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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 Process 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
Sandy Hook Unit									
Fort Hancock and Sandy Hook Proving Ground National Historic Landmark District									
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
Jamaica Bay Unit									
Floyd Bennett Field Historic District									
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

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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

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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
Fort Tilden Historic District									
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
Miller Army Airfield Historic District									
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

Section 7 of the Endangered Species Act



In Reply Refer To:
2014-I-0027

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Jersey Field Office
Ecological Services
927 North Main Street, Building D
Pleasantville, New Jersey 08232
Tel: 609/646 9310
Fax: 609/646 0352
<http://www.fws.gov/northeast/njfieldoffice/>



Suzanne McCarthy, Acting Superintendent
Gateway National Recreation Area
210 New York Avenue
Staten Island, New York 10305

NOV 01 2013

Dear Ms. McCarthy:

The U.S. Fish and Wildlife Service's (Service) New Jersey Field Office (NJFO) has reviewed the National Park Service's July 2013 (NPS) Draft General Management Plan/Environmental Impact Statement (DGMP/EIS, or Draft Plan) for the Gateway National Recreation Area (Gateway) in New York and New Jersey. This letter provides the NJFO's comments only on those portions of the Draft Plan dealing with the Sandy Hook Unit of Gateway, which is located in Monmouth County, New Jersey. Additional comments on the New York units of Gateway may be provided by the Service's New York or Long Island Field Offices.

AUTHORITY

These comments are provided pursuant to the National Environmental Policy Act of 1969 as amended (83 Stat. 852; 42 U.S.C. 4321 *et seq.*) (NEPA); Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA); the Migratory Bird Treaty Act of 1918 (40 Stat. 755; 16 U.S.C. 703-712), as amended; and Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds. These comments do not preclude separate review and comments by the Service as afforded by the Fish and Wildlife Coordination Act (48 Stat. 401; 16 U.S.C. 661 *et seq.*), if Plan implementation requires any permits from the U.S. Army Corps of Engineers pursuant to the Clean Water Act of 1977 (33 U.S.C. 1344 *et seq.*); and/or as afforded by the December 22, 1993 Memorandum of Agreement among the U.S. Environmental Protection Agency, New Jersey Department of Environmental Protection (NJDEP), and the Service, if Plan implementation requires any permits from the NJDEP pursuant to the New Jersey Freshwater Wetlands Protection Act (N.J.S.A. 13:9B *et seq.*).

FEDERALLY LISTED SPECIES

Piping Plover

Sandy Hook support New Jersey's largest nesting population of the federally listed (threatened) piping plover (*Charadrius melodus*) (background information on this species is enclosed). In

2012,¹ 50 pairs of plovers nested in Sandy Hook, more than 40% of New Jersey's total of 121 pairs. Sandy Hook's breeding success (productivity) in 2012 was also considerably higher than the State-wide average, with Sandy Hook's rate at 1.02 chicks fledged per pair, versus 0.72 for New Jersey as a whole. The piping plover recovery plan² establishes a target of 575 nesting pairs within the New York-New Jersey Recovery Unit, and a 5-year average productivity of 1.5 chicks fledged per pair. New Jersey's plover population is characterized by fluctuations at low levels,¹ a hallmark of high demographic risk. This demographic vulnerability is compounded by a very high concentration of the State's population within Sandy Hook, where stochastic weather events or other factors could impact a very high proportion of total pairs.

Seabeach Amaranth

Sandy Hook also supports New Jersey's largest and most consistent population of the federally listed (threatened) plant seabeach amaranth (*Amaranthus pumilus*) (background information on this species is enclosed). In 2012, NPS staff counted 1,186 amaranth plants in Sandy Hook, out of the State-wide count of 1,239, or nearly 96% of New Jersey's total. Importantly, Sandy Hook's amaranth population has been far more stable than rest of the State, with robust populations even in years when other areas of New Jersey fell to very low plant counts. Since State-wide surveys began in 2001 through 2012, Sandy Hook has showed a stable to slightly increasing trend in plant counts, while the rest of the State showed much higher variability and an overall sharply downward trend. The seabeach amaranth recovery plan³ establishes the following target: the species exists in at least six of the nine States within its historic range, and a minimum of 75 percent of the sites with suitable habitat within each State are occupied by amaranth populations for 10 consecutive years. Of the six sites in New Jersey that were consistently occupied by seabeach amaranth in each of the 10 years from 2003 to 2012, four (67%) are in Sandy Hook.

However, we understand from NPS staff that the 2013 counts were down sharply in Sandy Hook, to only 311 plants, due to habitat effects from Hurricane Sandy. As with plovers, the concentration of New Jersey's amaranth population in Sandy Hook leaves it vulnerable to stochastic events such as storms. Although Sandy Hook's 2013 amaranth count was down sharply, it's percent of the State-wide total continued to climb to 99%, with only 3 plants found elsewhere in New Jersey.

Northeastern Beach Tigerbeetle

In 1994, a population of the federally listed (threatened) northeastern beach tiger beetle (*Cicindela dorsalis dorsalis*) was re-established and the northern tip of Sandy Hook (background information on this species is enclosed). Recent surveys have not detected any beetles, and it is unclear if this population is still extant.

¹ <http://www.state.nj.us/dep/fgw/ensp/pdf/plover12.pdf>

² http://ecos.fws.gov/docs/recovery_plan/960502.pdf

³ http://ecos.fws.gov/docs/recovery_plan/961112b.pdf

Red Knot

The NJDEP Landscape Project maps depict habitat for the rufa red knot (*Calidris canutus rufa*) at the northern tip of Sandy Hook, and on the sand bars forming Spermacetti Cove. On September 30, 2013, the Service proposed to list the rufa red knot as a threatened species under the ESA.⁴ Background information on this species is enclosed.

SERVICE COMMENTS

The DGMP/EIS presents three alternatives: Alternative A (No Action, continuation of current management practices and policies), Alternative B (Discovering Gateway, recreation emphasis), and Alternative C (Experiencing Preserved Places, preservation emphasis). The NPS has identified Alternative B as its preferred alternative, and Alternative C as the Environmentally Preferable Alternative under NEPA.

The Service supports the NPS in its effort to update the GMP in response to the many environmental and cultural changes since the current GMP was adopted in 1979, and in attempting to adapt to ongoing climate change including sea level rise.

Sensitive Resource Subzone

We note that neither Alternative B nor C designates any of Sandy Hook's habitat areas for federally listed threatened or endangered (TE) species as the most protected category of Sensitive Resource Subzone, except for the sand bars around Spermacetti Cove that are mapped by NJDEP red knot habitat and that occasionally support small numbers of breeding plovers. Adult plovers and fledged plover chicks may also use these sand bars for foraging, and we support the designation of these sand bars as Sensitive Resource Subzone. However, we recommend that the NPS consider designation of additional TE habitats as Sensitive Resource Subzone, such as the beaches at the northern tip of Sandy Hook. The northern beaches support a large proportion of Sandy Hook's plover nests (14 of 50 nests in 2012) and provide TE species with one of New Jersey's very few unstabilized, accreting beach habitats, which are vital to the recovery of these species. Sandy Hook's northern beaches provide the only such habitat in Monmouth County, and warrant the highest levels of protection.

Shoreside Threatened and Endangered Species Management Plan

Page 212 of the DGMP/EIS summarizes the goals and provisions of Sandy Hook's 2007 Shoreside Threatened and Endangered Species Management Plan (Shoreside Plan). The Service recognizes the substantial benefits to TE species provided by the Shoreside Plan and by the NPS's ongoing monitoring, management, and protection of piping plovers, seabeach amaranth, northeastern beach tigerbeetles, and red knots, as well as their habitats. The Shoreside Plan as it has been implemented by the NPS is an important component of the NPS's fulfillment of its responsibilities under Section 7(a)(1) of the ESA, which directs Federal agencies to "utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species . . ."

⁴ <http://www.regulations.gov/#!documentDetail;D=FWS-R5-ES-2013-0097-0001>

At a meeting in May 2012, NPS and Service staff agreed to continue work on reformatting the Shoreside Plan as a stand-alone document, free of other TE management alternatives that were considered but rejected by NPS under NEPA. A stand-alone document will be easier to follow and update, and will facilitate species management on the ground. We look forward to continuation of our partnership with NPS to reformat the Shoreside Plan, and to advance the recovery of TE species that rely on Sandy Hook's unique coastal habitats.

Alternatives Analysis

The Service has serious concerns that the recreational and development elements included in Alternative B will have substantial long-term impacts on Federal trust wildlife resources such as TE species and migratory birds. These concerns are based on statements in the DGMP/EIS that show the sharp contrasts between Alternatives B and C (excerpts enclosed). These statements show clearly that Alternative C would have far less adverse impact on wildlife resources, and would include many more proactive elements to manage and protect these resources. Table 2-2 on page 61 states the following desired conditions (*i.e.*, goals) for Gateway: "Threatened and endangered species and habitats are protected to the greatest extent possible and other particularly sensitive species and biotic communities are closely monitored and protected. . . . Recreational uses are compatible with resource protection goals. Visitors to the marine zone avoid physical impacts and conserve the aesthetic and ecological values of shoreline areas and marine habitats." Based on the statements excerpted in the enclosure, Alternative C is more compatible with these goals than Alternative B.

ESA CONSULTATION

As you are aware, Section 7(a)(2) of the ESA requires Federal action agencies to consult with the Service on proposed activities that may affect federally listed species. The Service encourages the NPS to initiate consultation on the DGMP/EIS as soon as possible, and to complete consultation prior to issuance of the final GMP/EIS.

Under Section 7(c) of the ESA, the lead Federal agency for an action has the responsibility to prepare a BA if the proposed action is a major construction project that requires an EIS under NEPA, or if the proposed action may affect a federally listed species listed. The BA should contain information concerning listed or proposed species that may be present in the action area and an analysis of any potential effects of the proposed action on such species. The following may be considered for inclusion in a BA of the proposed action, although actual contents are at the discretion of the lead Federal agency:

- results of field surveys to determine if listed species are present or occur seasonally;
- views of recognized experts on the species;
- literature review;
- analysis of direct, indirect, and cumulative effects of the action on the species; and,
- analysis of alternative actions.

The BA may be consolidated with interagency cooperation procedures required by other statutes such as the Fish and Wildlife Coordination Act or NEPA, and the results of a BA may be

incorporated into an EIS. However, the satisfaction of the requirements of these other statutes does not in itself relieve a Federal agency of its obligation to comply with the BA procedures of the ESA. The results of the BA must be forwarded to this office to determine if further consultation is necessary to protect federally listed species.

Based on the level of likely impacts to federally listed species from the updating of the Gateway GMP, and the EIS-level analysis being conducted under NEPA, we recommend that the NPS prepare a BA. The Service is available to assist the NPS in determining the contents of the BA, as well as the appropriate level of analysis regarding impacts to listed species. The Service offers the following preliminary recommendations for information to include in the BA.

- The proportion of piping plover nests and seabeach amaranth plant locations over the past 10 years that would occur in Recreation versus Natural Zones under Alternatives B versus Alternative C.⁵
- More information on the types, locations, and magnitude of possible projects to “restore natural sand transport processes.”
- The likely changes in number of beach visitors to piping plover nesting areas during the nesting season as a result of markedly increased transportation into Sandy Hook that would occur under both Alternatives B and C (*e.g.*, expanded ferry and shuttle services, increased bicycle access), and, based on past visitor use and enforcement data,⁶ the likely increase in the number of unauthorized intrusions into fenced or closed piping plover habitats.
- Indication if the NPS will institute any caps on the total number of visitors into Sandy Hook during the piping plover nesting season. No such caps currently exist, but visitation is generally limited by the number of parking spaces and would be expected to increase markedly upon expansion of non-car-based transportation options to access the park.
- Specific information on the types, locations, durations, seasonal timing, and number of camping opportunities in or adjacent to piping plover nesting areas, or adjacent to trails (both authorized and unauthorized trails) that lead to nesting areas, as well as the likely increase in the number of unauthorized intrusions into fenced or closed piping plover habitats, based on past visitor use and enforcement data.
- Analysis of how the implementation of the Shoreside Plan will and will not change under Alternatives B and C relative to its implementation from 2007 to 2013.

⁵ A preliminary analysis by NJFO found that roughly 40% of the plover nests documented from 2003 to 2012 would be located in the Natural Zone under Alternative B, versus about 72% under Alternative C. These data require further analysis.

⁶ DGMP/EIS page 212: “The park monitors some of the violations by recreationists who enter beaches where posted signs indicate the area is closed. In Breezy Point Tip, even occasional monitoring noted 115 visitors in the closed area, including with pets or motor vehicles.”

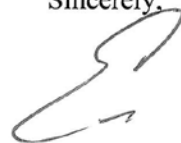
CONCLUSION

The Service supports the NPS in its effort to update the Gateway GMP in response to the many environmental and cultural changes since 1979, and in attempting to adapt to ongoing climate change. We recommend that the NPS consider designation of Sandy Hook's northern beaches as a Sensitive Resource Subzone, and request that efforts continue to reformat the Shoreside Plan as a stand-alone document. The Service has serious concerns that the recreational and development elements included in Alternative B will have substantial, long-term impacts on federal trust wildlife resources such as TE species and migratory birds; we conclude that Alternative C is more compatible with protection of these resources and the NPS's stated goals.

Revision of the GMP may affect four federally listed threatened or proposed species. Therefore, further consultation with the Service is necessary pursuant to Section 7 of the ESA. Preliminary recommendations are provided above regarding information that will be necessary to initiate consultation. We encourage NPS to complete consultation prior to issuance of the final GMP/EIS.

Please contact Wendy Walsh at (609) 383-3938, extension 48, if you have any questions regarding the comments provided in this letter, or to discuss initiation of consultation.

Sincerely,



Eric Schrading
Field Supervisor



**Statements Excerpted from the
National Park Service's July 2013 (NPS) Draft General Management Plan/Environmental
Impact Statement (DGMP/EIS, or Draft Plan) for the Gateway National Recreation Area
(Gateway) in New York and New Jersey**

Page xix: "Development of new facilities in several park sites could adversely affect vegetation, and in particular imperiled vegetation associations such as those at . . . the bay side of Sandy Hook in alternative B. These impacts would be minimized both by a lesser degree of development with fewer anticipated visitors and by the park's commitment to controlling erosion and additional efforts to restore beach, dune, and upland associations at several park sites in alternative C."

Page xx: "The development of facilities and amenities at Sandy Hook under alternative B could adversely affect wildlife by removing habitat and bringing additional visitors and human disturbance. This is true of planned changes on both the bay and ocean side; those on the ocean side could particularly affect feeding or nesting rare shorebirds. While alternative C also proposes development at park sites including . . . Sandy Hook, it is far less extensive and permanent than in alternative B and impacts on wildlife would be less severe."

Page xx: "Beneficial impacts to listed species or species of management concern from actions common to alternatives B and C would come from restoring natural sand transport processes, creating wetland or open water habitat . . . and continuing restrictions and protection of listed species through fencing, buffers, and closures. Restoring habitat and protecting listed species from disturbance or direct loss would have significant benefits. Continuing visitor use in any alternative could in some cases be preventing use of otherwise suitable habitat, and visitors not respecting closures could reduce nesting success, trample nesting sites or listed plants or otherwise cause substantial localized adverse impacts. Adding visitor amenities and programming would increase the potential for this kind of adverse impact in both action alternatives, although to a lesser extent in C than B."

Page 113: "Camping opportunities would be more widely distributed throughout the park than in alternative A, but less so than in alternative B. Sites would be concentrated in fewer locations than in alternative B in order to minimize impacts and would include designated backcountry / beach camping, walk-in tent, drive-in tent and RV."

Page 122, "Alternatives B and C both propose additional access and activities at many park sites, and this increase in use has the potential for damage to wildlife habitat—including that used by species of special concern—to vegetation, and to soils. However, each alternative also includes measures that would particularly enhance biological resources and that are absent from the no-action alternative. These measures include a commitment to using expanded partnerships with academics, agencies, private entities, and [non-governmental organizations] NGOs [on research], working with neighboring landowners to remove impediments to natural coastal sand transport processes; . . . and holistically planning and implementing freshwater wetland restoration at multiple locations. Alternative B has substantially greater development of some park sites than alternative C for camping, trails, and visitor recreational facilities and amenities. Particularly at Sandy Hook, . . . current unique or undisturbed areas used by imperiled vegetation associations

or plant or wildlife species of concern, or by many thousands of individual wildlife such as migrating birds, for example, could be affected by this development and by the presence of humans.”

Table 2-12, page 138, Species of Special Concern –

Alternative B: “Adverse impacts increased from increased visitor use, with harassment and significant impacts possible Continued restrictions would provide potential significant benefits. Alternative C: “Similar to B, although alternative C anticipates additional closures and fewer visitor amenities with fewer areas of disturbance . . . ”

Pages 406-407, “Alternative B would include less Natural Zone, less Sensitive Resources Subzone, and more of the beach in the central and southern portion used as recreation areas than alternative C. New and expanded trails, boating launch sites, camping facilities, and interpretive programs would be created. Direct connections between Fort Hancock and North Beach [which supported 13 plover nests in 2012, and 79% of Sandy Hooks reduced post-Sandy amaranth population in 2013] would be created and buildings at Fort Hancock would be used for lodging, food, tours, and interpretive programming. A direct connection between Fort Hancock and North Beach would need to be sited carefully to avoid removal of important saltmarsh, shrub, and dune vegetation, but would nonetheless have adverse localized impacts on vegetation from both development of the trail and potential off-trail use and trampling. . . . Beach camping including the use of yurts or cabins would become available in the Recreation Zone. These sites would be located primarily in North Atlantic upper ocean beach habitat, which is home to listed and rare plant and animal species at the park. Very careful planning and the use of exclosures, buffers, and other measures to avoid impacts on these species would be required to avoid substantial impacts on rare vegetation associations or rare plants. Impacts on beach and dune vegetation would also increase from trampling and use, with localized adverse impacts.”

Page 411: “Alternative C would include a larger area zoned as natural as well as additional Sensitive Resources Subzone overlays compared to alternative B. All of Spermaceti Cove would be zoned for the protection of sensitive resources, and much of the central/southern oceanfront [that collectively supported 16 plover nests in 2012] (except for beach areas B, C, and D . . .) would be zoned as natural. . . . Under alternative C, efforts to protect beach, dune, saltmarsh, and the holly forest would be increased, a potentially widespread (e.g., across the unit) and important benefit for these vegetative communities.”

Page 422: “Development of facilities and amenities, including trails, boat launch sites, and camping, are proposed in alternative B. At the same time, access to sensitive or rare habitats, including some rare vegetation associations, would be controlled . . . On the ocean site, yurts or cabins adjacent to beaches where unique shorebirds nest could add to existing impacts from visitors. These species are known to be especially sensitive to humans . . . and impacts on these shorebirds could be especially adverse. Careful siting of campgrounds and trails could avoid more substantial impacts, but saltmarsh, shrub, dune, or maritime forest habitat could still be removed. In addition, an influx of visitors, including overnight visitors, would disturb wildlife and if sustained could displace them.”

Page 425: “Alternative C would add a protective subzone for many of the areas in Sandy Hook, including Spermaceti Cove and much of the central/southern oceanfront. These and other important wildlife areas at Sandy Hook (including shorebird nesting locations in the north and along the central/southern coast, as well as saltmarsh and rare vegetative communities along Horseshoe Cove and Spermaceti Cove and American holly or other maritime forest associations) would be kept as natural areas and become the sites for targeted restoration efforts. Protection and restoration would be greater than is currently the case, with potential localized beneficial impacts on wildlife.”

Pages 438-439 (Alternative B): “On the ocean side, the addition of yurts or cabins on or adjacent to beaches could affect shorebirds like the piping plover or least tern. Currently, protected areas at Sandy Hook alternate with open recreational public beaches, particularly in the southern half of the site. Although adding cabins or yurts to these recreational beaches would not necessarily directly impact listed species, the addition of overnight visitors who may walk the beach in the evening or early morning when visitation is currently very low could have adverse impacts on shorebirds. Piping plovers are highly sensitive to the presence of humans, and the park currently employs a variety of intensive management efforts to keep people and predators away from nesting birds. Even so, beachgoers, dogs, large moveable objects such as kites or sails, fireworks, or other human disturbances cause piping plovers to flush from their nests, increase alert behavior, decrease foraging, and even abandon otherwise suitable nesting sites (NPS 2004f). A 2004 biological assessment of impacts on piping plovers at Sandy Hook concluded that the presence of people at the beaches of Sandy Hook may be deterring piping plovers from using a larger percentage of the site. The addition of structures and overnight visitors would worsen impacts from visitor use by increasing disturbance and potentially causing birds to abandon an even larger portion of the beach. Additional adverse impacts on shorebird feeding would result from the development and use of boat launches, trails, and additional campsites on the bay side, because this is where adults often feed. Terrapins and horseshoe crabs could also experience adverse effects from this development and the additional visitors it would bring. Any impact on horseshoe crabs would also have an indirect impact on the state-listed red knot, because this species depends solely on the eggs of horseshoe crabs to sustain its long migration.”

**U.S. FISH AND WILDLIFE SERVICE SPECIES NARRATIVES:
Biology and Threats of Federally Listed Species in New Jersey**

Piping plover (*Charadrius melodus*)

Within its Atlantic Coast breeding range, the piping plover was federally listed as threatened in 1986.

The piping plover is a small shorebird approximately 7 inches long with a wingspan of about 15 inches. Piping plovers have white underparts with a light beige back and crown. Breeding adults have a single black breast band, which is often incomplete, and a black bar across the forehead. The legs and bill are orange in summer, with a black tip on the bill. In winter, the birds lose the breast bands, the legs fade from orange to pale yellow, and the bill becomes mostly black. Piping plover adults and chicks feed on marine macroinvertebrates such as worms, fly larvae, beetles, and crustaceans.

Piping plovers are present on the New Jersey shore during the breeding season, generally between March 15 and August 31. These territorial birds nest above the high tide line, usually on sandy ocean beaches and barrier islands, but also on gently sloping foredunes, blowout areas behind primary dunes, washover areas cut into or between dunes, the ends of sandspits, and deposits of suitable dredged or pumped sand. Piping plover nests consist of a shallow scrape in the sand, frequently lined with shell fragments and often located near small clumps of vegetation. Females lay four eggs that hatch in about 25 days, and surviving chicks learn to fly (fledge) after about 25 to 35 days. The flightless chicks follow their parents to feeding areas, which include the intertidal zone of ocean beaches, ocean washover areas, mudflats, sandflats, wrack lines (organic ocean material left by high tide), and the shorelines of coastal ponds, lagoons, and salt marshes.

Threats to the piping plover include habitat loss, human disturbance of nesting birds, predation, and oil spills and other contaminants. Habitat loss results from development, as well as from beach stabilization, beach nourishment, and other physical alterations to the beach ecosystem. Human disturbance of nesting birds includes foot traffic, sunbathing, use of kites/kiteboards/kitebuggies, pets, fireworks, mechanical beach raking, construction, and vehicle use. These disturbances can result in crushing of eggs, failure of eggs to hatch, and death of chicks. Predation on piping plover chicks and eggs is intensified by development because predators such as foxes (*Vulpes vulpes*), rats (*Rattus norvegicus*), raccoons (*Procyon lotor*), skunks (*Mephitis mephitis*), crows (*Corvus* spp.), and gulls (*Larus* spp.) thrive in developed areas and are attracted to beaches by food scraps and trash. Unleashed and feral dogs (*Canis familiaris*) and cats (*Felis domesticus*) also disturb courtship and incubation and prey on chicks and adults.

January 2013

**U.S. FISH AND WILDLIFE SERVICE SPECIES NARRATIVES:
Biology and Threats of Federally Listed Species in New Jersey**

Seabeach amaranth (*Amaranthus pumilus*)

Seabeach amaranth was federally listed as a threatened species in 1993.

An annual member of the amaranth family, seabeach amaranth has reddish stems and small, rounded, notched, spinach-green leaves. In New Jersey, these low-growing plants are typically about 4 inches across by late summer, but can occasionally reach 2 or 3 feet in diameter. The small white flowers and dark seeds are located in inconspicuous clusters along the stems. Germination begins in May and continues through the summer. Flowering begins as soon as plants reach sufficient size (June or July) and continues until the plants die between September and December.

Seabeach amaranth is native (endemic) to Atlantic Coast beaches and barrier islands. The primary habitat of seabeach amaranth consists of overwash flats at accreting ends of islands, lower foredunes, and upper strands of non-eroding beaches (landward of the wrackline), although the species occasionally establishes small temporary populations in other habitats, including sound-side beaches, blowouts in foredunes, inter-dunal areas, and on sand and shell material deposited for beach replenishment or as dredge spoil. Seabeach amaranth usually grows on a nearly pure sand substrate, occasionally with shell fragments mixed in.

Seabeach amaranth occupies elevations from 8 inches to 5 feet above mean high tide. The plant grows in the upper beach zone above the high tide line, and is intolerant of even occasional flooding during its growing season. The habitat of seabeach amaranth is sparsely vegetated with annual herbs and, less commonly, perennial herbs (mostly grasses) and scattered shrubs. Vegetative associates of seabeach amaranth include sea rocket (*Cakile edentula*), seabeach spurge (*Chamaesyce polygonifolia*), and other species that require open, sandy beach habitats. However, this species is intolerant of competition and does not occur on well-vegetated sites. Seabeach amaranth is often associated with beaches managed for the protection of beach nesting birds such as the piping plover (*Charadrius melodus*) and least tern (*Sterna antillarum*).

Threats to seabeach amaranth include beach stabilization (particularly the use of beach armoring, such as sea walls and riprap), intensive recreational use, mechanical beach raking, and herbivory by insects.

January 2013

**U.S. FISH AND WILDLIFE SERVICE SPECIES NARRATIVES:
Biology and Threats of Federally Listed Species in New Jersey**

Northeastern beach tiger beetle (*Cicindela dorsalis dorsalis*)

The northeastern beach tiger beetle was federally listed as threatened in 1990.

About 0.5 inch long, the northeastern beach tiger beetle has a bronze-green head and thorax, and white to light tan wing coverings (elytra) often with dark lines. Tiger beetles are often the dominant invertebrate predators in habitats where they occur. Adults use their long mandibles to capture small amphipods, flies, and other invertebrates along the water's edge. Adults have also been observed scavenging on dead amphipods, crabs, and fish. Larvae are "sit and wait" predators that feed mainly on amphipods.

In New Jersey, northeastern beach tiger beetles inhabit wide, sandy, ocean beaches from the intertidal zone to the upper beach. Eggs are deposited in the mid- to above-high tide drift zone. Larval beetles occur in a relatively narrow band of the upper intertidal to high drift zone, where they can be regularly inundated by high tides. Larvae dig vertical burrows in the sand and wait at the burrow mouth to capture passing prey. Northeastern beach tiger beetle larvae pass through three developmental stages (instars) over 2 years, over-wintering twice as larvae, pupating at the bottom of their burrows, and emerging as winged adults during their third summer.

The northeastern beach tiger beetle was found historically along New Jersey's undeveloped Atlantic coastal beaches from Sandy Hook to Holgate, but was eliminated (extirpated) from the State. In 1994, a population of the northeastern beach tiger beetle was re-established at the Gateway National Recreation Area, Sandy Hook Unit.

The primary threat to the northeastern beach tiger beetle is habitat disturbance and destruction from development, beach stabilization activities, and recreational beach uses including pedestrian and vehicle traffic, all of which affect the larvae. Other threats include spills of oil or other contaminants, pesticide use, natural or human-induced beach erosion, and natural factors such as predation and storms.

January 2013

**U.S. FISH AND WILDLIFE SERVICE SPECIES NARRATIVES:
Biology and Threats of Federal ~~Candidate~~ Species in New Jersey**

Proposed

Candidate species are species that the U.S. Fish and Wildlife Service (Service) has determined warrant listing under the Endangered Species Act and await formal listing. Although these species receive no substantive or procedural protection under the Endangered Species Act until formal listing, the Service encourages consideration of candidate species in project planning.

Red Knot (*Calidris canutus rufa*)

The red knot was added to the list of Federal candidate species in 2006. Red knots are federally protected under the Migratory Bird Treaty Act, and are State-listed as threatened.

At 9 to 10 inches long, the red knot is a large, bulky sandpiper with a short, straight, black bill. During the breeding season, the legs are dark brown to black, and the breast and belly are a characteristic russet color that ranges from salmon-red to brick-red. Males are generally brighter shades of red, with a more distinct line through the eye. When not breeding, both sexes look alike—plain gray above and dirty white below with faint, dark streaking. As with most shorebirds, the long-winged, strong-flying knots fly in groups, sometimes with other species. Red knots feed on invertebrates, especially bivalves, small snails, crustaceans, and, on breeding grounds, terrestrial invertebrates.

Small numbers of red knots may occur in New Jersey year-round, while large numbers of birds rely on Atlantic and Delaware Bay stopover habitats during the spring (mid-May through early June) and fall (late-July through October) migration periods. Red knots winter at the southern tip of South America and breed above the Arctic Circle. These small shorebirds fly more than 9,300 miles from south to north every spring and reverse the trip every autumn, making the red knot one of the longest-distance migrating animals. Migrating red knots break their spring migration into non-stop segments of 1,500 miles or more, converging on just a few critical stopover areas along the way. Large flocks of red knots arrive at stopover areas along the Delaware Bay and Atlantic coast each spring, with many of the birds having flown directly from northern Brazil. Red knots are faithful to these specific sites, stopping at the same locations year after year. The spring migration is timed to coincide with the spawning season for the horseshoe crab (*Limulus polyphemus*). Horseshoe crab eggs provide a rich, easily digestible food source for migrating birds. Mussel beds are also an important food source for migrating knots, particularly if insufficient horseshoe crab eggs are available. Birds arrive at stopover areas with depleted energy reserves and must quickly rebuild their body fat to complete their migration to Arctic breeding areas. During their brief 10 to 14-day stay in the mid-Atlantic, red knots typically double their body weight.

Threats to the red knot include disturbance, reduced food availability at stopover areas, and shoreline development.

January 2013



United States Department of the Interior

FISH AND WILDLIFE SERVICE

3817 Luker Road
Cortland, NY 13045



December 9, 2013

Jennifer T. Nersesian, Superintendent
Gateway National Recreation Area
210 New York Avenue
Staten Island, NY 10305

Dear Ms. Nersesian:

The U.S. Fish and Wildlife Service's (Service) Long Island Field Office (LIFO) has reviewed the National Park Service's (NPS) document entitled, "Draft General Management Plan/Environmental Impact Statement" (Draft GMP/EIS, or Draft Plan) dated July 2013 for the Gateway National Recreation Area (Gateway or GNRA) in New York and New Jersey. This letter provides the LIFO's comments only on those portions of the Draft Plan dealing with the New York Units. The comments below are similar in scope and context to that provided by the Service's New Jersey Field Office (NJFO) due to the similarity of listed species in New York and New Jersey.

AUTHORITY

These comments are provided pursuant to the National Environmental Policy Act (NEPA) of 1969 as amended (42 U.S.C. 4321 *et seq.*); Section 7 of the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*); the Migratory Bird Treaty Act of 1918 (40 Stat. 755; 16 U.S.C. 703-712), as amended; and Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds. These comments do not preclude separate review and comments by the Service as afforded by the Fish and Wildlife Coordination Act (48 Stat. 401; 16 U.S.C. 661 *et seq.*), if implementation of the GMP requires any permits from the U.S. Army Corps of Engineers pursuant to the Clean Water Act of 1977 (33 U.S.C. 1344 *et seq.*).

NPS PREFERRED ALTERNATIVE

The Draft GMP/EIS presents three alternatives: Alternative A (No Action, continuation of current management practices and policies), Alternative B (Discovering Gateway, recreation emphasis), and Alternative C (Experiencing Preserved Places, preservation emphasis). The NPS has identified Alternative B as its preferred alternative, and Alternative C as the Environmentally Preferable Alternative under NEPA.

Overall, Alternative B would create increased recreational and educational opportunities within the GNRA's New York Units, drawing people into the park to increase awareness and enjoyment of the GNRA natural environment.

FEDERALLY-LISTED SPECIES

The federally-listed piping plover (*Charadrius melodus*; threatened), roseate tern (*Sterna dougallii dougallii*; endangered), and seabeach amaranth (*Amaranthus pumilus*; threatened) are known to occur within the New York portion of the GNRA, primarily within the Jamaica Bay Unit. The Jamaica Bay Unit also provides habitat for red knot (*Calidris canutus rufa*). On September 30, 2013, the Service proposed to list the *rufa* red knot as a threatened species under the ESA. Background information on piping plover, seabeach amaranth, and red knot was provided to your office in separate correspondence dated November 1, 2013, by the Service's New Jersey Field Office (NJFO), and is incorporated by reference into this correspondence.

SERVICE COMMENTS

As noted by the Service's NJFO, we also support the NPS in its effort to update the GMP and in considering climate change, including sea level rise, into the planning process. We note that neither Alternative B nor C designates to the fullest extent the habitat areas for federally-listed threatened or endangered (TE) species as the most protected category, that is, the Sensitive Resource Subzone. For example we would recommend including all of the shoreline around Breezy Point, Fort Tilden, Jacob Riis Parks, and Jamaica Bay's West Pond as Sensitive Resource Subzones, as well as Crookes Point in Great Kills Park, as they provide important habitats for piping plover, seabeach amaranth, roseate tern, and red knot.

Preferred Alternative B includes increasing recreational activities either within or adjacent to piping plover breeding and seabeach amaranth growing areas. For example, the Draft GMP/EIS calls for the expansion of public use of the active beach zone in Breezy Point where plovers and seabeach amaranth are known to occur. Such an expansion could lead to an increase of human disturbance to incubating or brooding plovers or trampling of plants. Alternative B also calls for the introduction of camping in the Natural Zone at Fort Tilden, where plovers breed. Although the camping areas are proposed in inland areas, these areas would be adjacent to beaches that supported piping plovers most recently as 2013. Campers would be likely to traverse into these breeding areas and disturb incubating and brooding plovers. Significant increases in enforcement of pedestrian and vehicular restrictions will be an important factor in addressing this impact.

Alternative B also proposes that dunes in Fort Tilden that had been overwashed from Hurricane Sandy (a natural coastal process) would be "restored" and remain in, as described in the Draft GMP/EIS, relatively "natural condition subject to natural processes." The construction of artificial dunes in this area could result in indirect adverse effects to piping plovers and seabeach amaranth. Artificial dune and beach construction impede natural processes of shoreline movement (cross-island sediment transport by overwash), thereby slowing down or preventing the natural formation of highly suitable overwash-created habitats essential for the recovery of these species (Cohen *et al.* 2007; Elias *et al.* 2000). High quality habitats for piping plovers that

are created by overwash include sparsely vegetated upper beach foredune habitats, dune blowouts (breaks in the dunes, often formed during storms), over-wash fans (over-topping of dunes and landward transport of sand), and interdunal swales (Strauss 1990).

ENDANGERED SPECIES ACT CONSULTATION

As you are aware, section 7(a)(2) of the ESA requires federal action agencies to consult with the Service on proposed activities that may affect federally-listed species. The Service encourages the NPS to initiate consultation on the Draft GMP/EIS as soon as possible, and to complete consultation prior to issuance of the final GMP/EIS.

Under section 7(c) of the ESA, the lead Federal agency for an action has the responsibility to prepare a biological assessment (BA) if the proposed action is a major construction project that requires an EIS under NEPA, or if the proposed action may affect a federally-listed species listed. Based on the level of likely impacts to federally-listed species from the updating of the Gateway GMP and the EIS-level analysis being conducted under NEPA, we recommend that the NPS prepare a Biological Assessment (BA).

The BA should contain information concerning listed or proposed species that may be present in the action area and an analysis of any potential effects of the proposed action on such species.

The Service is available to assist the NPS in determining the contents of the BA, as well as the appropriate level of analysis regarding impacts to listed species. We recommend that the contents of the BA include, but not be limited to:

The likely changes in number of beach visitors to piping plover nesting areas during the nesting season as a result of markedly increased transportation into Breezy Point, Jacob Riis, and Fort Tilden that would occur under both Alternatives B and C;

The types, locations, and magnitude of possible projects to restore natural sand transport processes;

The likely changes in number of beach visitors to piping plover nesting areas during the nesting season as a result of markedly increased transportation to natural and sensitive resource zones that would occur under both Alternatives B and C, and, based on past visitor use and enforcement data, the likely increase in the number of unauthorized intrusions into fenced or closed piping plover habitats;

Indication if the NPS will institute any caps on the total number of visitors into units supporting listed species, such as piping plover, during the breeding and growing seasons. No such caps currently exist, but visitation is generally limited by the number of parking spaces and would be expected to increase markedly upon expansion of non-car-based transportation options to access the park;

Specific information on the types, locations, durations, seasonal timing, and number of camping opportunities in or adjacent to piping plover nesting areas, or adjacent to trails (both authorized

and unauthorized trails) that lead to nesting areas, as well as the likely increase in the number of unauthorized intrusions into fenced or closed piping plover habitats, based on past visitor use and enforcement data; and

Analysis of how the implementation of the threatened and endangered species management will or will not change under Alternatives B and C relative to current management practices within the park.

MIGRATORY BIRD TREATY ACT AND EXECUTIVE ORDER 13186

Due to the significance of the Jamaica Bay Unit to a migratory birds, the Service recommends that the NPS avoid an increase of active recreation and vehicular and boat access in areas that support sensitive grassland, marsh, shorebird, and waterfowl species.

Breezy Point is a concentration area for migratory shorebirds, raptors, waterfowl, and landbirds, especially during the summer and fall migrations. Raptor species observed in this area include American kestrel (*Falco sparverius*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), northern harrier (*Circus cyaneus*), osprey (*Pandion haliaetus*), peregrine falcon (*Falco peregrinus*), and merlin (*Falco columbarius*).

Grassland birds which may use Floyd Bennett Field as a breeding area include grasshopper sparrow (*Ammodramus savannarum*), horned lark (*Eremophila alpestris*), eastern meadowlark (*Sturnella magna*), upland sandpiper (*Bartramia longicauda*), savannah sparrow (*Passerculus sandwichensis*), northern harrier (*Circus cyaneus*), American kestrel, and common barn-owl (*Tyto alba*). Overwintering grassland birds at Floyd Bennett Field include northern harrier, rough-legged hawk (*Buteo lagopus*), American kestrel, common barn-owl, short-eared owl (*Asio flammeus*), horned lark, eastern meadowlark, and savannah sparrow. Bobolink (*Dolichonyx oryzivorus*) is a regular migrant visitor in the grasslands.

The saltmarsh, dredged material, and upland islands in the middle of Jamaica Bay are largely separated from disturbance and predation occurring on the surrounding mainland, and support large numbers of nesting waterbirds and diverse migratory birds throughout the year. A few islands in the bay support or have supported heronries, including a heronry located on Canarsie Pol that has supported a variety of nesting waders including glossy ibis (*Plegadis falcinellus*), great egret (*Casmerodius albus*), snowy egret (*Egretta thula*), cattle egret (*Bubulcus ibis*), black-crowned night-heron (*Nycticorax nycticorax*), and tricolored heron (*Egretta tricolor*). Canarsie Pol also has nesting by the state-listed common tern (*Sterna hirundo*; threatened), as well as by great black-backed gull (*Larus marinus*), herring gull (*Larus argentatus*), and American oystercatcher (*Haematopus palliatus*). Common terns occur on several other islands in the bay, including Jo Co Marsh and Silver Hole Marsh, as well as at Duck Creek Marsh, East High Meadow, Ruffle Bar, and Subway Island. Laughing gulls (*Larus atricilla*) re-colonized the bay in 1979 and now occur at three colonies in the bay at East High Meadow, Silver Hole Marsh, and Jo Co Marsh. Ospreys have also nested in the marshes in Jamaica Bay in recent years. Clapper rail (*Rallus longirostris*), common moorhen (*Gallinula chloropus*), seaside sparrow (*Ammodramus maritimus*) and saltmarsh sparrow (*Ammodramus caudacutus*) also nest in the saltmarshes in the bay.

Jamaica Bay is one of the most important migratory shorebird stopover sites in the New York Bight region, especially during fall migration (July to November). The shorebirds utilize much of the bay, but tend to focus on the intertidal areas during low tide and move to East and West Ponds on Ruler's Bar Hassock during higher tides. Black-bellied plover (*Pluvialis squatarola*), semipalmated plover (*Charadrius semipalmatus*), greater yellowlegs (*Tringa melanoleuca*), ruddy turnstone (*Arenaria interpres*), sanderling (*Calidris alba*), semipalmated sandpiper (*Calidris pusilla*), least sandpiper (*Calidris minutilla*), dunlin (*Calidris alpina*), and short-billed dowitcher (*Limnodromus griseus*) have all been observed here. Shorebirds known to breed in or around Jamaica Bay include killdeer (*Charadrius vociferus*), American oystercatcher, willet (*Catoptrophorus semipalmatus*), spotted sandpiper (*Actitis macularia*), upland sandpiper, and American woodcock (*Scolopax minor*).

Jamaica Bay also has significant wintering waterfowl concentrations of greater scaup (*Aythya marila*), American black duck (*Anas rubripes*), brant (*Branta bernicula*), Canada goose (*Branta canadensis*), bufflehead (*Bucephala albeola*), canvasback (*Aythya valisneria*), mallard (*Anas platyrhynchos*), ruddy duck (*Oxyura jamaicensis*), red-breasted merganser (*Mergus serrator*), snow goose (*Chen caerulescens*), and American wigeon (*Anas americana*). Jamaica Bay supports some of the largest wintering populations of greater scaup and American black duck in New York State. Regularly occurring waterfowl also include horned grebe (*Podiceps auritus*), green-winged teal (*Anas crecca*), gadwall (*Anas strepera*), northern shoveler (*Anas clypeata*), and common goldeneye (*Bucephala clangula*). Concentrations of waterfowl also occur in the bay during spring and fall migrations. Waterfowl confirmed breeding in the bay include Canada goose, American black duck, mallard, northern shoveler, gadwall, redhead (*Aythya americana* - introduced), and ruddy duck.

The shorelines of Raritan Bay, both the south shore in Monmouth County, New Jersey, and the shoreline of Staten Island, New York, concentrate migratory shorebirds and Neotropical migrant landbirds. Shorebird surveys done in the early 1980s have indicated the importance of the greater Raritan Bay for spring and fall shorebird migration with seasonal totals of over 20,000 birds based on weekly surveys; three species, sanderling, ruddy turnstone, and semipalmated sandpiper, make up about 85 percent of the total of migratory shorebirds using this area. Historically, the migratory and mid-winter concentrations of waterfowl in this complex are especially significant, with 20-year midwinter averages of over 60,000 birds based on assessments completed in the mid-1990s. The combination of geographic location and configuration coupled with productive bay wetlands, flats, and waters in Raritan Bay and its tributaries, beaches, and nearshore waters make it an important migratory staging area for many species of waterfowl on the Atlantic Flyway, with peak migration occurring in late October. The number of horned grebes as well as common and red-throated loons during migration is regionally significant. Especially notable are the overwintering scaup concentrations, American black duck, mallard, and brant (*Branta bernicla*), along with lesser numbers of bufflehead, long-tailed duck (*Clangula hyemalis*), mergansers, primarily red-breasted merganser, common goldeneye, and American wigeon. Birds identified in the New York State Breeding Bird Atlas include, but are not limited to, American black duck, mallard, clapper rail, king rail (*Rallus elegans*), green-backed heron (*Butorides striatus*), marsh wren (*Cistothorus palustris*), willet (*Catoptrophorus semipalmatus*), Canada goose, gadwall, green heron (*Butorides virescens*),

osprey, northern Harrier, Cooper's hawk, American kestrel, clapper rail, killdeer, American oystercatcher, spotted sandpiper (*Actitis macularius*), willet, American Woodcock, mourning dove (*Zenaidura macroura*), black-billed cuckoo (*Coccyzus erythrophthalmus*), barn owl, eastern screech-owl (*Megascops asio*), great horned owl (*Bubo virginianus*), whip-poor-will (*Caprimulgus vociferous*), belted kingfisher (*Megasceryle alcyon*), and red-bellied woodpecker (*Melanerpes carolinus*).

Increasing recreational activities in the sensitive habitats as envisioned in Alternative B may result in inadvertent disturbances to migrating, overwintering and breeding bird populations. The GMP should seek to minimize or eliminate entirely any disturbances to these federally-protected bird species. This is especially important in the case of colonial beach-nesting birds, grassland species, heron rookeries, wintering waterfowl, and marsh birds. At the ocean shores, human intrusions into beach nesting areas during the critical nesting season (April to August) should be prevented using a variety of methods, including protective fencing, posting, warden patrols, and public education. Public education and cooperative approaches with landowners are essential to successful protection of beach species in this area. When determined to be a problem, as it is at most mainland-connected nesting beaches, predator control and/or removal should be instituted. Those tasks and objectives of the piping plover recovery plan that are applicable to this area should be undertaken, including restoration or enhancement of degraded sites where appropriate. Additional development along the Rockaway barrier beach should be limited; existing erosion control policies and proposed erosion control projects need to be carefully planned and implemented in order to minimize impacts and existing and potential habitat for piping plover, and other beach strand species at Breezy Point.

Boat access to bay islands and saltmarshes should be avoided during critical marsh bird breeding periods. Overwintering waterfowl concentration areas should be avoided and sand bar habitats important to migrating shorebirds should be identified and managed to prevent boat landings during critical migration periods. Finally, large areas of Floyd Bennett Field should be maintained as grasslands and the grassland species they support protected by only considering compatible recreational activities in those areas.

CONCLUSION

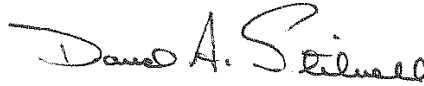
It appears that Alternative B could have substantial, long-term impacts on federal trust wildlife resource such as threatened and endangered species and migratory birds. Of the alternatives analyzed in the GMP; Alternative C may be more compatible with protection of these resources.

The Draft GMP presents a preferred alternative that may affect federally-listed threatened or proposed species. Therefore, further consultation with the Service is necessary pursuant to section 7 of the ESA. Preliminary recommendations are provided above regarding information that will be necessary to initiate consultation. As recommended by the Service's NJFO, we encourage NPS to complete consultation prior to issuance of the final GMP/EIS.

We also note that for future reference, the Service will designate either the NJFO or the LIFO as lead office to serve as primary contact, and future correspondence will consist of combined comments from both offices. We will notify you upon that designation.

Thank you for the opportunity to provide comments on the Draft GMP. If you have any questions or require further assistance, please have your staff contact the Long Island Field Office at (631) 286-0485.

Sincerely,

A handwritten signature in black ink, reading "David A. Stilwell". The signature is fluid and cursive, with the first name "David" and last name "Stilwell" clearly legible.

David A. Stilwell
Field Supervisor

REFERENCES

- Cohen, J.B., L.M. Houghton, and J.D. Fraser, 2007. Nesting Density and Reproductive Success of Piping Plovers in Response to Storm- and Human-Created Habitat Changes. *Wildlife Monographs* (173): 1-24.
- Elias, S.P., Fraser, J.D., and P.A. Buckley. 2000. Piping Plover Brood Foraging Ecology on New York Barrier Islands. *Journal Wildlife Management*. 64(2): 346-354.
- Strauss, E. 1990. Reproductive Success, Life History Patterns, and Behavioral Variation in Populations of Piping Plovers Subjected to Human Disturbance (1982-1989). Ph.D. Dissertation. Tufts University, Medford, MA. 143 pp.



In Reply Refer To:
2014-I-0027

United States Department of the Interior

FISH AND WILDLIFE SERVICE

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MAR 10 2014

Jennifer Nersesian, Superintendent
Gateway National Recreation Area
210 New York Avenue
Staten Island, New York 10305

Dear Ms. Nersesian:

The U.S. Fish and Wildlife Service's (Service) New Jersey Field Office (NJFO) and New York Field Office (NYFO) have completed our review of the National Park Service's (NPS) proposed new General Management Plan (GMP) [draft issued July 2013 with a draft Environmental Impact Statement (EIS)] for Gateway National Recreation Area (Gateway) in New York and New Jersey. The NPS and the Service previously agreed that review of the GMP for effects to federally listed species would be conducted through informal consultation under Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA). However, upon completing our review of the GMP and the NPS's effects analysis, the Service has concluded that review under Section 7(a)(1) of the ESA is more appropriate.

Section 7(a)(2) of the ESA requires consultation on all Federal agency actions and programs that may affect listed species. However, Service policy states that, when there is insufficient project-specific information on an agency program or management plan to support a proper effects analysis, a 7(a)(1) programmatic review is appropriate (USFWS and NMFS 1998). Following our review of the GMP (as revised) and the effects analysis, the Service finds that the NPS's proposed adoption of the new GMP falls into this category (*i.e.*, of insufficient project-specific information) and therefore is more appropriately addressed by a Section 7(a)(1) programmatic review. This type of review outlines a "blueprint for conservation activities" during implementation of the GMP.

This letter concludes the Service's Section 7(a)(1) review of the new GMP, and provides the conservation framework for subsequent, project-specific 7(a)(2) consultations that will be conducted on all activities proposed at Gateway over the next 20 years under the new GMP.

GMP REVIEW HISTORY

November 1, 2013

The NJFO provided a letter with preliminary comments on the Draft GMP/EIS.

November 12, 2013	A conference call was held between NPS and Service management and staff to discuss the NJFO comment letter.
November 13, 2013	Service staff made a site visit to the Sandy Hook Unit of Gateway.
November 26, 2013	The NJFO received an NPS letter responding to our November 1, 2013 comments and providing a list of revisions to the GMP.
December 9, 2013	The NYFO provided a letter with preliminary comments on the Draft GMP/EIS.
December 11, 2013	The NJFO provided a letter with updated comments.
January 16, 2014	Service and NPS management met to discuss Service comments on the Draft GMP/EIS, and determined that formal consultation would not be necessary. Via e-mail, the NPS provided a list of revisions to the GMP.
January 23, 2014	A conference call was held between NPS and Service staff to discuss Service concerns.
January 23, 2014 – February 18, 2014	The Service provided technical assistance in the preparation of the NPS's effects analysis.
January 30, 2014	A conference call was held between NPS and Service staff to discuss Service concerns.
February 24, 2014	Via e-mail, NPS responded to several outstanding Service concerns and provided a list of revisions to the GMP.
March 4, 2014	The NPS provided its effects analysis pursuant to Section 7 of the ESA.

FEDERALLY LISTED SPECIES WITHIN GATEWAY

The Sandy Hook and Jamaica Bay Units of Gateway support important populations of the federally listed piping plover (*Charadrius melodus*) (threatened) and seabeach amaranth (*Amaranthus pumilus*) (threatened), and Gateway provides migratory stopover habitat for the rufa red knot (*Calidris canutus rufa*) that is currently proposed for listing as threatened. In addition, a population of the federally listed (threatened) northeastern beach tiger beetle (*Cicindela dorsalis dorsalis*) was re-established at the northern tip of Sandy Hook in 1994, but recent surveys have not detected any beetles and it is unclear if this population is still extant. Information regarding the status of these species within Gateway was provided in our November 1, 2013 and December 9, 2013 letters.

PROPOSED FEDERAL ACTION

The proposed action involves the adoption by NPS of a new GMP with a new vision for the management of Gateway. The new GMP is intended to “help park managers focus on what is most important in carrying out a new 20-year vision for Gateway and the mission of the NPS.”

According to the effects analysis, the existing General Management Plan for Gateway was completed in 1979 (1979 GMP) and generally focused on providing recreational opportunities to the New York metropolitan area. Although the 1979 GMP recognized the degraded conditions of park resources and referenced the park’s enabling legislation, the protection of federally listed threatened and endangered species was discussed in terms of “...identification and protection through appropriate vegetation and wildlife management programs.” Tern-nesting sites were addressed as being “...protected from random access by installing signs and/or snow fences or by other management techniques.” All beach strand (shorebird nesting) habitat was designated as “beach zone.” Beach zone designation provided for a variety of recreational uses, with “...natural shoreline dynamics interrupted only as necessary to reduce erosion and maintain beach use in major public use areas.” Following the Federal listing of the piping plover in 1986 and seabeach amaranth in 1993, park natural resource management evolved as a result of both formal and informal consultation with the Service, in an effort to achieve the goals of the regional plans for these species.

The NPS now proposes to adopt a new GMP and to select for its new management vision “Alternative B: Discovering Gateway—NPS Preferred Alternative.” The summary vision of Alternative B is presented on pages 38 and 77 of the Draft GMP/EIS as follows: “This alternative provides the widest range of activities and most recreation opportunities in dispersed locations throughout the park. New connections would be forged with park lands and communities adjacent and nearby Gateway. This alternative offers the most instructional programming and skills development and draws people into the park to increase awareness and enjoyment of Gateway’s historic resources and the natural environment. More convenient and affordable park access is developed through trail connections, bicycle infrastructure, public transit, and waterborne transportation. This alternative prioritizes joint management and operations for visitor services, orientation, programs, and facilities with New York City and other partners.” In adopting Alternative B, the NPS is rejecting both the No Action alternative that would have continued the adaptive implementation of the 1979 GMP, and Alternative C: Experiencing Preserved Places—Environmentally Preferable Alternative that would have “increase[d] the visibility, enjoyment, and protection of coastal resources and focuse[d] resource management on beach and dune ecosystems and coastal defense landscapes.”

The Draft GMP/EIS provides examples of the types of projects and management changes that may occur under Alternative B at the various park units (*e.g.*, new or expanded camping; new or expanded transportation options; increased recreational and educational activities; constructing dunes). However, no specific projects or management changes are proposed at this time. The NPS will initiate consultation with the Service prior to any proposed on-the-ground projects or management changes that may affect federally listed species, in accordance with Section 7(a)(2) of the ESA.

The Draft GMP/EIS also lays out a new set of management zones, which are “descriptions of desired conditions for park resources and visitor experience in different areas of the park.” The management zones that will be designated under the new GMP include Marine, Recreation (including Community Activity and Active Beach Subzones), Natural (including Sensitive Resource Subzone), Historic, and Developed.

Revisions Since the Draft GMP/EIS

The NPS has provided several revisions to the text of the July 2013 Draft GMP/EIS in order to address Service concerns for listed species. The NPS has not provided a revised version of the GMP, but did provide written lists of text revisions via correspondence received on November 26, 2013, January 16, 2014, and February 24, 2014. The NPS’s effects analysis, and the Service’s review of the proposed action, both reflect the GMP with these revisions. A list of revisions provided by NPS is enclosed with this letter.

Conservation Measures

According to the Service’s Consultation Handbook, conservation measures are actions to benefit or promote the recovery of listed species that are included by a Federal agency as an integral part of the proposed action; these actions will be taken by the Federal agency, and serve to minimize or compensate for project effects on the species under review (USFWS and NMFS 1998). Your February 24, 2014 e-mail lists the following conservation measures that will be added to the GMP.

- Continue to collect baseline data regarding disturbance to threatened and endangered species, such as data on disturbance levels from authorized activities, unauthorized intrusions, visitation levels, staffing levels.
- Continue to review the effectiveness of conservation measures for threatened and endangered species and adapt and revise the conservation measures as conditions change.
- Continue to consult with the Service on conservation measures for threatened and endangered species for site-specific planning efforts and natural resource management plans.
- Continue to work with the Service to update resource management plans for threatened and endangered species (such as the Shoreside Plan [*i.e.*, the 2007 Shoreside Threatened and Endangered Species Management Plan]) as needed to reflect changing conditions.

In addition, the effects analysis includes numerous conservation measures (enclosed) that the NPS has agreed to implement concurrent with implementation of the new GMP.

SERVICE COMMENTS

The NPS has a long history of proactively managing listed species at Gateway under Section 7(a)(1) of the ESA, and of consulting with the Service under Section 7(a)(2). At Jamaica Bay, piping plover management at the Breezy Point Tip and at West Beach is guided by the 1989 Management Plan for the Threatened Piping Plover (*Charadrius melodus*), Breezy Point District,

while protections at Fort Tilden and Jacob Riis Park are at least as protective as Service guidelines for recreational activities (USFWS 1994). At Sandy Hook, management of listed species is guided by the 2007 Shoreside Plan. The Service recognizes the substantial benefits to listed species provided by the NPS's ongoing monitoring, management, and protection of listed species and their habitats at Gateway.

The Service also appreciates the cooperation of NPS in addressing our concerns with the July 2013 Draft GMP/EIS. The adopted GMP text changes (enclosed) substantially improve the document's clarity of message regarding the NPS's intent to balance expanded recreation at Gateway with the continuation of high levels of protections for listed species. The adopted conservation measures (enclosed) include important sidebars and consultation triggers that will guide future projects and management changes under the new GMP. The Service anticipates that the designation of Natural Zones and Sensitive Resource Subzones will benefit listed species in many portions of the park. Listed species will also benefit from the above-mentioned conservation measures, which will continue NPS's adaptive implementation of ongoing management practices aimed at protecting these species. In addition, listed species will benefit from provisions in the new GMP for a proactive approach to mitigate and adapt to the effects of climate change over the next 20 years.

However, the Service has a few outstanding concerns.

1. The Service remains concerned that the selected vision statement (from Alternative B, quoted above) has not been revised to include any mention of conserving listed species or other natural resources. However, we concur that the text changes made throughout the GMP (enclosed) do provide adequate context for Alternative B to ensure that park managers will continue to balance expanded recreation with natural resource protections over the next 20 years.
2. We remain concerned that, based on GPS data from the past 10 years, more than 40 percent of recent piping plover nests in Sandy Hook were located in areas that will be designated Recreation Zone or Active Beach Subzone. We also remain concerned that the NPS has declined to adopt any conservation measures to expressly address the likelihood that increasing human use of the park (including, but not limited to, establishment of new Recreation Zones; the expansion of transportation options; the expansion and/or introduction of camping; and anticipated increases in overall visitor ship) will reduce the effectiveness of existing NPS policies, practices, and enforcement efforts aimed at protecting listed species. However, the effects analysis states, "It is anticipated that additional conservation measures will be needed to offset expected increases in visitor ship. Knowing the challenges associated with current intensity of use, it is likely that adverse effects would increase to levels where additional conservation measures would be required in the nesting areas adjacent to recreational beaches [at Sandy Hook and Jamaica Bay-Fort Tilden], as well as at the northern tip of Sandy Hook." Thus, the Service anticipates that, through future consultations, NPS will adopt adequate conservation measures to address these likely adverse effects from any proposed actions that would expand park uses or increase visitor ship.

3. We remain concerned that the following statement on page 338 of the Draft GMP/EIS has not been revised, "The dunes at Fort Tilden (which have been overwashed and eroded by Hurricane Sandy) would be restored and remain in relatively natural condition subject to natural coastal processes . . ." The Service disagrees that anthropogenic dune building is consistent with natural coastal processes. In fact, artificial dune and beach construction impede natural processes of shoreline movement (cross-island sediment transport by overwash), thereby slowing or preventing the natural formation of highly suitable overwash-created habitats essential for the recovery of piping plovers (Cohen *et al.* 2007; Elias *et al.* 2000) and other beach-dependent species. High-quality habitats for piping plovers that are created by overwash include sparsely vegetated upper beach foredune habitats, dune blowouts (breaks in the dunes, often formed during storms), over-wash fans (over-topping of dunes and landward transport of sand), and interdunal swales (Strauss 1990). However, the effects analysis includes a conservation measure for Sandy Hook and Jamaica Bay-Fort Tilden to, "Initiate early Section 7 (ESA) consultation for proposed projects that involve beach / dune manipulation, mechanized sand movement (redistribution), installation of sand fencing, and work that would affect native vegetation." Thus, the Service anticipates that, through future consultations, NPS will fully evaluate adverse effects to listed species from any proposed dune building; we anticipate formal consultation would be necessary since the central purpose of a constructed dune (impeding overwash) is itself a significant adverse effect to listed species.

4. We are concerned with the wording of the following conservation measure, from the effects analysis, for Sandy Hook and Jamaica Bay-Fort Tilden, "In beach strand areas where threatened and endangered species are known to occur, beach camping will not be permitted during the [piping plover] breeding season (March 15 through September 1)." We commend NPS for adopting this and other measures that are likely to prevent the most severe adverse effects to listed species from any new or expanded camping at Gateway. However, in park units that support listed species, beach camping anywhere during the breeding season could preclude these species from colonizing new areas, and could make enforcement (*e.g.*, of buffers around occupied habitats) more difficult. We understand NPS's intent is to prohibit beach camping during the breeding season throughout those units that support listed species, but this conservation measure has not been revised accordingly. Also, the conservation measures do not specify the buffer distances that will be implemented around listed species' habitats for inland (non-beach) camping, and do not specify how access to species' habitats from camp sites will be controlled or enforced. However, the effects analysis also includes a conservation measure that, "Camp sites will be appropriately sited to avoid impacts to threatened and endangered species and will be determined through future consultation." Thus, the Service anticipates that our remaining concerns will be addressed through future consultations should any new or expanded camping be proposed anywhere in Gateway.

5. We wish to clarify some statements in the effects analysis that seem to confuse the avoidance or minimization of adverse effects (*e.g.*, from proposed actions) with beneficial effects. For example, the effects analysis states that NPS anticipates beneficial effects at Sandy Hook and Jamaica Bay-Fort Tilden from "the careful and appropriate siting of recreational activities and trails." While we concur that careful siting is important to minimize adverse effects, such a conservation measure would not – of itself – provide a beneficial effect. According to the Consultation Handbook, beneficial effects are "contemporaneous positive effects without any adverse effects to the species" (USFWS and NMFS 1998). We do recognize a key beneficial

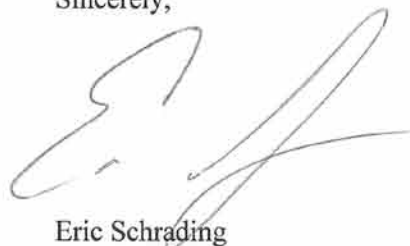
effect of the new GMP; namely, the NPS commitment to continue adaptive implementation of existing policies, practices, and enforcement efforts aimed at protecting listed species.

Despite the outstanding concerns listed above, the Service concurs that the NPS's new GMP, as revised, together with the enclosed conservation measures, constitute an adequate conservation and consultation framework for federally listed species under Service jurisdiction. This concurrence is based largely on the GMP revisions and conservation measures (both enclosed) adopted by the NPS. If additional information on federally listed species becomes available, or if the conservation measures or revised language of the GMP (enclosed) should change, this concurrence may be reconsidered.

This letter concludes the Service's Section 7(a)(1) programmatic review of the new GMP. This letter does NOT constitute programmatic Section 7(a)(2) consultation, make any 7(a)(2) effects determinations, or cover any specific project or management change. Your February 24, 2014 e-mail states, "In order for the GMP to be adaptive to changing conditions, the NPS would regularly review the status of threatened and endangered species and revise conservation measures as needed. Any plans or actions that include changes to the types, levels or locations of visitor use that may cause (or contribute to cumulative) impacts to [t]hreatened and [e]ndangered [s]pecies would be subject to [Section 7(a)(2)] consultation with U.S. Fish and Wildlife Service. Future [GMP] implementation projects resulting in site specific plans, such as expanded camping and transportation infrastructure, will include conservation measures for threatened and endangered species, following appropriate review and consultation with U.S. Fish and Wildlife Service. Conservation measures will include, but not be limited to, those identified in this plan (e.g., see Common to All, page 62, camping, page 70 and references to Shoreside Plan throughout). Future implementation of the GMP involving change in management practices or policies will also undergo review and consultation to avoid and minimize adverse effects to threatened and endangered species."

We appreciate the cooperation of NPS engaging in this 7(a)(1) programmatic review to address our concerns for the new GMP for Gateway, and look forward to continuing our cooperative relationship to manage and protect federally listed species at this park. Please contact Wendy Walsh at (609) 383-3938, extension 48, if you have any questions regarding threatened or endangered species.

Sincerely,



Eric Schrading
Field Supervisor

Enclosures

NPS revisions to the July 2013 Draft GMP/EIS
Conservation measures included in the NPS Effects Analysis

References Cited:

- Cohen, J.B., L.M. Houghton, and J.D. Fraser, 2007. Nesting Density and Reproductive Success of Piping Plovers in Response to Storm- and Human-Created Habitat Changes. *Wildlife Monographs* (173): 1–24.
- Elias, S.P., Fraser, J.D., and P.A. Buckley. 2000. Piping Plover Brood Foraging Ecology on New York Barrier Islands. *Journal Wildlife Management*. 64(2): 346-354.
- Strauss, E. 1990. Reproductive Success, Life History Patterns, and Behavioral Variation in Populations of Piping Plovers Subjected to Human Disturbance (1982-1989). Ph.D. Dissertation. Tufts University, Medford, MA. 143 pp.
- U.S. Fish and Wildlife Service. 1994. Guidelines for Managing Recreational Activities in Piping Plover Breeding Habitat on the U.S. Atlantic Coast to avoid Take under Section 9 of the Endangered Species Act. Northeast Region, Hadley, Massachusetts. 19 pp. + Tables. <http://www.fws.gov/northeast/pipingplover/pdf/recguide.pdf> [Accessed March 7, 2014]
- U.S. Fish and Wildlife Service and National Marine Fisheries Service. 1998. Consultation Handbook: Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act. http://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf [Accessed March 7, 2014].

cc via email:

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bcc: NJFO (2)

NJFO:ES:WWalsh:wlw:3/10/2014

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Enclosure: Revisions to the July 2013 Gateway National Recreation Area Draft General Management Plan/Environmental Impact Statement Provided by the National Park Service in Correspondence Received November 26, 2013, January 16, 2014, and February 24, 2014

*Indicates an earlier revision was superseded by the version received on February 24, 2014.

**Omitted from the February 24, 2014 list, but NPS has not indicated a withdrawal of these changes.

**Pg 23, Servicewide Laws and Policies section

Endangered Species Act is listed, no additional text recommended

Pg 29-30, Related Plans, National Park Service Plans

Add the Shoreside Plan (2007) to list of plans under Related Plans section.

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

Pg 46, Management Zones-

Clarify that existing laws would continue regardless of zoning.

'Management zoning does not preclude NPS law and policy.'

Pg 48, Recreation Zone, Recreation and Visitor Experience -Add-

'Visitor access and recreational use would be compatible with existing plans for managing Threatened and Endangered Species.'

Pg 48, Marine Zone, Recreation and Visitor Experience- Add-

'Access and recreational use would be limited or restricted within certain sensitive marine areas, such as Spermaceti Cove.'

**Pg 49, Natural Zone, Recreation and Visitor Experience- Add-

'Visitor access and use would be in accordance with existing plans for managing Threatened and Endangered Species. Park managers will continue established measures to protect and enhance habitat for wildlife and species of concern, such as providing symbolic fencing with posts and signs around nesting birds, predator removal, closure (to dogs for example), buffer zones, prohibition of certain recreational activities during breeding season (kite flying, kite surfing, fireworks) and visitor education.'

*Pg 52, Recreation Zone, Natural Resources

After last line in 2nd paragraph 'Species of special concern and their habitats would be managed to support species requirements'

Add-

'Park managers will continue established conservation measures to protect and enhance habitat for wildlife and species of concern, such as providing symbolic fencing with posts and signs around nesting birds, predator removal, closures, buffer zones, prohibition of certain recreational activities during breeding season (kite flying, kite surfing, fireworks) and visitor education.'

*Pg 53, Natural Zone, Natural Resources

Add- 'Park managers will continue with established measures to protect and enhance habitat for wildlife and species of concern, such as providing symbolic fencing with posts and signs around nesting birds, predator removal, closure (to dogs for example), buffer zones, prohibition of certain recreational activities during breeding season (kite flying, kite surfing, fireworks) and visitor education.'

Pg 59

Section will include list of conservation measures. Text will be forthcoming.

*Pg 62 [February 24, 2014 e-mail from Superintendent Nersesian]

FWS requested a summary of conservation measures, potentially within the Common to All Section. NPS believes the requested information can be added to the existing Chapter 2: Management Alternatives, Common to All Section, Table 2-2, Summary of Natural Resource Conditions, page 62. The following text will be included:

'Examples of Future Actions-

- Continue to collect baseline data regarding disturbance to threatened and endangered species, such as data on disturbance levels from authorized activities, unauthorized intrusions, visitation levels, staffing levels
- Continue to review the effectiveness of conservation measures for threatened and endangered species and adapt and revise the conservation measures as conditions change
- Continue to consult with USFWS on conservation measures for threatened and endangered species for site specific planning efforts and natural resource management plans
- Continue to work with USFWS to update resource management plans for threatened and endangered species (such as the Shoreside Plan) as needed to reflect changing conditions.'

*Pg 69

Multiple Day Experience Section, Camping –

Add as separate paragraph:

'The initial camping recommendations within the GMP/EIS would require further analysis, site planning, consultation and compliance. Camp sites would be appropriately sited to avoid impacts to threatened and endangered species and will be determined through future consultation. Access and trails to/from camp site areas will be defined, controlled, and signed, to limit disturbance to Threatened and Endangered Species and other resources. Educational materials concerning Threatened and Endangered Species will be provided at camp site areas. In areas of the Park, that have Threatened and Endangered Species, beach camping will not be permitted during breeding season (March 15-September 1). The Park will provide conservation measures for Threatened and Endangered Species, such as providing symbolic fencing with posts

and signs around nesting birds, establishing buffer zones, and prohibiting certain recreational activities during breeding season.'

*Pg 81, Jamaica Bay Unit, Resource Management

2nd paragraph, after 4th line,

Add-

'Conservation measures for threatened and endangered species, such as providing symbolic fencing with posts and signs around nesting birds, establishing buffer zones, and prohibiting certain recreational activities during breeding season will continue across all management zones, as needed.'

Pg 87, Jamaica Bay Wildlife Refuge

Add-

'Monitoring and protection measures for migrating birds would continue to be a priority.'

Pg 91, Breezy Point Tip

Add-

'Monitoring and protection measures for threatened and endangered species would continue to be a priority. Protection measures for threatened and endangered species, such as providing symbolic fencing with posts and signs around nesting birds, establishing buffer zones, and prohibiting certain recreational activities during breeding season will continue.

Pg 91, Sandy Hook Unit, Overview

Add as separate paragraph-

'Preservation and protection of threatened and endangered species would continue through monitoring and enforcement and would be balanced with additional recreational opportunities. The existing monitoring and protection measures for threatened and endangered species would continue to be a priority and could occur throughout all management zones'

Pg 92, Sandy Hook, Marine Zone

Add-

'Within certain Marine Zone areas, access may be restricted, such as Spermaceti Cove waters'.

Sandy Hook Zoning Map changes [between Pg 91 and 92]:

North Tip-

Sensitive Resource subzone will be significantly increased to include the vast majority of the north tip. A natural zone will be mapped over the existing fishing access trail (this was approved in 2007 Shoreside EA) and along the shoreline. The Natural Zone will allow for access for appropriate recreational uses, such as nature study, walking, fishing, outside of breeding season. It should be clarified, that the monitoring and enforcement measures outlined in the Shoreside Plan (2007) would continue not only in the Sensitive Resource Subzone, but throughout all management zones, regardless.

Spermaceti Cove-

Sensitive Resource subzone will be mapped over Spermaceti Cove and the adjacent lands, in keeping with Shoreside Plan

South Beach Areas-

Natural zone will be mapped and Recreation zone removed, south of Beach Area B. The Recreation Zone, as currently mapped, between Band D is to provide maximum flexibility for park management to adjust to changing shoreline conditions.

North Beach to Gunnison Beach-

Active Beach Subzone, will be removed between North Beach and Gunnison and replaced with Recreation Zone. North Beach and Gunnison Beach will remain Active Beach Subzone.

*Pg 130

Add-

‘Future implementation projects resulting in site specific plans, such as expanded camping and transportation infrastructure, will adhere to conservation measures for Threatened and Endangered Species. Camp sites will be appropriately sited to avoid impacts to Threatened and Endangered Species and will be determined through future consultation. Access and trails to/from camp site areas will be defined, controlled, and signed, to limit disturbance to Threatened and Endangered Species and other resources.’

*Pg 132

Add-

‘Transportation infrastructure projects will be sited in areas, to the greatest extent possible, that were previously disturbed, to minimize impacts to resources. Trails and access will be defined, controlled, and appropriately signed to lead people away from Threatened and Endangered Species locations. The initial proposed infrastructure options (ferry, shuttle, multi-use pathways), will require further analysis, site planning, consultation and compliance.’

*Pg. 563 [February 24, 2014 e-mail from Superintendent Nersesian]

In order to clarify that future actions will require consultation, the following has been added to the existing text under Chapter 5: Consultation and Coordination, Environmental Quality Review and Consultations, Section 7 Consultation, page 563:

‘In order for the GMP to be adaptive to changing conditions, the NPS would regularly review the status of threatened and endangered species and revise conservation measures as needed. Any plans or actions that include changes to the types, levels or locations of visitor use that may cause (or contribute to cumulative) impacts to Threatened and Endangered Species would be subject to consultation with U.S. Fish and Wildlife Service. Future implementation projects resulting in site specific plans, such as expanded camping and transportation infrastructure, will include conservation measures for threatened and endangered species, following appropriate review and consultation with U.S. Fish and Wildlife Service. Conservation measures will include, but not be limited to, those identified in this plan (e.g., see Common to All, page 62, camping, page 70 and references to Shoreside Plan throughout). Future implementation of the GMP involving change in management practices or policies will also undergo review and consultation to avoid and minimize adverse effects to threatened and endangered species.’

Enclosure: Conservation Measures Included in the National Park Service Effects Analysis for the New (2014) General Management Plan for Gateway National Recreation Area

SANDY HOOK UNIT

Disturbance

1. Camp sites would be appropriately sited to avoid impacts to threatened and endangered species and will be determined through future consultation. (GMP/EIS, pg 132)
2. Access and trails to/from camp site areas will be defined, controlled, and signed, to limit disturbance to threatened and endangered species and other resources. (GMP/EIS, pg 132)
3. Educational materials concerning threatened and endangered species will be provided at camp site areas. (GMP/EIS, pg 132)
4. In beach strand areas where threatened and endangered species are known to occur, beach camping will not be permitted during the breeding season (March 15 through September 1). (GMP/EIS, pg 69).
5. Transportation infrastructure projects will be sited in areas, to the greatest extent possible, that were previously disturbed, to minimize impacts to resources. Trails and access will be defined, controlled, and appropriately signed to lead people away from threatened and endangered species locations. The initial proposed infrastructure options (ferry, shuttle, multi-use pathways), will require further analysis, site planning, consultation and compliance. (GMP/EIS pg 132)
6. Future implementation projects resulting in site specific plans, such as expanded camping and transportation infrastructure, will adhere to conservation measures for threatened and endangered species. Camp sites will be appropriately sited to avoid impacts to threatened and endangered species and will be determined through future consultation. Access and trails to/from camp site areas will be defined, controlled, and signed, to limit disturbance to threatened and endangered Species and other resources. (GMP/EIS, pg. 130).
7. Park managers will continue established conservation measures to protect and enhance habitat for wildlife and species of concern, such as providing symbolic fencing with posts and signs around nesting birds, predator removal, closures, buffer zones, prohibition of certain recreational activities during breeding season (kite flying, kite surfing, fireworks) and visitor education.(Final GMP/EIS multiple locations throughout document).
8. Park managers will continue to review the effectiveness of conservation measures for threatened and endangered species and adapt and revise the conservation measures as conditions change. (GMP/EIS, pg 62)

9. Park managers will continue to consult with USFWS on conservation measures for threatened and endangered species for site specific planning efforts and natural resource management plans. (GMP/EIS, pg 62)

10. Park managers will continue to work with USFWS to update resource management plans for threatened and endangered species (such as the Shoreside Plan) as needed to reflect changing conditions. (Final GMP/EIS, pg 62)

11. Park managers will continue to collect baseline data regarding disturbance to threatened and endangered species, such as data on disturbance levels from authorized activities, unauthorized intrusions, visitation levels, staffing levels. (Final GMP/EIS pg 62)

12. Preservation and protection of threatened and endangered species would continue through monitoring and enforcement and would be balanced with additional recreational opportunities. The existing monitoring and conservation measures for threatened and endangered species would continue to be a priority and could occur throughout all management zones.

13. Beach access points will be monitored for possible disturbances to piping plover and other shorebird nesting locations. Conservation signage at and near access locations will be maintained and/or expanded as needed. Proximity to threatened and endangered species beach nesting areas will be a primary consideration when planning future campground expansions and/or new campsite locations. New or expanded camping areas will be carefully sited relative to shorebird nesting habitat.

Habitat

1. In the Natural Zone and Sensitive Resource Subzone, current resource management practices would be maintained, and protection, research, and monitoring of sensitive habitat like the beach habitat complex on the northern tip and Spermaceti Cove would be increased (Final GMP/EIS, p. 92).

2. Invasive exotic vegetation removal will be priority of natural resource management within the Natural Zone and Sensitive Resource Subzone, thereby providing additional piping plover breeding habitat and allowing for seabeach amaranth germination.

3. Beach grooming is limited (raking and mechanized trash removal) to Active Beach Sunzones.

4. Initiate early Section 7 (ESA) consultation for proposed projects that involve beach / dune manipulation, mechanized sand movement (redistribution), installation of sand fencing, and work that would affect native vegetation.

5. In Natural Zones and Sensitive Resource Subzones that support threatened and endangered species, natural resource management will be focused on providing breeding habitat for piping plover and other beach nesting shorebirds. The Sensitive Resource Subzone in the northern tip of Sandy Hook was expanded to include all natural features that will encourage piping plover nesting and foraging with minimal human disturbance.

6. Threatened and endangered species and habitat are protected to the greatest extent possible and other particularly sensitive species and biotic communities are closely monitored and protected (GMP/EIS, pg 62).

Predation

1. The park will continue established conservation measures to protect and enhance habitat for wildlife and species of concern, such as continuing with predation management program as indicated in the Shoreside Plan.
2. The park will continue to review the effectiveness of monitoring and removing feral cats, and revise as conditions change. "Smart" fox removal will continue on an as-needed basis, as a management tool to protect shorebird nests from predation. The park will review data and observations to explore the efficacy of removing other predators, such as crows, gulls, and ghost crabs.

JAMAICA BAY UNIT – FORT TILDEN

Disturbance

1. Access and trails to/from camp site areas will be defined, controlled, and signed, to limit disturbance to threatened and endangered species and other resources. (GMP/EIS, pg 132)
2. Educational materials concerning threatened and endangered species will be provided at camp site areas. (GMP/EIS, pg 132)
3. In beach strand areas where threatened and endangered species are known to occur, beach camping will not be permitted during the breeding season (March 15 through September 1). GMP/EIS, pg 69).
4. Future implementation projects resulting in site specific plans, such as expanded camping, will adhere to conservation measures for threatened and endangered species. Camp sites will be appropriately sited to avoid impacts to threatened and endangered species and will be determined through future consultation. Access and trails to/from camp site areas will be defined, controlled, and signed, to limit disturbance to threatened and endangered species and other resources. (GMP/EIS, pg. 130).
5. Park managers will continue established conservation measures to protect and enhance habitat for wildlife and species of concern, such as providing symbolic fencing with posts and signs around nesting birds, predator removal, closures, buffer zones, prohibition of certain recreational activities during breeding season (kite flying, kite surfing, fireworks) and visitor education.(Final GMP/EIS multiple locations throughout document).

6. Park managers will continue to review the effectiveness of conservation measures for threatened and endangered species and adapt and revise the conservation measures as conditions change. (GMP/EIS, pg 62)

7. Park managers will continue to consult with USFWS on conservation measures for threatened and endangered species for site specific planning efforts and natural resource management plans. (GMP/EIS, pg 62)

8. Park managers will continue to work with USFWS to update resource management plans for threatened and endangered species (such as the Shoreside Plan) as needed to reflect changing conditions. (Final GMP/EIS, pg 62)

9. Preservation and protection of threatened and endangered species would continue through monitoring and enforcement and would be balanced with additional recreational opportunities. The existing monitoring and conservation measures for threatened and endangered species would continue to be a priority and could occur throughout all management zones.

10. Beach access points will be monitored for possible disturbances to piping plover and other shorebird nesting locations. Conservation signage at and near access locations will be maintained and/or expanded as needed. Proximity to threatened and endangered species beach nesting areas will be a primary consideration when planning future campground expansions and/or new campsite locations. New or expanded camping areas will be carefully sited relative to shorebird nesting habitat.

11. Continue monitoring of key beach access points at Fort Tilden and Breezy Point Tip for possible disturbances to piping plover and other shorebird nesting locations. Maintain sufficient signage at and near access locations.

Habitat

1. Park managers will continue established conservation measures to protect and enhance habitat for wildlife and species of concern, such as providing symbolic fencing with posts and signs around nesting birds, predator removal, closures, buffer zones, prohibition of certain recreational activities during breeding season (kite flying, kite surfing, fireworks) and visitor education (numerous pages, GMP/EIS, 2014)

2. Invasive exotic vegetation removal will be priority of natural resource management within the Natural Zone.

3. Beach grooming (raking and mechanized trash removal) is not permitted within the Natural Zone.

4. Initiate early Section 7 (ESA) consultation for proposed projects that involve beach / dune manipulation, mechanized sand movement (redistribution), installation of sand fencing, and work that would affect native vegetation.

5. Threatened and endangered species and habitat are protected to the greatest extent possible and other particularly sensitive species and biotic communities are closely monitored and protected (GMP/EIS, pg 62).

Predation

1. Adherence to the Tilden carry-in, carry-out trash policy will be closely monitored. The park proposes to increase monitoring and removal of feral cats, especially within the vicinity of natural zones and sensitive resource subzones. The park will review data and field observations to explore the efficacy of removing or discouraging other predators, such as crows, gulls, and ghost crabs.

2. The park will continue to collect baseline data regarding disturbance to threatened and endangered species, such as data on disturbance levels from authorized activities, unauthorized intrusions, visitation levels, staffing levels (GMP/EIS pg 62)

3. The park will continue established conservation measures to protect and enhance habitat for wildlife and species of concern, such as continuing with predation management program.

JAMAICA BAY UNIT - BREEZY POINT TIP

Disturbance

1. Park managers will continue established conservation measures to protect and enhance habitat for wildlife and species of concern, such as providing symbolic fencing with posts and signs around nesting birds, predator removal, closures, buffer zones, prohibition of certain recreational activities during breeding season and visitor education. (GMP/EIS multiple locations throughout document).

2. Park managers will review the effectiveness of conservation measures for threatened and endangered species and adapt and revise the conservation measures as conditions change.

3. Park managers will continue to work with USFWS to update resource management plans for threatened and endangered species as needed to reflect changing conditions. (GMP/EIS, pg 62)

4. Natural resource biologists and technicians will monitor and map nests and individuals, and record the results of measures contributing to and including reproductive success

Habitat

1. Park managers will continue established conservation measures to protect and enhance habitat for wildlife and species of concern, such as providing symbolic fencing with posts and signs around nesting birds, predator removal, closures, buffer zones, prohibition of certain recreational activities during breeding season and visitor education.

2. Invasive exotic vegetation removal will be priority of natural resource management within the Natural Zone and Sensitive Resource Subzone, thereby providing additional piping plover breeding habitat and allowing for seabeach amaranth germination.

3. Habitats will be maintained, protected and enhanced through monitoring and restoration projects.

4. Threatened and endangered species and habitat are protected to the greatest extent possible and other particularly sensitive species and biotic communities are closely monitored and protected (GMP/EIS, pg 62).

Predation

1. Adherence to the carry-in, carry-out trash policy will be closely monitored to minimize predator-attracting trash.

2. The park proposes to increase monitoring and removal of feral cats, and other areas where threatened and endangered species may be adversely effected by cat predation.

3. Park managers will continue to review the effectiveness of conservation measures for threatened and endangered species and adapt and revise the conservation measures as conditions change. (Final GMP/EIS, pg 62)

Section 106 of the National Historic Preservation Act



New York State Office of Parks, Recreation and Historic Preservation

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518-237-8643

www.nysparks.com

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

September 30, 2013

Suzanne McCarthy
Acting Superintendent
National Park Service
Gateway National Recreation Area
210 New York Ave
Staten Island, NY 10305

Re: NPS
Gateway National Recreation Area (GATE)
Kings, Queens and Richmond County
13PR04069

Dear Ms. McCarthy,

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted documents in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental quality Review Act (New York Environmental Conservation Law Article 8).

With the potential of over 800 historic resources within GATE, it is nearly impossible for us to comment on the proposed GMP for each area of the park without in-depth consideration given to these numerous historic resources located throughout each area of the park. The NPS has proposed a Programmatic Agreement (PA) to assist us in carrying out the concepts within the GMP and we look forward to a draft of this document.

Even with the challenge of reviewing this document in a short time, we are able to offer a number of comments. Of the three alternatives proposed, we concur that Alternative A – “No Action” provides for the continuance of current management practices for historic resources and would result in significant adverse effects to many of GATE’s historic resources. Of concern is that both Alternatives B and C appear to formalize the informal practices of today by allowing some historic resources to decay by establishing Ruins Subzones. This would allow the natural decay of these National Register listed or eligible properties resulting in significant adverse effects by potentially losing the qualities and character-defining features that made these properties eligible in the first place.

When evaluating Alternative B and C, we note they are similar in many aspects. Our opinion is to prefer Alternative C as it provides for greater historic resource preservation and protection. In Alternative C the historic zones are larger and the potential benefits to historic resources by stabilization, preservation, restoration and limited adaptive re-use are greater than those proposed in Alternative B.

There are many complex pressures being put upon these historic resources and GATE in general. Consisting of primarily coastal properties the potential impacts of climate change, changes in sea-level and storms have the potential to significantly impact the park and the historic resources and we agree that a GMP and PA should continue to address these challenges.

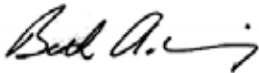
At this time, we cannot concur with the "Fundamental Resources" identified in Appendix B of the report. We are unclear as to what criterion was used to determine resources as fundamental and what treatment would be afforded fundamental resources. We are confused as to why all the historic resources at the National Register listed Floyd Bennett Field and Jacob Riis Park Historic District are not noted as fundamental. In addition, we note that Batteries Ayres, Berry, Richmond and Upton at Fort Wadsworth were all considered to be fundamental resources with national significance but were designated for "ruins". Since these resources are of national significance stabilization must be considered when exploring alternative treatments.

In reviewing the information for Floyd Bennett Field National Register Historic District (Update and Boundary Expansion) in Figure 3-11, we note the boundaries do not match the ones provided to us by the NPS (and the boundaries listed in our State Register of Historic Places). Our boundary map includes the U.S. Marine Corps property which is excluded from Figure 3-11. If there has been a boundary change, the NPS has not notified our office of this change. While we prefer Alternative C, in general, we are concerned that under this alternative Floyd Bennett Field's cultural landscape would be the Municipal Airport Era, implying that development outside this era would be incompatible with the period of significance and removed. It is not clear what resources may be impacted by this plan but it is important to note that the period of significance for Floyd Bennett Field spans from 1928 to 1945 and includes not just the municipal airport era structures but later military properties as well. It is not appropriate to simply remove listed properties.

In general, it is good to see that the GMP includes stabilization and preservation of a number of historic resources that are significant and require treatment or they will be lost. Any properties/resources proposed for treatment (including being placed in a ruins subzone) will require our review and comment individually prior to any action taken. The physical condition and eligibility of resources should be re-evaluated as each resource comes up for treatment. Given the vastness of this park and variety of resources, any specific project plans will need to be reviewed by our office.

If you have any questions, I can be reached at (518) 237-8643, ext. 3282.

Sincerely,



Beth A. Cumming
Historic Site Restoration Coordinator
e-mail: Beth.cumming@parks.ny.gov

cc: D. Avrin – NPS
D. Uschold – NPS
D. Saunders – NJ SHPO

via e-mail only

**PROGRAMMATIC AGREEMENT AMONG THE
NEW YORK STATE HISTORIC PRESERVATION OFFICE,
NEW JERSEY STATE HISTORIC PRESERVATION OFFICE
AND
GATEWAY NATIONAL RECREATION AREA,
NATIONAL PARK SERVICE
FOR IMPLEMENTATION OF THE GENERAL MANAGEMENT PLAN**

WHEREAS, the National Park Service (NPS) manages and administers the Gateway National Recreation Area (GATE) as a unit of the National Park System and is responsible for preserving, restoring, maintaining, and interpreting the historic properties of the park unimpaired for the enjoyment of future generations; and

WHEREAS, GATE includes the Jamaica Bay and Staten Island units of the park in Queens, Richmond and Kings Counties in New York and the Sandy Hook unit in Monmouth County, New Jersey. Historic sites within New York 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, among others. Historic sites within New Jersey include the Fort Hancock and Sandy Hook Proving Ground National Historic Landmark District, Sandy Hook Light National Historic Landmark, and the Fort Hancock Life Saving Station, among others; and

WHEREAS, the National Historic Preservation Act of 1966 (as amended) governs the treatment of archeological and historic properties; that NPS recognizes its responsibilities in executing provisions of Sections 110 and 106 of that Act; and that *Director's Order 28* outlines NPS policy in regard to the preservation and treatment of archeological, cultural and historic properties within the park; and

WHEREAS, in 2008 the National Park Service entered into a Nationwide Programmatic Agreement (Nationwide PA) with the Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers to carry out its Section 106 responsibilities with respect to the management of park areas; and

WHEREAS, the Nationwide PA encourages development of park-specific programmatic agreements to supplement the provisions of the Nationwide PA; and

WHEREAS, the NPS is currently preparing a General Management Plan/Environmental Impact Statement (GMP/EIS) for GATE; and

WHEREAS, the effects of the GMP/EIS on historic properties cannot be fully evaluated at this time and will require further evaluation and consultation as the GMP/EIS is implemented, though the GMP/EIS preferred alternative establishes a "ruins" concept and GATE has determined implementation of the ruins concept will have an adverse effect on historic properties and this PA will guide the Section 106 process as the GMP/EIS is implemented and as the decisions regarding management of historic properties designated as ruins are made; and

WHEREAS, the NPS has consulted with the New York State Office of Parks, Recreation and Historic Preservation (NY SHPO) and the New Jersey Department of Environmental, Historic Preservation Office (NJ SHPO) and they have agreed to participate in the development and execution of this PA; and

WHEREAS, the NPS has invited the Delaware Nation, Delaware Tribe of Indians and Stockbridge-Munsee Community and to participate in the development of this PA, and while they are not participating in the development of the PA the NPS will continue to consult with them during implementation of the GMP; and

WHEREAS, the NPS has consulted with the Advisory Council on Historic Preservation (ACHP) and invited them to participate in the development of this PA. and they have declined to participate; and

WHEREAS, the NPS has informed the public throughout the development of the GMP/EIS and made the draft GMP/EIS available to the public for review and comment and will provide additional opportunities for public input through the Section 106 process as the GMP/EIS is implemented, and

WHEREAS, the NPS, in consultation with the NY and NJ SHPOs, will identify additional consulting parties for inclusion in the Section 106 process as the GMP/EIS is implemented; and

NOW, THEREFORE, GATE, the NY SHPO, the NJ SHPO mutually agree that the NPS will carry out its Section 106 responsibilities with respect to implementation of the GATE GMP/EIS in accordance with the following guidelines:

STIPULATIONS

I. REVIEW OF UNDERTAKINGS: During the implementation of the GATE GMP/EIS, GATE will follow the Section 106 review process described in the Nationwide PA, particularly sections III and IV. Undertakings will be reviewed according to one of two processes: Streamlined Review or Standard Review.

A. Streamlined Review:

1. In order to qualify for streamlined review, undertakings must meet three criteria:
 - a) The undertaking must fall under one of the sixteen categories of activities eligible for streamlined review, listed in section III C of the Nationwide PA.
 - b) Identification and evaluation of properties within the undertaking's area of potential effect (APE) must have already occurred, and the SHPO(s) must have concurred with all eligibility/ineligibility determinations.
 - c) GATE's Section 106 coordinator, in consultation with the park CRM team, as defined in section I B of the Nationwide PA, must review the undertaking and the determination of effect must be no adverse effect upon properties listed on or eligible for the National Register of Historic Places (historic properties).
2. If the undertaking meets all of these criteria, GATE will document compliance with the Nationwide PA and report on the actions in the annual report to each SHPO required by section III B (5)(d) of the Nationwide PA.
3. Actions that do not meet all three criteria will follow the standard review process.

B. Standard Review:

1. The standard review process is described in 36 CFR Parts 800.3 through 800.6.
2. As appropriate, GATE will work with the NY SHPO and/or NJ SHPO to identify parties other than those who are signatories to this agreement that may have an interest in properties that could be affected by undertakings undergoing the standard review process.

II. TREATMENT OF HISTORIC PROPERTIES IDENTIFIED AS RUINS: Within the designated Ruins Subzones and through the priority banding, the GATE GMP/EIS identifies certain resources as "ruins." Within the GMP/EIS, properties designated as ruins are defined as "Structures in poor condition... that may be removed or fenced off to keep from being a safety hazard; no work will be done to better the condition of the resources." These structures, and in some cases their associated landscapes, will be allowed to decay naturally, be stabilized for safety, fenced off to limit public access, or demolished. Cumulatively, and in most cases individually, these actions will have an adverse effect upon historic properties.

- A. Upon execution of this PA and completion of the GMP/EIS Record of Decision (ROD) process, GATE will initiate consultations with the NY and NJ SHPOs, and interested federally-recognized tribes to complete the Section 106 process for implementation of the ruins concept. This process will formalize and document the decisions made regarding the treatment of specific historic properties designated as ruins.
- B. GATE will work with the NY and NJ SHPOs to identify additional consulting or interested parties as appropriate and establish a process for public involvement.
- C. Consultation on the treatment of historic properties designated as ruins will include input on final decisions regarding which properties will be designated as ruins. As stated in the GMP/EIS the priority banding (including the "ruins" designation) may be updated as the result of new or better information and further consultation.
- D. Consultations on the ruins concept will be initiated within one year of the ROD and will be organized in three efforts corresponding to GATE's three units. While consultation efforts will pertain to the three units of GATE separately, final decisions regarding treatment of historic properties will need to incorporate decisions being made across the park.
- E. Treatment decisions for historic properties identified as ruins may include demolition, natural decay, minor stabilization, fencing the properties, or other viable options identified during consultation.
- F. Treatments resulting in further damage or loss of historic properties, such as natural decay and demolition, will be mitigated by such efforts that might include documentation, interpretation or other measures to be determined during the consultation process.
- G. No historic property designated as a ruin will undergo demolition or destructive action prior to consultation regarding the treatment of that particular property.

III. ADMINISTRATIVE STIPULATIONS:

- A. **Amendment:** At any time, signatories to this Agreement may determine whether revisions or amendments to this Agreement are needed. If signatories to this Agreement determine that revisions or amendments are needed, the signatories will consult to consider such amendment, and upon the unanimous decision of all signatories, such amendments will be implemented.
- B. **Failure to Carry Out Terms of this Agreement:** In the event that NPS does not carry out the terms of this Agreement, GATE will comply with the terms of the Nationwide PA, or 36 CFR Section 800.3 through 800.6 as applicable with regard to individual undertakings that otherwise would be covered by the terms and provisions of this Programmatic Agreement.
- C. **Termination:** Signatories to this agreement may request termination of this agreement by providing ninety (90) calendar days' notice to all signatory and concurring parties, provided that the parties will consult during the period prior to termination to seek agreements on amendments or other actions that would avoid termination. In the event of termination, the NPS will follow the procedures in the Nationwide PA or 36 CFR Section 800.3 through 800.6.
- D. **Duration:** This agreement will terminate 20 years from the date of its execution. During the term of the PA, the NPS will review the PA every 5 years and consult with the signatories of the PA to evaluate the progress and effectiveness of the PA.
- E. **Anti-Deficiency:** All actions taken by GATE in accordance with this PA are subject to the availability of funds, and nothing in this PA shall be interpreted as constituting a violation of the Anti-Deficiency Act.

Execution of this PA by GATE and the NY and NJ SHPOs and implementation of its terms evidence that GATE has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

NEW YORK STATE HISTORIC PRESERVATION OFFICE

By: _____ **Date:** _____

NEW JERSEY STATE HISTORIC PRESERVATION OFFICE

By: _____ **Date:** _____

NATIONAL PARK SERVICE, GATEWAY NATIONAL RECREATION AREA

By: _____ **Date:** _____

Agency Comment Correspondence



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1868

OCT 18 2013

Superintendent
Gateway National Recreation Area
210 New York Avenue
Staten Island, New York 10305

Dear Mr. Superintendent:

In accordance with our responsibilities under the National Environmental Policy Act, (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the Gateway National Recreation Area (GNRA) - Draft General Management Plan (GMP)/Environmental Impact Statement (EIS); CEQ No. 20130230. Transmittal of this letter was delayed by the government shutdown from October 1-16, 2013.

The draft EIS was prepared by the National Park Service. Gateway National Recreation Area covers more than 40 square miles in New York and New Jersey. The park covers 27,025 acres and extends into adjacent waters, including the Atlantic Ocean, Jamaica Bay, Raritan Bay, and Upper and Lower New York Bay. The first GMP for GNRA was finished in 1979. Since then, new park issues and new ideas regarding park management have emerged that are not addressed in the 1979 GMP, warranting the need for a new management plan. Additionally, many of the recommendations made in the 1979 GMP are no longer appropriate due to changing conditions and circumstances in the recreation area.

The draft GMP/EIS proposes three management alternatives. Alternative A is the "no action" alternative; alternatives B and C are action alternatives. Alternative A serves as a baseline for comparing the impacts of implementing the action alternatives. Alternative B is referred to as "Discovery Gateway" and is the NPS preferred alternative. It provides the widest range of activities and most recreation opportunities in dispersed locations throughout the park. Alternative C is referred to as "Experiencing Preserved Places." It provides the most opportunities for independent exploration and "wild" experiences that immerse visitors into natural areas and historic sites and landscapes.

EPA commends the National Park Service for developing a thorough and detailed EIS that addresses management of GNRA by balancing the ecological health of GNRA with improvements to the visitor experience. Key issues such as climate change, sea level rise, water quality enhancements, and sustainability within the park are addressed in detail.

EPA defers to the expertise of the National Park Service in regard to the selection of the preferred alternative. EPA rates the EIS as an "LO - Lack of Objection." Thank you for the opportunity to comment on the draft EIS for the Gateway National Recreation Area - Draft

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General Management Plan/Environmental Impact Statement. Should you have any questions regarding this letter, or for further assistance with technical assistance in one of EPA's program areas, please feel free to contact Stephanie Lamster at 212-637-3465.

Sincerely,

A handwritten signature in cursive script, reading "Judy-Ann Mitchell".

Judy-Ann Mitchell, Chief
Sustainability and Multimedia Programs Branch
Clean Air and Sustainability Division

MONMOUTH COUNTY PLANNING BOARD
FREEHOLD · NEW JERSEY

VINCENT DOMIDION
Board Chairman



EDWARD SAMPSON, PP, AICP
Director of Planning

01 October 2013

Jennifer T. Nersesian, Superintendent
Gateway National Recreation Area
210 New York Avenue
Staten Island, New York 10305

RE: 2013 Draft General Management Plan & EIS Review
Gateway National Recreation Area

Dear Ms Nersesian:

The Monmouth County Planning Board appreciates the opportunity to comment on the 2013 Draft General Management Plan and EIS for Gateway National Recreation Area. Attached please find our official comment letter on that document. We are also pleased that the Fort Hancock 21st Century Federal Advisory Committee was appointed to seriously consider the future of the important Fort Hancock Historic Area within the context of Gateway National Recreation Area as a whole. Fort Hancock has National Landmark Status and could be an excellent catalyst for future economic growth. We look forward to hearing more about the potential public-private partnerships that could develop from the Requests for Expressions of Interest (REI) for the Fort Hancock facilities. I would like to express my most sincere gratitude to Freeholder Lillian Burry, a member of the Fort Hancock 21st Century Federal Advisory Committee, and Peter McCarthy, NPS Sandy Hook Unit Coordinator, for providing County staff with an invaluable opportunity to tour the Sandy Hook Unit and learn more about both the Fort Hancock REI and the Draft General Management Plan.

Very truly yours,

Vincent Domidion

Vincent Domidion II, Chairman
Monmouth County Planning Board

c: Freeholder Lillian Burry
Teri O'Connor, County Administrator
Kevin Burke, Deputy County Administrator
Edward Sampson, PP/AICP, Director, Monmouth County Division of Planning
Joseph Barris, PP/AICP, Assistant Director, Monmouth County Division of Planning
Joseph Ettore, PE, County Engineer
John Cuifo, Director, Monmouth County Department of Economic Development
Paul Gleitz, Park Planner, Monmouth County Park System
Randall Gabrielan, Executive Director, Monmouth County Historical Commission
Peter McCarthy, Unit Coordinator, Gateway National Recreation Area, Sandy Hook Unit

MONMOUTH COUNTY PLANNING BOARD
FREEHOLD • NEW JERSEY

VINCENT DOMIDION
Board Chairman



EDWARD SAMPSON, PP, AICP
Director of Planning

01 October 2013

Jennifer T. Nersesian, Superintendent
Gateway National Recreation Area
210 New York Avenue
Staten Island, New York 10305

RE: 2013 Draft General Management Plan & EIS Review
Gateway National Recreation Area

Dear Ms Nersesian:

The Sandy Hook Unit of Gateway National Recreation Area is located in Monmouth County, New Jersey. We are keenly aware of issues surrounding the management of a 21st Century urban park; the realities, both of the economic and physical environment, that surround coastal facilities after Superstorm Sandy; and the need to carefully plan a forward vision for the valuable historic and natural resources that exist today in such limited supply in this urban environment. The Monmouth County Planning Board's adopted County Master Plan has a series of goals, objectives and policies, many of which are applicable to the management of the Sandy Hook Unit. In 2009, the County Planning Board responded to a NPS visioning exercise by encouraging the consideration of our County goals as they apply to planning for the future of Gateway National Recreation Area in general and to the Sandy Hook Unit in particular. Our review of the 2013 Draft General Management Plan for Gateway National Recreation Area found that many of our 2009 recommendations and concerns were addressed, particularly through Alternative B.

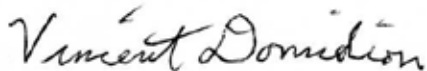
The Draft General Management Plan and EIS were discussed at the 16 September 2013 meeting of the Monmouth County Planning Board. The Fort Hancock 21st Century Federal Advisory Committee's upcoming Request for Expressions of Interest for redeveloping historic structures in the Sandy Hook Unit's Fort Hancock Historic District was also considered. The County Planning Board supports the efforts of the NPS to seek new public-private partnerships as a sound economic approach to the preservation of the historic facilities. Priority must be given to saving them while it is still possible and we encourage the NPS to continue to stabilize the buildings while partners are being sought. Draft General Management Plan Alternative B appears to offer the broadest opportunity for partnerships that would promote adaptive reuse of the existing structures.

The variety of transportation linkages discussed, particularly in Alternative B, are promising. Connections to surrounding communities could provide services that would enhance both the visitor experience and the local economy. Easy access to overnight accommodations and restaurants in the neighboring communities could encourage Gateway visitors to extend their stay beyond the typical day trip. The County would welcome the opportunity to discuss forming connections between Gateway and County Park facilities. Mount Mitchill Scenic Overlook provides stunning views of Sandy Hook and the New York Skyline and is home to a moving 9-11 memorial. Huber Woods Park and the Henry Hudson Trail offer excellent hiking and biking opportunities that could compliment trails at the Sandy Hook Unit. Hartshorne Woods Park is home to Battery Lewis, another piece of the New York Harbor defense system that included the batteries housed within the three Gateway units, and could expand the related historic programming offered at Gateway.

In conclusion, the Monmouth County Planning Board supports Alternative B of the Draft General Management Plan as the preferred option offering the most opportunities for park redevelopment, fruitful partnerships, and economic growth, while protecting the valuable natural and historic resources.

If you have any questions or require additional information, please contact Linda Brennen, Supervisor of the County Planning Division's Environmental and Sustainability Planning Section at 732-431-7460 or via email at Linda.Brennen@co.monmouth.nj.us.

Very truly yours,



Vincent Domidion II, Chairman
Monmouth County Planning Board

c: Freeholder Lillian Burry
Teri O'Connor, County Administrator
Kevin Burke, Deputy County Administrator
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Wednesday, Oct 2, 2013

Ms. Suzanne McCarthy
Acting Superintendent
Gateway National Recreation Area
210 New York Avenue
Staten Island, NY 10305

Re: DPR Comments on Gateway National Recreation Area 2013

Dear Ms. McCarthy:

The New York City Department of Parks & Recreation (DPR), on behalf of the City of New York, commends National Park Service's (NPS) development of the 2013 General Management Plan (GMP) for Gateway National Recreation Area. The GMP is the structured planning process by which the long-term vision of all national parks is set; the document serves as a roadmap with guiding principles for how NPS operates the park. The existing GMP for Gateway dates from 1979, and we have been presented with an extraordinary opportunity to collaborate with NPS to create a new GMP that offers a fresh, updated and dynamic vision for the park which can meet the current needs of the New Yorkers and beyond. In New York City, where opportunities for interaction with natural areas is limited, the City sees Gateway National Recreation Area as an opportunity for millions of New Yorkers to benefit more fully from the best of National Parks. President Obama, in launching the America's Great Outdoors initiative in 2011, squarely placed the focus on developing a 21st century conservation and recreation agenda that values great urban parks along with partnerships with local communities and local government. Gateway National Recreation Area is the perfect place to make this happen. In the Jamaica Bay Unit of the park for example, City and Federal parkland abut each other, and are often contiguous; our partnership seeks to better align our management and operations of our combined parklands to enhance environmental preservation as well as elevate the park visitor experience. Resulting from the process of several years of discussion, the City and NPS memorialized our partnership through a Cooperative Management Agreement signed in July 2012, which embodies our commitment to work with NPS to ensure that Gateway is both a natural and community resource.

DPR supports the GMP "Preferred Alternative" for Gateway National Recreation Area. This long-term vision for the park reflects the importance of providing visitors from New York City and beyond with compelling and varied park programming and activities and enhancement of the ecological importance of the site. Local urban communities will have the option for active recreation- potentially through new water-based activities, increased camping and accommodations, expanded hiking trails, better greenway connections, and interactive learning activities to foster greater appreciation for the natural environment. The vision paves the way for visitors to experience passive recreation - allowing for the possibility of flexible open spaces intended to provide community gathering spaces for picnics and events, and encouraging exploration of wild, undeveloped natural areas. The Preferred Alternative emphasizes scientific and research focus on Jamaica Bay and resiliency efforts which in the wake of Hurricane Sandy takes on critical importance for the future sustainability of the park and surrounding lands and communities. Focus on restoring wetlands and other ecological functions within Gateway will help increase the resiliency of Jamaica Bay and New York City; protected habitat will likewise contribute to a balanced ecosystem. Moreover, the Preferred Alternative is one that strikes an important balance between enhancing natural areas and updating the vision for the park to meet



NYC Parks

the needs of park users for the 21st century. With the implementation of the Preferred Alternative, New Yorkers and visitors will have the opportunity to experience the special historic, cultural and natural places that make up Gateway National Recreation Area, and learn about the historic structures, along with flora and fauna that live within and are part of our nation's heritage.

Ultimately, the Preferred Alternative presents a fresh, dynamic and updated roadmap for the park which prioritizes connecting park users to the natural environment with the goal of encouraging greater stewardship, awareness, appreciation and preservation of the park for the use of future generations.

Thank you for the opportunity to comment on the plan.

Best,

Alyssa Cobb
Assistant Commissioner

The Port Authority of New York and New Jersey

PEPC Project ID: 16091, Document ID: 54826, Correspondence: 187

Author Information

Name: Christopher R. Zeppie
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New York, NY 10003
USA

Correspondence Text

Comments: October 21, 2013

Ms. Jennifer T. Nersesian, Superintendent
Gateway National Recreation Area
210 New York Avenue
Staten Island, New York 10305

RE: Gateway National Recreation Area - Draft General Management Plan - Environmental Impact Statement - July 2013

Dear Ms. Nersesian:

The Port Authority of New York and New Jersey's comments regarding the Gateway National Recreation Area - Draft General Management Plan - Environmental Impact Statement follow. The Port Authority has reviewed the Gateway National Recreation Area (GNRA) - Draft General Management Plan/Environmental Impact Statement (GMP/EIS) with particular interest as the GNRA facilities are close to Port Authority facilities (John F Kennedy International Airport (JFK) is adjacent to the Jamaica Bay Wildlife Refuge) and changes in the operation of these facilities has the potential to positively or negatively impact Port Authority facilities.

While the Port Authority does not endorse the selection of a particular alternative (A, B or C) our comments are directed to the importance of continuing the ongoing collaborative partnership with the National Park Service - Gateway National Recreation Area (NPS-GNRA), and other NPS partners and stakeholders in the region. Specific attention to mitigation for potential impacts to Port Authority facilities is our primary concern in commenting on the EIS.

Notably absent from the EIS is any reference or discussion of cooperation and collaboration between the Port Authority of New York & New Jersey the National Park Service. We believe that the continued success of the National Park Service in operating the tremendous resource that is Gateway National Recreation Area helps the region to thrive. Likewise, JFK brings upwards of 25,000,000 people to our region annually, contributing about \$30.6 billion in economic activity. We welcome discussions to further our collaboration and ensure another 50 years of concurrent operations, during the GMP EIS process.

Finally, congratulations on your recent appointment as superintendent of GNRA. We look forward to working with you to continue balancing enhancement of this spectacular natural area with operation of our gateway to New York City - JFK.

Sincerely,

Christopher R. Zeppie
 Director, Office of Environmental & Energy Programs
 Port Authority of NY & NJ
 225 Park Avenue South, 12th Floor
 New York, NY 10003

Port Authority of New York & New Jersey Comments on the Gateway National Recreation Area - Draft General Management Plan - Environmental Impact Statement - July 2013

Airport/Gateway Compatibility

In a number of locations in Chapters Three and Four, the Draft GMP/EIS recognizes the presence of John F. Kennedy International Airport (JFK) adjacent to the Jamaica Bay Unit of Gateway. JFK, which has been in operation since 1947, is recognized as the premier U.S. gateway for passengers and cargo. The potential synergies between JFK and Gateway are recognized in the Draft GMP/EIS, for example, in the role that JFK can play in bringing increased visitation to Gateway (p. 528). The challenges presented by the proximity of JFK to Gateway are also recognized to some extent, for example, in the discussion of changes made to the Bay historically to accommodate the airport (p. 152). The alternatives presented in the Draft GMP/EIS could result in changes that are relevant to the safety of operations at the airport. We would like to highlight several potential issues, as follows:

Birds and Wildlife Strike Hazard As described in Chapter Two, Alternative B would involve the widest range of activities and most recreational opportunities throughout the park. Increased visitation and human presence within the park could lead to an increase in birds (and other wildlife that serve as prey bases for birds), through an increase in litter and visitors feeding birds. Depending on location, the increase in birds could present an increased wildlife strike hazard to aircraft using JFK. We request that NPS take steps to minimize litter within the park and include educational information for visitors regarding the potential safety impacts of feeding birds and other wildlife, and actively enforce those regulations. Implementation of Alternative B or C would lead to construction of additional buildings, signs, and other structures within the park. These structures could increase perching and roosting opportunities for birds, leading to a potential increase in wildlife strike hazard. We request that NPS incorporate anti-perching and other bird-detering features into the designs of structures build near JFK.

Chapter Two (p. 130) and Chapter Four (p. 353 and others) refer to a proposed anaerobic digester and composting facility at Floyd Bennett Field, which is less than five miles from JFK. Depending on the feedstock used in the digester, the facility design, and other factors, the facility could attract birds, presenting a potential wildlife strike hazard at JFK. FAA Advisory Circular 150/5200-33C, Hazardous Wildlife Attractants on or Near Airports, states that off-airport composting operations should not be located closer than what is called for by airport design requirements, which in the case of JFK, is five miles. The Port Authority supports the use of innovative means of reducing waste disposal to landfills, including composting. Given the potential for increased safety hazards at JFK, however, we ask that NPS coordinate with the Port Authority and FAA regarding any proposed composting or anaerobic digester within five miles of JFK.

The Draft GMP/EIS includes multiple references to habitat maintenance and restoration. The Port Authority

supports NPS efforts to improve the ecological health of Jamaica Bay. We request that NPS work with the Port Authority to understand the relationship between improved habitats in areas near the airport and potential wildlife strike hazards, to try to minimize potential safety impacts and mitigate those hazards whenever possible.

Obstructions to Navigation Chapter Four (pp. 350-351, for example) refers to a proposed multi-modal transportation hub, hotel, wetlands center, and other visitor facilities at Floyd Bennett Field. Based on this description, it does not appear that the GMP would result in the construction of any obstructions to air navigation. However, we request that NPS consult with the Port Authority and FAA regarding proposed new construction or alterations in portions of the park near JFK, and in particular, submit a FAA "Form 7460" for any proposed construction or alteration of more than 200 feet in height.

Solar Installation Chapter Two (p. 86) and Chapter Four (p. 339) mention the potential for solar installations at the former Pennsylvania Avenue and/or Fountain Avenue landfills, which are southwest of JFK. The Port Authority supports the increased use of solar power and is actively pursuing installation of solar photovoltaic systems at its facilities. However, the FAA has raised concerns regarding the potential glare impacts of solar installations on safe aircraft navigation. Off-airport solar installations would be subject to FAA review only if the installation required the submittal of a Form 7460 (see prior comment). However, we request that the NPS coordinate with us and FAA regarding any proposed major solar installations near JFK.

Soundscape There are a number of references to soundscape in the Draft GMP/EIS. The GMP/EIS recognizes that Gateway is located within an urban environment and refers to human-created noise sources heard within the park, including aircraft. However, the Draft GMP/EIS also cites the Director's Order to restore degraded soundscapes to natural conditions whenever possible, and there are a number of references to "quiet" as a desired condition in Chapter Two of the Draft GMP/EIS. We maintain that it is not possible to eliminate aircraft noise over Gateway or return the sound environment near JFK to what it was prior to the existence of the airport. We request that the GMP/EIS make a clearer distinction between areas of the park that can be restored to their natural soundscape and those (including the areas near JFK) that cannot.

Climate Change and Sea Level Rise

How do the management strategies for climate change incorporate sea level rise? There are several references to the protection of equipment and facilities within the 100-year floodplain and facilities at risk of storm surge. The Port Authority recommends reviewing the New York City Panel on Climate Change "Climate Risk Information 2013," which was released in June 2013. The best available sea level rise estimates for our area are established in this document, and are being used by New York City for planning purposes. The document recommends elevating critical infrastructure 2.5 feet above the 100-year floodplain.

The terms below, which are used on page 56 of Chapter 2:

- Critical systems
- Critical facilities
- Flood zones
- Storm surge zones

... should be defined to enhance the clarity of the GMP EIS.

The management plan notes that the park would allow "natural processes to continue unimpeded, except when health and safety or the park's fundamental resources and values are threatened." How will the park respond if action is needed within the park to protect critical transportation and other assets outside the park? Future coastal storms combined with sea level rise may increase vulnerability for critical assets and communities such as Canarsie, JFK airport, and parts of Staten Island if the park allows natural processes to continue unimpeded. Will the park respond proactively to these risks if necessary?

Other Comments

Chapter Three (p.162) includes a statement regarding "toxic runoff" from JFK, and cites as a reference the "Hudson-

Raritan Estuary Comprehensive Restoration Plan," which was developed by the Port Authority and U.S. Army Corps of Engineers. Although there are general statements regarding runoff and water quality in the Restoration Plan, there are no specific references to toxic runoff from JFK in the document. The only discharge from JFK is stormwater runoff; discharge from all outfalls is regulated through the New York State Pollution Discharge Elimination System Permit under the Clean Water Act and are in compliance with the permit. The Port Authority respectfully requests that NPS strike this unsubstantiated statement from the Draft GMP.

Chapter Three (p. 262) also includes a statement about loud JFK aircraft flights over Jamaica Bay. We recognize that, as Jamaica Bay is directly south of JFK, aircraft flying over the Bay are at low altitudes. We would like to point out, however, that there have been a number of advances that have led to quieter aircraft nationwide (including those using JFK), and the overall cooperation and collaboration between the Port Authority of New York & New Jersey and the National Park Service.

We believe the Port Authority and NPS-GNRA could benefit from exploring where opportunities may exist to support our mutual goals; for the NPS-GNRA in promoting their facilities as an important and attractive recreational resource and destination in the region and for the Port Authority providing first rate transportation facilities that allow travelers to get to their destinations with ease. The Port Authority would like to collaborate with NPS to increase interest of airport patrons to natural and cultural attributes of the Gateway National Recreation Area including especially, the Jamaica Bay unit.

Appendix D: Defining Visitor and Commercial Services

The park welcomes visitors to park lands for a broad array of appropriate and meaningful activities. This includes traditional NPS activities or uses such as hiking and kayaking, as well as appropriate, but not necessary services such as horse boarding and boat slip rental which may be provided by third parties.

Throughout the GMP, the term “visitor” refers to all persons accessing the park. For purposes of the GMP, “visitor services” and “commercial services” are interchangeable and do not imply the use of any specific legal authority. Visitor or commercial services can encompass any activity or service that occurs in a park for which compensation is made to a third party (lodging, boat rentals, guided tours, food vendors, etc.). Those third party operators offer services to park visitors which are not provided directly by the government. They can also help increase the use of, enjoyment by, and visibility of the park within the community.

In order to determine if a visitor or commercial service should be provided in the park, the NPS must evaluate “necessary” and “appropriate” considerations. “Appropriate” criteria help answer the question, “Can the park authorize this service without compromising the reason it is a unit of the national park system?” “Necessary” criteria help answer the question, “Why is this service important for the park and does the park need to prescribe how this service operates in the park?”

“Necessary” services are those services that would or could be offered by the Service, but can also be provided by a third party. Ferry service to Statue of Liberty, which is the only way in which a visitor can visit the Statue of Liberty National Monument, is one example of a “necessary” visitor or commercial service. Such visitor operations are critical to and an extension of the park. Because they are “necessary” to visitor enjoyment, the park is required to dictate how and when such visitor or commercial services must operate.

If a service is deemed “appropriate” but not necessary, the park must still evaluate the service’s impact on visitor experience but the service itself is not required. Appropriate visitor or commercial services must be compatible with the park mission and values, but the park does not dictate how and when such services are operated. They are services that are not necessarily an extension of the park, but a nice complement to or independent of any services otherwise available. A day care facility in a park owned building is a good example of an appropriate use that is not necessary.

Appendix E: List of Preparers and Contributors

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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.

surfmén. 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.

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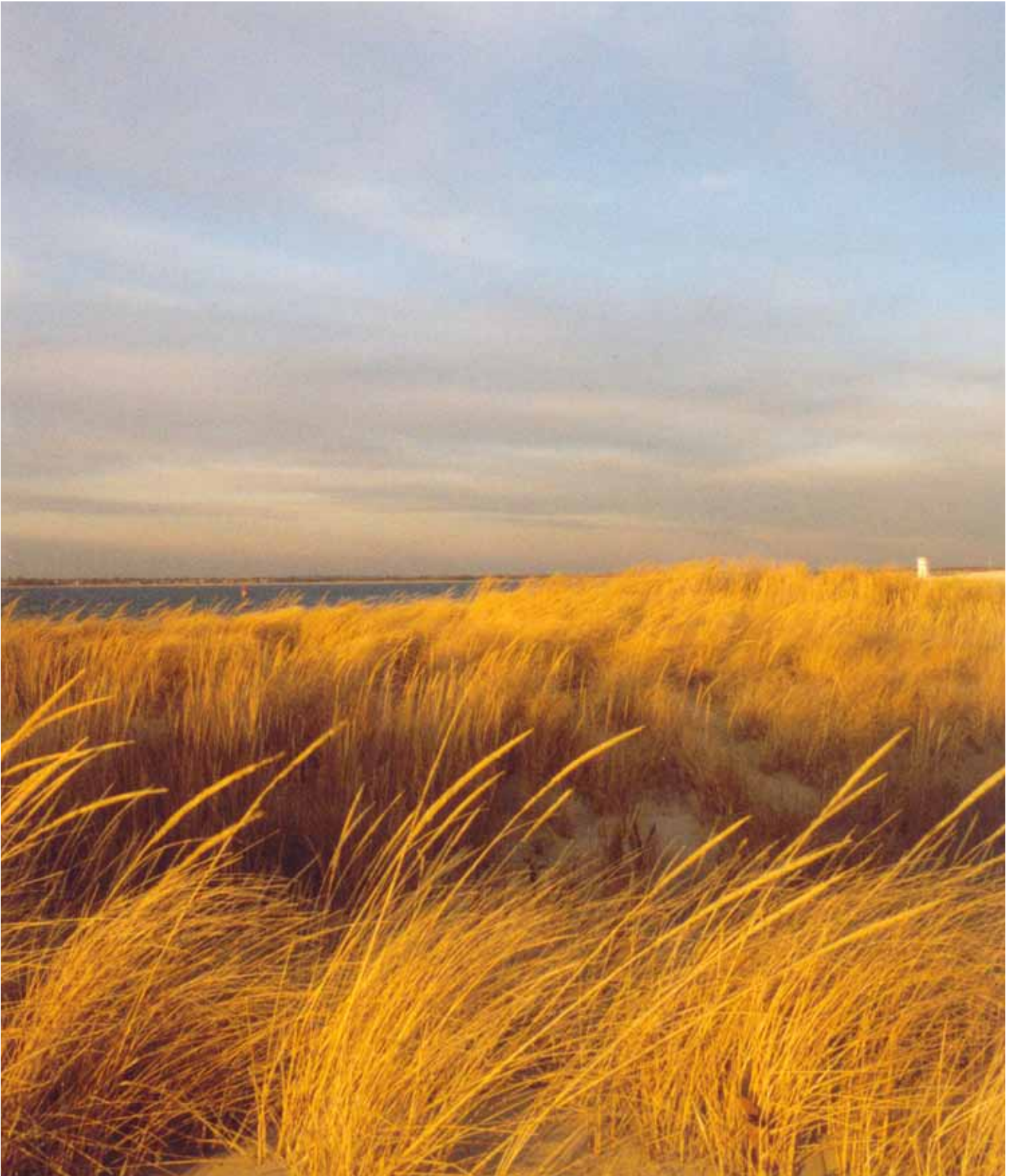
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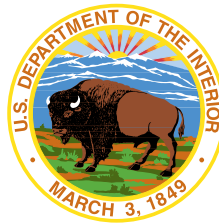
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