
COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area: **Baiting Hollow Wetlands and Beach**
County: **Suffolk**
Town(s): **Riverhead**
7½' Quadrangle(s): **Wading River, NY**
Designated: **October 15, 2005**

<u>Assessment Criteria</u>	<u>Score</u>
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: Narrow maritime beach and county parklands, not rare in Suffolk County.	0
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. 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 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 and 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] = 48.5

Significance = HI x R = 58.2

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

Baiting Hollow Wetlands and Beach

LOCATION AND DESCRIPTION OF HABITAT:

Baiting Hollow Wetlands and Beach is located on the north shore of Long Island, between Wildwood State Park to the west and Woodcliff Park to the east, in the Town of Riverhead, Suffolk County (7.5' Quadrangle: Wading River, NY). This approximately 81 acre area is roughly bounded by Long Island Sound to the north, Edwards Avenue to the east, State Route 25A to the south, and Wildwood State Park to the west. The fish and wildlife habitat includes the Baiting Hollow State Tidal Wetlands and maritime beach west of Fresh Pond Landing. The habitat is bordered by residential development, sloping undeveloped woodlands, and the Baiting Hollow Boy Scout Camp.

The Baiting Hollow Wetlands and Beach habitat consists of maritime beach community, as well as tidal marshland. Intrusions of the non-native common reed grass (*Phragmites australis*) may be found where wetland disturbances, such as mosquito ditching, have occurred.

FISH AND WILDLIFE VALUES:

The beach in the vicinity of Fresh Pond Landing within the Baiting Hollow Wetlands and Beach habitat is an important nesting site for piping plover (E, T-Fed) and least tern (T). An estimated annual average of 2 pairs of piping plover (E, T-Fed) nested on the beaches from 1993 to 2002, with a peak of 4 pairs in 2001 and 2002. During the period from 1993 to 2002, the site averaged approximately 24 pairs (41 in peak year) of nesting least terns (T) annually. The peak year for least tern (T) nesting was 1998, when 59 pairs were documented.

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 Baiting hollow Wetlands and Beach 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 and natural resources of the Baiting Hollow Wetlands and Beach would adversely affect the biological productivity of this area. 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.

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 the Baiting Hollow Wetlands and Beach area. 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. 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 overall natural resource values.

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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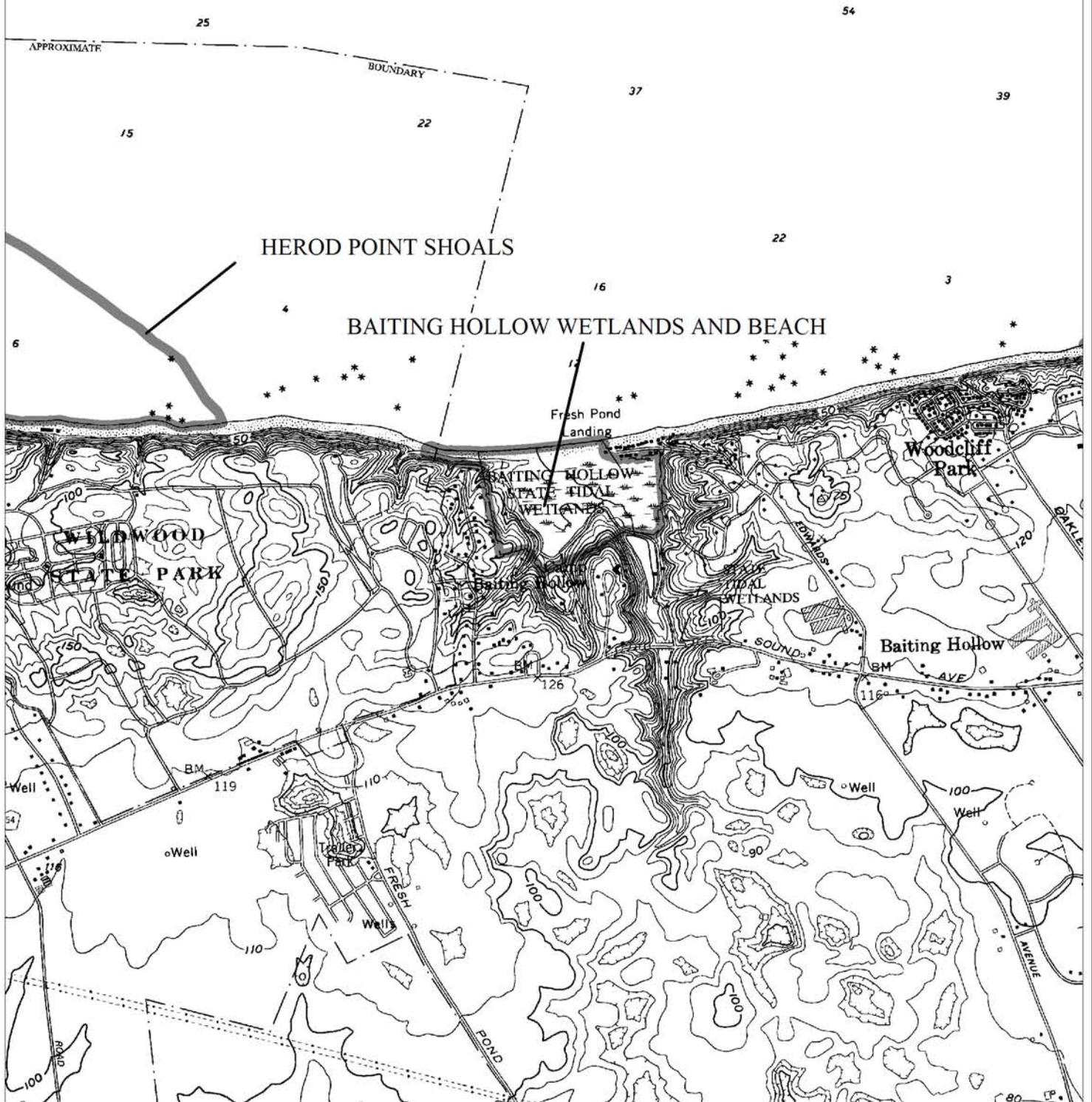
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Significant Coastal Fish and Wildlife Habitats



Baiting Hollow Wetland and Beach
 Herod Point Shoals (In part)

