
COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area: **Lloyd 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 the least disturbed coastal wetland ecosystems on the north shore of Long Island; rare in the ecological subregion.

16

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), osprey (SC), and horned lark (SC) nesting. Additive Division: $36 + 25/2 + 16/4 + 16/8 = 54.5$

54.5

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: Environmental education at Caumsett State Park significant in the region. Recreational fishing and birdwatching important at the local level.

9

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] = 79.5

Significance = HI x R = 95.4

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

LLOYD POINT

LOCATION AND DESCRIPTION OF HABITAT:

Lloyd Point is located on the North Shore of Long Island, on the northwest tip of Lloyd Neck, in the Town of Huntington, Suffolk County (7.5' Quadrangle: Lloyd Harbor, NY-CT). The fish and wildlife habitat is approximately 290 acres in size, consisting of a narrow, sparsely vegetated, sand peninsula, a small protected bay, high quality salt marsh, and intertidal flats. Most of the area is located within an undeveloped portion of Caumsett State Park. The remainder is bordered by undeveloped land and several private residences. Losses of tidal wetlands have recently been observed in Lloyd Point Marsh; investigation into the cause or causes of these losses is ongoing.

The marsh at Lloyd Point provides documented habitat for dwarf glasswort (*Salicornia bigelovii*), a species designated by the New York Natural Heritage Program as threatened in New York State.

FISH AND WILDLIFE VALUES:

Lloyd Point is an excellent example of undeveloped coastal wetland ecosystem, containing a diversity of fish and wildlife habitats. This area includes one of the least disturbed salt marshes on the north shore of Long Island.

One pair of osprey (SC) have consistently nested adjacent to the salt marsh each year since 1988. Least terns (T) have been documented nesting on the sand spit which extends southward from the tip of Lloyd Point since 1987, with 110 pairs observed in 1998, and an annual average population (1993 - 2002) of 41 pairs. An annual average of 4 piping plover (E, T-Fed) breeding pairs nested at Lloyd Point over the 10 year period from 1993-2002 and show a steady increase in numbers from 1994-2002. An peak of 11 piping plover pairs (E, T-Fed) nested at Lloyd Point in 2002. Common terns (T) have been nesting inconsistently at Lloyd Point since 1998, with as many as 14 nesting pairs documented in 2001. Roseate tern (E) have also been observed at Lloyd Point, but documentation of use by this species in the area is limited.

Other probable or confirmed breeding bird species in this area include American black duck, Canada goose, mallard, clapper rail, American oystercatcher, horned lark (SC), marsh wren, and red-winged blackbird. Other species using the area include various waterfowl, herons, egrets, gulls, terns, and sandpipers. The habitat area also serves as an important nursery and feeding area for finfish and shellfish.

In addition its ecological values, the Lloyd Point marsh is an important estuarine research and education area on Long Island. The marsh is used by Caumsett State Park for nature tours and by both the Queens College Center for Environmental Teaching and Research and the Nassau County

Board of Cooperative Educational Services for their residential environmental education programs. Birdwatching and recreational fishing are human uses important at the local level. Lloyd Point also supports an important local shore-based sportfishery which is available on a permit basis in Caumsett State Park.

IMPACT ASSESSMENT:

Any activity that would substantially degrade the water quality in Lloyd Point would adversely affect the biological productivity of this area. Degradation of water quality in the bay, or to its water sources, from chemical contamination (including food chain effects), oil spills, excessive turbidity, and waste disposal (including vessel wastes) would adversely affect all fish and wildlife. Efforts should be made to improve water quality, including the control and reduction of discharges from vessels and upland sources. Vegetated upland buffer zones should be protected or established to further reduce water quality impairment from upland sources.

Alteration of tidal patterns in Lloyd Point could have adverse effects on the biotic communities present. Dredging to maintain existing boat channels should be scheduled between September 15 dredged material 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 Lloyd 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 can 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.

Nesting shorebirds inhabiting Lloyd 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.

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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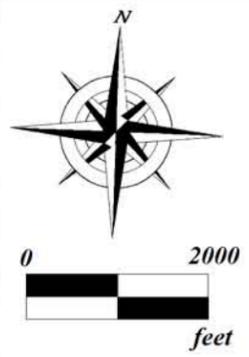
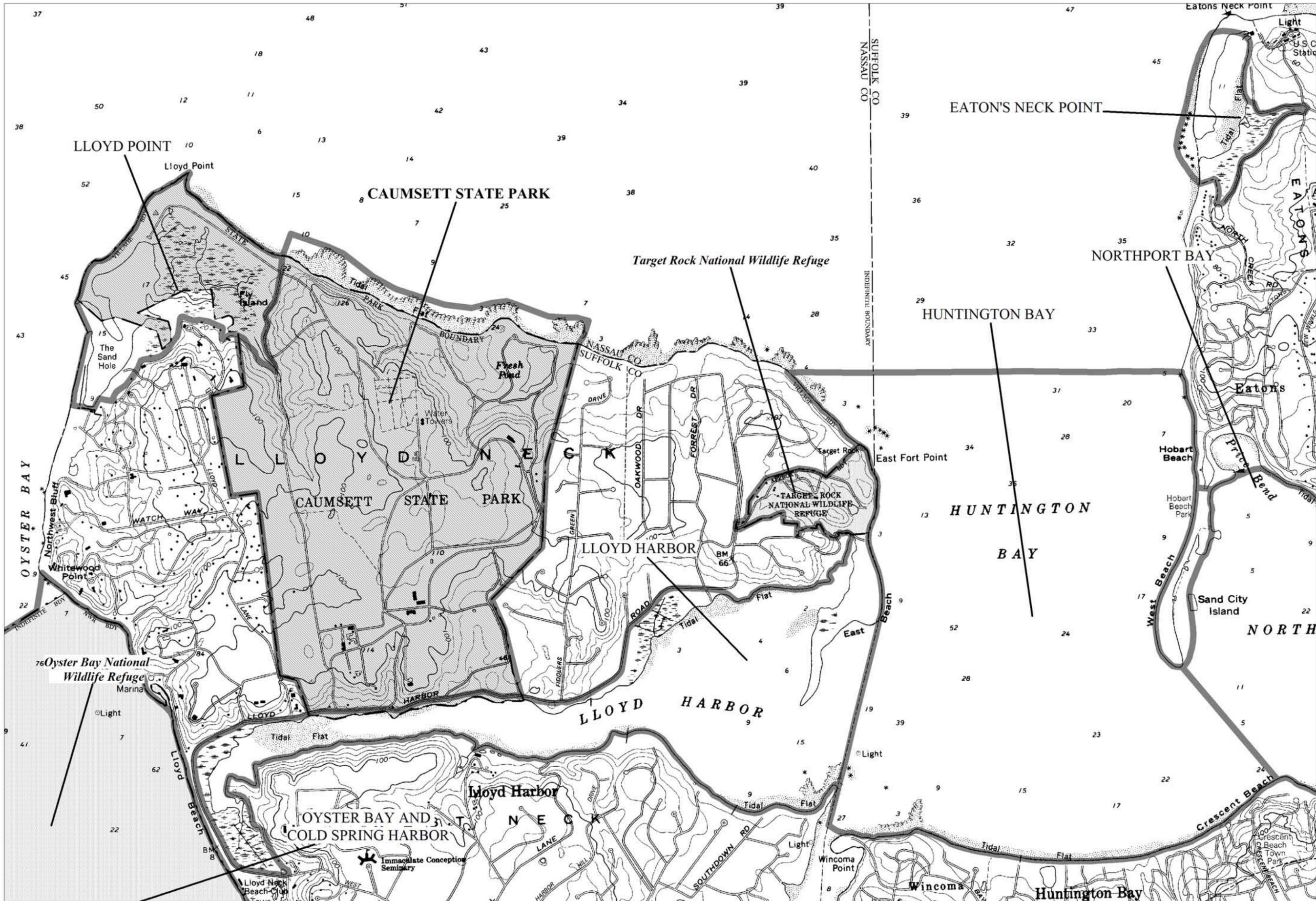
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Significant Coastal Fish and Wildlife Habitats

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