



Appendix A: Legislation and Administrative Commitments	568
Appendix B: Contributing Structures Prioritization Process Results	574
Appendix C: Compliance Coordination	590
Appendix D: List of Preparers and Contributors	604
References	606
Acronyms & Abbreviations	622
Glossary	623
Index	627

## Appendices



# Appendix A: Legislation and Administrative Commitments

## Gateway Legislation

**Title 16, Chapter 1, Subchapter LXXXVII, 460cc of the United States Code**  
**Ratified on Oct. 27, 1972**

### **460cc. Establishment**

In order to preserve and protect for the use and enjoyment of present and future generations an area possessing outstanding natural and recreational features, the Gateway National Recreation Area (hereinafter referred to as the “recreation area”) is hereby established.

#### **(a) Composition and boundaries**

The recreation area shall comprise the following lands, waters, marshes, and submerged lands in the New York Harbor area generally depicted on the map entitled “Boundary Map, Gateway National Recreation Area,” numbered 951–40017 sheets 1 through 3 and dated May, 1972:

- (1)** Jamaica Bay Unit—including all islands, marshes, hassocks, submerged lands, and waters in Jamaica Bay, Floyd Bennett Field, the lands generally located between highway route 27A and Jamaica Bay, and the area of Jamaica Bay up to the shoreline of John F. Kennedy International Airport;
- (2)** Breezy Point Unit—the entire area between the eastern boundary of Jacob Riis Park and the westernmost point of the peninsula;
- (3)** Sandy Hook Unit—the entire area between Highway 36 Bridge and the northernmost point of the peninsula;
- (4)** Staten Island Unit—including Great Kills Park, World War Veterans Park at Miller Field (except for approximately 26 acres which are to be made available for public school purposes), Fort Wadsworth, and the waterfront lands located between the streets designated as Cedar Grove Avenue, Seaside Boulevard, and Drury Avenue and the bay from Great Kills to Fort Wadsworth;
- (5)** Hoffman and Swinburne Islands; and
- (6)** All submerged lands, islands, and waters within one-fourth of a mile of the mean low water line of any waterfront area included above.

#### **(b) Boundary revisions: notification of Congressional committees; publication in Federal Register**

The map referred to in this section shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior, Washington, District of Columbia. After advising the Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate in writing, the Secretary of the Interior (hereinafter referred to as the “Secretary”) is authorized to make minor revisions of the boundaries of the recreation area when necessary by publication of a revised drawing or other boundary description in the Federal Register.

### **460cc-1. Acquisition of property**

#### **(a) Authority of Secretary; donation of State lands**

Within the boundaries of the recreation area, the Secretary may acquire lands and waters or interests therein by donation, purchase or exchange, except that lands owned by the States of New York or New Jersey or any political subdivisions thereof may be acquired only by donation.

**(b) Transfer from Federal agency to administrative jurisdiction of Secretary**

With the concurrence of the agency having custody thereof, any Federal property within the boundaries of the recreation area may be transferred, without consideration, to the administrative jurisdiction of the Secretary for administration as a part of the recreation area.

**(c) Breezy Point Unit; public use and access; agreement for use of lands for single-family residential community; specific provisions; Rockaway parking lot conveyance**

Within the Breezy Point Unit, (1) the Secretary shall acquire an adequate interest in the area depicted on the map referred to in section 460cc of this title to assure the public use of and access to the entire beach. The Secretary may enter into an agreement with any property owner or owners to assure the continued maintenance and use of all remaining lands in private ownership as a residential community composed of single-family dwellings. Any such agreement shall be irrevocable, unless terminated by mutual agreement, and shall specify, among other things:

**(A)** that the Secretary may designate, establish and maintain a buffer zone on Federal lands separating the public use area and the private community;

**(B)** that all construction commencing within the community, including the conversion of dwellings from seasonal to year-round residences, shall comply with standards to be established by the Secretary;

**(C)** that additional commercial establishments shall be permitted only with the express prior approval of the Secretary or his designee.

**(2)** If a valid, enforceable agreement is executed pursuant to paragraph (1) of this subsection, the authority of the Secretary to acquire any interest in the property subject to the agreement, except for the beach property, shall be suspended.

**(3)** The Secretary is authorized to accept by donation from the city of New York any right, title, or interest which it holds in the parking lot at Rockaway which is part of the Marine Bridge project at Riis Park. Nothing herein shall be deemed to authorize the United States to extinguish any present or future encumbrance or to authorize the State of New York or any political subdivision or agency thereof to further encumber any interest in the property so conveyed.

**(d) Jamaica Bay Unit; Broad Channel Community; title acceptance conditions**

Within the Jamaica Bay Unit,

**(1)** the Secretary may accept title to lands donated by the city of New York subject to a retained right to continue existing uses for a specifically limited period of time if such uses conform to plans agreed to by the Secretary, and

**(2)** the Secretary may accept title to the area known as Broad Channel Community only if, within five years after October 27, 1972, all improvements have been removed from the area and a clear title to the area is tendered to the United States.

**460cc-2. Administration****(a) Provisions applicable; utilization of authorities for conservation and management of wildlife and natural resources; Jamaica Bay Unit**

The Secretary shall administer the recreation area in accordance with the provisions of sections 1, 2, 3, and 4 of this title, as amended and supplemented. In the administration of the recreation area the Secretary may utilize such statutory authority available to him for the conservation and management of wildlife and natural resources as he deems appropriate to carry out the purposes of this subchapter: Provided, That the Secretary shall administer and protect the islands and waters within the Jamaica Bay Unit with the primary aim of conserving the natural resources, fish, and wildlife located therein and shall permit no development or use of this area which is incompatible with this purpose.

**(b) William Fitts Ryan Visitor Center; designation**

**(1)** The Secretary shall designate the principal visitor center within the recreation area as the “William Fitts Ryan Visitor Center” in commemoration of the leadership and contributions which Representative William Fitts Ryan made with respect to the creation and establishment of this public recreation area. To inform the public of the contributions of Representative Ryan to the creation of the recreation area, the Secretary shall provide such signs, markers, maps, interpretive materials, literature, and programs as he deems appropriate. Not later than December 31, 1980, the Secretary shall take such additional actions as he deems appropriate to recognize and commemorate the contributions of Representative Ryan to the recreation area.

**(2)** The portion of the Staten Island Unit of the recreation area known as Miller Field is hereby designated as “World War Veterans Park at Miller Field”. Any reference to such Miller Field in any law, regulation, map, document, record, or other paper of the United States shall be considered to be a reference to “World War Veterans Park at Miller Field”.

**(c) Federal-State cooperative agreements for police and fire protection**

The Secretary is authorized to enter into cooperative agreements with the States of New York and New Jersey, or any political subdivision thereof, for the rendering, on a reimbursable basis, of rescue, firefighting, and law enforcement services and cooperative assistance by nearby law enforcement and fire preventive agencies.

**(d) Water resource developments**

The authority of the Secretary of the Army to undertake or contribute to water resource developments, including shore erosion control, beach protection, and navigation improvements (including the deepening of the shipping channel from the Atlantic Ocean to the New York harbor) on land and/or waters within the recreation area shall be exercised in accordance with plans which are mutually acceptable to the Secretary of the Interior and the Secretary of the Army and which are consistent with both the purpose of this subchapter and the purpose of existing statutes dealing with water and related land resource development.

**(e) Airway facilities; maintenance, operation, and installation; Jamaica Bay and Floyd Bennett Field restrictions**

The authority of the Secretary of Transportation to maintain and operate existing airway facilities and to install necessary new facilities within the recreation area shall be exercised in accordance with plans which are mutually acceptable to the Secretary of the Interior and the Secretary of Transportation and which are consistent with both the purpose of this subchapter and the purpose of existing statutes dealing with the establishment, maintenance, and operation of airway facilities: Provided, That nothing in this section shall authorize the expansion of airport runways into Jamaica Bay or air facilities at Floyd Bennett Field.

**(f) Hunting, fishing, and trapping**

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



**(g) Sandy Hook and Staten Island Units; programs for preservation, restoration, interpretation, and utilization of sites and structures**

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

**(h) Donations for services and facilities; acceptance**

Notwithstanding any other provision of law, the Secretary is authorized to accept donations of funds from individuals, foundations, or corporations for the purpose of providing services and facilities which he deems consistent with the purposes of this subchapter.

**(i) Rights to solid waste byproducts of Fountain Avenue Landfill; conveyance from United States to city of New York; rights-of-way and permits; conditions; payments to United States for development and improvement of Gateway National Recreation Area**

Notwithstanding the provisions of subsection (a) of this section, the United States hereby conveys to the city of New York all rights to the methane gas and associated byproducts resulting from solid waste decomposition on the area within the Jamaica Bay Unit known as the Fountain Avenue Landfill site, subject to payments to the United States of 50 per centum of the revenue received by the city of New York, if any, from the development of such rights. The Secretary shall grant to the City, its lessee or assignee, all rights-of-way and other permits necessary from the Department of the Interior to extract and transport the gas from the site: Provided, That the rights-of-way and other permits shall provide for reasonable restoration of the site, including removal of any processing or storage facilities used in the disposal, development, or extraction of the gas, access by the Secretary to the site for safety and other recreation area purposes, and such other reasonable conditions as the Secretary deems necessary to further purposes of the recreation area. All such payments to the United States shall be credited to the appropriations of the National Park Service for the development and improvement of Gateway National Recreation Area.

**460cc-3. Gateway National Recreation Area Advisory Commission****(a) Establishment; termination date**

There is hereby established a Gateway National Recreation Area Advisory Commission (hereinafter referred to as the "Commission"). Said Commission shall terminate twenty years after the date of the establishment of the recreation area.

**(b) Membership; appointment; terms of office; representation of interests**

The Commission shall be composed of fifteen members each appointed for a term of two years by the Secretary as follows:

- (1)** two members to be appointed from recommendations made by the Governor of the State of New York;
- (2)** two members to be appointed from recommendations made by the Governor of the State of New Jersey;
- (3)** two members to be appointed from recommendations made by the mayor of New York City;
- (4)** two members to be appointed from recommendations made by the mayor of Newark, New Jersey; and
- (5)** seven members to be appointed by the Secretary to represent the general public.

**(c) Chairman; vacancies**

The Secretary shall designate one member to be Chairman. Any vacancy in the Commission shall be filled in the same manner in which the original appointment was made.

**(d) Compensation and expenses; vouchers**

A member of the Commission shall serve without compensation as such. The Secretary is authorized to pay the expenses reasonably incurred by the Commission in carrying out its responsibility under this subchapter upon vouchers signed by the Chairman.

**(e) Voting**

The Commission established by this section shall act and advise by affirmative vote of a majority of the members thereof.

**(f) Consultations of Secretary with members**

The Secretary or his designee shall, from time to time, consult with the members of the Commission with respect to matters relating to the development of the recreation area.

**460cc-4. Authorization of appropriations; limitation; adjustments**

There are hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this subchapter, but not more than \$12,125,000 for the acquisition of lands and interests in lands and not more than \$92,813,000 (July, 1971 prices) for development of the recreation area, plus or minus such amounts, if any, as may be justified by reason of ordinary fluctuations in the construction costs as indicated by engineering cost indices applicable to the type of construction involved herein.

## Summary of Administrative Commitments

Party with Whom Agreement Exists	Type of Agreement
American Littoral Society	Cooperative Agreement
Army Ground Forces Association	Memorandum of Agreement
Bike New York	General Agreement
Department of Sanitation (NYC)	Cooperative Agreement
Eastern National	Cooperating Association Agreement
Eastpointe Condominium Association	General Agreement
Federal Aviation Administration	Interagency Agreement
Great Kills Survey Access Agreement	General Agreement
Marine Academy of Science & Technology	Memorandum of Agreement
NPNH Conservancy	General Agreement
National Oceanic & Atmospheric Administration	Interagency Agreement
NYC Department of Parks and Recreation	Cooperative Management Agreement
NYC Department of Parks and Recreation – Frank Charles Park	Cooperative Management Agreement
New York City Police Department	Cooperative Agreement
Polytech University	General Agreement
Rockaway Artist Alliance	Cooperative Agreement
Rockaway Theater Company	Cooperative Agreement
Sandy Hook Foundation	General Agreement

## Appendix B: Contributing Structures Prioritization Results

In order to guide GMP decisions, the park determined that a prioritized list of resources was necessary to inform future preservation efforts, funding, and maintenance. Using variety of information sources, a group of park and regional office staff with expertise in history, architecture, cultural landscapes and business services created a process to evaluate structures and associated landscapes that are contributing resources to the park's nine National Register Districts (see the "Cultural Resources – Historic Districts and Structures" section of Affected Environment for a complete description). The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation.

These historic resources were evaluated for the following criteria and results presented in the table below:

**Fundamental Resource: identified in Foundation Document as a fundamental resource (see chapter 1: Foundation for Planning)**

**National Register Status and Level of Significance: individual listed, listed as district: local, state or national**

Criteria used to evaluate properties for the National Register of Historic Places and National Historic Landmarks was used to guide the level of significance and status. Historic contexts are found at a variety of geographical levels or scales. The geographic scale selected may relate to a pattern of historical development, a political division, or a cultural area. Regardless of the scale, the historic context establishes the framework from which decisions about the significance of related properties can be made.

### Local Historic Contexts

A local historic context represents an aspect of the history of a town, city, county, cultural area, or region, or any portions thereof. It is defined by the importance of the property, not necessarily the physical location of the property. For instance, if a property is of a type found throughout a State, or its boundaries extend over two States, but its importance relates only to a particular county, the property would be considered of local significance.

### State Historic Contexts

Properties are evaluated in a State context when they represent an aspect of the history of the State as a whole. These properties do not necessarily have to belong to property types found throughout the entire State: they can be located in only a portion of the State's present political boundary. It is the property's historic context that must be important statewide. A property whose historic associations or information potential appears to extend beyond a single local area might be significant at the State level. A property that overlaps several State boundaries can possibly be significant to the State or local history of each of the States. Such a property is not necessarily of national significance, however, nor is it necessarily significant to all of the States in which it is located.



## National Historic Contexts

Properties are evaluated in a national context when they represent an aspect of the history of the United States and its territories as a whole. These national historic contexts may have associated properties that are locally or statewide significant representations, as well as those of national significance. A property with national significance helps us understand the history of the nation by illustrating the nationwide impact of events or persons associated with the property, its architectural type or style, or information potential. It must be of exceptional value in representing or illustrating an important theme in the history of the nation.

## Condition

Information on the condition of the resources was taken from two separate NPS managed databases: Facility Management Software System (FMSS) and the List of Classified Structures (LCS). The FMSS Facility Condition Index (FCI) takes into account the repair backlog and the replacement value of each resource which is then assigned a condition category of Good, Fair, Poor, or Serious based on industry and NPS standards. Structures on the LCS are assessed to determine whether the structure and their significant features are intact, structurally sound, and performing their intended purpose. LCS conditions are assigned a condition category of Good, Fair and Poor. Because each is a managed database with specific requirements for updating, these two rating systems were utilized as follows:

**Good** - structures with the lowest FCI and/or that are listed in good condition on the LCS

**Fair** - structures with a lower FCI and/or that are listed in fair condition on the LCS

**Poor** - structures with a higher FCI and/or that are listed in poor condition on the LCS

**Serious** - structures with the highest FCI

## Uniqueness to the Park

**Common** - there are a number of similar structures in the park

**Uncommon** - there is one or a few structures of this type in the park and/or there are a number of similar structures in the park, but there are aspects of this particular structure that make it unique. An example may be a battery with design similar to a number of other batteries in the park, but this particular battery was the only one of its type used for a particular gun.

## Visibility

**Prominent** - structures that are visible to all visitors and make a statement in the landscape

**Accessible** - structures that are visible to visitors

**Remote** – structures that due to location are hidden from public view and are not readily accessible to visitors.

## Potential Use

**Occupied** – structures that are currently occupied – this includes buildings that are used for interpretation and planned curatorial and/or maintenance storage.

**Vacant with a high potential for reuse** – structures that are currently vacant but based on the type of structure, location and condition, reoccupation and reuse of the structure is viable.

**Vacant with a low potential for reuse** - structures that are currently vacant but based on the type of structure, location and condition, the cost of rehabilitation of the structure will limit the potential for reuse.

## Vulnerability to Future Storm Events

At the time the banding was prepared, updated FEMA maps were not yet available, therefore the climate change vulnerability assessment was based on damaged from Hurricane Sandy.

**Not Vulnerable** - structures that were not damaged

**Minimal Vulnerability** - structures that incurred minor wind related damage

**Moderate Vulnerability** - structures that incurred more moderate damage including flooding below the occupied floor level.

**Significant Vulnerability** - structures that incurred major damage, flooding of the occupied floors and structural damage.

## Priority Bands

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

- **Preserve:** Actions will be taken to maintain and preserve these structures. Efforts will be made to maintain these structures in their current condition or move these structures into good condition through preservation or rehabilitation by NPS or partners. These structures will be utilized for operations, visitor services, and interpretation.
- **Stabilize:** Structures where actions will be taken to render an unsafe, damaged, or deteriorated property stable while retaining its present form. Minimal efforts will be made to maintain the structure in its current condition. Unless a use and/or funding is found, the structure may fall into disrepair.
- **Ruin:** Structures in poor condition where one or more of the basic structural elements has been lost and due to this condition are without viable reuse options. Resources may be removed or fenced off to keep from being a safety hazard; no work will be done to better the condition of the resource.

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

	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
<b>Sandy Hook Unit</b>									
<b>Fort Hancock and Sandy Hook Proving Ground National Historic Landmark District</b>									
9-Gun Battery	Stabilize	Yes	NR-District	National	Vacant - Low Potential	Uncommon	Prominent	Not	Serious
Batteries McCook and Reynolds (also known as Mortar Battery)	Preserve	Yes	NR-District	National	Occupied	Uncommon	Remote	Minimal	Fair
Battery Arrowsmith [Ruin]	Ruin	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Remote	Minimal	Poor
Battery Granger	Ruin	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Remote	Minimal	Poor
Battery Gunnison	Preserve	Yes	NR-District	National	Occupied	Uncommon	Accessible	Moderate	Fair
Battery Kingman	Stabilize	Yes	NR-District	National	Vacant - High Potential for Reuse	Common	Remote	Not	Poor
Battery Mills	Stabilize	Yes	NR-District	National	Vacant - High Potential for Reuse	Common	Remote	Minimal	Poor
Battery Morris	Ruin	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
Battery Peck	Ruin	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
Battery Potter	Preserve	Yes	NR-District	National	Occupied	Uncommon	Accessible	Moderate	Fair
Coal Shed 260	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Fair
Switchboard Room 256	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Fair
Switchboard Room 257	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Central Power Plant 259	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Uncommon	Accessible	Moderate	Fair
Battery Urmston	Ruin	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
Igloo Magazine 442	Stabilize	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Minimal	Fair
Igloo Magazine 443	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Significant	Serious
Lieutenants' Quarters 01	Preserve	Yes	NR-District	National	Occupied	Uncommon	Prominent	Moderate	Fair
Lieutenants' Quarters 02	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Lieutenants' Quarters 03	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Lieutenants' Quarters 04	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Lieutenants' Quarters 05	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Lieutenants' Quarters 06	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Lieutenants' Quarters 07	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Lieutenants' Quarters 08	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Captains' Quarters 09	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Captains' Quarters 10	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Captains' Quarters 11	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Commanding Officer's Quarters 12	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Captains' Quarters 13	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor

	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Captains' Quarters 14	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Captains' Quarters 15	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Lieutenants' Quarters 16	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Minimal	Poor
Lieutenants' Quarters 17	Preserve	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Minimal	Poor
Lieutenants' Quarters 18	Preserve	Yes	NR-District	National	Occupied	Uncommon	Prominent	Minimal	Good
Duplex Officers' Quarters 21	Preserve	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Fair
NCO Quarters 20	Preserve	No	NR-District	State/Local/Contributing	Occupied	Common	Prominent	Minimal	Good
Chapel 35	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Moderate	Fair
Commissary 47	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Accessible	Moderate	Good
Bachelor Officers' Quarters 27	Preserve*	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Bakery 33	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Moderate	Poor
Duplex NCO Quarters 29	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Minimal	Fair
Duplex NCO Quarters 66	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Remote	Minimal	Good
Emergency Power Plant 324	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Enlisted Men's Barracks 22	Preserve	Yes	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Moderate	Fair
Enlisted Men Barracks 23	Preserve*	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Enlisted Men's Barracks 24	Preserve*	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Enlisted Men's Barracks 25	Preserve*	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
Mess Hall 55	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Moderate	Poor
Mess Hall 56	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Moderate	Poor
Mess Hall 57	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Moderate	Poor
Mess Hall 58	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Accessible	Moderate	Good
Barracks and Mess 74	Preserve	Yes	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Moderate	Good
Post Laundry 77	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Officers' Mess Hall 301	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Camp Headquarters 302	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Officers' Latrine 304	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Dispensary 305	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Enlisted Men's Mess Hall 315	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Post Exchange 316	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good

	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Enlisted Men's Mess Hall 317	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Enlisted Men's Latrine 318	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Enlisted Men's Latrine 319	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Enlisted Men's Latrine 320	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Enlisted Men's Latrine 321	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Sewage Pump Plant 306	Stabilize	No	NR-District	Contributing	Occupied	Common	Remote	Moderate	Poor
Sewage Pump Station 307	Ruin	No	NHL-District	Contributing	Vacant - Low Potential for Reuse	Common	Remote	Moderate	Poor
Fire Station Office 34	Preserve*	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Significant	Fair
Firehouse #1 Building 51	Preserve*	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Fair
Firehouse #2 Building 76	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Fair
Guardhouse 28	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Fair
NCO Club/Post Stables 36	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Prominent	Moderate	Fair
NCO Quarters 30	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Moderate	Fair
NCO Quarters 335	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
NCO Quarters 52	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Moderate	Fair
NCO Quarters 64	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Moderate	Fair
Nike Radar Site-Barracks 402	Stabilize	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Remote	Not	Fair
Nike Radar Site-Barracks 403	Stabilize	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Remote	Not	Fair
Nike Radar Site-Latrine 406	Stabilize	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Remote	Not	Fair
Nike Radar Site-Boiler Room 407	Stabilize	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Remote	Minimal	Fair
Nike Radar Site-Generator House 410	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Fair
Nike Radar Connecting Corridors	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Uncommon	Accessible	Minimal	Fair
Nike Radar Site-Equipment & Ops. 454	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Moderate	Poor
Nike Radar Site-Sentry Box 413	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Moderate	Poor
Nike Radar Site-Connec. Corridors 411	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Uncommon	Remote	Moderate	Poor
Nike Radar Site-Generator House 414	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Moderate	Poor
Nike Launch Site-Boiler House 435	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Nike Launch Site-Latrine 434	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Nike Missile Launch [4 silos]	Stabilize	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Remote	Moderate	Fair
Nike Launch Site-Missile Assembly 449	Stabilize	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Remote	Moderate	Fair



	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Nike Launch Site-Ready Barracks 430	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Nike Launch Site-Ready Barracks 431	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Good
Nike Launch Site-Ready Barracks 432	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Good
Nike Launch Site-Ready Barracks 433	Preserve	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Good
Nike Launch Site-Ready Building 437	Preserve	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Good
Nike Launch Site-Sentry Box 439	Preserve	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Good
Nike Launch Site-Sentry Box 447	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Significant	Fair
Nike Launch Site-Warhead Bldg. 450	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Significant	Fair
Nike Radar Site-Hipar Building 468	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Remote	Significant	Poor
Nike Radar Site-Sentry Box 423	Preserve	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Good
Officers' Latrine 300	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Moderate	Serious
Post Exchange 53	Ruin	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Moderate	Poor
Post Exchange Gas Station 60	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Moderate	Poor
Post Headquarters 26	Preserve*	Yes	NR-District	State/Local/Contributing	Occupied	Common	Prominent	Moderate	Fair
Post Morgue 326	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Good
Post Office 41	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Accessible	Minimal	Good
Post Theater 67	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Significant	Good
Post Theater-Transformer Building	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Significant	Fair
Pumphouse 206	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Significant	Good
Radio Station 207	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Significant	Poor
Quartermaster's Office/Storehouse 32	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Fair
Service Club YMCA Building 40	Preserve*	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Moderate	Fair
Storehouse 65	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Good
Two Family NCO Quarters 71	Preserve	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Minimal	Good
Two Family NCO Quarters 72	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Minimal	Fair
Two Family NCO Quarters 73	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Moderate	Fair
Two Family NCO Quarters 75	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Moderate	Good
Two Family NCO Quarters 80	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Prominent	Moderate	Fair
Barracks 119	Ruin	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Significant	Serious
Barracks 120	Ruin	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Significant	Serious

	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Two Family Officers Quarters 144	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Minimal	Good
Two Family Officers' Quarters 145	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Minimal	Good
Warehouse 49	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Minimal	Good
Storehouse 344	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Poor
Generator Building 350	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Poor
Pumphouse & Sewage Lift Station 37	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Significant	Good
Water Pumping Plant 341	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Remote	Significant	Good
Limehouse 342	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Engineers Quarters 340	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Remote	Moderate	Good
Double Fireman's Quarters 338	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Remote	Moderate	Good
Aerator House 343	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Remote	Minimal	Good
Gate Guardhouse 438	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Fair
Provost Marshal's Office 470	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Prominent	Significant	Fair
Gate House 471	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Significant	Good
Oil & Paint Storehouse	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Minimal	Poor
Shell Warehouse 45	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Moderate	Fair
Parade Ground	Preserve	Yes	NR-District	National	Occupied	Uncommon	Prominent	Minimal	Good
Roadways	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Sandy Hook Light	Preserve	Yes	NR-Individual Listing	National	Occupied	Uncommon	Prominent	Not	Fair
Sandy Hook Light-Keeper's Quarters 84	Preserve	Yes	NR-Individual Listing	National	Occupied	Uncommon	Prominent	Not	Good
Garage 85	Preserve	Yes	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Good
Sandy Hook Proving Ground-Brick Officers Qtrs. 114	Stabilize	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Minimal	Serious
Sandy Hook Proving Ground-Laundry 113	Ruin	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Minimal	Serious
Sandy Hook Proving Ground-Ordnance Barracks 102	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Minimal	Poor
Sandy Hook Proving Ground-Foreman's Residence 104	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Significant	Fair
Sandy Hook Proving Ground-Locomotive Engineer Qtrs	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Significant	Fair
Sandy Hook Proving Ground-Proof Battery	Stabilize	Yes	NR-District	National	Occupied	Uncommon	Remote	Minimal	Poor

	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Sandy Hook Proving Ground-Magazine 173 Traverses	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Remote	Minimal	Fair
Sandy Hook Proving Ground-Magazine 174 Traverses	Stabilize	Yes	NR-District	State/Local/Contributing	Occupied	Common	Remote	Minimal	Fair
Sandy Hook Proving Ground-Electrical Shed 124a	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Prominent	Significant	Fair
Sandy Hook Proving Ground-Machine/Smith Shop 125	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Uncommon	Accessible	Significant	Serious
Sandy Hook Proving Ground-Paint Shop 132	Ruin	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Remote	Significant	Poor
Sandy Hook Proving Ground-Power Plant 124	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Significant	Poor
Sandy Hook Proving Ground-Shelter House 131	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Significant	Poor
Sandy Hook Proving Ground-Storehouse 130	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Significant	Fair
Paint Storehouse 184	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Significant	Poor
Post Engineer Warehouse 156	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Significant	Good
Storehouse 134	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Significant	Poor
Laundry & Latrine 157	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Sandy Hook-Park Entrance, Area Manager House #600	Ruin	No	Ineligible	Not significant	Vacant - High Potential for Reuse	Common	Accessible	Moderate	Poor
Spermaceti Cove-#2 Life Saving Station	Preserve	Yes	NR-Individual Listing	National	Occupied	Uncommon	Accessible	Moderate	Good
<b>Jamaica Bay Unit</b>									
<b>Floyd Bennett Field Historic District</b>									
Administration Building	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Minimal	Fair
Fire Pump House	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Poor
Garage & Maintenance Shop	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Not	Good
Hangars 1 and 2	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Not	Poor
Hangars 3 and 4	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Not	Poor
Hangars 5 and 6	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Not	Good
Hangars 7 and 8	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Not	Good
Fire House / Storage	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Not	Poor
Synthetic Training Building	Ruin	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Not	Serious
Barracks No.2/CPO Club	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Not	Good
CPO Barracks No.5/Navy HQ Bldg	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Minimal	Fair
West Recreation Building	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Minimal	Fair

	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Marines Barracks No. 15	Stabilize	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Not	Good
Navy Enlisted Men Recreation Bldg	Stabilize	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Not	Good
Power Plant "A"	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Fair
Fire Station and Garage	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Not	Fair
Station Maintenance Shop	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Not	Fair
Torpedo Storage	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Not	Poor
Power Plant "B"	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Not	Good
Cold Storage Commissary	Stabilize	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Good
General Storehouse	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Not	Fair
NAPB Seaplane Hangar B	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Minimal	Poor
Inert Storage	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Moderate	Poor
Ordinance/Practice Bomb Storage	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
Married Officer's Quarters A	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Not	Serious
Married Officer's Quarters B	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Not	Serious
US Coast Guard Main Hangar	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Remote	Not	Fair
US Coast Guard Garage	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Not	Fair
Contributing Runways	Preserve	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Not	Fair
Contributing Taxiways	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Not	Fair
Contributing Apron	Preserve	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Not	Good
Sea Plane Ramp	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Accessible	Minimal	Fair
Airfield	Preserve	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Not	Fair
Contributing Roadways	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Fair
High Explosive Magazine	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
High Explosive Magazine	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
High Explosive Magazine	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
High Explosive Magazine	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
Ammunition	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
North Service Substation	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Not	Poor
Fire Protection Pump Station	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Not	Serious
Fuse Detonator Magazine	Stabilize	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Good

	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Fuse Detonator Magazine	Stabilize	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Good
Fuel Storage	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Not	Good
Sewage Pump Station	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Serious
South Service Substation	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Serious
Fire Pump Station	Stabilize	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Good
Water Tank	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Water Tank	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Electrical Vault	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Serious
Pump House	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Serious
Transformer Building	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Good
<b>Fort Tilden Historic District</b>									
Battery Construction 220	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Minimal	Poor
Battery Harris - Bombproof Magazine	Stabilize	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Fair
Battery Harris - Magazine 401	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Battery Harris - Magazine 405	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Battery Harris - Magazine 409	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Battery Harris - Magazine 414	Stabilize	Yes	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Remote	Not	Poor
Battery Harris - Power Plant #1 Tank	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Battery Harris - Power Plant #2 Tank	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Battery Harris - Power Plant #3	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Battery Harris East	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Not	Fair
Battery Harris West	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Not	Fair
Battery Kessler	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Accessible	Moderate	Poor
Fire Control & Plotting Room	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Harbor Entrance Command Post	Stabilize	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Uncommon	Remote	Not	Good
Igloo Magazine 403	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Igloo Magazine 404	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Mine Casemate & Plotting Room	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Remote	Not	Good
Nike Silo 310	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Not	Poor
Nike Silo 311	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Not	Poor
Nike Silo 312	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Not	Poor
Nike Silo 313	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Not	Poor



	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Nike Site - Gate House	Ruin	Yes	NR-District	National	Vacant - High Potential for Reuse	Common	Remote	Minimal	Serious
Storage Shed 322	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Significant	Fair
Storage Shed 402	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Poor
Sentry Booth	Ruin	Yes	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
Missile Assembly	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Not	Poor
Generator Building	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Not	Good
Latrine / Motor Pool Office	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Not	Poor
Beach House	Ruin	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Remote	Minimal	Serious
NCO Snack Bar	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Moderate	Poor
NCO Annex/ Latrine	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Moderate	Poor
Beach House/ Water Meter	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Moderate	Poor
Quarters	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Minimal	Good
Quarters	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Minimal	Fair
Administration	Preserve	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Minimal	Good
Main Transformer Building	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Ordinance Shop/ Storage	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Minimal	Poor
Administration/ Storage	Ruin	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Minimal	Poor
Motor Shop/ Rockaway Alliance	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Good
Theatre	Preserve	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Prominent	Minimal	Good
Chapel	Stabilize *	No	NR-District	State/Local/Contributing	Occupied	Common	Prominent	Minimal	Serious
Community Building	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Minimal	Poor
Post Headquarters/ Office	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Serious
Post Sewage Lift Unit	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Good
Residence	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Good
Garage	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Good
Dispensary/ Residence	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Good
Store House	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Quarters	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Quarters	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Quarters	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor

	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Quarters	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Storage	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Serious
B-3 Comfort Station	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Good
Parade Ground	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Accessible	Minimal	Good
Administration / Harbor Ferry Master	Preserve	No	NR-District	State/Local/Contributing	Occupied	Common	Prominent	Minimal	Good
Gas Station	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Good
Oil Shop / Ground Storage	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Poor
Quartermasters / Plumbers Shop	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Oil Storage	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Auto Shop	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Poor
Garage	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Poor
Storage/ Electrical Shop	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Prominent	Minimal	Fair
CG Main Building	Preserve	No	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Poor
CG Boat House	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Moderate	Poor
Garages	Ruin	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Moderate	Serious
Power House	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Moderate	Poor
Jacob Riis Park Historic District									
Ball Field Electrical Building	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Bathhouse - Beach Pavilion	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Significant	Poor
Bathhouse - East Wing Pavilion	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Significant	Good
Bathhouse - Entrance Pavilion	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Minimal	Good
Bathhouse - West Wing Pavilion	Preserve	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Uncommon	Prominent	Significant	Good
Boiler Room	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Significant	Good
East Mall Building	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Minimal	Poor
Garage	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Serious
Park Police Stables	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Accessible	Minimal	Poor
Parking Lot	Preserve	No	NR-Individual Listing	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Minimal	Fair
West Mall Building	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Minimal	Good
Golf Course	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Fair

	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Playing Courts	Ruin	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Moderate	Serious
Boardwalk/ Promenade	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Significant	Poor
Mall	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Prominent	Minimal	Fair
Lighting -Type A, B and 1931	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Minimal	Good
Wise Clock	Preserve	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Prominent	Minimal	Good
Silver Gull Beach Club Historic District									
Clubhouse	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Cabanas [A,B,C & D]	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Significant	Fair
Gatehouses - East and West	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Breezy Point Surf Club Historic District									
Barracks	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Bayberry Room	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Fair
Birdhouse	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Fair
Gatehouse	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Cabanas A,B,C,D,W	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Fair
Bath Cabins E,F	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Fair
Original Court Restrooms/ Showers	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Fair
Administration Building	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Cafeteria/Ballroom	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Ocean Court Cabins [008-212]	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Fair
Ocean Court Cabanas A,A-B,B, B-C, B-s,C-D, D E,E-N,F,G,H	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Fair
Ocean Court Terrace Cabanas Q-Z	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Fair
Seahorse Café/Cap Gig's Lounge	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Good
Ocean Court Restroom/ Showers	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Fair
Staten Island Unit									
Fort Wadsworth Historic District									
B.C. & C.R.F. Stations	Ruin	No	NR-District	National	Vacant - Low Potential for Reuse	Common	Accessible	Moderate	Poor
Battery 218	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Minimal	Poor
Battery Ayres	Ruin	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
Battery Bacon	Stabilize	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Accessible	Moderate	Poor

	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Battery Barbour	Stabilize	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Accessible	Moderate	Poor
Battery Barry	Ruin	Yes	NR-District	National	Vacant - High Potential for Reuse	Common	Accessible	Minimal	Serious
Battery Catlin	Stabilize	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Accessible	Moderate	Poor
Battery Catlin Magazine	Stabilize	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Accessible	Not	Serious
Battery Dix	Stabilize	Yes	NR-District	National	Vacant - High Potential for Reuse	Common	Accessible	Minimal	Poor
Battery Duane	Preserve	Yes	NR-District	National	Occupied	Uncommon	Prominent	Not	Fair
Battery Hudson	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Accessible	Minimal	Poor
Battery Mills	Ruin	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
Battery Richmond	Ruin	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Remote	Not	Serious
Battery Turnbull	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Accessible	Moderate	Poor
Battery Upton	Ruin	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Remote	Minimal	Serious
Battery Weed	Preserve	Yes	NR-Individual Listing	National	Occupied	Uncommon	Prominent	Moderate	Fair
Battery Weed - Light Station	Preserve	Yes	NR-Individual Listing	State/Local/Contributing	Occupied	Uncommon	Prominent	Not	Fair
Building 101 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Good
Building 102 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Fair
Building 103 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Poor
Building 104 - Detached Garage	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Poor
Building 105 - Detached Garage	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Poor
Building 106 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Fair
Building 107 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Good
Building 109 - Admin / Off. Club	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Accessible	Not	Poor
Building 110 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Fair
Building 111 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Poor
Building 112 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Poor
Building 113 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Fair
Building 114 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Fair
Building 115 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Poor
Building 116 - Detached Garage	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Poor
Building 117 - Detached Garage	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Poor

	Band	Fundamental Resource	National Register Status	Level of Significance	Potential Use	Uniqueness	Visibility	Climate Change Vulnerability	Pre-Sandy Condition
Building 119 - Housing	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Not	Poor
Building 138 - Mars Station	Stabilize	No	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Minimal	Poor
Building 139 - Signal Storage	Stabilize	No	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Minimal	Good
Building 140 - Mining Casemate	Stabilize	No	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Minimal	Poor
Building 147 - Torpedo Storage	Stabilize	Yes	NR-District	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Moderate	Serious
Building 148 - Warehouse	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Building 210 - Inf. Battery Bks.	Preserve*	No	NR-District	State/Local/Contributing	Occupied	Uncommon	Accessible	Minimal	Poor
Building 211 - Open Warehouse	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Minimal	Fair
Building 301 - Motor Pool	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Building 302 - Motor Pool	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Building 303/304 - Motor Pool Off	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Fair
Building 305 - Administration	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Poor
Building 307 - Ready Magazine	Stabilize	Yes	NR-District	National	Vacant - Low Potential for Reuse	Common	Remote	Moderate	Fair
Building 309 - Stables (Storage)	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Minimal	Fair
Building 310 - Storage Shed	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Fair
Building 339 - Seaplane Hangar	Ruin	No	NR-District	State/Local/Contributing	Occupied	Common	Remote	Moderate	Poor
Building 352 - NCO Club	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Common	Accessible	Not	Fair
Building 404 - Gatehouse	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Not	Fair
Building 406 - Gatehouse	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Not	Poor
Experimental Battery	Ruin	Yes	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Significant	Poor
Fort Tompkins	Preserve	Yes	NR-Individual Listing	National	Vacant - High Potential for Reuse	Uncommon	Prominent	Minimal	Fair
Glacis Gun Battery	Ruin	Yes	NR-District	National	Vacant - Low Potential for Reuse	Uncommon	Remote	Significant	Poor
Transformer Building	Stabilize	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Common	Accessible	Minimal	Good
Battery Weed Seawall	Preserve*	No	NR-District	National	Occupied	Uncommon	Prominent	Significant	Serious
Roadways	Stabilize	No	NR-District	State/Local/Contributing	Occupied	Common	Accessible	Minimal	Fair
<b>Miller Army Airfield Historic District</b>									
Elm Tree Light	Stabilize	No	NR-District	State/Local/Contributing	Vacant - Low Potential for Reuse	Uncommon	Prominent	Minimal	Fair
Hangar 38	Stabilize	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Prominent	Significant	Poor
Hangar Apron	Preserve	No	NR-District	State/Local/Contributing	Vacant - High Potential for Reuse	Uncommon	Accessible	Minimal	Good
Band * - Due to location and/or current use the band for this resource was changed from the calculated rating and band.									



## Appendix C: Compliance Coordination



IN REPLY REFER TO:

L76 (GATE-S)

March 1, 2012

### United States Department of the Interior

#### NATIONAL PARK SERVICE

Gateway National Recreation Area  
210 New York Ave.  
Staten Island, N.Y. 10305-5019

Mr. Daniel Saunders  
Administrator and Deputy State Preservation Officer  
New Jersey Department of Environmental Protection  
Historic Preservation Office  
P.O. Box 420  
Trenton, New Jersey 08625-0420

Dear Mr. Saunders:

The National Park Service is preparing a General Management Plan/Environmental Impact Statement (GMP/EIS) for Gateway National Recreation Area (GATE) including its Sandy Hook Unit which is located in Monmouth County, New Jersey. The Fort Hancock and the Sandy Hook Proving Ground National Historic Landmark District, Sandy Hook Light National Historic Landmark and Fort Hancock Life Saving Station (also known as Spermaceti Cove No 2. Life Saving Service Station) historic site are all located within the Sandy Hook Unit of GATE.

The GMP will provide National Park Service managers a comprehensive planning framework for managing the park and its resources over the next fifteen to twenty years. Consistent with the park's purpose, significance and legislative mandates, the plan will identify strategies for achieving desired resource conditions, visitor experiences, and appropriate types and locations of potential future development and adaptive reuse. Treatment recommendations for our cultural resources will be a key element in the plan. The combined GMP/EIS will identify management issues and concerns, present a reasonable range of management alternatives for addressing these issues, and will analyze the environmental impacts of each alternative on natural and cultural resources. The National Park Service requests your involvement in the planning process and we wish to consult with you in accord with Section 106 of the National Historic Preservation Act of 1996 (NHPA), as amended, and with the National Environmental Policy Act of 1969 (NEPA).

The plan is being developed by a multidisciplinary team made up of Gateway National Recreation Area staff, staff from the National Park Service Northeast Region Park Planning and Special Studies Division, and consultants. We are in the process of developing preliminary alternatives and looking at the effects these alternatives will have on our resources. We anticipate having these preliminary alternatives ready for public comment in the spring of 2012 and a draft GMP/EIS ready for review within one year. We would welcome the opportunity to




meet with you to present our work before the public comment phase begins. We would like to invite you to GATE at a time of your choosing. Please contact me to arrange a meeting at 718-354-4665, or e-mail me at [Linda\\_Canzanelli@nps.gov](mailto:Linda_Canzanelli@nps.gov), or write to me at the address above.

We will keep you informed of public meetings, to which you will be invited, as the schedule is developed over the next few months and of other events and benchmarks as planning progresses over the next year. At the appropriate time, we shall consult with you and invite you to review and comment on the draft plan.

We look forward to meeting with you and welcome your involvement and comments. If you have any questions or require additional information, please contact me as mentioned above.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Linda Canzanelli', is written over the printed name and title.

Linda Canzanelli  
Superintendent



IN REPLY REFER TO:

## United States Department of the Interior

NATIONAL PARK SERVICE

Gateway National Recreation Area  
210 New York Ave.  
Staten Island, N.Y. 10305-5019

L76 (GATE-S)

February 29, 2012

Ms. Ruth Pierpont  
Director and Acting Deputy Commissioner  
New York State Historic Preservation Office  
Peebles Island Resource Center  
P.O. Box 189  
Waterford, New York 12188-0189

Dear Ms. Pierpont:

The National Park Service is preparing a General Management Plan/Environmental Impact Statement (GMP/EIS) for Gateway National Recreation Area (GATE). GATE includes the Jamaica Bay and Staten Island units of the park in Richmond and Kings County in New York. Historic sites include Ft. Tilden, Floyd Bennett Field, Jacob Riis Park and Miller Army Air Field National Historic Districts along with Battery Weed, Fort Tompkins Quadrangle, the Endicott Era Batteries at Fort Wadsworth, and the USCG Station Far Rockaway.

The GMP will provide National Park Service managers a comprehensive planning framework for managing the park and its resources over the next fifteen to twenty years. Consistent with the park's purpose, significance and legislative mandates, the plan will identify strategies for achieving desired resource conditions, visitor experiences, and appropriate types and locations of potential future development and adaptive reuse. Treatment recommendations for our cultural resources will be a key element in the plan. The combined GMP/EIS will identify management issues and concerns, present a reasonable range of management alternatives for addressing these issues, and will analyze the environmental impacts of each alternative on natural and cultural resources. The National Park Service requests your involvement in the planning process and we wish to consult with you in accord with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, and with the National Environmental Policy Act of 1969 (NEPA).

The plan is being developed by a multidisciplinary team made up of Gateway National Recreation Area staff, staff from the National Park Service Northeast Region Park Planning and Special Studies Division, and consultants. We are in the process of developing preliminary alternatives and looking at the effects these alternatives will have on our resources. We anticipate having these preliminary alternatives ready for public comment in the spring of 2012 and a draft GMP/EIS document ready for review within one year. We would welcome the




opportunity to meet with you to present our work before the public comment phase begins. We would like to invite you to GATE at a time of your choosing. Please contact me to arrange a meeting at 718-354-4665, or e-mail me at [Linda\\_Canzanelli@nps.gov](mailto:Linda_Canzanelli@nps.gov), or write to me at the address above.

We will keep you informed of public meetings, to which you will be invited, as the schedule is developed over the next few months and of other events and benchmarks as planning progresses over the next year. At the appropriate time, we shall consult with you and invite you to review and comment on the draft plan.

We look forward to meeting with you and welcome your involvement and comments. If you have any questions or require additional information, please contact me as mentioned above.

Sincerely,

A handwritten signature in black ink, appearing to read 'Linda Canzanelli', written over the printed name.

Linda Canzanelli  
Superintendent





## United States Department of the Interior

NATIONAL PARK SERVICE  
Gateway National Recreation Area  
210 New York Ave., Staten Island, N.Y. 10305

IN REPLY REFER TO:  
N1621 (NRM-GATE)

June 21, 2013

Eric Schrading, Acting Supervisor  
U.S. Fish and Wildlife Service  
Ecological Services  
New Jersey Field Office  
927 N. Main St., Building D  
Pleasantville, New Jersey 08232

Re: Section 7, Endangered Species Act Coordination with New York and New Jersey Ecological Services Field Offices; Concurrent Review of NEPA Document (Draft EIS) of General Management Plan for Gateway National Recreation Area;

Dear Mr. Schrading:

The National Park Service's (NPS) Gateway National Recreation Area (GATE) submits the enclosed Draft Environmental Impact Statement (DEIS) and associated materials for your review. The information in the DEIS is being provided to the U.S. Fish and Wildlife Service (Service) to determine whether any federally listed species that occur within GATE would be adversely affected by implementation of any of the three alternatives proposed for the Park's General Management Plan (GMP). The purpose of this submittal is to ensure the protection of federally listed threatened and endangered species pursuant to Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA).

Since the above-mentioned document encompasses parkwide (i.e., GATE units in New York and New Jersey) planning, a copy of this request is being provided concurrently to the Service's Long Island Field Office (LIFO). During previous joint LIFO / NJFO coordination with NPS, the review of similar documents (i.e., environmental assessments) was conducted jointly, with the Service selecting one field office as the lead in consolidating comments and advising NPS regarding Section 7 consultation requirements.

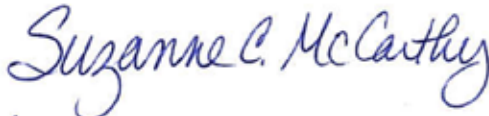
Species that are known to occur in GATE include the federally listed (threatened) piping plover (*Charadrius melodus*), seabeach amaranth (*Amaranthus pumilus*) and northeastern beach tiger beetle (*Cincindela dorsalis dorsalis*). It should be noted that individual management and development project proposals tied to the GMP would receive individual review for compliance with the National Environmental Policy Act (NEPA) and the Fish and Wildlife Coordination Act (FWCA), as well as all required state and federal regulations, laws and



policies, including Section 7 of ESA. We therefore seek your office's written comments following your review of the information provided.

I look forward to your response and thank you in advance for your review and, if necessary, determination of the appropriate consultation pathway for the enclosed DEIS. Should any questions arise, please contact Dave Avrin, Chief, Resource Management Division at (718) 354-4625 or at [Dave\\_Avrin@nps.gov](mailto:Dave_Avrin@nps.gov).

Sincerely,



for Linda Canzanelli  
Superintendent

cc:

Deputy Superintendent, GATE  
Chief, Resource Management Division, GATE  
Chief, Natural Resource Management Division, GATE  
Community Planner, NPS-NER (H. Mahan)

Steve Papa, Biologist  
U.S. Fish and Wildlife Service  
Ecological Services  
Long Island Field Office  
340 Smith Road  
Shirley, New York 11967



## United States Department of the Interior

NATIONAL PARK SERVICE

Gateway National Recreation Area  
210 New York Ave., Staten Island, N.Y. 10305

IN REPLY REFER TO:  
N1621 (NRM-GATE)

June 21, 2013

Steve Papa, Biologist  
U.S. Fish and Wildlife Service  
Ecological Services  
Long Island Field Office  
340 Smith Road  
Shirley, New York 11967

Re: Section 7, Endangered Species Act Coordination with New York and New Jersey Ecological Services Field Offices; Concurrent Review of NEPA Document (Draft EIS) of General Management Plan for Gateway National Recreation Area;

Dear Mr. Papa:

The National Park Service's (NPS) Gateway National Recreation Area (GATE) submits the enclosed Draft Environmental Impact Statement (DEIS) and associated materials for your review. The information in the DEIS is being provided to the U.S. Fish and Wildlife Service (Service) to determine whether any federally listed species that occur within GATE would be adversely affected by implementation of any of the three alternatives proposed for the Park's General Management Plan (GMP). The purpose of this submittal is to ensure the protection of federally listed threatened and endangered species pursuant to Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA).

Since the above-mentioned document encompasses parkwide (i.e., GATE units in New York and New Jersey) planning, a copy of this request is being provided concurrently to the Service's New Jersey Field Office (NJFO). During previous joint LIFO / NJFO coordination with NPS, the review of similar documents (i.e., environmental assessments) was conducted jointly, with the Service selecting one field office as the lead in consolidating comments and advising NPS regarding Section 7 consultation requirements.

Species that are known to occur in GATE include the federally listed (threatened) piping plover (*Charadrius melodus*), seabeach amaranth (*Amaranthus pumilus*) and northeastern beach tiger beetle (*Cincindela dorsalis dorsalis*). It should be noted that individual management and development project proposals tiered to the GMP would receive individual review for compliance with the National Environmental Policy Act (NEPA) and the Fish and Wildlife

Coordination Act (FWCA), as well as all required state and federal regulations, laws and policies, including Section 7 of ESA. We therefore seek your office's written comments following your review of the information provided.

I look forward to your response and thank you in advance for your review and, if necessary, determination of the appropriate consultation pathway for the enclosed DEIS. Should any questions arise, please contact Dave Avrin, Chief, Resource Management Division at (718) 354-4625 or at [Dave\\_Avrin@nps.gov](mailto:Dave_Avrin@nps.gov).

Sincerely,



*for* Linda Canzanelli  
Superintendent

cc:  
Deputy Superintendent, GATE  
Chief, Resource Management Division, GATE  
Chief, Natural Resource Management Division, GATE  
Community Planner, NPS-NER (H. Mahan)

Eric Schradling, Acting Supervisor  
U.S. Fish and Wildlife Service  
Ecological Services  
New Jersey Field Office  
927 N. Main St., Building D  
Pleasantville, New Jersey 08232



## United States Department of the Interior

NATIONAL PARK SERVICE  
Gateway National Recreation Area  
210 New York Ave., Staten Island, NY 10305

IN REPLY REFER TO:

June 20, 2013

Ms. Tamara Francis-Fourkiller  
Cultural Preservation Director  
The Delaware Nation  
P.O. Box 825  
Anadarko, OK 73005

Dear Ms. Francis-Fourkiller:

The National Park Service is developing a General Management Plan and Environmental Impact Statement (GMP/EIS) for Gateway National Recreation Area in New York and New Jersey. The park is located in the New York City boroughs of Brooklyn, Queens and Staten Island and extends into adjacent waters, including the Atlantic Ocean, Jamaica Bay, Raritan Bay, and Upper and Lower New York Bay. Sandy Hook, the New Jersey portion of the park is located in Monmouth County. A GMP provides broad guidance for park management over the next 20 years. An environmental impact statement is prepared as part of the planning process and describes the environment affected by the alternative management actions and the environmental consequences of implementing the alternatives. Implementation of the GMP may result in site specific actions and additional compliance (including tribal consultations).

The GMP/EIS provides an overview of the park's cultural resources including a description of pre-contact archeology and the contact period. Specific references to the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge-Munsee Community are included in Chapter 3: Affected Environment, Cultural Resources, Pre-contact to Contact Context section. We are interested in understanding if additional information on tribal history events, cultural sites or geographic areas that are of special concern to your tribal members should be included. To date, no pre-contact and historic period archeological sites with Native American components have been identified in the park, but as you know, there has been an inadvertent discovery of a Native American human remain in the Jamaica Bay Unit.

A copy of the Draft GMP/EIS will be sent to you in early July. I would like to invite you to consult with us about the draft plan or any other topics that you might wish to bring to our attention. I look forward to talking with you about any tribal interests in the general management plan. If you have any questions or would like additional information, please contact me at 718-354-4665 or our Chief of Resource Management, Dave Avrin at 718-354-4625.

Sincerely,

Linda Canzanelli  
Superintendent





## United States Department of the Interior

NATIONAL PARK SERVICE  
Gateway National Recreation Area  
210 New York Ave., Staten Island, NY 10305

IN REPLY REFER TO:

June 20, 2013

Wally Miller, Acting President  
Stockbridge-Munsee Community  
P.O. Box 70  
Bowler, WI 54416

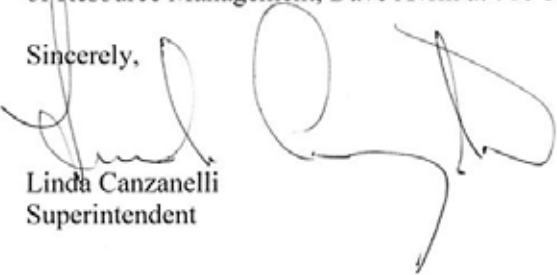
Dear Mr. Miller:

The National Park Service is developing a General Management Plan and Environmental Impact Statement (GMP/EIS) for Gateway National Recreation Area in New York and New Jersey. The park is located in the New York City boroughs of Brooklyn, Queens and Staten Island and extends into adjacent waters, including the Atlantic Ocean, Jamaica Bay, Raritan Bay, and Upper and Lower New York Bay. Sandy Hook, the New Jersey portion of the park is located in Monmouth County. A GMP provides broad guidance for park management over the next 20 years. An environmental impact statement is prepared as part of the planning process and describes the environment affected by the alternative management actions and the environmental consequences of implementing the alternatives. Implementation of the GMP may result in site specific actions and additional compliance (including tribal consultations).

The GMP/EIS provides an overview of the park's cultural resources including a description of pre-contact archeology and the contact period. Specific references to the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge-Munsee Community are included in Chapter 3: Affected Environment, Cultural Resources, Pre-contact to Contact Context section. We are interested in understanding if additional information on tribal history events, cultural sites or geographic areas that are of special concern to your tribal members should be included. To date, no pre-contact and historic period archeological sites with Native American components have been identified in the park, but as you know, there has been an inadvertent discovery of a Native American human remain in the Jamaica Bay Unit.

A copy of the Draft GMP/EIS will be sent to you in early July. I would like to invite you to consult with us about the draft plan or any other topics that you might wish to bring to our attention. I look forward to talking with you about any tribal interests in the general management plan. If you have any questions or would like additional information, please contact me at 718-354-4665 or our Chief of Resource Management, Dave Avrin at 718-354-4625.

Sincerely,

  
Linda Canzanelli  
Superintendent



## United States Department of the Interior

NATIONAL PARK SERVICE  
Gateway National Recreation Area  
210 New York Ave., Staten Island, NY 10305

IN REPLY REFER TO:

June 20, 2013

Brice Obermeyer  
Delaware Tribe Historic Preservation Office  
1420 C of E Drive, Suite 190  
Emporia, KS 66801

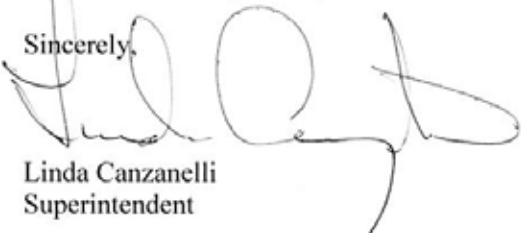
Dear Mr. Obermeyer:

The National Park Service is developing a General Management Plan and Environmental Impact Statement (GMP/EIS) for Gateway National Recreation Area in New York and New Jersey. The park is located in the New York City boroughs of Brooklyn, Queens and Staten Island and extends into adjacent waters, including the Atlantic Ocean, Jamaica Bay, Raritan Bay, and Upper and Lower New York Bay. Sandy Hook, the New Jersey portion of the park is located in Monmouth County. A GMP provides broad guidance for park management over the next 20 years. An environmental impact statement is prepared as part of the planning process and describes the environment affected by the alternative management actions and the environmental consequences of implementing the alternatives. Implementation of the GMP may result in site specific actions and additional compliance (including tribal consultations).

The GMP/EIS provides an overview of the park's cultural resources including a description of pre-contact archeology and the contact period. Specific references to the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge-Munsee Community are included in Chapter 3: Affected Environment, Cultural Resources, Pre-contact to Contact Context section. We are interested in understanding if additional information on tribal history events, cultural sites or geographic areas that are of special concern to your tribal members should be included. To date, no pre-contact and historic period archeological sites with Native American components have been identified in the park, but as you know, there has been an inadvertent discovery of a Native American human remain in the Jamaica Bay Unit.

A copy of the Draft GMP/EIS will be sent to you in early July. I would like to invite you to consult with us about the draft plan or any other topics that you might wish to bring to our attention. I look forward to talking with you about any tribal interests in the general management plan. If you have any questions or would like additional information, please contact me at 718-354-4665 or our Chief of Resource Management, Dave Avrin at 718-354-4625.

Sincerely,

  
Linda Canzanelli  
Superintendent





## United States Department of the Interior

NATIONAL PARK SERVICE  
Gateway National Recreation Area  
210 New York Ave., Staten Island, NY 10305

IN REPLY REFER TO:

June 20, 2013

Chief Paula Pechonick  
Delaware Tribe of Indians  
170 N. Barbara Avenue  
Bartlesville, OK 74006

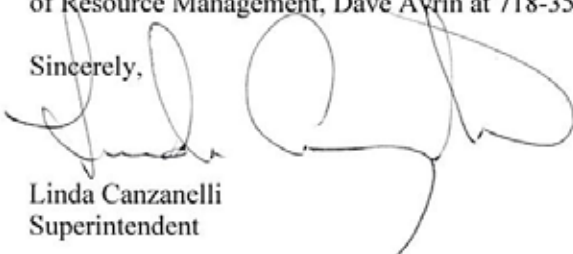
Dear Chief Pechonick:

The National Park Service is developing a General Management Plan and Environmental Impact Statement (GMP/EIS) for Gateway National Recreation Area in New York and New Jersey. The park is located in the New York City boroughs of Brooklyn, Queens and Staten Island and extends into adjacent waters, including the Atlantic Ocean, Jamaica Bay, Raritan Bay, and Upper and Lower New York Bay. Sandy Hook, the New Jersey portion of the park is located in Monmouth County. A GMP provides broad guidance for park management over the next 20 years. An environmental impact statement is prepared as part of the planning process and describes the environment affected by the alternative management actions and the environmental consequences of implementing the alternatives. Implementation of the GMP may result in site specific actions and additional compliance (including tribal consultations).

The GMP/EIS provides an overview of the park's cultural resources including a description of pre-contact archeology and the contact period. Specific references to the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge-Munsee Community are included in Chapter 3: Affected Environment, Cultural Resources, Pre-contact to Contact Context section. We are interested in understanding if additional information on tribal history events, cultural sites or geographic areas that are of special concern to your tribal members should be included. To date, no pre-contact and historic period archeological sites with Native American components have been identified in the park, but as you know, there has been an inadvertent discovery of a Native American human remain in the Jamaica Bay Unit.

A copy of the Draft GMP/EIS will be sent to you in early July. I would like to invite you to consult with us about the draft plan or any other topics that you might wish to bring to our attention. I look forward to talking with you about any tribal interests in the general management plan. If you have any questions or would like additional information, please contact me at 718-354-4665 or our Chief of Resource Management, Dave Avrin at 718-354-4625.

Sincerely,

  
Linda Canzanelli  
Superintendent



## United States Department of the Interior

NATIONAL PARK SERVICE  
Gateway National Recreation Area  
210 New York Ave., Staten Island, NY 10305

IN REPLY REFER TO:

June 20, 2013

Mr. C. J. Watkins  
Vice President  
The Delaware Nation  
P.O. Box 825  
Anadarko, OK 73005

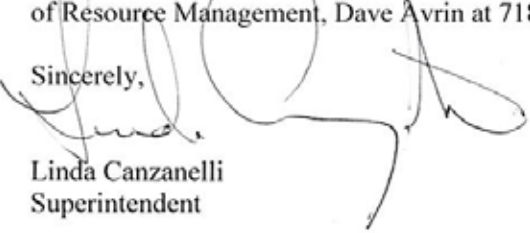
Dear Mr. C. J. Watkins:

The National Park Service is developing a General Management Plan and Environmental Impact Statement (GMP/EIS) for Gateway National Recreation Area in New York and New Jersey. The park is located in the New York City boroughs of Brooklyn, Queens and Staten Island and extends into adjacent waters, including the Atlantic Ocean, Jamaica Bay, Raritan Bay, and Upper and Lower New York Bay. Sandy Hook, the New Jersey portion of the park is located in Monmouth County. A GMP provides broad guidance for park management over the next 20 years. An environmental impact statement is prepared as part of the planning process and describes the environment affected by the alternative management actions and the environmental consequences of implementing the alternatives. Implementation of the GMP may result in site specific actions and additional compliance (including tribal consultations).

The GMP/EIS provides an overview of the park's cultural resources including a description of pre-contact archeology and the contact period. Specific references to the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge-Munsee Community are included in Chapter 3: Affected Environment, Cultural Resources, Pre-contact to Contact Context section. We are interested in understanding if additional information on tribal history events, cultural sites or geographic areas that are of special concern to your tribal members should be included. To date, no pre-contact and historic period archeological sites with Native American components have been identified in the park, but as you know, there has been an inadvertent discovery of a Native American human remain in the Jamaica Bay Unit.

A copy of the Draft GMP/EIS will be sent to you in early July. I would like to invite you to consult with us about the draft plan or any other topics that you might wish to bring to our attention. I look forward to talking with you about any tribal interests in the general management plan. If you have any questions or would like additional information, please contact me at 718-354-4665 or our Chief of Resource Management, Dave Avrin at 718-354-4625.

Sincerely,

  
Linda Canzanelli  
Superintendent



## United States Department of the Interior

NATIONAL PARK SERVICE  
Gateway National Recreation Area  
210 New York Ave., Staten Island, NY 10305

IN REPLY REFER TO:

June 20, 2013

Sherry White  
Tribal Historic Preservation Office  
Stockbridge-Munsee Community  
P.O. Box 70  
Bowler, WI 54416

Dear Ms. White:

The National Park Service is developing a General Management Plan and Environmental Impact Statement (GMP/EIS) for Gateway National Recreation Area in New York and New Jersey. The park is located in the New York City boroughs of Brooklyn, Queens and Staten Island and extends into adjacent waters, including the Atlantic Ocean, Jamaica Bay, Raritan Bay, and Upper and Lower New York Bay. Sandy Hook, the New Jersey portion of the park is located in Monmouth County. A GMP provides broad guidance for park management over the next 20 years. An environmental impact statement is prepared as part of the planning process and describes the environment affected by the alternative management actions and the environmental consequences of implementing the alternatives. Implementation of the GMP may result in site specific actions and additional compliance (including tribal consultations).

The GMP/EIS provides an overview of the park's cultural resources including a description of pre-contact archeology and the contact period. Specific references to the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge-Munsee Community are included in Chapter 3: Affected Environment, Cultural Resources, Pre-contact to Contact Context section. We are interested in understanding if additional information on tribal history events, cultural sites or geographic areas that are of special concern to your tribal members should be included. To date, no pre-contact and historic period archeological sites with Native American components have been identified in the park, but as you know, there has been an inadvertent discovery of a Native American human remain in the Jamaica Bay Unit.

A copy of the Draft GMP/EIS will be sent to you in early July. I would like to invite you to consult with us about the draft plan or any other topics that you might wish to bring to our attention. I look forward to talking with you about any tribal interests in the general management plan. If you have any questions or would like additional information, please contact me at 718-354-4665 or our Chief of Resource Management, Dave Avrin at 718-354-4625.

Sincerely,

Linda Canzanelli  
Superintendent



# Appendix D: List of Preparers and Contributors

## Core Planning Team

Linda Canzanelli, *Superintendent (former)*  
Suzanne McCarthy, *Deputy Superintendent*  
Doug Adamo, *Chief, Natural Resource Management*  
Natalya Apostolou, *Resource Information Specialist*  
Dave Avrin, *Chief, Division of Resources Management*  
Mark Christiano, *GIS Specialist*  
Marilou Ehrler, *Historical Architect*  
Brian Feeney, *Staten Island Unit Coordinator*  
Bruce Lane, *Chief Ranger*  
Megan Lang, *Community Planner*  
Helen Mahan, *GMP Team Leader/Community Planner*  
Pete McCarthy, *Sandy Hook Unit Coordinator*  
Pam McLay, *Chief of Business and Partnership Development*  
Jeanette Parker, *Chief of Interpretation and Education*  
Minka Sendich, *Community Planner*  
Dave Taft, *Jamaica Bay Unit Coordinator*

## GMP Team and Advisors

### Gateway National Recreation Area

Felice Ciccione, *Museum Curator*  
Kathleen Cuzzolino, *Environmental Protection Specialist*  
Brian Forseth, *Facility Operations Specialist*  
George Frame, *Biologist*  
John Lincoln Hallowell, *Park Ranger*  
Rita Mullally, *Supervisory Park Ranger*  
Richard O'Neill, *Facility Operations Specialist*  
Barbara Repeta, *Business Manager*  
Earnestine Robinson, *Recreation Specialist*  
William Tate, *Supervisory Park Ranger*  
John Warren, *Park Ranger*  
Sara Weimer, *Communications Manager*  
Kathy Foppes, *Chief of Cultural Resource Management Division (former)*  
Kathy Krause, *Interpretive Specialist (former)*  
Liam Strain, *Management Assistant (former)*  
Barry Sullivan, *General Superintendent (former)*  
Billy Garrett, *Deputy Superintendent (former)*

### National Parks of New York Harbor

Joshua Laird, *Commissioner*  
Maria Burks, *Commissioner (former)*  
Giles Parker, *Chief of Staff*

### Northeast Regional Office

Dennis Reidenbach, *Regional Director*  
Michael Caldwell, *Deputy Regional Director*  
John Piltzecker, *Associate Regional Director*  
Allen Cooper, *Park Planning and Special Studies Program Manager*  
Mary Foley, *Chief Scientist*  
H. Elliott Foulds, *Historical Landscape Architect*  
James Harmon, *Archeologist*  
Elizabeth Iglehart, *National Register Coordinator*  
Jacki Katzmire, *Environmental Protection Specialist*  
James Lee, *Architectural Historian*  
Jennifer McConaghie, *Resource Planning Specialist*  
Patti Reilly, *Interpretive Specialist (former)*  
Charles Roman, *Coastal Resource Specialist*  
Chuck Smythe, *Ethnography Program Manager*  
David Uschold, *Cultural Resource Specialist*  
Robert McIntosh, *Associate Regional Director (former)*  
Terrence Moore, *Chief of Planning and Compliance Division (former)*  
Paul Weinbaum, *History Program Manager (former)*

### The City of New York

Adrian Benepe, *Commissioner, Department of Parks and Recreation (former)*  
David Bragdon, *Director, Mayor's Office of Long-Term Planning and Sustainability (former)*  
Susan Donoghue, *Assistant Commissioner, Department of Parks and Recreation (former)*

## Preparers and Consultant Team

### Preparers

**Natalya Apostolou**, Resource information Specialist, B.S. Geography; 8 years in cartography and geographic information systems , 5 years with National Park Service

**Margaret Bailey**, Senior Vice President, CHM Government Services, B.S. Hotel Administration; 26 years in hospitality and recreation management

**Kathie Joyner**, NEPA Analyst, Total Quality NEPA , M.A. Anthropology/ Archeology, B.A. Education; 30 years in cultural resource analysis

**Helen Mahan**, Community Planner, National Park Service, B.S. Resource Development; 23 years in park and recreation planning with National Park Service

**Casey Martin**, Historic Architect, Jacobs Engineering Group, M.A. Architecture; 20 years in asset and facility management

**Mimi Mather**, Principal/Park Planner, Root House Studio, M.S. Landscape Architecture, B.A. Sociology; 12 years in park and recreation planning

**Stephanie Owens**, NEPA Analyst, Total Quality NEPA, M.S. Ecology, B.S. Environmental Forest Biology, B.S. Forest Resources Management; 15 years in wetland/ botanical impact analysis

**Jane Rowan**, Director of Ecological Services , Bioengineering Group, M.S. Environmental Science, B.S. Biology; 20 years in wetland science and coastal ecology

**Emina Sendich**, Community Planner, M.S. Landscape Architecture, B.A. Graphic Design; 16 years in planning and graphic design, 3 years with National Park Service

**Patricia Steinholtz**, Senior Environmental Planner, David Evans and Associates, M.S. Applied Science in Environmental Policy & Management; 12 years in environmental planning and impact analysis

**Stacy Tschour**, Transportation Group Leader, David Evans and Associates, B.S. Civil Engineering; 14 years in transportation planning

**Heidi West**, NEPA analyst/Impact Analysis Coordinator, Total Quality NEPA, Ph.D. Environmental Science and Engineering, M.A. Science Communication, M.S. Biology, B.S. Biology; 25 years in environmental planning and impact analysis

### Consultants

#### **Denver Service Center (Camping)**

Tom Gibney, *Landscape Architect*

Mike Pisano, *Landscape Architect*

#### **Happold Consulting (Jamaica Bay)**

Amelia Aboff, *Analyst*

Kate Ascher, *Principal*

Nerissa Moray, *Associate Principal*

#### **MajaDesign, Inc.**

Maja Smith, *Graphic Designer*

#### **Wallace, Roberts and Todd (Foundation Document/Camping)**

Elizabeth Clarke, *Planner*

## References

Art, 1992. Cited in Lawrence, Roman, and Frame 2010.

Audubon New York, 2013. Audubon Society, New York website. Accessed May 17, 2013, at [www.ny.audubon.org/staten-island-birding/great-kills-park](http://www.ny.audubon.org/staten-island-birding/great-kills-park).

Avrin, D., 2013. Personal communication re: Northeastern beach tiger beetle population. March 2013.

Beck, A., J. Cochran, and S. Sañudo-Wilhelmy, 2009. "Temporal Trends of Dissolved Trace Metals in Jamaica Bay, NY: Importance of Wastewater Input and Submarine Groundwater Discharge in an Urban Estuary." *Estuaries and Coasts* 32(3): 535–550. May 2009.

Benotti, M.J., P.E. Misut, M. Abbene, and S.A. Terracciano, 2006. Historic Nitrogen Loading in Jamaica Bay, Long Island, New York: Predevelopment to 2005. USGS Open File Report SIR 2007-5051.

Bernick et al., 2007. Cited in Lawrence, Roman, and Frame 2010.

Bianchi, Leonard G., 2006. *Draft Phase I Cultural Resource Survey for the Installation of a New Waterline to Building SH-84, Lighthouse Keeper's Quarters at Sandy Hook, Middletown Township, Monmouth County, NJ*. Prepared for the Sandy Hook Foundation, under direction of NPS.

Black, Frederick, 1983. *Historic Resource Study: A History of Fort Wadsworth, New York Harbor*. Cultural Resource Management Study, No. 7. Prepared for the Division of Cultural Resources, National Park Service.

Boose et al., 2001. Cited in Lawrence, Roman, and Frame 2010.

Borgmann, K.L., 2011. *A Review of Human Disturbance Impacts on Waterbirds*. Tiburon, California: Audubon California.

Bowman et al., 2005. Cited in Colle, Rojowsky, and Buonaiuto 2010.

Burger, J., M. Gochfeld, C.D. Jenkins, and F. Lesser, 2010. "Effect of Approaching Boats on Nesting Black Skimmers: Using Response Distances to Establish Protective Buffer Zones." *Journal of Wildlife Management* 74(1): 102–108.

Caffrey, M. 2013. Personal Communication. National Park Service, Geological Resources Division. Geological Society of America Visiting Scientist. Lakewood, CO.

Caldewell, 1966. Cited in Psuty et al. 2009.

Cody and Auwaerter, 2009. *Floyd Bennett Field Cultural Landscape Report*.

Colle, B.A., F. Buonaiuto, M.J. Bowman, R.E. Wilson, R. Flood, R. Hunter, A. Mintz, and D. Hill, 2008. "New York City's Vulnerability to Coastal Flooding: Storm Surge Modeling of Past Cyclones." *Bulletin of the American Meteorological Society* 89:829–841. June 2008.

Colle, B.A., K. Rojowsky, and F. Buonaiuto, 2010. "New York City Storm Surges: Climatology and Analysis of Wind and Cyclone Evolution." *Journal of Applied Meteorology and Climatology* 49:85–100.

Columbia University, 2011. [Cited in Chapter 4, Soils, Water, Wetlands; need reference.]

Columbia University School of International and Public Affairs (Columbia University), 2009. *Gateway National Recreation Area: Long-term Resource Management under a Changing Climate*. K. Kirchoff and L. Stokes, primary authors.



Cowan, J.P., 1994. *Handbook of Environmental Acoustics*. New York, New York: John Wiley & Sons.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe, 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Department of the Interior Fish and Wildlife Service, Washington, DC.

CUNY Mapping Service at the Center for Urban Research "Nyctsubwayroutes\_100627." [Vector digital data] (2010) "Stops\_curcleaned." [Vector digital data] (2010).

Dallas, K., P. Ruggiero, and M. Berry., 2013. Inventory of coastal engineering projects in Gateway National Recreation Area. Natural Resource Technical Report NPS/NRSS/GRD/NRTR—2013/738. National Park Service, Fort Collins, Colorado.

Davis, T.H., n.d. "Birds of the Jamaica Bay Wildlife Refuge." Compiled for Gateway National Recreation Area.

Drennan, S.R., 1981. "The Christmas Bird Count: An Overlooked and Underused Sample." In *Estimating Numbers of Terrestrial Birds, Studies in Avian Biology* No. 6, C.J. Ralph, and J.M. Scott, Eds, 24–29. Cited in NYCDEP 2007.

Ecology and Environment, Inc., 2009. Cited in Lawrence, Roman, and Frame 2010.

Edinger et al., 2008a. [Cited in Soils and Geology, re: Bedrock makeup of Jamaica Bay and Staten Island; reference needed.]

Edinger, G.J., A.L. Feldmann, T.G. Howard, J.J. Schmid, E. Eastman, E. Largay, and L.A. Sneddon, 2008b. *Vegetation Classification and Mapping at Gateway National Recreation Area*. Technical Report NPS/NER/NRTR—2008/107. National Park Service. Northeast Region. Philadelphia, Pennsylvania.

Ehrler, M.—NPS, Gateway National Recreation Area, 2013. Personal communication from Marilou Ehrler re: Uses of Fort Hancock's Officers' Row, Hurricane Sandy damage at Breezy Point Surf Club, National Register nominations and Determinations of Eligibility, etc.

Federal Highway Administration (FHWA), 2006. *Gateway National Recreation Area, Jamaica Bay Transportation Studies, Development Concept Plan / Environmental Assessment / Assessment of Effect*. May 5, 2006.

Fisher et al., 1970. Cited in Edinger et al. 2008. [Cited in Soils and Geology, re: Bedrock makeup of Jamaica Bay and Staten Island; reference needed.]

Fleshler, D., and R. Nolin, 2012. "Ocean's Wrath Floods Neighborhoods, Rips Up Beaches." *Sun Sentinel*. Available online at [http://articles.sun-sentinel.com/2012-10-30/news/fl-high-tides-infrastructure-20121029\\_1\\_sea-walls-beach-erosion-high-tide](http://articles.sun-sentinel.com/2012-10-30/news/fl-high-tides-infrastructure-20121029_1_sea-walls-beach-erosion-high-tide). October 30, 2012.

Foderaro, L.W., 2012. "Gateway Recreation Area Faces Long Recovery after Storm's Battering." *New York Times*. Available online at [http://www.nytimes.com/2012/12/11/nyregion/gateway-national-recreation-area-still-rebuilding-after-hurricane-sandy.html?\\_r=0](http://www.nytimes.com/2012/12/11/nyregion/gateway-national-recreation-area-still-rebuilding-after-hurricane-sandy.html?_r=0). December 10, 2012.

Forrester et al., 2004. Cited in Lawrence, Roman, and Frame 2010., 2008. Cited in Lawrence, Roman, and Frame 2010.

Frame, G.W. 2013a. Personal communication from G. Frame, National Park Service, re: Marine and anadromous fish in the nearshore ocean zone at Gateway National Recreation Area. 2013b. Personal communication re: Nonnative plants in Gateway National Recreation Area.

Frame, G, and D. Avrin—NPS, 2013. Personal communication re: Ospreys nesting at the Jamaica Bay Wildlife Refuge and Breezy Point Tip.

Friedberg, M. Paul and Partners, Hardy Holzman Peiffer Associates, Edward and Kelcey, Inc., and Trans Urban East Organization: A Joint Venture, 1980. Floyd Bennett Field, Gateway National Recreation Area: Environmental Inventory and Preliminary Land Use Program.

Furlong, E.T., J.L. Gray, D.M. Quanrud, S.S. Teske, K. Esposito, J. Marine, W.P. Ela, B. Stinson, D.W. Kolpin, and P.J. Phillips, 2010. Fate of Estrogenic Compounds during Municipal Sludge Stabilization and Dewatering. Water Environment Research Foundation Report 04-HHE-6.

Gateway National Recreation Area and Jamaica Bay Watershed Protection Plan Advisory Committee (Gateway and JBWPPAC), 2007. *An Update on the Disappearing Salt Marshes of Jamaica Bay, New York*. National Park Service, U.S. Department of the Interior, Staten Island, New York.

Godbey, G., G. DeJong, V. Sasidharan, and C. Yarnal, 2001. *The Northeastern United States in the Next Two Decades—Implications for the Northeast Region of the National Park Service*. Pennsylvania State University.

Greller, 1984. Cited in Lawrence, Roman, and Frame 2010

Grumet, 2009. [Cited in Cultural Resources, Prehistory to Contact Context section, re: Indigenous speakers of the Manhattan language; reference needed.]

Happold Consulting (Happold), 2012. *Jamaica Bay—Great Urban Park Vision Plan, June 2012*.

Harrington, B., n.d. Personal communication from B. Harrington, Manomet Center for Conservation Sciences, re: Migratory shorebirds at Gateway National Recreation Area.

Herman, G.C., R.J. Canace, S.D. Stanford, R.S. Pristas, P.J. Sugarman, M.A. French, J.L. Hoffman, M.S. Serfes, and W.J. Mennel. 1998. "Aquifers of New Jersey." Open-File Map OFM-24. New Jersey Geological Survey, Division of Science and Research, New Jersey Department of Environmental Protection.

Hess and Harris, 1987. Cited in Psuty et al. 2009.

Horton, Gornitz, and Bowman, 2010. "Climate Observations and Projections." In *Annals of the New York Academy of Sciences, New York City Panel on Climate Change 2010 Report*, chapter 3.

Horton, R., 2007. *Climate Change Scenarios for New York City*. Columbia University Center for Climate Systems Research. Cited in Columbia University 2011.

Hyland et al., 2000. Cited in Rafferty, Castagna, and Adamo 2011. [Ref. from "Shoreline of Jamaica Bay" re: Total organic carbon in bay soils.]

Incident Management Team (IMT), 2012a. "Museum Collections." In *NPS Response to Effects of Superstorm Sandy October 28, 2012, to November 10, 2012*. Incident Management Team, National Park Service, Gateway National Recreation Area.

Incident Management Team (IMT), 2012b. "Sandy Hook, Preliminary Damage Assessment—Specific Recommendations for Fort Hancock Cultural Landscape." In *NPS Response to Effects of Hurricane Sandy, November 11, 2012*. Incident Management Team, National Park Service, Gateway National Recreation Area.

Incident Management Team (IMT), 2012c. "Fort Tilden." Archeological Damage Assessments at Gateway National Recreation Area and Specific Recommendations for Fort Tilden Cultural Landscape. In *NPS Response to Effects of Hurricane Sandy, November 11, 2012*. Incident Management Team, National Park Service, Gateway National Recreation Area.

Incident Management Team (IMT), 2012d. "Fort Wadsworth—Specific Recommendations for Fort Wadsworth Cultural Landscape." In *NPS Response to Effects of Hurricane Sandy, November 11, 2012*. Incident Management Team, National Park Service, Gateway National Recreation Area.

Incident Management Team (IMT), 2012e. "Sandy Hook Resources Summaries." In *NPS Response to Effects of Hurricane Sandy*, Incident Management Team, National Park Service, Gateway National Recreation Area.

Incident Management Team (IMT), 2012f. "Miller Field, Preliminary Damage Assessment." In *NPS Response to Effects of Hurricane Sandy, November 11, 2012*. Incident Management Team, National Park Service, Gateway National Recreation Area.

Incident Management Team (IMT), 2012g. "Floyd Bennett Field, Preliminary Damage Assessment." In *NPS Response to Effects of Hurricane Sandy, November 11, 2012*. Incident Management Team, National Park Service, Gateway National Recreation Area.

Incident Management Team (IMT), 2012h. "Jacob Riis Park, Preliminary Damage Assessment." In *NPS Response to Effects of Hurricane Sandy, November 11, 2012*. Incident Management Team, National Park Service, Gateway National Recreation Area.

Incident Management Team (IMT), 2012i. "Breezy Point Surf Club and Silver Gull Beach Club, Preliminary Damage Assessment." In *NPS Response to Effects of Hurricane Sandy, November 11, 2012*. Incident Management Team, National Park Service, Gateway National Recreation Area.

Incident Management Team (IMT), 2012j. "Transportation." In *NPS Response to Effects of Superstorm Sandy, October 28, 2012, to November 10, 2012*. Incident Management Team, National Park Service, Gateway National Recreation Area.

Infogroup, 2012. ESRI forecasts for 2011. Infogroup. Omaha, Nebraska.

International Bicycle Fund, 2011. [Reference re: Bicycle facility classifications; complete citation needed.]

Iowa State University Extension, 2009. "Understanding and Managing Soil Compaction." *Resources Conservation Practices*. Accessed online March 23, 2013, at <http://www.extension.iastate.edu/Publications/PM1901B.pdf>.

Jamaica Bay Watershed Protection Plan Advisory Committee (JBWPPAC), 2006. *Planning for Jamaica Bay's Future: Preliminary Recommendations on the Jamaica Bay Watershed Protection Plan*. June 29, 2006.

Jamaica Bay Watershed Protection Plan Advisory Committee (JBWPPAC), 2007. *Planning for Jamaica Bay's Future: Final Recommendations on the Jamaica Bay Watershed Protection Plan*. June 1, 2007.

John Milner Associates, Inc. (JMA), 1978. *A Cultural Resources Inventory of the Gateway National Recreation Area, New York and New Jersey*. Denver, Colorado: National Park Service, Denver Service Center.

Kohut, 2004. [Ref. from table 3-1 regarding risk for ozone damage to plants at Gateway; complete citation needed.]

Kolker, A., 2006. "Salt Marsh Loss in Jamaica Bay and Its Relationship to Vertical Accretion, Human Impacts and Sediment Chemistry." Presentation to the Jamaica Bay Advisory Committee. April 26, 2006.

Kunkel, K.E., L.E. Stevens, S.E. Stevens, L. Sun, E. Janssen, D. Wuebbles, J. Rennells, A. DeGaetano and J.G. Dobson. 2013. Regional Climate Trends and Scenarios for the U.S. National Climate Assessment. Part 1. Climate of the Northeast U.S. National Oceanic and Atmospheric Administration Technical Report NESDIS 141-2. Washington, D.C.

Lane, B.—NPS, 2013. Personal communication from Bruce Lane, NPS, re: holly tree die-off from flooding caused by Hurricane Sandy. May 2013.

Lane, Frenchman, and Associates, 1992. *Jacob Riis Park Cultural Landscape Report, Gateway National Recreation Area*. Prepared for the Denver Service Center, National Park Service.

Lawrence, M.E., C. Roman, and G.W. Frame, 2010. *Significant Natural Resources of Gateway National Recreation Area*. Gateway National Recreation Area, NY & NJ. Synthesis Papers for the General Management Plan. National Park Service. Revised January 7, 2010.

Layton, T., and E. Foulds, 2010. *Cultural Landscape Report for the Sandy Hook Coastal Defense Batteries, Gateway National Recreation Area*. Olmsted Center for Landscape Preservation, National Park Service, Boston, Massachusetts.

Lee, J.J., 2008. *Spermaceti Cove Life Saving Station, Historic Structure Report, Sandy Hook Unit, Gateway National Recreation Area*. Historic Architecture Program, National Park Service.

Levinton, J.S., and J.R. Waldman (Eds), 2006. "Executive Summary." In *The Hudson River Estuary*. New York, New York: Cambridge University Press.

Linck, Dana C., 1981. *Fort Tilden, Gateway National Recreation Area*. Historic Structure Report: Archeological Data Section. U.S. Department of the Interior, National Park Service, Denver Service Center.

Louis Berger Associates, Inc., 1990. *The VanDeventer-Fountain House Site Ca. 1786 to 1901 Staten Island, New York*. Report prepared for the U.S. Department of the Navy, Northern Division. Louis Berger Associates, Inc.

Mahan, Helen—NPS, Northeast Region, 2013a. Personal communication re: Current conditions of Gateway National Recreation Area museum collections. February 7, 2013.

Mahan, Helen—NPS, Northeast Region, 2013b. Personal communication re: Development proposed under Gateway GMP/EIS alternatives. March 7, 2013.

McElroy, A.E., 2006. "Endocrine Disruptors in Jamaica Bay." Presentation to the Jamaica Bay Advisory Committee. May 15, 2006.

Monmouth County, 2011. *Monmouth County Biking Guide*. Available online at <http://co.monmouth.nj.us/page.aspx?ID=2974>.

Mowen, A.J., A.R. Graefe, and D. Graefe, 2009. *A Synthesis of Existing Visitor Data and Demographic Trends for the Gateway National Recreation Area*. Pennsylvania State University, Department of Recreation Park, and Tourism Management and the Population Research Institute.

National Oceanic and Atmospheric Administration (NOAA) National Geophysical Data Center "Coastal Relief Model." Grid extracted , June 19th, 2013, <http://www.ngdc.noaa.gov/mgg/bathymetry/relief.html>.

National Oceanic and Atmospheric Administration (NOAA), 2004. Cited in U.S. Army Corps of Engineers (USACE) 2010., 2013. NOAA–Fisheries website: <http://www.nefsc.noaa.gov/sos/spsyn/af/sturgeon/>. Accessed March 2013.

National Park Service, n.d.a. Sandy Hook's Lifesavers (brochure). Sandy Hook, Gateway National Recreation Area. On-line resource: [http://www.nps.gov/gate/planyourvisit/upload/history\\_uslss-1.pdf](http://www.nps.gov/gate/planyourvisit/upload/history_uslss-1.pdf).

National Park Service, n.d.b. National Register of Historic Places Nomination Form, Fort Wadsworth Historic District, Gateway National Recreation Area.

National Park Service, n.d.c. National Register of Historic Places Nomination Information, Silver Gull Beach Club, Jamaica Bay Unit, Gateway National Recreation Area.

National Park Service, n.d.d. National Register of Historic Places Nomination Information, Breezy Point Surf Club, Jamaica Bay Unit, Gateway National Recreation Area.

National Park Service, n.d.e. "List of Classified Structures, Gateway National Recreation Area." Available online at <http://www.hscl.cr.nps.gov/insidenps/summary.asp?PARK=GATE&STATE=&STRUCTURE=&SORT=&PAGE=1>.

National Park Service, n.d.f. "Birds of Floyd Bennett Field."

National Park Service, n.d.g. "Post-Sandy Evaluation of Gateway's Historic Structures." Provided by Helen Mahan (photo chart).

National Park Service, n.d.h. "Federal Threatened and Endangered Species in GATE." FY 2010 data summary for the National Park Service database and GPRA reporting.

National Park Service, n.d.i. Cultural Resource Index with Hurricane Sandy Assessments, Gateway National Recreation Area, provided by Helen Mahan March 6, 2013.

National Park Service, n.d.j. "Ellis Island Infrequently Asked Questions." *Swinburne and Hoffman Islands*. Website. Available online at [nps.gov/elis/forteachers/upload/3-5-Ellis-QnAs2.pdf](http://nps.gov/elis/forteachers/upload/3-5-Ellis-QnAs2.pdf).

National Park Service, n.d.k. "NPS Stats." National Park Service Visitor Use Statistics. Available online at <http://www.nature.nps.gov/stats/>.

National Park Service, 1971. National Register of Historic Places Nomination Form, Sandy Hook Light, Sandy Hook Unit, Gateway National Recreation Area.

National Park Service, 1978. National Register of Historic Places Nomination Form, Floyd Bennett Field, Jamaica Bay Unit, Gateway National Recreation Area.

National Park Service, 1979a. National Register of Historic Places Nomination Form, Miller Army Airfield, Staten Island Unit, Gateway National Recreation Area.

National Park Service, 1979b. National Register of Historic Places Nomination Form, Jacob Riis Park, Jamaica Bay Unit, Gateway National Recreation Area.

National Park Service, 1979c. National Register of Historic Places Nomination Form, Miller Army Air Field Historic District, Gateway National Recreation Area. United States Department of the Interior, National Park Service.

National Park Service, 1979d. *Gateway National Recreation Area General Management Plan*.

National Park Service, 1980a. National Register of Historic Places Nomination Form, Fort Hancock and the Sandy Hook Proving Ground Historic District, Gateway National Recreation Area.

National Park Service, 1980b. Historic Structure Report, Historical Data Section, Fort Tilden, Gateway National Recreation Area, New York, Denver Service Center.

National Park Service, 1981a. National Register of Historic Nomination Form, Spermaceti Cove No. 2 Life-saving Service Station. United States Department of the Interior, National Park Service.

National Park Service, 1981b. National Register of Historic Places Nomination Form, Fort Hancock Life-Saving Station, Sandy Hook Unit, Gateway National Recreation Area.

National Park Service, 1984a. National Register of Historic Places Nomination Form, Fort Hancock and the Sandy Hook Proving Ground National Historic Landmark District, Gateway National Recreation Area.

National Park Service, 1984b. National Register of Historic Places Nomination Form, Fort Tilden Historic District, Gateway National Recreation Area.

National Park Service, 1985. National Register of Historic Places Nomination Form, Endicott-era Batteries, Fort Wadsworth, Gateway National Recreation Area.

National Park Service, 1990a. *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin 15. United States Department of the Interior, National Park Service.

National Park Service, 1990b. "Museum Collection Storage." *NPS Museum Handbook, Part I: Museum Collections*, Chapter 7 (revised September 1990). Available online at <http://www.cr.nps.gov/museum/publications/MHI/CHAP7.pdf>.

National Park Service, 1991. *Gateway National Recreation Area General User Study*. United States Department of the Interior, National Park Service, Gateway National Recreation Area.

National Park Service, 1992. Secretary of the Interior's Standards for the Treatment of Historic Properties.

National Park Service, 1993. *NPS Guiding Principles of Sustainable Design*. U.S. Department of the Interior, National Park Service.

National Park Service, 1998a. *NPS-28: Cultural Resource Management Guideline*. United States Department of the Interior, National Park Service.

National Park Service, 1998b. Director's Order 28A: *Archeology*.

National Park Service, 1998c. Director's Order 28: *Cultural Resource Management*. United States Department of the Interior, National Park Service. June 11, 1998.

National Park Service, 2000. Director's Order 47: *Soundscape Preservation and Noise Management*. United States Department of the Interior, National Park Service.

National Park Service, 2001. Handbook to Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision Making*. Available at <http://www.nps.gov/policy/DOrders/RM12.pdf>.

National Park Service, 2002. Director's Order 77-1: *Wetland Protection*. U.S. Department of the Interior, National Park Service. October 30, 2002.

National Park Service, 2003a. "Floyd Bennett Field Visitor Study."

National Park Service, 2003b. "Climate Friendly Parks: Framework for Local Action Planning." U.S. Department of the Interior, National Park Service.

National Park Service, 2003c. Native American Graves Protection and Repatriation Act of 1990.

National Park Service, 2004a. *Submerged Cultural Resources Survey of Fort Wadsworth, Gateway NRA, New York, New York*. Prepared by the Submerged Resources Center (David Conlin and Matthew Russell). Technical Report #13. February 2004.

National Park Service, 2004b. *Long-range Interpretive Plan*. United States Department of the Interior, National Park Service.

National Park Service, 2004c. Environmental Assessment. [Ref. from "Coastal Processes at the Sandy Hook Unit" re: Seawall and groins on Sandy Hook; complete citation needed.]

National Park Service, 2004d. *Proceedings: Jamaica Bay's Disappearing Marshes*. Scientific Symposium and Public Forum, March 3, 2004. New York Aquarium. U.S. Department of the Interior National Park Service and Jamaica Bay Institute.

National Park Service, 2004e. National Register Nomination Form: U.S. Coast Guard Station Far Rockaway, Queens, Gateway National Recreation Area.

National Park Service, 2004f. Sandy Hook Sand Slurry Pipeline Project Biological Assessment.

National Park Service, 2004g. Environmental Assessment for Cyclic Beach Replenishment at Sandy Hook Unit, Gateway National Recreation Area New York / New Jersey.

National Park Service, 2004h. Elwha River Ecosystem Restoration Implementation Supplemental Environmental Impact Statement.

National Park Service, 2006a. *Management Policies 2006*. United States Department of the Interior, National Park Service.

National Park Service, 2006b. Cultural Landscape Report for Fort Hancock, Treatment Plan, Gateway National Recreation Area, Sandy Hook Unit.



National Park Service, 2006d. Park Museum Collection Storage Plan, Park Museum Management Program. [this may also be in prior references]

National Park Service, 2007a. Environmental Assessment for Proposed Update of the 1992 Management Plan for the Threatened Piping Plover on Sandy Hook Unit, Gateway NRA, New York/New Jersey.

National Park Service, 2007b. "Threatened and Endangered Species Management Breezy Point District, Jamaica Bay Unit 2007."

National Park Service, 2007c. Source needed for Table 3.6-1 Assets at Gateway National Recreation Area and Table 3.6-3 Condition of Historic and Non-Historic Buildings at the Park

National Park Service, 2008a. *Gateway State of the Park 2008*. Annual Report. Available online at <http://www.nps.gov/gate/parknews/upload/Annual%20Report%202008.pdf>

National Park Service, 2008b. *General Management Planning Dynamic Sourcebook*. NPS.

National Park Service, 2008c. Director's Order 24: *NPS Museum Collections Management*. U.S. Department of the Interior, National Park Service. September 3, 2008. Available online at <http://www.nps.gov/policy/DOrders/DOrder24.pdf>.

National Park Service, 2009a. Archeological Overview and Assessment, Sandy Hook Unit, Gateway National Recreation Area. United States Department of the Interior, National Park Service.

National Park Service, 2009b. *Final Collection Management Plan, Gateway National Recreation Area*. United States Department of the Interior, National Park Service.

National Park Service, 2009c. Draft Cultural Landscape Inventory, Fort Hancock Post Grounds, Gateway National Recreation Area, Sandy Hook Unit.

National Park Service, 2009d. "Threatened and Endangered Species Management Breezy Point District, Jamaica Bay Unit 2009."

National Park Service, 2009e. Shoreside Threatened and Endangered Species Beach Management Plan for the Sandy Hook Unit of Gateway National Recreation Area, New Jersey.

National Park Service, 2009f. "Species of Management Concern, Gateway National Recreation Area." National Park Service Biological Resources Management Division Program Data.

National Park Service, 2009g. Internal Draft General Management Plan/EIS for Point Reyes National Seashore.

National Park Service, 2009h. Long-term Resource Management under a Changing Climate, Gateway National Recreation Area.

National Park Service, 2009i. "Public Input Requested for Fort Hancock Pier and Dock Replacement Project." Available online at <http://parkplanning.nps.gov/document.cfm?parkID=237&projectID=23149&documentID=25999>.

National Park Service, 2010a. Planning Document and Environmental Assessment? [Ref. from "Plumb Beach" re: Changes in sediment supply at Plumb Beach.]

National Park Service, 2010b. *A Vision for the Jamaica Bay Estuary: Desired Future Conditions of Natural Resources*. U.S. Department of the Interior, National Park Service, Gateway National Recreation Area Department of Natural Resources.

National Park Service, 2010c. National Register of Historic Places Nomination Form, Floyd Bennett Field (expanded), Jamaica Bay Unit, Gateway National Recreation Area.

National Park Service, 2010d. "Great Kills Park Information on Radium Contamination." United States Department of the Interior, National Park Service, Gateway National Recreation Area.

National Park Service, 2010e. Cape Hatteras National Seashore Off-road Vehicle Management Plan/EIS.

National Park Service, 2010f. Draft Environmental Assessment, Plumb Beach Section 204/207: Beneficial Uses of Dredged Material, Brooklyn, NY.

National Park Service, 2010g. *Jamaica Bay Greenway Missing Links Study*. U.S. Department of the Interior, National Park Service, Gateway National Recreation Area, Jamaica Bay Unit. September 2010.

National Park Service, 2010h. Harbor Seal Monitoring at Point Reyes National Seashore and Golden Gate Recreation Area, SF Bay Area Network Research Project Summary 2010.

National Park Service, 2011a. Archeological Overview and Assessment, Gateway National Recreation Area, Great Kills Park, Staten Island Unit, Richmond County, New York. United States Department of the Interior, National Park Service.

National Park Service, 2011b. Archeological Overview and Assessment, Gateway National Recreation Area, Fort Wadsworth, Staten Island Unit, Richmond County, New York. United States Department of the Interior, National Park Service.

National Park Service, 2011c. Archeological Overview and Assessment, Gateway National Recreation Area, Jamaica Bay Unit, Kings and Queens Counties, New York. United States Department of the Interior, National Park Service.

National Park Service, 2011d. *Scope of Collection Statement, Gateway National Recreation Area*. United States Department of the Interior, National Park Service.

National Park Service, 2011e. NPS Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision Making. October 5, 2011.

National Park Service, 2012a. *Out of the Gateway*. United States Department of the Interior, National Park Service, Gateway National Recreation Area. Vol. II, No. 2, September 2012.

National Park Service, 2012b. *Gateway General Management Plan/Environmental Impact Statement Newsletter No.3*. United States Department of the Interior, National Park Service, Gateway National Recreation Area. August 2012.

National Park Service, 2012c. Hurricane Sandy Incident Management Team: Coastal Geology Assessment and Recommendations. Produced by Rebecca Beavers, for the National Park Service. November 19, 2012.

National Park Service, 2012d. "Green Parks Plan." United States Department of the Interior, National Park Service. Available online at [www.nps.gov/greenparksplan](http://www.nps.gov/greenparksplan).

National Park Service, 2012e. "Re-optimizer Tool." *Park Asset Management Plan*. U.S. Department of the Interior, National Park Service.

National Park Service, 2012f. NPS post-Sandy documentation; briefing books: Sandy Hook, Staten Island, and Jamaica Bay Units.

National Park Service, 2012g. Seabeach amaranth data sheets and map, Gateway FY 2012.

National Park Service, 2012h. "Overview of Proposed MUP3 Alternatives." Available online at <http://parkplanning.nps.gov/document.cfm?parkID=237&projectID=40954&documentID=48399>.

National Park Service, 2013a. "2nd System Fortifications." Gateway National Recreation Area Website. Available at <http://www.nps.gov/gate/historyculture/2ndsystemforts.htm>.

National Park Service, 2013b. Base maps provided by Gateway National Recreation Area: Fort Tilden Historic District map, Fort Wadsworth, Fort Hancock (Officer's Row).

National Park Service, 2013c. "Annual Park Visitation." *Park Visitor Use Statistics: Gateway National Recreation Area, All Recreation Visitors by Month*. United States Department of the Interior, National Park Service, Integrated Resource Management Applications, IRMA Portal. Available online at [https://irma.nps.gov/Stats/SSRSReports/Park Specific Reports/ Annual Park Visitation \(All Years\)?Park=GATE](https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Visitation%20(All%20Years)?Park=GATE). February 22, 2013.

National Park Service, 2013d. "Monthly Public Use." *Park Visitor Use Statistics: Gateway National Recreation Area, All Recreation Visitors by Month*. United States Department of the Interior, National Park Service, Integrated Resource Management Applications, IRMA Portal. Available online at [https://irma.nps.gov/Stats/SSRSReports/Park Specific Reports/ Monthly Public Use?RptDate=12/1/2012&Park=GATE](https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Monthly%20Public%20Use?RptDate=12/1/2012&Park=GATE). February 22, 2013.

National Park Service, 2013e. Personal communication between NPS park staff and Helen Mahan, NPS, re: Damage to Gateway National Recreation Area units as a result of Hurricane Sandy.

National Park Service, 2013f. "Gateway Species of Management Concern."

National Park Service, 2013h. "Gateway Recovers from Hurricane Sandy." Available online at <http://www.nps.gov/gate/parknews/sandy-recovery.htm>.

National Park Service, 2013j. "Hurricane Sandy at Sandy Hook—Six Months Later." Gateway Park News website. U.S. Department of the Interior, National Park Service. Accessed May 21, 2013, at <http://www.nps.gov/gate/parknews/sandy-sandy-6.htm>.

National Park Service (NPS), Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers.

National Park Service, 1995. Programmatic Agreement Among the National Park Service (USDI), the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers.

National Park Service, Air Resources Division (NPS ARD)

National Park Service, 2011. *Technical Guidance on Assessing Impacts to Air Quality in NEPA and Planning Documents*. Natural Resources Report NPS/NRPC/ARD/NRR-2011/289.

National Park Service, 2013. *Air Quality in National Parks*. 2010 annual performance and progress report. Natural Resources Report NPS/NRPC/ARD/NRR—2013/XXX (in prep.). National Park Service, Denver, Colorado.

National Parks Conservation Association (NPCA), 2007a. *Gateway National Recreation Area: A Resource Assessment*. National Parks Conservation Service, Center for State of the Parks, Fort Collins, Colorado.

National Parks Conservation Association (NPCA), 2007b. *Envisioning Gateway*. Prepared by Columbia University Graduate School of Architecture, Planning and Preservation.

National Parks Conservation Association (NPCA), 2007c. *State of the Parks: Gateway National Recreation Area, A Resource Assessment*.

National Parks Conservation Association (NPCA), 2007d. New York City residents' awareness and use of Gateway National Recreation Area poll. Conducted by Zogby International, Inc.

National Parks of New York Harbor Conservancy (NPNYHC), n.d. "Inner-Outer Harbor Transportation Strategy."

National Parks of New York Harbor Conservancy (NPNYHC), 2009. Website. <http://www.nyharborparks.org>. National Parks of New York Harbor Conservancy, New York Harbor Parks.

National Parks of New York Harbor Conservancy (NPNYHC), 2010. "Gateway to America." Water Tour. Available online at <http://www.nyharborparks.org/visit/tour-gateway-to-america.html>. National Parks of New York Harbor Conservancy, New York Harbor Parks.

National Parks of New York Harbor Conservancy (NPNYHC), 2012. "Canarsie Pier." <http://www.nyharborparks.org/visit/capi.html>. National Parks of New York Harbor Conservancy, New York Harbor Parks. Neresian, 1977. Cited in Psuty et al. 2009.

New Jersey Department of Environmental Protection (NJDEP), n.d.a. "New Jersey's Endangered and Threatened Wildlife." New Jersey Department of Environmental Protection, Division of Fish and Wildlife website. Available online at <http://www.state.nj.us/dep/fgw/tandespp.htm>.

New Jersey Department of Environmental Protection (NJDEP), n.d.b. "Wildlife Species of Special Concern in New Jersey." New Jersey Department of Environmental Protection, Division of Fish and Wildlife website. Available online at <http://www.state.nj.us/dep/fgw/spclspp.htm>.

New Jersey Department of Environmental Protection (NJDEP), 2010. "List of Endangered Plant Species and Plant Species of Concern." New Jersey Department of Environmental Protection Division of Fish and Wildlife website. January 2010. Available online at <http://www.state.nj.us/dep/parksandforests/natural/heritage/jan2010plantlist.pdf>.

New Jersey Department of Environmental Protection (NJDEP), Green Acres "NJDEP State Owned, Protected Open Space and Recreation Areas in New Jersey (Version 200812)." [Vector digital data] (2008).

New Jersey Department of Labor and Workforce Development (NJDLWD), Division of Labor Market & Demographic Research, n.d. "Population and Labor Force Projections." Available online at [http://lwd.dol.state.nj.us/labor/lpa/dmograph/lfpjproj/lfpjproj\\_index.html](http://lwd.dol.state.nj.us/labor/lpa/dmograph/lfpjproj/lfpjproj_index.html).

New Jersey Department of Labor and Workforce Development (NJDLWD), Division of Labor Market & Demographic Research, 2012. *Central Regional Community Factbook, Monmouth County Edition*. Available online at <http://lwd.dol.state.nj.us/labor/lpa/pub/factbook/monfct.pdf>.

New Jersey Department of Transportation (NJDOT) "NJDOT Linework." [Vector digital data] (2012) "NJ\_Roadway\_Network." [Vector digital data] (2010).

New Jersey Office of Information Technology (NJOIT), Office of Geographic Information Systems (OGIS) "New Jersey Transit Bus Stop Locations, 2013 (NAD83, NJSP feet)." [Vector digital data] (2013) "New Jersey Transit Bus Currently Operating Routes, 2013 (NAD83, NJSP feet)." [Vector digital data] (2013). "New Jersey Transit Rail, Light Rail, and Subway Currently Operated Right-of-Way Lines, 2013 (NAD83, NJSP feet)." [Vector digital data] (2013). New Jersey Transit Passenger Rail Station Points, 2013 (NAD83, NJSP feet). [Vector digital data] (2013).

New York Academy of Sciences, 2010. "Climate Observations and Projections." *Annals of the New York Academy of Sciences, New York City Panel on Climate Change 2010 Report*, chapter 3. R. Horton, V. Gornitz, and M. Bowman, lead authors.

New York City Department of City Planning (NYCDCP), 2006. "New York City Population Projections by Age/Sex and Borough 2000–2013." Available online at [http://www.nyc.gov/html/dcp/pdf/census/projections\\_briefing\\_booklet.pdf](http://www.nyc.gov/html/dcp/pdf/census/projections_briefing_booklet.pdf).

New York City Department of City Planning (NYCDCP), 2008. "New York Today." In *World Cities Best Practices, Innovations in Transportation*, Part I. October 2008. Available online at [http://www.nyc.gov/html/dcp/pdf/transportation/world\\_cities\\_pt1.pdf](http://www.nyc.gov/html/dcp/pdf/transportation/world_cities_pt1.pdf).

New York City Department of City Planning (NYCDCP), 2011. *Vision 2020: New York City Comprehensive Waterfront Plan*. Accessed online April 24, 2013, at <http://www.nyc.gov/html/dcp/html/cwp/index.shtml>.

New York City Department of City Planning (NYCDCP), 2013. "Population Facts." Available online at <http://www.nyc.gov/html/dcp/html/census/popdiv.shtml>.

New York City Department of Environmental Protection (NYCDEP), 1994. *Jamaica Bay Comprehensive Watershed Management Plan*. New York City Department of Environmental Protection. New York, New York.

New York City Department of Environmental Protection (NYCDEP), 2007. *Jamaica Bay Watershed Protection Plan*. New York City Department of Environmental Protection. New York, New York.

New York City Department of Environmental Protection (NYCDEP), 2010. "Restoring Brooklyn's Pennsylvania and Fountain Landfills." Fresh Kills Park Talks Slide Show, January 26, 2010.

New York City Department of Environmental Protection (NYCDEP), 2012. *Jamaica Bay Watershed Protection Plan 2012 Update*. New York City Department of Environmental Protection. New York, New York.

New York City Department of Information Technology and Telecommunication (DOITT), Citywide GIS Group "NYCPlanimetric Geodatabase." [Vector digital data] (2008). "Base Map copyright 2008 The New York City Department of Information Technology and Telecommunications. All rights reserved."

New York City Department of Parks and Recreation (NYCDPR), n.d. "New York City Water Trail." Available online at <http://www.nycgovparks.org/facilities/kayak>.

New York City Department of Parks and Recreation (NYCDPR), 2010. "Urban Wetlands Protection and Restoration: Identifying Regional Priorities." Report from the December 2010 Workshop. December 1, 2010. Columbia University, New York, New York.

New York City Department of Parks and Recreation (NYCDPR), 2013. "Freshwater Wetlands in New York City – Cunningham Park." NYCDPR Website. Accessed April 15, 2013, at [nycgovparks.org/parks/cunninghampark/highlights/11314](http://nycgovparks.org/parks/cunninghampark/highlights/11314).  
New York City Department of Transportation (NYCDOT)

New York City Department of Parks and Recreation (NYCDPR), 2013. "Great Kills Ferry." <http://www.nyc.gov/html/dot/html/ferrybus/greatkills.shtml>.

New York City Department of Parks and Recreation (NYCDPR) "Parks.GIS.DPR.Property." [Vector digital data] (2011).

New York City Economic Development Corporation (NYCEDC), n.d. "Waterfront Action Agenda: Transforming New York City's Waterfront." Implementation component of Vision 2020: *New York City Comprehensive Waterfront Plan*. Available online at <http://www.nycedc.com/sites/default/files/filemanager/Projects/WAVES/WAVESActionAgenda.pdf>.

New York City Office of Emergency Management (NYCOEM), 2013. "Sandy." *NYC Hazards: NYC Hurricane History*. New York City Office of Emergency Management website. Accessed February 27, 2013 at [http://www.nyc.gov/html/oem/html/hazards/storms\\_hurricanehistory.shtml](http://www.nyc.gov/html/oem/html/hazards/storms_hurricanehistory.shtml).

New York City, Landmarks Preservation Commission, 1967. "Battery Weed Landmark Site." Landmarks Preservation Commission, October 12, 1967, Number 3 LP-0379. 1974 "Fort Tompkins Landmark Site." Landmarks Preservation Commission, September 24, 1974, Number 3 LP-0824.

New York City Planning Commission (NYCPC), 2012a. *625 West 57th Street Final EIS, New York City Planning Commission*. Prepared by AKRF, Inc., and Philip Habib & Associates. December 2012.

New York City Planning Commission (NYCPC), 2012b. *NYU Core Final Environmental Impact Statement*. Prepared by AKRF, Inc. CEQR No. 11DCP121M. May 2012.

New York City Planning Commission (NYCPC), 2012c. *NYU Core Final EIS*. CEQR 11DCO121M. Prepared by AKRF, Inc. May 2012.

New York City Planning Commission (NYCPC), 2013. *Hudson Square Rezoning Final EIS*. Prepared by AKRF, Inc. January 2013.

New York Department of Environmental Conservation (NYDEC), n.d.a. "Protected Native Plants since 2000." New York Department of Environmental Conservation, Recently Adopted Part 193.3. Available online at <http://www.dec.ny.gov/regulations/79699.html>.



New York Department of Environmental Conservation (NYDEC), n.d.b. New York Natural Heritage Program animal and plant guides and search engine. A partnership between New York State Department of Environmental Conservation and the State University of New York College of Environmental Science and Forestry. Accessed online March 2013 at <http://www.acris.nynhp.org>.

New York Department of Environmental Conservation (NYDEC), n.d.c. "New York DEC List of Endangered, Threatened and Special Concern Fish & Wildlife Species of New York State." Available online at <http://www.dec.ny.gov/animals/7494.html>.

New York Department of Environmental Conservation (NYDEC), n.d.d. "Tidal Wetland Losses: Jamaica Bay, Queens County, New York." New York State Department of Environmental Conservation website. Accessed March 27, 2013, at <http://www.dec.ny.gov/lands/5489.html>.

New York Department of Environmental Conservation (NYDEC), 2013a. "Species of Greatest Conservation Need (SGCN)." Accessed online March 2013 at <http://www.dec.ny.gov/animals/9406.html>.

New York Department of Environmental Conservation (NYDEC), 2013b. Tidal wetland losses website. Accessed March 27, 2013, at <http://www.dec.ny.gov/lands/5489.html>.

New York Department of Environmental Conservation (NYDEC), 2013c. New York Department of Environmental Conservation website: <http://www.dec.ny.gov/regs/4014.html#12837>; consulted June 17, 2013.

New York State Office of Parks, Recreation & Historic Preservation "Ophrhp10." [Vector digital data] (2007).

National Oceanic and Atmospheric Administration, 2013. <http://www.nero.noaa.gov/hcd/STATES4/ConnNYNJ.htm>, consulted June 14, 2013).

Olmsted Center for Landscape Preservation, 2002. Cultural Landscape Report for Jacob Riis Park, Volume 2, Landscape Treatment Plan, 50% Draft.

Olmsted Center for Landscape Preservation, 2008. Cultural Landscape Report for the Battery Weed Headland, Fort Wadsworth, Gateway National Recreation Area, Staten Island, New York.

Panamerican Consultants, 2001. "Remote Sensing Survey, Sandy Hook Borrow Area, Raritan Bay and Sandy Hook Bay, Union Beach, Monmouth County, New Jersey." *Combined Erosion Control and Storm Damage Protection Project*.

PBS&J (currently Atkins North America), 2009. Marine Archeological Assessment for the Rockaway Delivery Point Project, Queens County, New York. Prepared for Gateway National Recreation Area.

Peteet et al., 2004. Cited in Rafferty, Castagna, and Adamo 2011. [Ref. from "Shoreline of Jamaica Bay" re: Jamaica Bay marsh soils.]

Peteet et al., 2008. Cited in Rafferty, Castagna, and Adamo 2011. [Ref. from "Shoreline of Jamaica Bay" re: Jamaica Bay marsh soils.]

Psuty and Namikas, 1991. Cited in Psuty et al. 2009.

Psuty and Ofiara, 2002. Cited in Psuty et al. 2009.

Psuty, N.P., and T.M. Silveira, 2010. "Global Climate Change: An Opportunity for Coastal Dunes?" *Journal of Coastal Conservation* 14:153–160.

Psuty, N.P., P. Dennehy, R. Silveira, and N. Apostolou, 2009. Coastal Geomorphology of the Ocean Shoreline, Gateway National Recreation Area: Natural Evolution and Cultural Modifications—A Synthesis. Draft.

Rafferty, P., Castagna, J., and D. Adamo, 2010. "Restoration Journal: Building Partnerships to Restore an Urban Marsh Ecosystem at Gateway National Recreation Area." *Park Science* 27(3): 34–41. Winter 2010–2011.

Rafferty, P., Castagna, J., and D. Adamo, 2011. "Restoration Journal: Building Partnerships to Restore an Urban Marsh Ecosystem at Gateway National Recreation Area." *Park Science* 27(3): 1, 3, 34–41. Accessed online March 23, 2013, at <http://www.nature.nps.gov/ParkScience/index.cfm?ArticleID=413>.

Regional Plan Association (RPA), 2012. "A User's Guide to the Jamaica Bay Greenway." Available online at <http://www.rpa.org/library/pdf/RPA-Jamaica-Bay-Users-Guide-2012.pdf>.

Renfro, A., J.K. Cochran, D.J. Hirschberg, and S.L. Goodbred, 2010. *Natural Radionuclides (234Th, 7Be, and 210Pb) as Indicators of Sediment Dynamics in Jamaica Bay, New York*. Natural Resource Technical Report NPS/NERO/NRTR–2010/324. U.S. Department of the Interior, National Park Service, Natural Resource Program Center, Fort Collins, Colorado. Available online at [http://www.nps.gov/nero/science/FINAL/GATE\\_JamaicaBay\\_nuclides/JamaicaBay\\_nuclides.html](http://www.nps.gov/nero/science/FINAL/GATE_JamaicaBay_nuclides/JamaicaBay_nuclides.html).

Ringear—NPS, 2013a. Personal communication re: Filtering capabilities of coastal marsh.

Ringear—NPS, 2013b. Personal communication re: Seal haul-out sites at Gateway National Recreation Area.

Rowan, J., 2012. "Ecology Summary." *General Management Plan – Gateway National Recreation Area*, as modified in February 2013 by Dave Avrin, Abbott, and Sendich. Biohabitats.

Selvek, C., 2005. Draft Cultural Landscape Report for Fort Tilden, Gateway National Recreation Area (95% Draft), September 2005. Olmsted Center for Landscape Preservation, National Park Service, Boston, Massachusetts.

SENE Consultants Limited, 2009. Air Quality Technical Analysis: Anaerobic Digestion Facility, Abbotsford, British Columbia.

Sherman et al., 1976. Cited in Psuty et al. 2009.

Stanford, 2000. Cited in Edinger et al. 2008. [Ref. from Soils and Geology re: Surficial geology of Sandy Hook.]

Sullivan, T.J., G.T. McPherson, S.D. Mackey, and D. Moore, 2011a. *Evaluation of the Sensitivity of Inventory and Monitoring National Parks to Acidification Effects from Atmospheric Sulfur and Nitrogen Deposition: Main Report*. Natural Resource Report NPS/NRPC/ARD/NRR -2011/349. National Park Service, Denver, Colorado. Available online at <http://www.nature.nps.gov/air/permits/aris/networks/acidification-eval.cfm>.

Sullivan, T.J., G.T. McPherson, S.D. Mackey, and D. Moore, 2011b. *Evaluation of the Sensitivity of Inventory and Monitoring National Parks to Acidification Effects from Atmospheric Sulfur and Nutrient Enrichment Effects from Atmospheric Nitrogen Deposition: Main Report*. Natural Resource Report NPS/NRPC/ARD/NRR -2011/313. National Park Service, Denver, Colorado. Available online at <http://www.nature.nps.gov/air/permits/aris/networks/n-sensitivity.cfm>.

Swanson, R.L., and R.E. Wilson, 2008. "Increased Tidal Ranges Coinciding with Jamaica Bay Development Contribute to Marsh Flooding." *Journal of Coastal Research*, 24(6): 1565–1569. West Palm Beach, Florida. ISSN 0749-0208.

Tanacredi and Badger, 1995. Cited in NRCS et al. 2001.

U.S. Army Corps of Engineers (USACE), 2008. Raritan Bay and Sandy Hook Bay Hurricane and Storm Damage Reduction Study, Port Monmouth, New Jersey. Environmental Assessment.

U.S. Army Corps of Engineers (USACE), 2010. Draft Environmental Assessment: Plumb Beach, Section 204/207 Beneficial Uses of Dredged Material, Brooklyn, New York.

U.S. Army Corps of Engineers (USACE), 2012a. Draft Environmental Assessment, Elimination of "High Spot C" Obstruction to Navigation with the New York Bight Navigational Precautionary Area – Ambrose Channel: New York and New Jersey 50-foot Harbor Deepening Project. U.S. Army Corps of Engineers, New York District.

U.S. Army Corps of Engineers (USACE), 2012b. *Army Corps Restores Marsh Islands in Jamaica Bay N.Y.* US Army Corps of Engineers New York District. September 13, 2012. Accessed March 17, 2013, at <http://www.nan.usace.army.mil/Media/NewsStories.aspx>.

U.S. Army Corps of Engineers and the Port Authority of New York and New Jersey (USACE and PA), 2009. "Hudson–Raritan Estuary Comprehensive Restoration Plan." Draft March 2009. In partnership with the New York–New Jersey Harbor Estuary Program.

U.S. Census Bureau, 2009 2005–2009 American Community Survey., 2010. ESRI forecasts for 2012 and 2017. Census 2010 Summary File 1.

U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) in collaboration with National Park Service (NPS), Cornell University, and New York City Soil and Water Conservation District, 2001. *Soil Survey of Gateway National Recreation Area, New York and New Jersey*. USDA Natural Resources Conservation Service and U.S. Department of the Interior National Park Service, Gateway National Recreation Area, in partnership with Cornell University Agricultural Experiment Station and New York City Soil and Water Conservation District.

U.S. Department of the Interior, 2009. Determination of Eligibility, Fort Tilden Historic District, National Park Service, Gateway National Recreation Area.

U.S. Department of the Interior, 2011. Bureau of Transportation Statistics, Table 4-43: Estimated National Average Vehicle Emissions Rates per Vehicle by Vehicle Type Using Gasoline and Diesel.

U.S. Environmental Protection Agency (EPA), 2003. "Conversion Factors for Hydrocarbon Emission Components, Air, and Radiation." EPA420-P-03-002.

U.S. Environmental Protection Agency (EPA), 2010. "New Jersey Coastal Plain Aquifer." Webpage updated October 5, 2010. Accessed March 4, 2013, at <http://www.epa.gov/region2/water/aquifer/coast/coastpln.htm>.

U.S. Environmental Protection Agency (EPA), 2012. "Brooklyn–Queens Aquifer System." Webpage updated September 5, 2012. Accessed March 4, 2013, at <http://www.epa.gov/region02/water/aquifer/brooklyn/brooklyn.htm>.

U.S. Environmental Protection Agency (EPA), 2013. Landfill Methane Outreach Program website. Accessed March 2013 at <http://www.epa.gov/lmop/basic-info/index.html>.

U.S. Fish and Wildlife Service (USFWS), 1997a. "Raritan Bay – Sandy Hook Bay Complex, Complex #17." Significant Habitats and Habitat Complexes of the New York Bight Watershed.

U.S. Fish and Wildlife Service (USFWS), 1997b. "Jamaica Bay and Breezy Point, Complex #16." Significant Habitats and Habitat Complexes of the New York Bight Watershed.

U.S. Fish and Wildlife Service (USFWS), 1997c. "Marine Habitats." Significant Habitats and Habitat Complexes of the New York Bight Watershed.

U.S. Geological Survey (USGS), n.d.a. "Sandy Hook (Gateway National Recreation Area)." *Geology of National Parks, 3D and Photographic Tours*. U.S. Geological Survey New York Parks website. Accessed online February 2013 at <http://3dparks.wr.usgs.gov/nyc/parks/loc67.htm>.

U.S. Geological Survey (USGS), n.d.b. "Science for a Changing World: Geology of National Parks." Available online at <http://3dparks.wr.usgs.gov/nyc/common/introduction.htm>.

U.S. Geological Survey (USGS), 2005. *Coastal Vulnerability Assessment of Gateway National Recreation Area (GATE) to Sea-Level Rise*. Open File Report 2004-1257. Prepared by Elizabeth A. Pendleton, E.R. Thieler, and S.J. Williams.

U.S. Geological Survey (USGS) Woods Hole Science Center, 2004. *Coastal Vulnerability Assessment of Assateague Island National Seashore to Sea-Level Rise, 2004*. Prepared by Elizabeth A. Pendleton, S.J. Williams, and E.R. Thieler for the USGS Woods Hole Science Center, Coastal and Marine Program.

Uschold, D.—Regional Section 106 Coordinator, NPS, Northeast Region, 2013. Personal communication from David Uschold re: Exposure of archeological resources at Gateway due to wind and ocean currents (including Hurricane Sandy). May 15, 2013.

John A. Volpe National Transportation Systems Center (Volpe Center), 2003. *Gateway National Recreation Area Sandy Hook Unit Parking Management Study*. Research and Special Programs Administration, John A. Volpe National Transportation Systems Center, U.S. Department of Transportation. Cambridge, Massachusetts. December 2003.

John A. Volpe National Transportation Systems Center (Volpe Center), 2004. *Gateway Integrated Transportation Strategy and Implementation Plan*. PMIS No. 76518. John A. Volpe National Transportation Systems Center, U.S. Department of Transportation. March 2004.

Van Asselen, S., D. Karssenbergh, and E. Stouthamer, 2011. "Contribution of Peat Compaction to Relative Sea-level Rise within Holocene Deltas." *Geophysical Research Letters* 38; abstract.

Walter, S., n.d. Personal communication re: Moth species in and around Jamaica Bay.

Washburn, B.E., M.S. Lowney, and A.L. Gosser, 2012. "Historical and Current Status of Laughing Gulls Breeding in New York State." *Wilson Journal of Ornithology* 124(3): 525–530

Wijesundara, 1997. Cited in Lawrence, Roman, and Frame 2010.

Wildfowl and Wetlands Trust Consulting Ltd. (WWT Consulting), 2011. "Floyd Bennett Field Wetland Visitor Center Feasibility Assessment."

Wildfowl and Wetlands Trust Consulting Ltd. (WWT Consulting), 2012. "Floyd Bennett Field Wetland Center Concept Plan." Drawing number HAP02C(32)001. Prepared for Happold Consulting. August 15, 2012.

Wilson, R.E., and C. Flagg, 2008. "Circulation and Mixing: Implications for Sediment Transport." Presentation. State of the Bay Symposium October 2008. Cited in Rafferty et al. 2011.

Wren, Tony P., 1974. *General History of the Jamaica Bay, Breezy Point, and Staten Island Units, Gateway National Recreation Area, New York, New York*.

Yasso and Hartman, 1976. Cited in Psuty et al. 2009.

Yue C., E. Mahoney, and T. Herbowicz, 2013. *Economic Benefits to Local Communities from National Park Visitation, 2011*. Natural Resource Report NPS/NRSS/EQD/NRTR—2013/631. National Park Service, Fort Collins, Colorado.

Yuhas, C., 2003. "Commercial Shellfishing in the Harbor Estuary." *Tidal Exchange* Winter 2003.

Zhang et al., 2000. Cited in Colle, Rojowsky, and Buonaiuto 2010.

# Acronyms and Abbreviations

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CMP	Final Collection Management Plan
CSO	combined sewer outflow
DO	dissolved oxygen
EA	environmental assessment
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
FDNY	New York City Fire Department
GMP/EIS	New Vision for a Great Urban Park: Gateway National Recreation Area General Management Plan and Environmental Impact Statement
HARP	Historic Aircraft Restoration Project
IMT	Incident Management Team
JBWR	Jamaica Bay Wildlife Refuge
JBSRC	Jamaica Bay Science and Resilience Center
LCS	List of Classified Structures
LEED	Leadership in Energy and Environmental Design
mg/L	milligrams per liter
mR/h	milliroentgens per hour
MTA	Metropolitan Transportation Authority
MUP	multi-use pathway or path
NAAQS	National Ambient Air Quality Standards
National Register	National Register of Historic Places
NJDEP	New Jersey Department of Environmental Protection
NGO	non-governmental organization
NJ Transit	New Jersey Transit
NOAA–Fisheries	National Oceanic and Atmospheric Administration–Fisheries
NPNYHC	National Parks of New York Harbor Conservancy
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NYC Greenway	New York City Greenway
NYC Water Trail	New York City Water Trail
NYCDEP	New York City Department of Environmental Protection
NYCDOT	New York City Department of Transportation
NYCDPR	New York City Department of Parks and Recreation
NYDEC	New York Department of Environmental Conservation
OSV	over-sand vehicle
PMDA	primary market drawing area
ppt	parts per thousand
SHPO	state historic preservation officer
SSA	sole-source aquifer (EPA designation)
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
VMT	vehicle miles traveled
WPA	Works Progress Administration
WPCP	wastewater pollution control plants



# Glossary

**accessibility.** Occurs when individuals with disabilities are able to reach, use, understand, or appreciate NPS programs, facilities, and services, or to enjoy the same benefits that are available to persons without disabilities.

**accession.** Official acquisition, entered into the documented collection of a museum.  
**anadromous.** Fish that migrate from saltwater to freshwater rivers or creeks to spawn.

**anaerobic.** Without oxygen.

**anoxic event.** Occurs when the oceans become completely depleted of oxygen below the surface levels.

**aquifer.** A body of permeable rock or sediment capable of storing or transmitting water.

**backcountry.** Primitive, undeveloped portions of parks.

**barbette.** A protective circular armor feature around a cannon or heavy artillery gun.

**battery.** A defensive structure containing all features and appliances necessary to support and serve a number of cannons.

**benthic.** Bottom habitat in water bodies.

**benthos.** All the organisms that live on the bottom of a water body or in the bottom sediments.

**best management practices.** Practices that apply the most current means and technologies available to not only comply with mandatory environmental regulations, but also maintain a superior level of environmental performance. See also, "sustainable practices/principles."

**bight.** A bend or curve in the shoreline (nautical term).

**boreal waters.** Located in northern regions of the continent.

**brackish.** A mix of saltwater and freshwater.

**breech-loading weapon.** A weapon in which the round is loaded by opening a plug at the base of the gun tube.

**cantonment.** A camp, usually of large size, where men are trained for military service; military quarters.

**casemate.** A chamber within a fortification built with overhead cover, and therefore resistant to bombs or high-angled shell fire; an armored compartment for artillery on a rampart.

**Class I.** Visibility area.

**Class II.** Visibility area. Gateway National Recreation Area is a Class II visibility area.

**Craftsman style.** The Craftsman style, or the American Arts and Crafts movement, is an American domestic architectural, interior design, landscape design, applied arts, and decorative arts style and lifestyle philosophy that began in the last years of the **19th century**. As a comprehensive design and art movement, it remained popular into the 1930s. However, in decorative arts and architectural design it has continued with numerous revivals and restoration projects through present times.

**cultural resource.** An aspect of a cultural system that is valued by or significantly representative of a cultural or that contains significant information about a culture. A cultural resource may be a tangible entity or a cultural practice. Tangible cultural resources are categorized as districts, sites, buildings, structures, and objects for the National Register of Historic Places and as archeological resources, cultural landscapes, structures, museum objects, and ethnographic resources for NPS management purposes.

**deciview.** A measurement of visibility. One deciview represents the minimal perceptible change in visibility to the human eye.

**deferred maintenance.** Maintenance that was not performed when it should have been, and therefore, is delayed. Continued deferment of maintenance results in deficiencies. Deferred maintenance is the cost to repair an asset's deficiencies.

**demersal.** Swimming near the bottom of the body of water.

**developed area.** An area managed to provide and maintain facilities (e.g., roads, campgrounds, housing) serving visitors and park management functions. Includes areas where park development or intensive use may have substantially altered the natural environment or the setting for culturally significant resources.

**disappearing carriage.** A gun mount designed to raise the gun to firing position above the parapet by means of a counterweight, and use the force of recoil to carry the gun back to its loading position below the parapet.  
**distal.** Farthest from the main body.

**earthwork.** A military construction formed chiefly of earth, used in both defensive and offensive operations.

**echinoderm.** A type of marine invertebrate; includes starfish.

**endangered.** A species in danger of extinction through all or a significant portion of its range.

**environmentally preferred alternative (or environmentally preferable alternative).** Of the action alternatives analyzed, the one that would best promote the policies in section 101 of the National Environmental Policy Act. This is usually selected by the planning team members. The Council on Environmental Quality encourages agencies to identify an environmentally preferable alternative in the draft environmental impact statement or environmental assessment, but only requires that it be named in the record of decision.

**ephemeral.** Lasting for a short time.

**eutrophication.** Excess nutrient loading in a water body.

**floodplain.** An area of land that is subject to natural flooding from an adjoining waterway.

**fundamental resources and values.** Those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management because they are critical to achieving the park's purpose and maintaining its significance. A fundamental value, unlike a tangible resource, refers to a process, force, story, or experience, such as such as an island experience, the ancestral homeland, wilderness values, or oral histories.

**fundamental resources.** Fundamental resources are defined as those considered fundamental to maintaining the park's purpose and significance.

**garrison.** The troops permanently assigned to a military post.

**gateway community.** A community that exists in close proximity to a unit of the national park system whose residents and elected officials are often affected by the decisions made in the course of managing the park, and whose decisions may affect the resources of the park. Because of this, there are shared interests and concerns regarding decisions. Gateway communities usually offer food, lodging, and other services to park visitors. They also provide opportunities for employee housing, and a convenient location to purchase goods and services essential to park administration.

**geomorphological processes.** Processes that relate to the origin and development of landforms.

**groin.** A low wall or other rigid barrier built out into the sea from a beach to reduce erosion, trap sand, or direct a current for scouring a channel.

**groundwater.** Subsurface water in the saturated zone in which pore spaces are completely filled with water.

**heritage asset.** A term defined by the Federal Accounting Standards Advisory Board, as "property, plant, and equipment that are unique for one or more of the following reasons: historical or natural significance; cultural, educational, or artistic (for example, aesthetic) importance; or significant architectural characteristics."

**historic property.** Cultural resources listed on or determined eligible for listing in the National Register of Historic Places.

**hypoxic.** Low in oxygen.

**indicators of user capacity.** Specific, measurable physical, ecological, or social variables that can be measured to track changes in conditions caused by public use, so that progress toward attaining the desired conditions can be assessed.

**indigenous.** Native.

**issue.** Some point of debate that needs to be decided. For general management planning purposes, issues can be divided into “major questions to be answered by the general management plan” (also referred to as the decision points of the general management plan) and the “National Environmental Policy Act issues” (usually environmental problems related to one or more of the planning alternatives).

**lithic.** Made of stone.

**littoral drift.** Transport of sand or other materials along a coastline by longshore current.

**macrofauna.** Organisms retained on 1-millimeter (European standard) or 0.5-millimeter sieves.

**management concept.** A brief, statement of the kind of place the park should be (a “vision” statement).

**management zone.** A geographical area for which management directions have been developed to determine what can and cannot occur in terms of resource management, visitor use, access, facilities or development, and park operations. Each zone has a unique combination of resource and social conditions and a consistent management direction. Different actions are taken by the National Park Service in different zones.

**management zoning.** The application of management zones to a park unit. The application of different type of zones and/or size of zones will likely vary in different alternatives.

**National Historic Landmark.** Nationally significant properties in American history and archeology; recognition established through the Historic Sites Act of 1935; official list maintained by the National Park Service on behalf of the U.S. Secretary of the Interior.

**National Register of Historic Places (National Register).** The official list of historically significant national, state, and local districts, sites, buildings, structures, and objects maintained by the National Park Service on behalf of the U.S. Secretary of the Interior; established through the National Historic Preservation Act of 1966.

**nearshore zone.** The area of open water from the mean low-water line offshore to the 66-foot depth contour line.

**nektonic.** Marine and freshwater organisms that can swim freely (generally independent of currents).

**New York Bight.** A great expanse of shallow ocean between Long Island to the north and east and the New Jersey Coast to the south and west.

**ordnance.** Artillery pieces and the equipment used to maintain and fire them.

**parade.** A regular place of assembly for reviews of troops.

**parapet.** In coastal defense, a wall of concrete or masonry that protects the cannon and those manning it.

**park partner.** any state or local government (or subdivision thereof), public or private agency, organization, institution, corporation, individual, or other entity which is engaged in helping to ensure the protection, enhancement and enjoyment of the park’s natural, cultural and recreation heritage.

**passerine.** Perching or songbird.

**phytoplankton.** Minute, free-floating aquatic plants.

**plankton.** Minute, free-floating aquatic plants and animals.

**programmatic camping.** Definition needed.

**rampart.** A type of defensive wall.

**rapid-fire gun.** A gun that can be loaded and fired with great rapidity because of a single-motion breech mechanism; such guns also usually employ fixed ammunition, avoiding the need to load the propellant and the projectile separately.

**raptor.** Comes from the Latin root that means “to seize and carry away,” and is assigned to any bird that kills with its feet.

**Raritan Bay.** A bay bounded on the northwest by New York’s Staten Island; on the west by Perth Amboy, New Jersey; on the south by the Raritan Bayshore communities of Monmouth County, New Jersey; and on the east by Sandy Hook Bay.

**S1.** Typically 5 or fewer occurrences.

**S2.** Typically 6–20 occurrences.

**S3.** Typically 21–100 occurrences.

**scarp.** A steep slope formation.

**sedentism.** Living in one place in a settled manner, often in groups.

**semidiurnal.** Occurring approximately every half day.

**shell midden.** Refuse piles from shucking shellfish. An indication of sea harvesting on a community scale.

**sherds.** Fragments, usually of ceramics.

**shorebird.** A bird that uses the coastal shore for feeding, resting, or nesting.

**species of special concern.** A species likely to become a threatened species.

**storm surge.** The abnormal rise of water generated by the winds of a storm, over and above that from predicted astronomic tides.

**Strategic Arms Limitation Talks (SALT).** Refers to two rounds of bilateral talks and corresponding international treaties involving the United States and the Soviet Union—the Cold War superpowers—on the issue of armament control. There were two rounds of talks and agreements: SALT I and SALT II.

**surfmen.** Used to describe members of the United States Lifesaving Service. “Surfman” is also currently the highest qualification in the United States Coast Guard for small boat operations.

**threatened.** A species likely to become an endangered species within the foreseeable future through all or a portion of its range.

**trophic level.** A group of organisms that occupy the same position in a food chain.

**waterbird.** A swimming or wading bird, particularly the group of herons, ibises, and other wading species.

**waterfowl.** Wild game birds, such as ducks or geese, that swim.

**Yoruba.** The Yorùbá religion comprises the traditional religious and spiritual concepts and practices of the Yoruba people whose homeland is Southwestern Nigeria and the adjoining parts of Benin and Togo. The Yorùbá religion is formed of diverse traditions and has no single founder. Yoruba religious beliefs are part of itan, the total complex of songs, histories, stories and other cultural concepts that make up the Yorùbá society.

**zooplankton.** Minute, free-floating aquatic animals.

# Index

**Active Beach Subzone** - 47, 48, 52, 90, 91, 108, 113, 128

**adaptive management** - 57

**air quality** - xv, xvi, xxvi, x, 1, 25, 130, 135, 143, 153, 155, 156, 157, 158, 159

**anaerobic digester** - xvi, xxiii, 25, 130, 353, 354, 355, 409, 500, 554, 556

**archeological resources** - xv, xxi, xxii, xxvi, xxvii, 1, 52, 54, 68, 123, 131, 134, 140, 143, 213, 245, 246, 323, 328, 443, 445, 448, 453, 457, 460, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476

**aviation history** - xiii, 4, 14, 101, 102, 104, 105, 217, 223, 236, 237, 491

**Battery Harris** - xiii, 8, 11, 41, 44, 90, 101, 110, 124, 221, 229, 230, 260, 315, 446

**Battery Weed** - viii, xi, xiv, xxi, xxix, 8, 11, 16, 44, 96, 114, 117, 124, 214, 218, 220, 231, 232, 233, 234, 260, 293, 446, 451, 458, 460, 490, 546, 454

**Breezy Point Surf Club** - xxi, 90, 110, 139, 242, 243, 244, 429, 446, 459, 460, 464, 565

**Cold War** - 217, 219, 222, 229, 230

**common tern** - xx, 176, 186, 192, 193, 202, 209, 210, 381, 415, 429, 431, 432, 434, 436, 437

**Community Activity Subzone** - 47, 48, 50, 82, 85, 88, 97, 118, 401, 402

**critical habitat** - 211, 414, 427, 563

**Developed Zone** - 49, 83, 84, 86, 90, 97, 98, 103, 105, 107, 119, 127

**enabling legislation** - vii, 1, 9, 22, 24, 37, 38, 366, 378, 386, 444, 447, 448, 452, 454, 461, 465, 466, 467, 469, 474, 476, 477, 478, 479

**Endicott** - xiv, xxix, xxx, 8, 11, 115, 220, 221, 225, 226, 227, 228, 231, 232, 233, 234, 244, 446, 449, 453, 454, 461, 464

**ethnographic resources** -29, 68, 213, 445

**First System Defenses** - 219

**Floyd Bennett Field Historic District** - 139, 236, 244, 446, 456, 457, 459, 460, 467, 470

**Fort Hancock and Sandy Hook Proving Ground Historic District** - 225

**Fort Tilden Historic District** - xxi, 214, 221, 229, 237, 240, 243, 244, 446, 455, 456, 458, 460, 463, 464

**Fort Tompkins** - xi, xiv, xxi, 8, 11, 45, 96, 115, 117, 124, 218, 220, 231, 232, 260, 294, 446, 451, 458, 460, 462, 464, 490, 501, 555

**Fort Wadsworth Historic District** - xxi, xxx, 214, 221, 231, 244, 245, 446, 454, 455, 456, 458, 460, 462, 464

**historic district** - xv, xxi, xxvi, xxvii, xxix, xxx, 1, 25, 27, 44, 123, 131, 139, 140, 64, 65, 143, 213, 217, 218, 221, 224, 225, 229, 230, 231, 236, 238, 239, 240, 242, 243, 244, 245, 246, 303, 304, 323, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 464, 466, 475, 546

**historic structures** - ix, xiii, xiv, xviii, xxi, xxii, 44, 47, 49, 51, 52, 53, 63, 65, 66, 81, 111, 115, 124, 128, 133, 139, 140, 241, 244, 260, 309, 310, 314, 319, 327, 445, 446, 447, 448, 450, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 468, 469, 470, 471, 472, 474, 476, 490, 554, 555, 556

**History House** - 45, 227, 241, 264, 294, 449

**Hurricane Sandy** - iii, iv, vii, viii, xvii, xxi, xxii, 3, 16, 26, 36, 38, 45, 55, 109, 113, 133, 140, 142, 143, 147, 148, 152, 162, 165, 166, 170, 182, 186, 187, 188, 190, 196, 210, 214, 227, 230, 231, 232, 233, 235, 236, 237, 238, 240, 241, 242, 243, 247, 248, 249, 252, 250, 253, 257, 268, 270, 281, 282, 289, 290, 291, 294, 300, 302, 303, 304, 306, 307, 310, 316, 317, 322, 328, 332, 334, 335, 338, 340, 344, 347, 348, 364, 365, 370, 382, 383, 386, 397, 402, 431, 446, 448, 449, 450, 451, 453, 468, 469, 470, 471, 474, 476, 478, 482, 483, 486, 489, 490, 503, 504, 514, 519, 520, 525, 526, 546, 547, 548

**impairment** - 155, 157

**invasive species** - xiii, xvii, xix, xxi, 26, 43, 44, 90, 95, 111, 113, 120, 136, 140, 138, 167, 170, 180, 183, 185, 186, 189, 326, 327, 360, 372, 373, 381, 395, 396, 397, 398, 399, 401, 408, 411, 412, 414, 416, 417, 418, 420, 423, 424, 426, 433, 467, 471, 472, 475

**Jacob Riis Park Historic District** - 139, 214, 238, 240, 244, 446, 456, 459, 463

**least tern** - xx, 174, 176, 192, 202, 209, 210, 381, 429, 430, 431, 432, 434, 436, 437, 439

**management action** - iv, 1, 14, 24, 53, 63, 68, 124, 125, 126, 140, 331, 332, 364, 374, 399, 453, 459, 463, 469, 473, 475, 478, 480, 518

**management zone** - xxv, xxx, 33, 46, 48, 50, 52, 64, 65, 70, 74, 125, 126

**Marine Zone** - 50, 52, 63, 83, 87, 92, 96, 97, 98, 104, 114, 115, 171, 177, 378, 379, 383, 384, 385, 387

**Miller Army Airfield Historic District** - 459

**mitigation** - xxii, xxvi, xxx, 27, 33, 43, 55, 57, 129, 131, 132, 161, 169, 234, 359, 386, 427, 429, 437, 444, 445, 447, 449, 450, 451, 456, 457, 468, 469, 470, 471, 472, 473, 474, 475, 476

**Mont Sec Avenue** - 241, 244



**museum collections** - v, viii, xv, xxii, xxvi, xxvii, 1, 11, 17, 25, 27, 44, 67, 123, 131, 141, 143, 213, 214, 247, 248, 249, 251, 309, 323, 328, 445, 448, 476, 477, 478, 479, 480

**National Historic Landmark** - iv, xxi, xxix, 6, 21, 218, 225, 226, 234, 235, 244, 446, 448, 449, 450, 455, 456, 458, 460, 461, 462, 464

**National Register of Historic Places (NRHP)** - 213, 231, 330, 443, 562

**Natural Zone** - 49, 53, 82, 83, 85, 86, 87, 88, 89, 90, 92, 96, 97, 98, 102, 103, 104, 106, 107, 108, 113, 114, 118, 120, 127, 128, 371, 399, 401, 405, 406, 409

**Nike Missile Launch Site** - 8, 11, 44, 113, 221, 227, 229, 230, 307, 446, 449, 450, 458, 484

**Nike Missile Program** - 217

**noise** - xxii, 26, 48, 53, 132, 261, 262, 263, 314, 328, 380, 387, 388, 389, 390, 415, 419, 421, 438, 441, 485, 486, 490, 495, 499, 512, 520, 521, 527, 538

**Officers' Row** - 11, 16, 44, 45, 225, 227, 241, 314, 449, 455, 458, 462

**osprey** - ii, xx, 3, 130, 192, 193, 200, 202, 209, 417, 429, 430, 432, 434, 436, 437

**Phragmites** - xvii, 88, 106, 168, 170, 174, 183, 185, 187, 188, 189, 190, 198, 210, 368, 372, 393, 394, 396, 398, 406, 411, 414, 430

**piping plover** - xx, 43, 127, 130, 139, 174, 175, 176, 186, 192, 201, 205, 208, 209, 210, 211, 381, 391, 416, 429, 431, 432, 433, 434, 436, 437, 439, 440, 441, 442

**protected species** - 210

**public scoping** - 255, 258, 263, 481, 511

**Recreation Zone** - 48, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 95, 97, 98, 102, 103, 107, 108, 109, 113, 117, 118, 120, 127, 128, 371, 401, 404, 405, 407, 513

**Riis Landing** - 30, 44, 45, 89, 90, 110, 229, 240, 282, 284, 285, 287, 290, 291, 292, 338, 39, 387, 389, 395, 458, 463, 518, 534, 535, 542

**Rockaway Naval Air Station** - 223, 224, 473, 475

**Ruins Subzone** - xxi, 47, 49, 53, 123, 139, 140, 310, 406, 445, 460, 461, 463, 464, 465, 471, 474, 476

**safety** - vi, xxvi, 12, 19, 22, 27, 29, 47, 49, 50, 51, 53, 57, 64, 81, 123, 132, 141,

**Sandy Hook Lighthouse** - viii, xxi, xxix, 6, 12, 13, 44, 45, 218, 225, 234, 244, 248, 264, 446, 450, 453, 454, 455, 460, 464, 484

**Second System Fortifications** - 219

**Section 106** - xxviii, 131, 443, 444, 445, 557, 562, 563

**Sensitive Resources Subzone** - 49, 51, 53, 102, 113, 120, 371, 375, 399, 400, 401, 402, 403, 406, 409, 410, 411, 487, 499

**Silver Gull Beach Club** - xxi, 89, 139, 109, 242, 244, 256, 395, 446, 459, 460

**Spermaceti Cove Life Saving Station** - xxi, xxix, 6, 12, 218, 219, 225, 235, 244, 248, 446, 450, 453, 454, 455, 460, 464, 484

**Taft** - 220, 221, 226

**Taft-era batteries** - xiv, xxx, 11, 115, 225, 228, 244, 446, 449, 450, 453, 461, 464

**terrapin** - xx, 27, 138, 199, 178, 191, 195, 208, 210, 416, 417, 429, 430, 432, 433, 434, 435, 436, 439, 440, 442

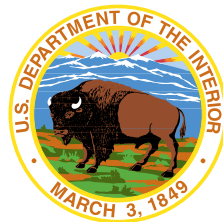
**Third System Fortifications** - 220, 231

**threatened species** - 204, 330, 427, 429

**visitation** - vi, xxiii, xxix, 18, 27, 28, 29, 48, 137, 251, 252, 253, 254, 256, 266, 267, 274, 278, 279, 281, 398, 405, 419, 422, 423, 424, 431, 439, 440, 481, 482, 486, 487, 492, 493, 495, 497, 503, 504, 506, 507, 508, 509, 510, 511, 513, 514, 515, 524, 525, 527, 529, 530, 533, 536, 537, 538, 544, 552, 554,

**visitor activities** - 50, 105, 281, 502, 506, 511

**wetlands** - ix, xiii, xiv, xv, xvii, xix, xx, xxvi, xxvii, 1, 16, 20, 23, 25, 26, 27, 57, 60, 62, 81, 83, 85, 86, 87, 95, 100, 103, 106, 111, 115, 116, 120, 122, 125, 134, 135, 136, 137, 138, 143, 152, 153, 161, 163, 164, 167, 168, 169, 170, 176, 179, 185, 187, 188, 191, 194, 195, 200, 204, 314, 332, 334, 336, 337, 342, 323, 326, 350, 351, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 379, 381, 382, 387, 391, 392, 394, 396, 397, 398, 400, 401, 404, 407, 408, 409, 410, 411, 412, 414, 417, 419, 420, 422, 423, 424, 425, 426, 430, 433, 435, 436, 441, 442, 457, 469, 489, 490, 491, 492, 495, 496, 497, 500, 507, 550, 552



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.



US Department of the Interior  
National Park Service  
Gateway National Recreation Area  
210 New York Avenue  
Staten Island, NY 10305

