
COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area: **Sand City (Eaton's Neck)**
County: **Suffolk**
Town(s): **Huntington**
7½' Quadrangle(s): **Lloyd Harbor, NY-CT**
Originally Designated: **March 15, 1987**
Modified: **October 15, 2005**

<u>Assessment Criteria</u>	<u>Score</u>
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Ecosystem Rarity (ER)--the uniqueness of the plant and animal community in the area and the physical, structural, and chemical features supporting this community.

ER assessment: Undeveloped sand peninsula and tidal flat is rare in New York State. 64

Species Vulnerability (SV)--the degree of vulnerability throughout its range in New York State of a species residing in the ecosystem or utilizing the ecosystem for its survival. (E = Endangered, T = Threatened, SC = Special concern)

SV assessment: Piping plover (E, T-Fed), least tern (T), and common tern (T) nesting.
Additive Division: $36 + (25/2) + (25/4) = 54.75$ 54.75

Human Use (HU)-- the conduct of significant, demonstrable commercial, recreational, or educational wildlife-related human uses, either consumptive or non-consumptive, in the area or directly dependent upon the area.

HU assessment: Significant at the county level for recreational uses such as birdwatching and nature study. 4

Population Level (PL)--the concentration of a species in the area during its normal, recurring period of occurrence, regardless of the length of that period of occurrence.

PL assessment: Concentration of nesting least terns (T) significant in New York State. 16

Replaceability (R)--ability to replace the area, either on or off site, with an equivalent replacement for the same fish and wildlife and uses of those same fish and wildlife, for the same users of those fish and wildlife.

R assessment: Irreplaceable. 1.2

Habitat Index = [ER + SV + HU + PL] = 138.75	Significance = HI x R = 166.5
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NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

SAND CITY (EATON'S NECK)

LOCATION AND DESCRIPTION OF HABITAT:

Sand City is located on the northern shore of Long Island, at the southern tip of Eaton's Neck in the Town of Huntington, Suffolk County (7.5' Quadrangle: Lloyd Harbor, NY). The fish and wildlife habitat is approximately 50 acres in size, consisting of a narrow, sparsely vegetated sand, gravel and cobble peninsula (beach and breakwall), and some surrounding intertidal flats. This area is owned by the Town of Huntington and is currently posted to protect the bird nesting areas.

FISH AND WILDLIFE VALUES:

Undeveloped marine peninsulas, such as Sand City, are becoming less common on Long Island and are generally rare in New York State. They are vitally important habitat for some rare bird species. Although bird population levels vary from year to year, it is well documented that Sand City is an important nesting site for several endangered and threatened bird species. Common terns (T) are abundant at the site, with an annual average (1993-2002) of 565 breeding pairs and a peak population of 1,035 pairs (2000). Least tern (T) populations peaked in 1995, with 284 breeding pairs recorded. Their annual average nesting population over the 10 year period from 1993-2002 was 98 pairs. The piping plover (E, T-Fed) nesting population has averaged 4 pairs annually (1993-2002), with a peak population of 7 pairs in 2002. Other birds documented at the site include the black skimmer (SC), which has shown increasing numbers since 1994, with 17 pairs recorded in 2000 and 18 pairs in 2002. Currently, recreational and scientific uses of the West Beach area include birdwatching and nature study and are of county level significance.

IMPACT ASSESSMENT:

Any activity that would disturb or eliminate marsh, natural beach, and/or duneland plant communities would result in a loss of valuable habitat for a number of important wildlife species. Elimination and fragmentation of the natural dune and wetland communities, through excavation, filling, or other land developments would adversely affect concentrations of wildlife. 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 for certain species of wildlife, by setting back vegetative succession.

Development of the area for residential or recreational use would result in a direct loss of wildlife habitat. However, limited development of areas to protect or improve the habitat for fish and

wildlife, or increase access for compatible human use of these resources may be desirable.

Nesting shorebirds inhabiting Sand City are highly vulnerable to disturbance by humans, especially during the nesting and fledging period (March 15 through August 15). Significant pedestrian traffic or recreational use of the beach (e.g., boat and personal watercraft landing, off-road vehicle use, picnicking) could easily eliminate the use of this site as a breeding area and should be minimized during this period. 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. Fencing and/or continued annual posting of shorebird nesting areas should be provided to help protect these species.

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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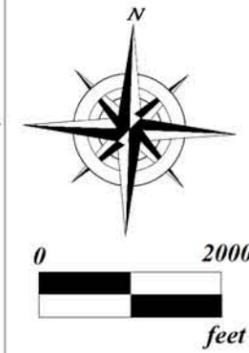
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Significant Coastal Fish and Wildlife Habitats

- Crab Meadow Wetlands and Beach
- Eaton's Neck Point (In Part)
- Northport Bay
- Sand City (Eaton's Neck)
- Huntington Bay (In Part)