COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

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

Assessment Criteria	**Score**
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: One of only a few undeveloped barrier beach-wetland ecosystems remaining on the north shore of Suffolk County.	9
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) and least tern (T) nesting. Common tern (T) may also be present, but importance of the area to this species not adequately documented. Additive Division: 36 + 25/2 = 48.5	48.5
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: No significant fish or wildlife related human use of the area.	0
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: No unusual concentrations of any fish or wildlife species in the area.	0
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] = 57.5 **Significance = HI x R = 69.0**

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

EATON'S NECK POINT

LOCATION AND DESCRIPTION OF HABITAT:

Eaton's Neck Point is located on the north shore of Long Island, on the northwest tip of Eaton's Neck, in the Town of Huntington, Suffolk County (7.5' Quadrangle: Lloyd Harbor, NY-CT). The fish and wildlife habitat is approximately 114 acres in size, consisting of a narrow, sparsely vegetated sand peninsula, with a small protected bay, salt marsh, and tidal flats located behind the peninsula. The area is generally undeveloped and privately owned. A navigation channel (approximately 12 feet in depth below mean low water) is maintained in the bay for boat access to a United States Coast Guard Station on Eaton's Neck Point.

FISH AND WILDLIFE VALUES:

Portions of the Eaton's Neck Point significant habitat have been designated as part of the National Coastal Barrier Resources System. The habitat consists of undeveloped barrier beach and wetland ecosystems. These ecosystem types are rare on the north shore of Long Island, and serve as an important nesting site for piping plover (E, T-Fed) and least tern (T). For the 8 year period from 1995 to 2002, an average of 2 nesting pairs (4 in peak year) of piping plover (E, T-Fed) were observed on Eaton's Neck Point per year. In 1983, the least tern (T) population at Eaton's Neck Point was among the ten largest on Long Island, but they were not present during the late 1980s and early 1990s. Least terns (T) returned to this site in 1995 with an average of 17 nesting pairs from 1995 to 2002. The documentation of 67 pairs of nesting least tern (T) in 2002 may indicate a resurgence in the use of this site as a breeding area. Common terns (T) loaf at Eaton's Neck Point, but nesting by this species has not been documented.

The protected bay, mudflats, and salt marsh areas located behind the sand peninsula serve as feeding areas for least terns (T) and many other wetland wildlife species. The marsh habitat also acts as a nursery area for commercial and recreational fisheries in Long Island Sound. There are no significant human use activities specifically associated with the wildlife resources at Eaton's Neck Point.

IMPACT ASSESSMENT:

Any activity that would disturb or eliminate marsh, natural beach, and 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.

Nesting shorebirds inhabiting Eaton's Neck Point 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. Control of vegetative succession, through beneficial use of dredged material or other means may improve the availability of nesting habitat in this area.

Any activity that would substantially degrade the water quality near the Eaton's Neck Point shores would adversely affect the biological productivity of this area. All species of fish and wildlife would be affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, and waste disposal (including vessel wastes) would adversely affect all fish and wildlife that rely on these waters as a food source, or utilize these waters during a portion of their life-cycle. Efforts should be made to improve water quality in Eaton's Neck Point, including the reduction or elimination of discharges from vessels and upland sources. Vegetated upland buffer zones should be protected or established to reduce non-point source pollution or sedimentation from upland sources.

Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in areas not previously disturbed by development, may result in the loss of productive areas which support the fish and wildlife resources of Eaton's Neck Point. Development of the area for residential or recreational use would result in a direct loss of wildlife habitat. Alternative strategies for the protection of shoreline property should be examined, including innovative, vegetation-based approaches. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance habitat wetland values.

Alteration of tidal patterns in Eaton's Neck Point could have negative impacts on the fish and wildlife communities present. No new navigation channels should be excavated within the area. Dredging to maintain existing boat channels should be scheduled between September 15 and December 15 to minimize potential impacts on aquatic organisms, and to allow for upland placement when wildlife populations are least sensitive to disturbance. Dredged material placement in this area would be detrimental, but such activities may be designed to maintain or improve the habitat for certain species of wildlife. Existing and proposed dredging operations in this area should incorporate the use of best management practices to avoid and reduce adverse effects.

Unrestricted use of motorized vessels including personal watercraft in the protected, shallow waters of the area could have adverse effects on aquatic vegetation and fish and wildlife populations. Use of motorized vessels should be controlled (*e.g.*, no wake zones, speed zones, zones of exclusion) in and adjacent to shallow waters and vegetated wetlands.

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:

Habitat Unit
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Division of Coastal Resources
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Albany, NY 12231
Phone: (518) 474-6000

NYSDEC—Region 1
State University of New York, Building 40
Stony Brook, NY 11790-2356
Phone: (631) 444-0354

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

Town of Huntington
Department of Planning and Environment
100 Main Street
Huntington, NY 11743
Phone: (631) 351-3186

New York Natural Heritage Program
625 Broadway, 5th Floor
Albany, NY 12233-4757
Phone: (518) 402-8935

Office of Ecology
Suffolk County Dept. of Health Services
Bureau of Environmental Management
County Center
Riverhead, NY 11901
Phone: (631) 852-2077

Theodore Roosevelt Sanctuary
134 Cove Road
Oyster Bay, NY 11771
Phone: (516) 922-3200

Town of Huntington
Department of Maritime Services
100 Main Street
Huntington, NY 11743
Phone: (631) 351-3192

LLOYD POINT

CAUMSETT STATE PARK

Target Rock National Wildlife Refuge

EATON'S NECK POINT

NORTHPORT BAY

HUNTINGTON BAY

Lloyd Point

Fly Island

The Sand Hole

Fresh Pond

Water Towers

L L O Y D N E C K

CAUMSETT STATE PARK

OYSTER BAY

Northwest Bluff

Whitewood Point

Oyster Bay National Wildlife Refuge

Marina

LLOYD HARBOR

TARGET ROCK NATIONAL WILDLIFE REFUGE

East Fort Point

Eatons Neck Point Light

U.S.C. Station

Flat

Tidal

EATONS NECK

NORTH

Hobart Beach

Hobart Beach Park

Prince Bend

West Beach

Sand City Island

NORTH

East Beach

Lloyd Beach

OYSTER BAY AND COLD SPRING HARBOR

Lloyd Harbor

Immaculate Conception Seminary

Lloyd Neck Beach Club

Wincoma Point

Wincoma

Huntington Bay

Crescent Beach

Crescent Beach Town Park

SUFFOLK CO
NASSAU CO

INDEFINITE BOUNDARY

N

0 2000 feet

Significant Coastal Fish and Wildlife Habitats

Caumsett State Park
Eatons Neck Point
Huntington Bay
Lloyd Harbor
Lloyd Point
Sand City (Eaton's Neck)
Cold Spring Harbor (In Part)
Northport Bay (In Part)

New York State Department of State
Division of Coastal Resources