
COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area: **Crab Meadow Wetlands and Beach**
County: **Suffolk**
Town(s): **Huntington**
7½' Quadrangle(s): **Northport, 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 the largest areas of undeveloped salt marsh on Long Island's north shore; rare in 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) and least tern (T) nesting. Documented northern harrier (T) foraging area. 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: No significant fish or wildlife related human uses 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] = 70.75

Significance = HI x R = 84.9

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

CRAB MEADOW WETLANDS AND BEACH

LOCATION AND DESCRIPTION OF HABITAT:

Crab Meadow Wetlands and Beach is located approximately one and one-half miles north of the Village of Northport, on the north shore of Long Island, in the Town of Huntington, Suffolk County (7.5' Quadrangle: Northport, NY). The fish and wildlife habitat consists of approximately 300 acres of undeveloped high salt marsh dominated by salt hay cordgrass (*Spartina patens*) and approximately 30 acres of beach and tidal flat. Relatively little open water occurs within this area. Crab Meadow is owned by the Town of Huntington, and is bordered by undeveloped woodland, county parkland and a golf course to the south and east, seasonal homes along the barrier beach to the north, and low density residential development to the west.

FISH AND WILDLIFE VALUES:

Crab Meadow is one of a few large areas of undeveloped salt marsh ecosystem remaining on the north shore of Long Island. Despite the extent of development in the vicinity, there has been only minimal encroachment into the wetland area. Crab Meadow provides habitat for a variety of fish and wildlife species that are characteristic of Long Island's coastal wetlands.

Crab Meadow Wetlands and Beach provides nesting and feeding habitat for piping plover (E, T-Fed) and least tern (T). During the nine year period from 1994 to 2002 an annual average of 20 least tern (T) pairs nested at Crab Meadow Beach, with a peak of 88 pairs in 1998. During that same eight year period, an annual average of two piping plover (E, T-Fed) pairs nested at Crab Meadow Beach.

Probable or confirmed breeding bird species in the area include green heron, snowy egret, black-crowned night heron, mallard, Canada goose, clapper rail, marsh wren, red-winged blackbird, and swamp sparrow. Sharp-tailed sparrow may also nest in the marsh. In addition, this area serves as a valuable feeding area for herons, egrets, gulls, plovers, sandpipers, and northern harrier (T) throughout much of the year.

Crab Meadow is a productive area for finfish, shellfish, and crustaceans, contributing to the biological productivity of Long Island Sound. The tidal creek channels serve as nursery and feeding areas for many species, and as conveyors of organic matter and nutrients from the marsh into the Sound. There are no significant human uses of the fish and wildlife resources at Crab Meadow.

IMPACT ASSESSMENT:

Any activity that would substantially degrade the water quality in Crab Meadow 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 Crab Meadow, by modification of inlet configurations or other means, could have major impacts on the fish and wildlife communities present. Dredging to maintain adverse effects on aquatic organisms, and to allow for disposal 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 Crab Meadow. 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 Crab Meadow 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:

Habitat Unit
NYS Department of State
Division of Coastal Resources
41 State Street
Albany, NY 12231
Phone: (518) 474-6000

Office of Ecology
Suffolk County Dept. of Health Services
Bureau of Environmental Management
County Center
Riverhead, NY 11901
Phone: (516) 852-2077

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

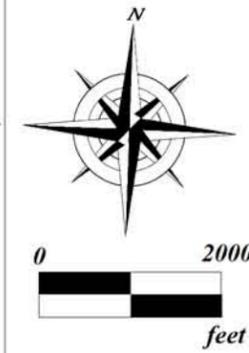
Theodore Roosevelt Sanctuary
134 Cove Road
Oyster Bay, NY 11771
Phone: (516) 922-3200

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 Maritime Services
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

Town of Huntington
Department of Planning and Environment
100 Main Street
Huntington, NY 11743
Phone: (631) 351-3192



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)