jobs would be created under this alternative.

There would be no adverse impacts on community relations from implementing this alternative (only the initial actions).

Impacts on Utilities

Utilities and connections thereto would not be impacted by implementing this alternative.

ALTERNATIVE 2 — IMPACTS ON NPS OPERATIONS AND ADMINISTRATION

Most maintenance activities would continue to be conducted at onsite maintenance facilities (the Seabee complex). Adequate NPS permanent employee housing would continue to be provided onsite. Space for NPS offices and conference and meeting rooms would not be available without the rehabilitation of half of the second and all of the third floor of this building.

ENVIRONMENTAL COMPLIANCE

The National Park Service would comply with all applicable federal executive orders, federal, state, and local laws, regulations, and policies in implementing either alternative.

COMPLIANCE WITH THE NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act (NEPA) of 1969, as amended, does not contain specific time requirements for public review, nor do the Council on Environmental Quality NEPA regulations (found at 40 CFR 1501 et seq.) Section 3 of 516 *Departmental Manual* outlines the procedures for environmental assessments but also does not provide specific time requirements or public review guidance. However, 516 *Departmental Manual* section 3.3 A. and B. allows for the scoping process for an environmental impact statement (as contained in 40 CFR section 1501.7) to be applied to an environmental assessment and allow for public involvement in the environmental analysis process (as contained in 40 CFR section 1506.6). This environmental assessment meets NEPA and NPS informational requirements, and the Park Service would continue to provide for public review and input as further described in the "Consultation and Coordination" section of this document.

LAWS RELATED TO CULTURAL RESOURCES

One of the National Park Service's mandates is to preserve and protect its cultural resources — through the organic act of August 25, 1916, that established the National Park Service and through specific legislation such as the Antiquities Act of 1906, the National Environmental Policy Act, and the National Historic Preservation Act (described below). Cultural resources at Fort Wadsworth would be managed in accordance with these acts and in accordance with chapter 5 of *NPS Management Policies*, the *Cultural Resource Management Guideline* (NPS-28), the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, the *Secretary of the Interior's Standards for Rehabilitation*, *Guidelines for the Rehabilitation of Historic Buildings*, the *Secretary of the Interior's Standards for Archeology and Historic Preservation*, and other relevant policy directives.

As part of its cultural resources management responsibilities, the National Park Service surveys and evaluates all cultural resources on lands under its jurisdiction. Cultural resources are evaluated by applying the criteria for the National Register of Historic Places. All cultural resources eligible for the National Register of Historic Places would be recorded and/or measured according to the highest professional standards.

In accordance with the Americans with Disabilities Act of 199_ (___ USC ___ et seq.), the Architectural Barriers Act of 1968 (42 USC 4151 et seq.), the Rehabilitation Act of 1973 (29 USC 701 et seq.), and *Uniform Federal Accessibility Standards*, all facilities and programs developed at Fort Wadsworth would be made as accessible as possible given the site's historic preservation constraints.

Section 106 of the National Historic Preservation Act of 1966, as amended, Executive Order 11593, and the Archeological Resources Protection Act of 1979 establish the obligations of the

federal government regarding activities proposed in or affecting properties on or eligible for listing on the National Register of Historic Places. Federal agencies are required to take into account the potential effects of their activities on protected resources and to allow the Advisory Council on Historic Preservation (ACHP) and appropriate state authorities an opportunity to comment. Toward that end, the National Park Service is working with the New York state historic preservation officer (SHPO) and the advisory council to meet the requirements of the August 1990 programmatic agreement among the National Conference of State Historic Preservation Officers, the advisory council, and the National Park Service. The programmatic agreement requires the Park Service to work closely with the state historic preservation office and the advisory council in planning new and existing areas.

This agreement also provides for a number of programmatic exclusions for actions that are not likely to have an adverse effect on cultural resources. These actions may be implemented without further SHPO or ACHP review, thus reducing required consultation. Actions not specifically excluded in the programmatic agreement must be reviewed by the state historic preservation office and the advisory council during the design stage and before implementation.

Internally, the National Park Service would complete a section 106 form (Assessment of Actions Having an Effect on Cultural Resources) before implementing any proposed actions. The section 106 form documents any project effects, outlines actions proposed to mitigate such effects, and documents that the proposed action flows from the *Site Management Plan*. Cultural resource specialists specified in NPS-28 would use the section 106 form to review and certify all proposed actions affecting cultural resources.

All ground-disturbing actions would be preceded by an archeological evaluation to determine the level of archeological investigation required before construction can begin. Should any such resources be identified, the state historic preservation office and the National Park Service would evaluate their potential for inclusion on the National Register of Historic Places; if eligible, appropriate measures would be undertaken to preserve them. Archeological survey and testing would be carried out before, or in conjunction with, construction.

Table 2 lists actions that are either programmatic exclusions or that are subject to further SHPO and ACHP consultation. Should the National Park Service and the state historic preservation officer so decide, other actions not meeting the programmatic exclusion definition may be determined to need no further review. Any such agreement, however, must be mutually determined and fully documented.

TABLE 2. CULTURAL RESOURCE SECTION 106 COMPLIANCE REQUIREMENTS FOR PLAN UNDERTAKINGS

	Actions Requiring Further SHPO Review	Actions Not Requiring Further Review (letters refer to specific exclusions in the programmatic agreement)
ALTERNATIVE 1		
Fort Tompkins	* Rehabilitate roof structure to halt water damage in casemates * Remove peeling lead paint from walls and ceilings of all casemates and rooms where it may pose visitor or employee safety concerns * Extend plumbing and electric service as required by future uses of the structure * Replace all broken windows within the fort and restore or replace in-kind all doors * Install reproduction guns to enhance interpretation * Restore or replace in-kind wrought iron stairways, railings, and decorative ironwork throughout fort * Restore or replace in-kind rotted wooden flooring structures throughout fort * Restore roofs on several small free standing structures within the dry moat * Rehabilitate cisterns	
Battery Weed	* Restore roofs on two magazines * Restore exterior of guardhouse and rehabilitate interior * Restore metal shutters * Restore lighthouse * Rehabilitate roof structure to halt water damage in casemates * Install reproduction guns to enhance interpretation * Install electrical system within structures * Restore or replace in-kind rotted wooden flooring structures throughout fort * restoring section of moat?	
Seawall and Dock	* Rehabilitate dock for ferry landing * Reconstruct the seawall at Battery Weed * New interpretive structure at dock?	
Endicott Batteries	* Rehabilitate Battery Catline for limited visitor use	
Batteries Duane, Upton, Barry, Barbour, Hudson, Richmond, Bacon, Mills, Ayers, Dix, Turnbull		* Preserve present appearance (exclusion a)
Mont Sec Avenue	* Remove shingle siding on buildings 111-114 and restore original siding * Install access ramps where necessary * Rehabilitate structure interiors to allow proposed uses * Install new street lighting	
Building 109	* Rehabilitate structure interior for a restaurant * Install access ramp	

	Actions Requiring Further SHPO Review	Actions Not Requiring Further Review (letters refer to specific exclusions in the programmatic agreement)
Torpedo Building	* Install restroom facilities in the ground level on the south end * Install adequate plumbing and wastewater removal system * Install new roof	
Stable (Building 309)	*  ?	
Building 352	* Remove nonhistoric siding and rehabilitate * Rehabilitate interior for a restaurant	
Seabee Complex	* Remove nonhistoric siding and rehabilitate for site operations and maintenance use	
Buildings 120, 210, Mont Sec Avenue		* preservation maintenance (exclusion a)
Range Road road work		
Grounds		* Routine grounds maintenance (exclusion b)
ALTERNATIVE 2		
Fort Tompkins	* Rehabilitate roof structure to halt water damage in casemates	* Preserve present appearance (exclusion a)
Battery Weed	* Rehabilitate roof structure to halt water damage in casemates	* Preserve present appearance (exclusion a)
Seawall and Dock	* Restore seawall	* Preserve dock (exclusion a)
Battery Catlin		* Preserve present appearance (exclusion a)
Batteries Duane, Upton, Barry, Barbour, Hudson, Bacon, Barry, Mills, Ayers, Dix, Turnbull		* Preserve present appearance (exclusion a)
Mont Sec Avenue		* Preserve present appearance of buildings and landscape (exclusions a and b)
Building 109		* Preserve present appearance (Exclusion a)
Torpedo Building	* Install new roof	* Preserve present appearance (exclusion a)
Building 352		* Preserve present appearance (Exclusion a)
Seabee Complex	* Rehabilitate interiors for operations and maintenance use	* Preserve present appearance (exclusion a)
Buildings 120 and 210		* Preservation maintenance (exclusion a)

	Actions Requiring Further SHPO Review	Actions Not Requiring Further Review (letters refer to specific exclusions in the programmatic agreement)
Grounds		* Routine grounds maintenance (Exclusion b)

LAWS RELATED TO NATURAL RESOURCES

The following section attempts to outline permits that may be required. Other permits that are not listed below may also be required. The Park Service will apply for and comply with all necessary permits and regulations that may be required.

Federal Laws and Executive Orders

Section 404 of the Clean Water Act requires that any activity involving dredging or filling in a U.S. waters or in a federally protected wetland must obtain a permit from the U.S. Army Corps of Engineers before beginning the activity. The Park Service has contacted the Army Corps of Engineers to see what permits are required.

Section 401 of the Clean Water Act is triggered by the filling of 5,000 square feet of wetlands and would require a water quality certification by the state Department of Environmental Conservation. The National Park Service would obtain this certification if the state determines that is it required. (The National Park Service needs to determine if this threshold would be reached by the dock and seawall work. If so, the review time for such a permit gives the state Department of Environmental Conservation one year in which to issue the permit. Some states have policies allowing for expedited review for reasons of public safety, recreation, and certain improvements.)

Section 10 of the Rivers and Harbors Act of 1899 requires a permit from the Army Corps of Engineers for any activity in a navigable waterway occurring below the spring high tide.

The National Park Service would work with the Army Corps of Engineers throughout the permit process to ensure that impacts on navigable waterways are minimized and accomplished through the use of the least intrusive methods.

Executive Order 11988 ("Floodplain Management") requires that all federal agencies avoid construction within the 100-year floodplain unless no other practicable alternative exists. Construction activities on the dock and seawall, which involves providing higher quality visitor access, improving safety, and stabilizing historic structures, would occur within the 100-year floodplain.

Executive Order 11990 ("Protection of Wetlands") requires that all federal agencies avoid, wherever possible, impacts on wetlands. The National Park Service would work with the Army Core of Engineers and the state Department of Environmental Conservation to minimize any impacts on wetlands.

Fort Wadsworth is in a mandatory class II clean air area. Under the Clean Air Act, as amended (42 USC 7401 et. seq.), maximum allowable increases of sulfur dioxide, particulate matter, and

nitrogen oxide beyond baseline concentrations established for class II areas cannot be exceeded. Although none are proposed, these class increments allow modest industrial activities within the vicinity of the site. During any construction or restoration activities, the National Park Service would take all practical measures to limit fugitive dust and noise. Section 118 of the Clean Air Act requires all federal facilities to comply with existing federal, state, and local air pollution control laws and regulations. The National Park Service would work with the state to ensure that all site activities meet the requirements of the state *air quality implementation plan*. Is this a printed document?

Section 7 of the Endangered Species Act of 1973, as amended (16 USC 1531 et seq.) requires all federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitat for such species. The National Park Service has consulted with the U.S. Fish and Wildlife Service pursuant to section 7 of the Endangered Species Act and has received correspondence from that agency to the effect that our proposed actions would not jeopardize the habitat or the continued existence of the peregrine falcon (see appendix F).

The Resource Conservation and Recovery Act and the implementing rules promulgated by the Environmental Protection Agency establish performance standards for generators, transporters, and disposers of hazardous waste. Any such wastes generated or removed from the site would be disposed of through NPS procedures, which are compatible with the act's requirements.

Coastal Zone Management

Full compliance would be made with the New York City Waterfront Revitalization program policies A through K and the New York State Coastal Zone Management program policies 1 through 44. Based on the NPS analysis of those policies, the implementation of alternative 1 would not cause a significant adverse impact on the quality or use of the coastal zone and would be consistent with the objectives of the program. The proposed action is compatible with protecting the coastal zone from erosion through the stabilization of existing structures in the coastal zone.

In regards to stimulating economic development along the waterfront and improving public access, the establishment of a ferry service direct to Fort Wadsworth is compatible with the program in that it would provide for an important tourist destination, would allow users to reach public shore areas adjacent to the dock and Battery Weed, and might alleviate some congestion of existing services. The Park Service would contact the state to be consistent with the coastal zone management plan and would comply with state regulations.

STATE PERMITTING REQUIREMENTS

During the design and construction permitting process, the National Park Service would contact the state's Public Information and Permitting Office, a clearinghouse for the various state offices, to determine application procedures for state water pollution control, underground storage tanks, utility siting, and other permits. Compliance would be made with all applicable requirements.

LOCAL REGULATIONS

The National Park Service would work with the Borough of Staten Island to determine how local rules and ordinances might apply to any proposed activities. Compliance would be made with all applicable requirements.

CONSULTATION AND COORDINATION

PUBLIC INVOLVEMENT

The *Draft Site Management Plan/Environmental Assessment* has been developed with substantial public consultation. The public involvement process began in 1993 when Gateway National Recreation Area's general superintendent met with military and community leaders and with representatives from the private sector. During 1994 the planning team held a series of meetings to solicit concerns and desires of interested citizens and community leaders regarding the management of Fort Wadsworth. In May 1994 the National Park Service invited participation of the state historic preservation office and the Advisory Council on Historic Preservation in the planning process and met with them on January 19, 1995. In spring 1995 the planning team distributed an informational newsletter to over 150 residents and institutions in the greater New York City metropolitan area that described the purpose of Fort Wadsworth and how citizens could become more involved in this planning effort.

The *Draft Site Management Plan/Environmental Assessment* will be available for formal public review for 30 days. During this review period, the team will hold public meetings and accept written and oral comments on the alternatives. The team will carefully review all comments and incorporate them, as appropriate, in the *Final Site Management Plan / Environmental Assessment*. After its approval, the plan would be implemented over the next 20 years as funding and other contingencies allow.

LIST OF AGENCIES AND ORGANIZATIONS TO RECEIVE COPIES OF THE PLAN

Advisory Council on Historic Preservation
Alice Austen House
American Institute of Architects
American Littoral Society
American Youth Hostel
Architects, Designers, and Planners for Social Responsibility
Association for a Better New York
Battery Weed Living History
Borough Historian, Staten Island
Borough President's Office
Brooklyn Sports Foundation
Coastal Defense Group
Council on America's Military Past
Department of Defense, U.S. Navy
Environmental Protection Agency
Fish and Wildlife Service, U.S. Department of the Interior
Floating the Apple
Friends of Clearwater
Friends of Gateway
Friends of Trashed Rivers
Harbor Defense Museum
Historic House Trust of New York City
Hudson River Foundation
Hudson River Park Conservancy

Landmarks Preservation Commission of New York City
 Lighthouse Research for Preservation
 Municipal Arts Society of New York
 Museum of the City of New York
 National Trust for Historic Preservation
 Neighborhood Open Space Coalition
 New Jersey Public Library
 New York City Audubon Society
 New York City Board of Education
 New York City Council on the Arts
 New York City Department of Coastal Resources
 New York City Department of Conservation
 New York City Department of City Planning
 New York City Department of Environmental Protection
 New York City Department of Transportation
 New York City Landmarks Preservation Commission
 New York City Office of Park, Recreation, and Historic Preservation
 New York Historical Society
 New York Landmarks Conservancy
 New York Public Library
 New York Society for the Prevention of Cruelty to Animals
 New York State Historic Preservation Office
 Office of the Honorable Alfonse D'Amato
 Office of the Honorable Daniel P. Moynihan
 Office of the Honorable Guy V. Molinari
 Office of the Honorable Susan Molinari
 Office of the Mayor of the City of New York
 Port Authority of New York and New Jersey
 Preservation League of Staten Island
 Protectors of Pine Oak Woods
 Real Estate Board of New York
 Regional Plan Association
 Road Runners Club
 Scenic Hudson
 Snug Harbor
 Staten Island Advance
 Staten Island Chamber of Commerce
 Staten Island Council of Social Studies Teachers
 Staten Island Geological Society
 Staten Island Institute of Arts and Sciences
 Staten Island Historical Society
 Staten Island Science Teachers Association
 Superintendent, School District 31
 Trust for Public Land
 United Fishermens' Association of New York State
 United States Army Corps of Engineers
 United States Army Reserve
 United States Coast Guard

APPENDIXES

APPENDIX A: ENABLING LEGISLATION

(DSC TO CUT AND PASTE IN)

APPENDIX B: CATEGORICAL EXCLUSION MEMORANDUM

(DSC has; will insert)

APPENDIX C: SIGNIFICANCE AND MORE DETAILED HISTORY

Fort Wadsworth's main significance was in its use as a coastal defense installation. Coastal defense, or more accurately the defense of vital harbors, has been one of the most persistent and powerful themes of American military history by any measure of effort, expenditure, and emphasis. A noted military historian, Russell F. Weigley, finds the interest in coastal defense during the late 19th century "almost obsessive." Physically, the focus on coastal defense has left what Emanuel Raymond Lewis, the most influential scholar on coastal defense, terms "an enduring heritage of military architecture." The development of Fort Wadsworth closely parallels broad trends in the history of our nation's coastal defense.

Although on many occasions advocates of defense measures have played on unwarranted fears to achieve selfish ends, the enduring emphasis on this subject coastal defense derives from profound convictions about the nature of American government and America's place in the world. The fort testifies to the basically defensive, passive posture of the United States in world affairs during much of its history. The stress on fortifications is a product of several patterns of thought that pervade American history: suspicion of a permanent military establishment, resistance to large federal expenditures except during emergencies, and faith in engineering or technical fixes to avoid excessive commitments and losses of military manpower.

In keeping with the importance placed on it, coastal defense has been one of the most intensively studied and analyzed topics in American military history. High-level boards and committees, both civilian and military, have repeatedly addressed the issue, with profound and direct consequences. As a result, U.S. coastal defense has from its beginnings manifested itself as a series of systematic national programs. For this reason there are close parallels and strong relationships among fortifications throughout the country, including Fort Wadsworth.

Lewis has identified eight generations of fortifications, divided into two groups of four each. The first four were mostly constructed of earth, earth and stone, stone or brick, and they were armed with smooth-bore, cast-iron, muzzle-loading cannons; the last four were based on rifled steel breech-loading guns mounted in battery structures built primarily of reinforced concrete. Lewis's scheme of classification has been generally adopted by other scholars and is useful in understanding the history of particular fortified places such as Fort Wadsworth.

As with other aspects of American military history, the development of coastal defense has been by no means a smooth progression. Periods of vigorous, often emergency activity have been followed by dormant intervals sometimes lasting many years. Fort Wadsworth exemplifies this erratic pattern. Except perhaps for limited work in the 1790s, the site was largely deserted between the War for Independence and 1808. From 1816 to 1847 it was not garrisoned and probably not maintained to any significant extent. For 15 years beginning in 1875, a time of great consternation in the coastal defense establishment, coastal defenses throughout the nation were neglected and nearly inactive. Another lull occurred between the two World Wars.

New York City has always occupied a prominent position within the national defensive campaigns. It was one of 16 sites selected for defensive works under the First System (defenses constructed primarily of earth) in 1794 and one of four population centers to be protected by an improved Nike missile system in 1958. In the interim, the defense of the city was given first priority by the Endicott Board in 1886. The Endicott Board, formed by President Cleveland and headed by Secretary of War William C. Endicott, was mandated to study and evaluate the coastal defense situation throughout the country and recommend a program based on newly developed weapons. New York was one of four cities that received initial funding under the recommendations of this board. An artillery officer, Lieutenant. G.M. Whistler wrote, "Concerning the question of expense, I submit, as a mere business proposition, that the people of the United States cannot afford to have the city of New York destroyed by a bombardment once in a century,--no, nor once in two centuries" (Clary 1990).

Lewis stated that "developments in the technology of armament [that] lead to increased effective ranges that enabled shore-mounted artillery to cover more extensive areas of water and span broader channels often making it possible to dispense entirely with certain fortifications" (Lewis 1993, page 9). The number of defended localities along the Atlantic coast stood at 35 early in the 19th century but declined to 20 by 1850 and only 10 by 1940. No matter what the total, New York was always given highest priority.

Lewis also described how fortifications moved steadily farther out from the cities they were defending, in response to improved capability of both offensive and defensive weaponry — resulting in what he termed "horizontal stratification." This long-term trend is important in understanding the development of Staten Islands' fortifications. Under the First System, starting in 1794, emphasis was placed on "inner harbor" fortifications at and immediately adjacent to New York City. Although the importance of Staten Island was recognized, little work was done there; the main effort was devoted to Governors Island. Beginning in 1807, during the Second System (with its defenses of three basic types — open batteries, masonry-faced earth forts, and all-masonry forts) attention shifted outward without abandoning concern for close-in defense. A major fort was constructed at the current Fort Wordsworth, while on Governors Island Castle Williams (considered to be the outstanding example of this system) was erected.

The forts on both sides of the Narrows attained probably their greatest relative importance in the defense of New York Harbor that was initiated in 1816 under the Third System (fortifications built for permanence that primarily restored fortifications from the Second System) following the recommendations of the Bernard Board. The Bernard Board, headed by Brig. Gen. Simon Bernard, was mandated to study the country's coastal defenses and make recommendations for a new program. The program is also known as the Permanent System, and the underlying philosophy is evident in the structures it produced. With their innate conservatism reinforced by French influence, Army engineers sought to create a defense system that would endure almost indefinitely. In his 1820 message to Congress, President Monroe spoke of defenses that would "last the ages," and two years later he expressed the grandiose goal of making the coast "so far as practicable, impregnable."

The two most conspicuous individual structures on Fort Wadsworth are products of the later stages of this period and its attitudes. Battery Weed was begun in 1847 and essentially completed in circa 1864, and Fort Tompkins was started in 1859 and finished in 1876. These works are outstanding examples of Third System fortifications and would be noteworthy for their architecture and craftsmanship apart from their military significance. Their extended period of construction is not unusual, given the inherent difficulty of the work and the fluctuating and often parsimonious appropriations.

Not for the first time in the history of coastal defense, these forts were virtually obsolete by the time they were completed. Rapid changes in technology, notably iron-clad and steam-powered ships and breech-loading and rifled artillery that used improved propellants, made a mockery of the army engineers' illusions of permanence. The speed and magnitude of the technological upheaval were so great that the engineers were thrown into a quandary, and for a number of years they were unable to agree on a course of action. By 1875 the nation's coastal defenses were virtually moribund.

In the absence of a credible foreign threat, the United States was granted the opportunity for a leisurely examination of its defense system. This period of reconsideration prevented the adoption of another system that would become prematurely outdated. By 1884 President Arthur observed that "The time has now come when such defenses can be prepared with confidence that they will not prove abortive." Less than two years later the Endicott Board brought forth its recommendations, which resulted in an extended program of constructing an entirely new type of fortification.

By 1904, 12 new Endicott batteries and a command post had been constructed at Fort Wadsworth (some of which consisted of adapting existing old-style batteries). The defensive perimeter of the city had been moved outward again, to embrace Queens (Fort Tilden) and Sandy Hook (Fort Hancock). However, it is clear the Staten Island fort still comprised a vital element of New York's harbor defense.

Numerical comparisons of weaponry have the potential to be misleading because of the difficulty of comparing different types of guns with differing capabilities and functions. Any comparisons risk distorting the vital concept that the placement of guns around a harbor was part of a unified scheme. With these precautions in mind, raw statistical analysis shows that, in terms of planned number of batteries and number of guns and cumulative firepower, Fort Wadsworth was similar to Fort Hamilton, which was across the Narrows in Brooklyn. Both were considerably outgunned by Fort Hancock, the most heavily armed of the New York Harbor forts. New York's total defensive armament was the heaviest in the nation, with San Francisco second, though the difference between the two — on the order of 15%–30% depending on the criterion used — is not categorical.

The Endicott period works, as improved by the Taft Board (headed by Secretary of War William Howard Taft) early in the 20th century, remained in service through World War I. Like their predecessors, they were never tested in combat. The traditional interest in coastal defense did not end with World War I, and subsequent years saw the development of a new generation of coastal artillery. It does not appear that these longer-range guns were emplaced at Fort Wadsworth; with forts Tilden and Hancock in existence, it would have made little sense to do so. As a result, the relative importance of Fort Wadsworth within the New York Harbor defense system declined, and this impression is strengthened by the fact that the fort was transferred from the command of the Coast Artillery Corps to the infantry in 1919. Periodically during the next two decades other elements of the army, and in the 1930s the Works Progress Administration, undertook considerable new construction on the post.

Army correspondence in the 1920s indicates that even though only a skeleton contingent of coast artillerymen remained at Fort Wadsworth, the coastal defense mission remained primary, and no construction was undertaken that might interfere with that function. Nor did the national concern for coastal defense come to an end. Another harbor defense board was convened in 1940, and between that year and 1950 about \$250 million was spent on harbor defenses. Fort Wadsworth, where only a caretaker detachment of coast artillerymen struggled to maintain the remaining guns, was typical. This pattern, however, is characteristic of American military history, with its frequent alternation between periods of intense activity and sudden retrenchment. The lull between the World Wars does not differ from the many earlier phases of decline.

After World War I the emphasis in coastal defense shifted to antiaircraft, and by World War II the antiaircraft function overshadowed traditional concern with defense against surface ships. Both missions were entrusted to the Coast Artillery Corps, and the change was more one of technology than philosophy. Fort Wadsworth was returned to the control of the Coast Artillery Corps in March 1941, and during World War II the post commanders belonged to this branch. None of the latest antiship guns were emplaced at Fort Wadsworth, but antiaircraft weapons and mines were deployed. The fort, perhaps to a diminished degree, remained part of the New York coastal defense system. Although additional research is required, it appears that the post housed a sizable contingent of coast artillerymen and also performed service functions for troops manning guns elsewhere on Staten Island and at Forts Hancock and Navasink in New Jersey.

In the years immediately following World War II the rapid advancement of military technology led to the abrupt abandonment of traditional concepts of coastal defense at Fort Wadsworth and throughout the United States. According to historian Emanuel Raymond Lewis, the technology of amphibious invasion and the increasing reliance on aircraft for both defense and attack reduced the strategic importance of port facilities. Heavy ships guns, if used at all, would be used in connection with such open beach landings and not in bombarding coastal cities or naval bases, which could be more safely and easily attacked from the air. In 1949 the practice of defending U.S. harbors by long-range, ground-based artillery officially ended. In 1950 the remaining harbor defense commands were disbanded. That same year the Coast Artillery Corps was abolished as a separate branch of the military and combined with the Field Artillery Corps into a single artillery branch with primarily an antiaircraft function.

Following the abolition of the Coast Artillery Corps, Fort Wadsworth was used briefly as a training station for the National Guard, as well as an antiaircraft defense site during the Korean War. Between 1954 and 1960 Fort Wadsworth served as the headquarters for the 52nd Antiaircraft Brigade, which was responsible for the development of the first generation of Nike antiaircraft missiles in the New York City area. According to Lewis, the Nike missiles along with other new antiaircraft guns and missiles can be seen as "the functional descendants of seacoast defenses." However, it does not appear that any missiles were actually placed on the grounds of Fort Wadsworth.

APPENDIX D: RESOURCE ANALYSIS AND RESEARCH

The planning team identified several distinct areas of research necessary to develop comprehensive alternatives for the future of Fort Wadsworth. A summary of the scope and findings of several research efforts follows. These studies have been completed.

Cultural Resource Report

To assess the cultural and historic resources of Fort Wadsworth, the NPS North Atlantic Region staff, with support from consultants, completed a comprehensive *Cultural Resource Report* (to be completed in June 1995). Through documentary research and field investigation, the study team examined the site's geographic setting and identified and evaluated prehistoric, pre-military, and military resources. The report also contains an assessment of the site's potential to contain archeological resources.

The study team's two major conclusions are (1) a national historic district should be created for the entire 226-acre Fort Wadsworth property, and (2) the treatment of the historic properties should be accomplished within the context of rehabilitation (e.g., modifying a historic property for contemporary uses while retaining its historic integrity and character) rather than restoration (e.g., returning a historic property to an earlier appearance).

Graffiti Removal Report

An NPS conservator, Judy Jacobson, studied the graffiti on Fort Tompkins and Battery Weed to determine how it can best be removed. The report identifies several methods of removal and evaluates the efficacy of each method based on actual site tests.

Interim Interpretive Plan

The NPS Division of Interpretive Planning, Harpers Ferry Center, has developed an *Interim Interpretive Plan* (NPS 1995) concurrently with this *Site Management Plan*. The visitor experience plan outlines the interim interpretive actions necessary to bring the site on-line as a national park system unit. The plan proposes resource management and visitor service actions necessary to provide meaningful experiences quickly for a variety of users and begin the transformation of a military base into a unit of Gateway National Recreation Area. The plan also describes the interpretive themes that will be communicated to visitors and the media that will be used to interpret those themes in the near future. This plan guides the development of interpretive facilities and services for the visiting public until the implementation of the longer-range site plan (preferred alternative in this document) is implemented.

Traffic and Transportation Analysis: Initial Trips Meetings, and Scoping Summary

A consultant to the National Park Service, Robert Peccia and Associates of Helena, Montana, compiled background information for traffic and transportation analysis. This report summarizes telephone conversations and other data collected during July–October 1994 to provide a basis for a traffic and transportation study (Robert Peccia and Associates, memo summarizing their information, July 1994). A second consultant, Langan Engineering, performed analysis of the feasibility of ferry access (Langan 1994).
Woody Plant Inventory at Fort Wadsworth, Staten Island, New York

The Olmsted Center for Landscape Preservation, in cooperation with the Arnold Arboretum and Gateway National Recreation Area staff, prepared a preliminary report on the woody vegetation of Fort Wadsworth in the winter of 1994–95 (NPS 1995__). The purpose of the study was to provide information concerning stands of native species, unique or rare species, remnants of historical plantings, uncommon individual specimens or groups of specimens, plants of remarkable age, size, or character, and hazardous conditions and horticultural problems that should be addressed.

The study team determined that most of the site is covered with a diversity of native and nonnative trees, shrubs, vines, and herbaceous plants that have taken hold on areas that were stripped of their vegetation during the development of fortifications that have since been abandoned. Several areas of the site are composed of stands of mature, native trees, including American elm, sassafras, and Kentucky coffeetree, that likely predate World War I and II fortifications. One notable finding is that a cluster of trees, primarily oaks, in the northwest corner of Fort Wadsworth (inside the NPS boundary but outside of NPS ownership), is a remnant of a naturally occurring woodland. The age of vegetation within Fort Wadsworth ranges from very recently planted to about 150–200 years old. The oldest trees may be the enormous tuliptree with a 50-inch diameter at breast height and, standing beside it, a European beech with a 67-inch diameter.

APPENDIX E: LIST OF STRUCTURES

The following is from _____ ? _____ by Oz Architecture

The following is a preliminary list of buildings at Fort Wadsworth including building number, name, date and status as contributing or non-contributing (NC or C) within the proposed historic district. This list is limited to buildings and structures but does not include objects or other landscape features such as roads, walls or fields. It should further be noted that this list has not been field checked, and that further research and field work may reveal changes in name, date and National Register status.

A.4 Fort Wadsworth Building Inventory

100	GP Berth Pier	1990	NC
101	Housing	1933	C
102	Housing	1939	C
103	Housing	c.1870	C
104	Detached Garage	1936	C
105	Detached Garage	1932	C
106	Housing	1932	C
107	Housing	1932	C
109	Administrative	1871-1882	C
110	Housing	1933	C
111	Housing	1890	C
112	Housing	1890	C
113	Housing	1890	C
114	Housing	1889	C
115	Housing	1933	C
116	Detached Garage	1935	C
117	Detached Garage	1935	C
118	Housing	1960	NC
119	Housing	1939	C
120	Offices/Visitor Center	1992	NC
125	Substation	1940	C
133	Battery Duane	1895-1897	C
137	Fort Tompkins	1859-1876	C
138	Mars Station		
	(Inside wall at Tompkins)	1900	C
139	Signal Storage		
	(Inside wall at Tompkins)	1891	C
140	Rod and Gun Club	1940	C
141	North Deck/Supply Wharf	1850	C
147	Torpedo Storage	1894	C
148	General Warehouse	1939	C
150	Guardhouse	1861	C
151	Battery Weed	1861	C
155	Battery Catlin	1902-1904	C
? 155A	Battery	1895	C
? 164	Shelter		
201	North Gatehouse	1990	NC
203	Chapel	1963	NC
204	Gymnasium	1962	NC
205	Theater	1960	NC
206	Post Exchange - Commissary	1960	NC
207	Post Exchange - temp	1962	NC

208	Administrative Office	1961	NC
209	Admin/Computer Center	1960	NC
210	Administrative Office	1929	C
211	Open Warehouse	1939	C
214	Electric Distr.	1962	NC
215A-F	Bachelor Enlisted Quarters Building	1990	NC
216	Dining Facility (BEQ)/Galley	1990	NC
? 218	Incinerator	1962	NC
220	Post Office	1989	NC
221	Handball Court	1960	NC
222	Housing	1962	NC
223	Housing	1960	NC
300	Ammunition Storage		
301	Motor Pool	1938	C
302	Motor Pool	1937	C
303	Motor Pool Office	1938	C
305	Administrative Office	1900	C
306	Warehouse	1960	NC
307	Ready Magazine	1910	C
309	Stables (Storage)	1931	C
310	Administrative Storage	1927	C
312	Sewage Pump Station	1927	C
314	General Storage Shed	1900	C
315	Battery Upton	1896	C
316	Battery Bacon	1898	C
316A	Battery Turnbull	1901-1903	C
317	Battery Hudson	1899-1904	C
318	Battery Mills	1899-1904	C
319	Battery Dix	1802-1904	C
320	Command Post	1895-1900	C
321	Battery Barry	1896-1897	C
? 336	Latrine	1959	NC
? 337	Latrine	1960	NC
338	Guard Watch Towers	1905	C
339	Small Arms Range	1944	C
? 341	Shelter		
352	Carriage Club	1921	C
354	Police Station	1960	NC
356	Reserve Training Building	1974	NC
357	Vehicle Shop	1977	NC
358	Public Works Shop	1992	C
375	Gas Station	ND	NC
? 401	Gatehouse	1989	NC
404	West Gatehouse	1939	C
406	Housing	1905	C
408	Navy Lodge	1991	NC
421	Battery Richmond	1898-1899	C
422	Battery Ayres	1900-1901	C
423	Housing	1989	NC
? 423A	Detached Garage	1989	NC
424	Housing	1989	NC
425	Housing	1989	NC
426	Housing	1989	NC
427	Housing	1989	NC

428	Housing	1989	NC
429	Housing	1989	NC
430	Housing	1989	NC
431	Housing	1989	NC
432	Housing	1989	NC
433	Housing	1989	NC
434	Housing	1989	NC
435	Housing	1989	NC
435A/B	Consolidated Civilian Personnel Office	1959	NC
436	Housing	1990	NC
437	Housing	1990	NC
438	Housing	1990	NC
439	Housing	1990	NC
440	Housing	1990	NC
441	Housing	1990	NC
442	Housing	1990	NC
442A/B	Youth Center	1952	NC
443	Housing	1990	NC
444	Housing	1990	NC
445	Housing	1990	NC
446	Housing	1990	NC
447	Housing	1990	NC
448	Housing	1990	NC
449	Housing	1990	NC
450	Housing	1990	NC
451	Housing	1990	NC
452	Housing	1990	NC
453	Housing	1990	NC
454	Housing	1990	NC
453A	Detached Carport	1990	NC
454A	Detached Carport	1990	NC
455	Jr. Officer Housing	1990	NC
455A	Detached Carport	1990	NC
456	Jr. Officer Housing	1990	NC
457	Jr. Officer Housing	1990	NC
458	Jr. Officer Housing	1990	NC

Sources:

Detailed Building Inventory of Naval Shore Facilities, 1992.

Cultural Resources Survey, August, 1984 (Appendix C: Draft Environmental Impact Statement for the Surface Action Group Homeporting at Stapleton/Fort Wadsworth Complex, Staten Island, New York).

Black, Fredrick R. "A History of Fort Wadsworth, New York Harbor." (Division of Cultural Resources, North Atlantic Regional Office, National Park Service, USDI. 1983).

Oz Associates, Fort Wadsworth Building Inventory, Task Order #34. February, 1994.

"History of Fort Wadsworth, New York, 1636-1955." (United States Army Military History Institute.)

APPENDIX F: U.S. FISH AND WILDLIFE LETTER

(DSC has; will paste in)

APPENDIX G: NUMBERED AND LETTERED POLICIES OF STATE AND CITY PROGRAMS
(INCLUDE ONLY IF KEVIN MENDIK CAN PROVIDE)

APPENDIX H: INTERIM INTERPRETIVE PLAN
Fort Wadsworth
Gateway National Recreation Area

(unedited)

Introduction

The purpose of this Interim Interpretive Plan is to guide the development of interpretive facilities and services for the visiting public until the implementation of the long-range *Site Management Plan*. This interim plan proposes resource management and visitor service actions necessary to provide meaningful experiences quickly for a variety of users and begin the transformation of a military base into a unit of Gateway National Recreation Area.

I. BACKGROUND FOR PLANNING

Purpose and Significance of Fort Wadsworth

The purpose statements listed below describe the reasons Fort Wadsworth was established as a unit of the National Park System. These purposes provide the foundation for everything else that is done in the unit. They set the parameters for how the unit should be managed and used. The significance statements describe why Fort Wadsworth is important and places the unit within a broader regional and national context. The resources and values described are those that contribute to, and must be preserved in order to accomplish, the purpose of the unit. The following statements were derived from Gateway NRA's enabling legislation (P.L. 92-592) and General Management Plan and Final Environmental Impact Statement (1979).

PURPOSES

1. To preserve and protect for the use and enjoyment of present and future generations an area possessing outstanding historical features.
2. To preserve and interpret the historical and cultural resources of Fort Wadsworth that are associated with the American Coastal Defense Systems.
3. To preserve and interpret the site's natural history within the context of the Hudson-Raritan Estuary.
4. To underscore and ensure the relationship of Fort Wadsworth to the importance of New York Harbor and the growth of the New York metropolitan area.

SIGNIFICANCE

1. Fort Wadsworth is one of the finest locations within the New York metropolitan area to view and interpret the geography of the harbor and the growth of the metropolitan area.
2. Fort Wadsworth was constructed at the Narrows, a place naturally well suited for the defense of the harbor. It was constructed to work in concert with other fortifications (Fort Hamilton, Castle Clinton, Fort Gibson, Castle Williams, Fort Wood, Fort Hancock, Fort Tilden) to protect the country's most important harbor.
3. Fort Wadsworth evidences the progression of coastal fortification systems in the United States ca. 1800-1920. Fort Tompkins and Battery Weed are particularly significant because of their high level of

preservation. The other batteries and support structures at Fort Wadsworth are valuable to explain the interdependence and progression of various firearms and weaponry.

Interpretive Themes

The following are those ideas and stories about park resources and values that are critical to the visitor's understanding of the significance of Fort Wadsworth.

Primary and Secondary Interpretive Themes

1. As a significant component of the American Coastal Defense System, Fort Wadsworth represents the evolution of America's concept of national defense.
 - The commercial importance of New York City and its harbor prompted the development of the fortifications at Fort Wadsworth as well as other New York and New Jersey locations, making New York Harbor one of the best defended regions in the nation.
 - The development and obsolescence of Fort Wadsworth fortifications illustrate the measure/counter measure evolution of coastal defenses, as well as the erratic political support for these defenses and the resistance of a large bureaucracy to rapid change.
 - The transformation of the Fort Wadsworth from a military base to a national park represents the latest phase in our concept of national defense -- the decreased reliance on domestic military bases for national security.
2. Geologic forces, especially the Pleistocene epoch glaciers and the formation of the Hudson River, created the natural environment that attracted European settlers and provided ideal locations for defense of New York Harbor.
 - The Hudson River, with its associated estuary and wetlands provided both transportation and sustenance, leading to the growth and development of New York City into the nation's preeminent city.
 - The Narrows, located along the glacial moraine, constricted the harbor's entrance and provided high ground, thereby creating an ideal site from which to defend New York Harbor.
3. Fort Wadsworth, with its splendid panoramic views of Manhattan, the Hudson River, Raritan Bay, and the open ocean, provides a link between the largest city in the country and the natural marine environment.
 - Fort Wadsworth lies within the Hudson-Raritan Estuary, an area of diverse habitats for wildlife, and offers new opportunities for public involvement in learning about and helping to preserve the Hudson-Raritan Estuarine Ecosystem.

Visitor Experience Goals

The following goals indicate the National Park Service's management intent during the initial phase of Fort Wadsworth as a unit of the National Park System. These do not reflect the more comprehensive goals furthered by the implementation of the *Site Management Plan*.

1. Provide a welcoming National Park Service (NPS) presence and identity.
2. Provide minimum orientation and information about Fort Wadsworth necessary for visitors to this new national park unit to understand the resources and stories, and its use opportunities.

3. Interpret the historical significance of Fort Wadsworth, from its earliest occupation to its transition to a national park area, highlighting coastal defense.
4. Provide for safe access to essential resources.
5. Adequately protect the Fort's significant resources.
6. Provide a variety of experiences and challenge levels.
7. Quickly provide a national park experience sufficient to accommodate the public within the abilities and resources of Gateway NRA.

Desired Visitor Experience

Visitor experience is an inclusive term which describes what people perceive, do, and encounter when they visit Fort Wadsworth. In its collective sense, it is everything that a person derives from his or her visit to the site.

Although many local people are visually familiar with the site's iconographic fortification -- Battery Weed, clearly visible from Brooklyn and the Verrazano-Narrows Bridge -- the Fort's resources have long been locked away behind gates guarded by military personnel. Few people, other than buffs of military and local history, understand the importance of Fort Wadsworth history or the magnificence and variety of its military architecture.

With the implementation of the long-range *Site Management Plan*, Fort Wadsworth will offer visitors a multifaceted educational and cultural experience. During the initial phases of development, the experience will be based primarily on introducing the visitor to the site's core significant historic resources and stories. For many local residents who are not current users of other Gateway units' recreational, natural, cultural, and historical resources, a visit to Fort Wadsworth may provide their first national park experience.

Even in its earliest phases, the opportunities at Fort Wadsworth will warrant a visit by those from across the world equally as much as by those from across the street. Local, regional, and national visitors will mingle in their explorations in a manner that occurs at no other Staten Island attraction.

A variety of experiences and challenge levels await the different types of people and groups that will visit Fort Wadsworth. All visitors will enter the site through the main gate on New York Avenue. After a greeting by a uniformed guard and receiving a simple orientation map, they will be directed to the Visitor Center located in Building 120, located just ahead on New York Avenue. The Visitor Center will be operated 7 days a week. Here visitors will encounter a staffed information desk and orientation media, as well as exhibits and audiovisuals interpreting the evolution of Fort Wadsworth's coastal defense fortifications and cultural landscape.

After orientation to the Fort and its themes, visitors will be encouraged to explore the Fort via a self-guiding trail. The trail will provide educational and recreational (scenic vista viewing) opportunities along both a long and a short loop. The short loop proceeds from the Visitor Center along Tompkins Street past Battery Duane and Fort Tompkins to the overlook above Battery Weed. Here they will encounter one of the most magnificent vistas in the United States -- New York Harbor, framed by the imposing Verrazano-Narrows Bridge, the skyline of New York City in the distance. From this vantage the visitor can look right into the courtyard and casemates of Battery Weed, with its neighboring historic torpedo building and the granite-block dock and sea wall.

The longer loop will enable visitors to descend to the level of Battery Weed and the dock, past Battery Catlin and the torpedo building on the way, and returning past Batteries Bacon and Turnbull. All the major

historic features along these routes will be interpreted through wayside exhibits. Disabled visitors will be allowed to drive to, and park at, the water level, stopping to view the Endicott Period batteries along the route.

The two primary historic features, Battery Weed and Fort Tompkins, will be open to visitors only through tours led by national park rangers, and on a case by case basis, volunteers and invited subject-matter experts. Only then will visitors truly be able to appreciate the scale of these structures or the craftsmanship and beauty of their architecture. By looking through the casemate windows of Battery Weed at the swift flowing waters of the Narrows or standing next to a reproduction of a Rodman gun on its carriage, visitors will be able to imagine the old Fort Richmond, bristling with cannon, defending the country's most strategic harbor. At Fort Tompkins, visitors can see the rooms where soldiers slept and worked. Here they will be able to enter the shadowy counterscarp gallery (an enclosed passageway surrounding Fort Tompkins) and learn about this most interesting method of protection from attack. These programs will be offered to the general public primarily during weekends. The focus for weekdays will be in serving school and special interest groups.

Due to the historical nature of the unit and the variety of its other tenants and residents the public will not be encouraged to engage in recreational activities or explore other areas of the fort. Once bicycle routes are developed and aligned adjacent to the fort, bicyclists will be allowed to pass through the site. Fishers will be allowed access to some of New York City's best fishing spots.

Issues and Influences

Although there will be many challenges in opening Fort Wadsworth to the visiting public, there are a few key issues affecting the ability of the National Park Service to offer access and services here.

- * For the foreseeable future Fort Wadsworth will be a divided base. Many other tenants from a variety of military and other agencies will occupy its office buildings and residences. Many significant historic features are very close to residential clusters. It will be crucial to clearly orient the visitor to the site, allowing for a feeling of exploration while discouraging access to areas primarily supporting other non-NPS activities. With the public roaming what was once a closely guarded fort it will be important to provide residents and office tenants with an adequate level of security.

- * Historic buildings are dispersed throughout the fort; many are hidden from view by landforms and vegetation. The NPS must actively protect these features from all potentially destructive activities, such as illegal entry and vandalism. Additionally, the NPS must minimize any impacts to the integrity of those historic structures that will be opened and made accessible to the public.

- * As Fort Wadsworth is being added to an existing national park during a period of a shrinking NPS workforce, it is anticipated that funding and personnel constraints will make it difficult to provide core services for visitors.

- * There is a general lack of recognition among many populations of the existence or significance of Gateway NRA and Fort Wadsworth. Additionally, where people do know of Gateway, there is the perception that the park is essentially an area for recreational activities. The historic significance of Fort Wadsworth will be under pressure from requests to accommodate additional recreational activities and infrastructure, especially for the local population. There is a need for the NPS to define its roles at Fort Wadsworth and with the adjacent neighborhoods and how to reach out to them. An additional concern is the possible perceptions of neighbors about the increase in public access and traffic into the fort. The fort has been a limited access site throughout most of its history. Adjacent landowner concerns may increase with additional public access.

- * As a military base that has been essentially closed to the public, little is known about the potential clientele for Fort Wadsworth's interpretive services. When the Army museum was operating in Fort Tompkins, its

predominant clientele was groups of school children during the week and tourists during the weekend. Additionally, there is a perception that Fort Wadsworth is remote from Manhattan. This may result in difficulty attracting non-Staten Island visitors and partnership organizations to the site.

Potential Clientele

As stated above, little is known of the potential market for Fort Wadsworth. The following lists the target audiences for the initial phases of visitor-related facility and services development.

- * general public, especially weekend users
- * school groups
- * special interest groups:
 - historians
 - photographers
 - naturalists
 - scouts
 - junior seabees
 - senior citizens
 - potential volunteers-in-parks

Existing Interpretive Facilities and Media

No interpretive facilities nor media currently exists at Fort Wadsworth.

II. INTERIM INTERPRETIVE PROGRAM

Personal Services

This most valuable interpretive and visitor service will be targeted where it is essential in achieving the NPS mission at Fort Wadsworth. As a new unit of the National Park System it is important to quickly establish an identity and a rapport with park neighbors and users. There is no better image and representative of the National Park Service than the uniformed ranger.

Interpretation and other visitor services at Fort Wadsworth will rely on a team of full-time and seasonal employees equal to approximately 10 full-time employees. This staff will operate the new Visitor Center seven days a week. They will prepare and offer the basic tours into the site's primary historic features as well as the specialized school services and special interest tours.

Ranger-led tours will be the only method for the public to enter Battery Weed, Fort Tompkins and its counterscarp gallery, and other fortifications as they are cleared of vegetation and safety hazards and opened for public viewing.

Non-personal Services

During the initial phase of development non-personal services will rely primarily on media in the Visitor Center, wayside exhibits and park-produced publications.

Museum Exhibits

The exhibits at the Visitor Center will consist of the following:

- Orientation to the site possibly including a large-scale map of modern Fort Wadsworth.
- Evolution of coastal defense fortifications.

- Evolution of Fort Wadsworth cultural landscape (briefly, the relationships and associations between the diverse natural and constructed components of a landscape resulting from historic land use or settlement patterns).
- Orientation to Gateway NRA and NPS mission, incorporating map and photographs of Gateway units.

The exhibits will be installed in circular room, originally designed as a library, just off the lobby.

Wayside Exhibits

Wayside exhibits will play a major role in interpreting the primary themes of Fort Wadsworth during its initial phases. These exhibits will provide an almost immediate NPS presence on the site. The exhibits listed below are concentrated in the core historic zone and will serve as the means of interpretation along the self-guiding trail.

<u>Subject</u>	<u>Location</u>
1. Dry Moat & Counterscarp Gallery	S.W. corner of Fort Tompkins
2. Fort Tompkins	S.E. gate into Fort Tompkins
3. Defenses of New York Harbor	N. side of harbor overlook
4. Verrazano-Narrows Bridge	S. side of harbor overlook
5. Torpedo (Mine) Building	E. side of Torpedo Building
6. Battery Weed	Entrance to Battery Weed
7. Battery Duane	N. side of Battery Duane
8. Dock	Gate to Dock
9. Battery Catlin	Observation post above Catlin
10. Batteries Bacon and Turnbull	W. side of Battery Bacon
11. Orientation to F. W.	Courtyard outside V.C.
12. Bulletin Cases	Courtyard outside V.C.

Audiovisual

A video, approximately 20 minutes in length, will be produced by Gateway NRA staff which will provide an overview of Fort Wadsworth history, its strategic location, and role in the evolution of coastal and harbor defense.

Publications

Publications at the Fort will consist of a single-page tear-off orientation map with a brief overview of the historical significance of the

Additional site bulletins will be produced by park staff on specific themes to support the interpretive program as it develops. Additional site bulletins will be produced by park staff on specific themes to support the interpretive program as it develops. The subject matter of these brochures can include, but is not limited to the evolution of harbor defenses, the native peoples of Staten Island, the early European settlements and growth of the area, and the natural history of Fort Wadsworth, including geology and the Hudson-Raritan Ecosystem.

Partnerships

Many potential partners in providing resources management, interpretation and visitor services were identified during the early phases of the planning process. These were predominantly in the areas of historical interpretation (living history demonstrations), natural history research and interpretation, and

recreation. The selection of long-term partnerships will be undertaken during the implementation of the *Site Management Plan*. For the purposes of this plan the primary focus on partnerships will be in identifying groups to assist in providing visitor orientation and historical interpretation.

Foremost among these potential partners is the Staten Island Historical Society, the Staten Island Institute of Arts and Sciences, and the Battery Weed Living History Association. Specific roles of these organizations has not been identified, but there is potential for the Battery Weed group to sponsor living history encampments demonstrating the lifestyles of Civil War period Coast Artillery troops. No battles will be reenacted here and the firing of weapons will be controlled in accordance with NPS policy and regulations.

In addition to those mentioned above, the cooperating association, Eastern National Park & Monument Association will work with the NPS to provide visitor information and sales of Fort Wadsworth-related items at the new visitor center.

Research and Collection Needs

As a new unit of the National Park System a great deal of work must be undertaken to identify graphic and textual information and historic objects that can be utilized in the interpretive program. National Park Service staff and researchers working for the NPS are identifying resources available in federal, military and other archives. Many of these resources will be used in preparing the museum and wayside exhibits identified in this plan.

Some of the specific information yet to be determined is the types and numbers of weapons used at the Fort, the exact locations of historic fortifications and associated structures, the companies and numbers of troops garrisoned here, the use of the area by native Americans, the pre-military habitants and residences, the early public use of the post, the living conditions and lifestyles of military families, the locations of various cultural artifacts and graphics, the purpose of the historic Command Center building and other Nike missile-related resources and stories, the significant natural resources, and other information necessary to accurately interpret Fort Wadsworth history.

Surprisingly, much of the information most difficult to obtain is that which relates to the relatively recent past of the Fort, the period covering the last 45 years. As this and other information is obtained, the interpretive program will be continuously adjusted to maintain accuracy. For this reason, the initial interpretive program at Fort Wadsworth will rely primarily on basic stories and concepts that can be readily confirmed through research.

III. PROPOSED ACTIONS

The following are those resource management and interpretive development actions that must be undertaken to achieve the proposals in this plan.

Outside of Boundary

*Design, produce, and install directional signs at Ferry Terminal, Bay Street, Verrazano Narrows Bridge Exit, and S.I. Expressway Exit. Signs should incorporate Fort Wadsworth logo, and in the case of the Ferry Terminal, directions to bus connections.

Main Gate

- *Provide NPS presence and orientation at Main Gate.
- Install arrowhead and identification sign at gate .

Building 120

*Provide Visitor Contact Station in Building 120.

Requires rooms 101, 102, 103, 104, 105, 106, 107, 108, 109, and 132. Visitors enter at lower level south entrance just north of rotunda. All other building occupants enter second level entrance on east side of building.

*Design, produce, and install Contact Station sign.

*Sign first two parking bays (55 spaces) for visitor use only.

*Install arrowhead in lobby.

*Plan, design, and install the following exhibits:

- Large-scale map of modern Fort Wadsworth.
- Evolution of coastal defense fortifications.
- Evolution of Fort Wadsworth cultural landscape.
- Orientation to Gateway NRA and NPS mission, incorporating map and photographs of Gateway units.

*Plan and produce video of F.W. history overview, its strategic location, and role in the evolution of coastal and harbor defense.

*Eliminate doorway from room 104 into rotunda. Install doorway from room 104 into room 105.

*Add additional accessible restrooms.

*Mount hinged cover over fire signal panel in room 102.

*Convert room 132 into combination video/lunch room.

- Purchase large screen (30+ inches) video monitor.
- Purchase 40 stackable chairs.
- Mount collapsible tables along north and south walls of room.

Fort Tompkins

*Clean, remove vegetation, and fill holes at entrance to and in Counterscarp Gallery moat.

*Move gate into Counterscarp moat approximately 25 feet north into moat.

*Install wayside at this location.

*Clean debris from interior of Counterscarp Gallery beyond two sets of gun ports.

*Clean all debris from interior courtyard of fort.

*Remove debris and clean (if possible) two bays at former museum location.

*Clear vista from overlook to enable viewing of entire Battery Weed.

*Install benches along overlook wall, except at flagpole.

*Hoist flag at flagpole.

*Plan, produce, and install two wayside exhibits on strategic location for harbor defense and Battery Weed; and the Verrazano Narrows Bridge; at flagpole overlook.

Torpedo Building (147)

*Seal off all doors and windows accessible to public.

*Plan, produce and install wayside exhibits on harbor mines.

Substation (146)

*Remove piles of dirt and fill in hole on south side.

Small Warehouse (148)

*Seal front door and remove vegetation from building.

Battery Weed

*Remove all graffiti visible to public from building.

*Cover all cisterns.

*Clean all vegetation from courtyard.

*Clean out gatehouses.

*Remove bricks from central casemates on first level and install metal shutters.

*Sweep all debris from second level.

*Cover pipe protruding from grass west from the entrance to the battery.

*Install wayside exhibit about Battery Weed near road.

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We still need info for the following documents. CF

State Air Quality Implementation Plan

New York Comprehensive Waterfront Plan

North Shore Esplanade Plan for Staten Island, New York

A Greenway Plan for New York City

Staten Island Bikeway and Cultural Trail

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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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