
COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area: **Prospect Point**
County: **Nassau**
Town(s): **North Hempstead**
7½' Quadrangle(s): **Sea Cliff, NY**
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 sizeable, beach-protected salt marshes remaining on the north shore of Nassau 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), least tern (T), and osprey (SC) nesting. Common tern (T) feeding. Additive Division: $36 + 25/2 + 25/4 + 16/8 = 56.75$

56.75

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: Recreational fishing of county-level significance.

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: 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; no replacement sites exist in the vicinity.

1.2

Habitat Index = [ER + SV + HU + PL] = 69.75

Significance = HI x R = 83.7

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

PROSPECT POINT

LOCATION AND DESCRIPTION OF HABITAT:

Prospect Point is located at the northern tip of Manhasset Neck, in the Village of Sands Point, Town of North Hempstead, Nassau County (7.5' Quadrangle: Sea Cliff, N.Y.). The approximately 175 acre fish and wildlife habitat is comprised of a narrow barrier beach, salt marsh, intertidal flats, East Creek, and the open water area extending approximately 1,000 feet offshore from the mean high water elevation along the beach. One of the largest stands of prickly-pear cactus on Long Island is found along the back side of the beach in this area. This area is under private and Village ownership. The habitat is bordered by the County-owned Sands Point Park and Preserve to the east, undeveloped land to the south, and residential development to the west.

FISH AND WILDLIFE VALUES:

The Prospect Point beach and marsh complex comprises one of a few remaining wetland ecosystems of this type on the north shore of Nassau County. Despite recent disturbance by development, the habitat remains an important feeding, nesting, and loafing area for over 250 different bird species. Significant concentrations of least terns (T) and common terns (T) have been observed feeding in the waters adjacent to the mouth of East Creek and resting on its beaches. An increase of least tern (T) nesting activity has been documented recently with 74 pairs in 2001, and 135 pairs in 2002. Since 2000, piping plover (E, T-Fed) have nested in small numbers on the beach, with an average of 3 nesting pairs from 2000 to 2002. American oystercatcher, although in lesser numbers, also nests at Prospect Point. The wetland component serves as a probable or confirmed nesting area for green heron, Canada goose, mallard, American black duck, clapper rail, fish crow, red-winged blackbird, marsh wren, screech owl, tree swallow, belted kingfisher, barn swallow, and sharp-tailed sparrow. One pair of osprey (SC) has been documented nesting within the marsh from 2000 to 2003. Prospect Point is a valuable feeding area for black-crowned night heron, snowy egret, great egret, great blue heron, and little blue heron during the summer. Numerous migrating shorebirds utilize Prospect Point in the fall, including semipalmated sandpiper, least sandpiper, ruddy turnstone, semipalmated plover, black-bellied plover, short-billed dowicher, greater yellowlegs, lesser yellowlegs, dunlin, spotted sandpiper, red knot, and sanderling.

The salt marshes, intertidal flats, and shallows of the Long Island Sound in this area are used extensively as feeding areas for birds nesting here and for many other species during migration (shorebirds in particular). Average concentrations of 100 brant, 100 American black duck, as well as substantial numbers of scaup (greater and/or lesser) use this area each winter. The Prospect Point area provides waterfowl hunting of local significance.

Diamondback terrapin, a relatively uncommon species on the north shore of Long Island, has been

confirmed nesting within the habitat area. Terrapin lay their eggs on the sand beaches bordering marshes. The tidal creek and salt marshes provide feeding areas and cover for terrapins during this period (April 1 - July 31).

This area is also a productive habitat for finfish and shellfish, contributing to the biological productivity of Long Island Sound. East Creek serves as a nursery and feeding area for many species and circulates organic matter and nutrients from the marsh into the Sound. The nearshore waters to the northeast of the mouth of East Creek support moderate recreational fishing opportunities, primarily for bluefish, but also for striped bass, flounder, fluke, weakfish, blackfish and porgy.

IMPACT ASSESSMENT:

Any activity that would substantially degrade the water quality in Prospect Point 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). Efforts should be made to improve water quality, including 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 and sedimentation from upland sources.

Alteration of tidal patterns in Prospect 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 adverse effects 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.

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 Prospect Point. Elimination of salt marsh and intertidal areas, through loss of tidal connection, ditching, excavation, or filling, would result in a direct loss of valuable habitat area. 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 overall wetland values.

Unrestricted use of motorized vessels including personal watercraft in the protected, shallow waters of bays, harbors, and tidal creeks 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.

Thermal discharges, depending on time of year, may have variable effects on use of the area by marine species and wintering waterfowl. Installation and operation of water intakes could have a

significant impact on juvenile (and, in some cases, adult) fish concentrations, through impingement or entrainment.

Nesting shorebirds inhabiting Prospect Point are highly vulnerable to disturbance by humans, especially during the nesting and fledgling 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.

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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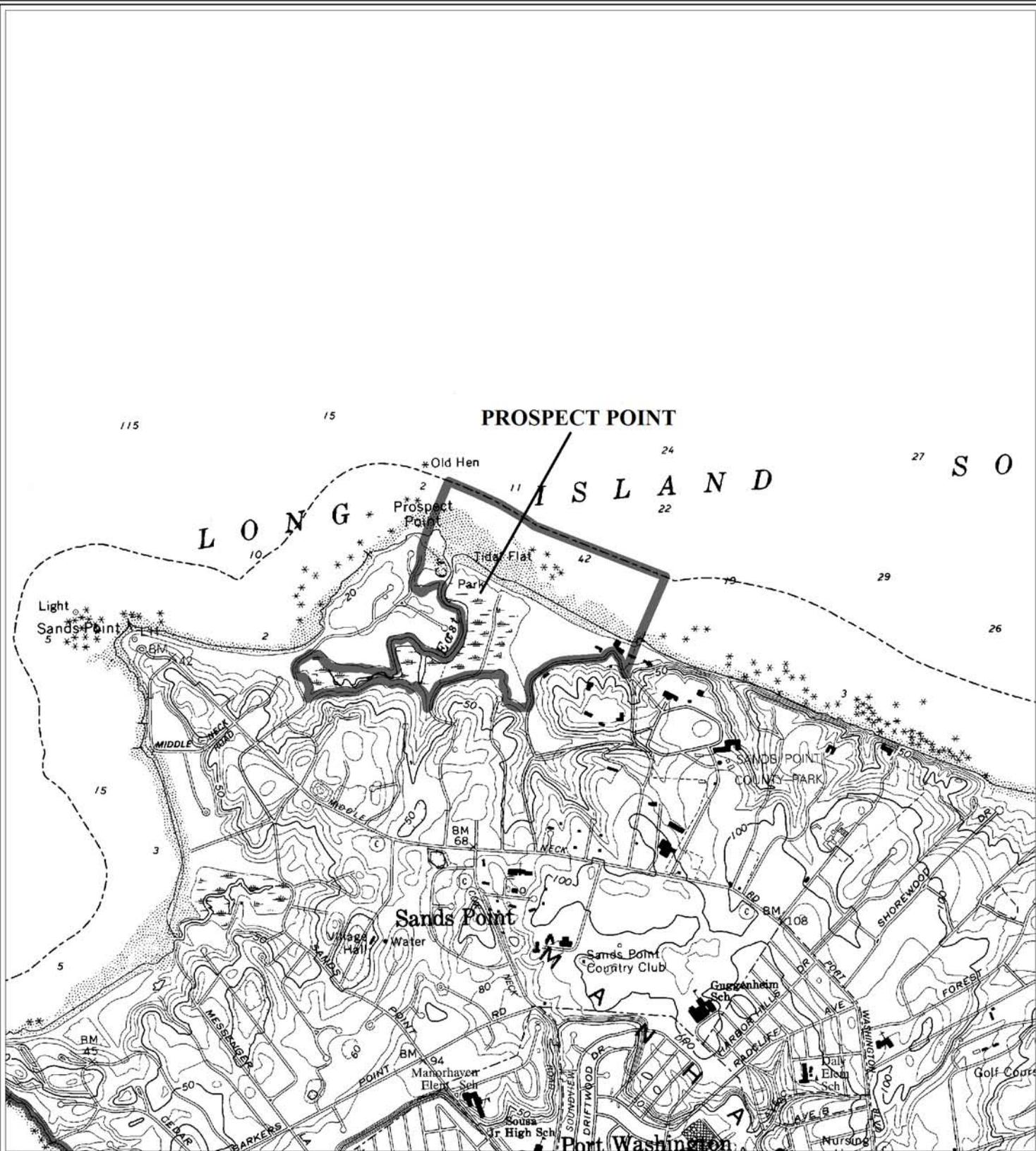
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Significant Coastal Fish and Wildlife Habitats

Prospect Point



New York State
Department of State

Division of
Coastal Resources

