**Attachment B:**

**COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM**

<table>
<thead>
<tr>
<th>Name of Area:</th>
<th>Silver Point Beach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designated:</td>
<td>March 15, 1987</td>
</tr>
<tr>
<td>Date Revised:</td>
<td>December 15, 2008</td>
</tr>
<tr>
<td>County:</td>
<td>Nassau</td>
</tr>
<tr>
<td>Town(s):</td>
<td>Hempstead</td>
</tr>
<tr>
<td>7½' Quadrangle(s):</td>
<td>Far Rockaway, NY; Lawrence, NY</td>
</tr>
</tbody>
</table>

**Assessment Criteria**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecosystem Rarity (ER)</td>
<td>20</td>
</tr>
<tr>
<td>Species Vulnerability (SV)</td>
<td>57.75</td>
</tr>
<tr>
<td>Human Use (HU)</td>
<td>0</td>
</tr>
<tr>
<td>Population Level (PL)</td>
<td>4</td>
</tr>
<tr>
<td>Replaceability (R)</td>
<td>1.2</td>
</tr>
</tbody>
</table>

**Habitat Index:** \( (ER + SV + HU + PL) = 81.75 \)

**Significance:** \( (HI \times R) = 98.1 \)
NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

SILVER POINT BEACH

LOCATION AND DESCRIPTION OF HABITAT:

Silver Point Beach is located south of Far Rockaway Inlet, at the tip of the westernmost barrier island on Long Island's south shore. The beach is located within Silver Point County Park, in the Town of Hempstead, Nassau County (7.5’ Quadrangles: Far Rockaway, N.Y.; and Lawrence, N.Y.). Due to the dynamic nature of the Atlantic shoreline, the southern boundary of the Silver Point Beach significant habitat will reflect the most current land forms, extending to mean low water. The fish and wildlife habitat is approximately 60 acres in size, consisting of sparsely vegetated dunes at the western end of the beach, bare shell and pebble beach in the center of the public recreation facilities (the cabana area), extending waterward to mean low water. Silver Point Beach is located on a barrier island with maritime beach and maritime dune communities. Maritime beach is a sparsely vegetated community dominated by beach grass (*Ammophila breviligulata*). Maritime beach occurs on unstable sand, gravel, or cobble ocean shores above mean high tide, where the shore is modified by storm waves and wind erosion. The community is an important nesting ground for beach nesting shore birds. The maritime dune community is comprised of grasses and low shrubs in a mosaic of vegetated patches dominated by beach grass and seaside goldenrod (*Solidago sempervirens*). Silver Point Beach receives heavy recreational use during the summer, except in the portion which lies west of a chain link fence designed to keep people away from the jetty on East Rockaway Inlet.

FISH AND WILDLIFE VALUES:

The Silver Point Beach fish and wildlife habitat consists of a relatively small segment of undeveloped barrier beach ecosystem. Continued human pressures such as coastal development, recreational activities, and disturbance from off-road vehicles have resulted in some degradation of the habitat. Although the biological communities in the area are uncommon only at the county level, the existence of undeveloped beach in close proximity to a major inlet is rare on Long Island, and provides an important nesting site for nesting tern species and piping plovers (E, T-Fed).

An estimated average of 125 pairs (452 in peak year) of nesting least tern (T) inhabited Silver Point Beach annually from 1993 through 2005. Silver Point accounts for the second largest least tern (T) nesting concentration in Nassau County for the period from 1993 to 2005. Common tern (T) also show significant nesting concentrations in the Silver Point Beach significant habitat with concentrations averaging 138 pairs per year (710 in peak year) from 1993 to 2005. During this same time period, populations of nesting black skimmer (SC) averaged 35 pairs per year with 152 pairs in 1999. Terns typically nest in simple scrapes built in sand, gravel, sparsely lined with small shells or other debris (i.e. seaweed). Tern breeding colonies may contain several hundred to several thousand birds, including roseate (E), least (T), common (T), and gull-billed terns, along with black skimmer (SC). Terns feed by
striking the water in shallow dives, or skimming the surface for small fish. The tern populations at this site have generally been divided into two subcolonies; one near the jetty, and another adjacent to the bathhouses. Human disturbances have resulted in much unsuccessful reproduction by both species in the bathhouse area. According to data recorded from 1993 to 2005, an average of 8 pairs (24 in peak year) of piping plover (E, T-Fed) nested on Silver Point Beach annually. Piping plover (E, T-Fed) nests resemble those of tern species, but plover nests are usually placed well above the high tide mark on open, grassless sand beaches or areas containing dredged material. Piping plover (E, T-Fed) generally nest with least tern (T) colonies. Their diet consists primarily of marine worms, insect larvae, beetles, crustaceans, and mollusks they obtain from foraging on beaches, dunes and tidal wrack. American oystercatcher, although reported in lesser numbers, has also been reported nesting at Silver Point Beach. An average of one pair of breeding osprey (SC) has been observed at Silver Point from 1998 to 2004. Although large numbers of people use the beach area for recreation, there are no significant human use activities specifically associated with the wildlife resources at Silver Point Beach.

IMPACT ASSESSMENT:

Nesting shorebird species inhabiting the barrier beaches of Long Island are highly vulnerable to disturbance by humans from March 15 through August 15. Significant pedestrian traffic or recreational use of the sparsely vegetated beach and dunes (e.g., boat and personal watercraft landing, off-road vehicle use, picnicking) could easily eliminate the use of this site as a nesting area and should be minimized during this period. Reduction, or loss of the area presently utilized by nesting colonies could significantly affect the bird populations in this vicinity. Introduction or attraction of mammalian predators to the Silver Point Beach area would be detrimental to reproduction and nesting of the tern and plover population and should be avoided. Predation of chicks and destruction of eggs or nests by unleashed pets (e.g., dogs, cats) and natural predators may also occur, and predator control should be implemented where feasible. Appropriate placement of trash receptacles and signs promoting proper trash disposal would be beneficial to the habitat as beach lying trash may attract additional predators to sensitive populations. Fencing and/or annual posting of the bird nesting area should be provided to help protect the nesting bird species. Unregulated dredged material placement in this area would be detrimental to the habitat area, but such activities may be designed to maintain or improve the habitat, by setting back vegetative succession. This is especially true near the jetty, where suitable habitat may become limited through vegetative succession.

Construction of adjacent recreational facilities should be designed to minimize impacts to the nesting areas. Construction of new or maintenance of existing erosion control structures which interfere with natural coastal processes should be carefully evaluated for need and where possible, non-structural solutions should be utilized.

HABITAT IMPAIRMENT TEST:

A habitat impairment test must be applied to any activity that is subject to consistency review under federal and State laws, or under applicable local laws contained in an approved local waterfront revitalization program. If the proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area.

The specific habitat impairment test is as follows.

In order to protect and preserve a significant habitat, land and water uses or development
shall not be undertaken if such actions would:

- destroy the habitat; or,

- significantly impair the viability of a habitat.

*Habitat destruction* is defined as the loss of fish or wildlife use through direct physical alteration, disturbance, or pollution of a designated area or through the indirect effects of these actions on a designated area. Habitat destruction may be indicated by changes in vegetation, substrate, or hydrology, or increases in runoff, erosion, sedimentation, or pollutants.

*Significant impairment* is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include but are not limited to reduced carrying capacity, changes in community structure (food chain relationships, species diversity), reduced productivity and/or increased incidence of disease and mortality.

The *tolerance range* of an organism is not defined as the physiological range of conditions beyond which a species will not survive at all, but as the ecological range of conditions that supports the species population or has the potential to support a restored population, where practical. Either the loss of individuals through an increase in emigration or an increase in death rate indicates that the tolerance range of an organism has been exceeded. An abrupt increase in death rate may occur as an environmental factor falls beyond a tolerance limit (a range has both upper and lower limits). Many environmental factors, however, do not have a sharply defined tolerance limit, but produce increasing emigration or death rates with increasing departure from conditions that are optimal for the species.

The range of parameters which should be considered in applying the habitat impairment test include but are not limited to the following:

1. physical parameters such as living space, circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth (including loss of littoral zone), morphology, substrate type, vegetation, structure, erosion and sedimentation rates;

2. biological parameters such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, meristic features, behavioral patterns and migratory patterns; and,

3. chemical parameters such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxics and hazardous materials).

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed in the Impact Assessment section to assist in applying the habitat impairment test to a proposed activity.
KNOWLEDGEABLE CONTACTS:

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Division of Coastal Resources
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Stony Brook, NY 11790
Phone: (631) 444-0204

NYSDEC
Bureau of Marine Resources
205 N. Belle Meade Road, Suite #1
East Setauket, NY 11733
Phone: (631) 444-0430

New York Natural Heritage Program
625 Broadway, 5th floor
Albany, NY 12233
Phone: (518) 402-8935

Town of Hempstead
Department of Conservation and Waterways
Lido Boulevard
Point Lookout, NY 11569
Phone: (516) 431-9200
Significant Coastal Fish and Wildlife Habitats

Silver Point Beach
Jamaica Bay (In Part)
West Hempstead Bay (In Part)