
COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area: **Goldsmith Inlet and Beach**
County: **Suffolk**
Town(s): **Southold**
7½' Quadrangle(s): **Southold,NY**
Designated: **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: Maritime dune and maritime freshwater interdunal swale communities, rare in New York State.

64

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.
Additive Division: $36 + 25/2 + 16/4 = 52.5$

52.5

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 human use of fish and wildlife resources 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] = 116.5

Significance = HI x R = 139.8

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

Goldsmith Inlet and Beach

LOCATION AND DESCRIPTION OF HABITAT:

Goldsmith Inlet and Beach is located on the north shore of Long Island, between Mattituck Inlet to the west and Horton Neck to the east, in the Town of Southold, Suffolk County (7.5' Quadrangle: Southold, NY). This approximately 150-acre area is bounded by Long Island Sound on the north, Horton Lane on the east, Sound View Avenue on the south, and Mill Lane on the west. The fish and wildlife habitat includes a narrow area of maritime beach that extends approximately 2.25 miles along the Sound from approximately 800 feet west of Goldsmith Inlet northeast to and including Horton Lane Beach; Goldsmith Inlet and Pond and its contiguous tidal wetlands, which lie at the western end of the habitat; and a mosaic of maritime dunes, maritime freshwater interdunal swales, wetlands, and wooded uplands extending from Goldsmith Inlet County Park northeast to Great Pond. The habitat is bordered by residential development as well as undeveloped vegetated dunes.

The Goldsmith Inlet and Beach area contains a variety of ecological community types, including tidal pond, maritime beach, maritime dunes, and maritime freshwater interdunal swales. These latter two communities extend from approximately 1.5 miles west of Great Pond southwest to Goldsmith Pond, and are considered rare ecological occurrences statewide by the New York Natural Heritage Program. Approximately 70 acres of maritime dune habitat extends from Great Pond to Goldsmith Inlet, with approximately 22 acres of maritime freshwater interdunal swales located adjacent to the dunes. Small wetlands containing poor fen species such as cranberries (*Vaccinium macrocarpon*), sundew (*Drosera intermedia*), twig-rush (*Cladium mariscoides*), and marsh St. John's-wort (*Triadenum virginicum*) are also located within the habitat. Slender blue flag (*Iris prismatica*), a rare plant species with less than 20 remaining sites or individuals in New York State, has been documented within the wetlands of this habitat.

FISH AND WILDLIFE VALUES:

The Goldsmith Inlet and Beach habitat consists of several associated significant natural ecological communities. This highly diverse area provides important nesting and feeding habitat for a variety of migratory birds. Least tern (T) and piping plover (E, T-Fed) nest along the habitat's beaches. An estimated annual average of 4 breeding pairs of piping plover (E, T-Fed) were observed at Goldsmith Inlet and beach from 1996 to 2002, with a peak of 7 pairs in 1998. Least tern (T) have nested at this site since 1997, with an estimated annual average of 8 nesting pairs from 1997 to 2002, with a peak of 22 pairs in 2000. One pair of common tern (T) was documented nesting on the beach in 2000, but none have been observed since. This species had not been noted since 1992, when 27 nesting pairs were documented. Approximately 40 adult roseate terns (E) were observed loafing near the inlet in 2001. Osprey (SC) historically nested at Goldsmith's Pond. More recently, osprey (SC) have nested at Peconic Dunes County Park, with an average of 1 nesting pair from 1998 to 2003.

Recreational uses of Goldsmith Inlet and Beach are concentrated in the area around Goldsmith Inlet and Goldsmith Pond, where blue crab and American eel are harvested recreationally. The Town of Southold maintains a public beach at Goldsmith Inlet, and Goldsmith Inlet County Park includes 34 acres of park land which is home to a diversity of wildlife. Peconic Dunes County Park, on the west shore of Great Pond, south of Kenny Road Beach, provides access across the beach to Long Island Sound for surf fishing.

IMPACT ASSESSMENT:

Any activity that would substantially degrade water quality and/or terrestrial natural resources at Goldsmith Inlet and Beach 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. Efforts should be made to improve water quality in the bay, 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 Goldsmith Inlet Pond, by modification of inlet configurations or other means, would have major 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 the upland placement of dredged material when wildlife populations are least sensitive to disturbance. This is especially critical during the nesting and fledging period for colonial nesting birds from March 15 through August 15. 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 (e.g., natural salt marsh, tidal flats, or shallows), would result in the loss of productive areas which support the fish and wildlife resources of the Goldsmith Inlet and Beach 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.

Unrestricted use of motorized vessels including personal watercraft in shallow waters 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 fish. 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 Goldsmith Inlet and Beach are highly vulnerable to disturbance by humans, especially during the nesting and fledgling period (March 15 through August 15). Significant pedestrian traffic or recreational vehicle use of the beach could easily eliminate the use of this site as a breeding area and should be minimized during this period. Recreational activities (e.g., boat and personal watercraft landing, off-road vehicle use, picnicking) in the vicinity of bird nesting areas 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 the nesting bird 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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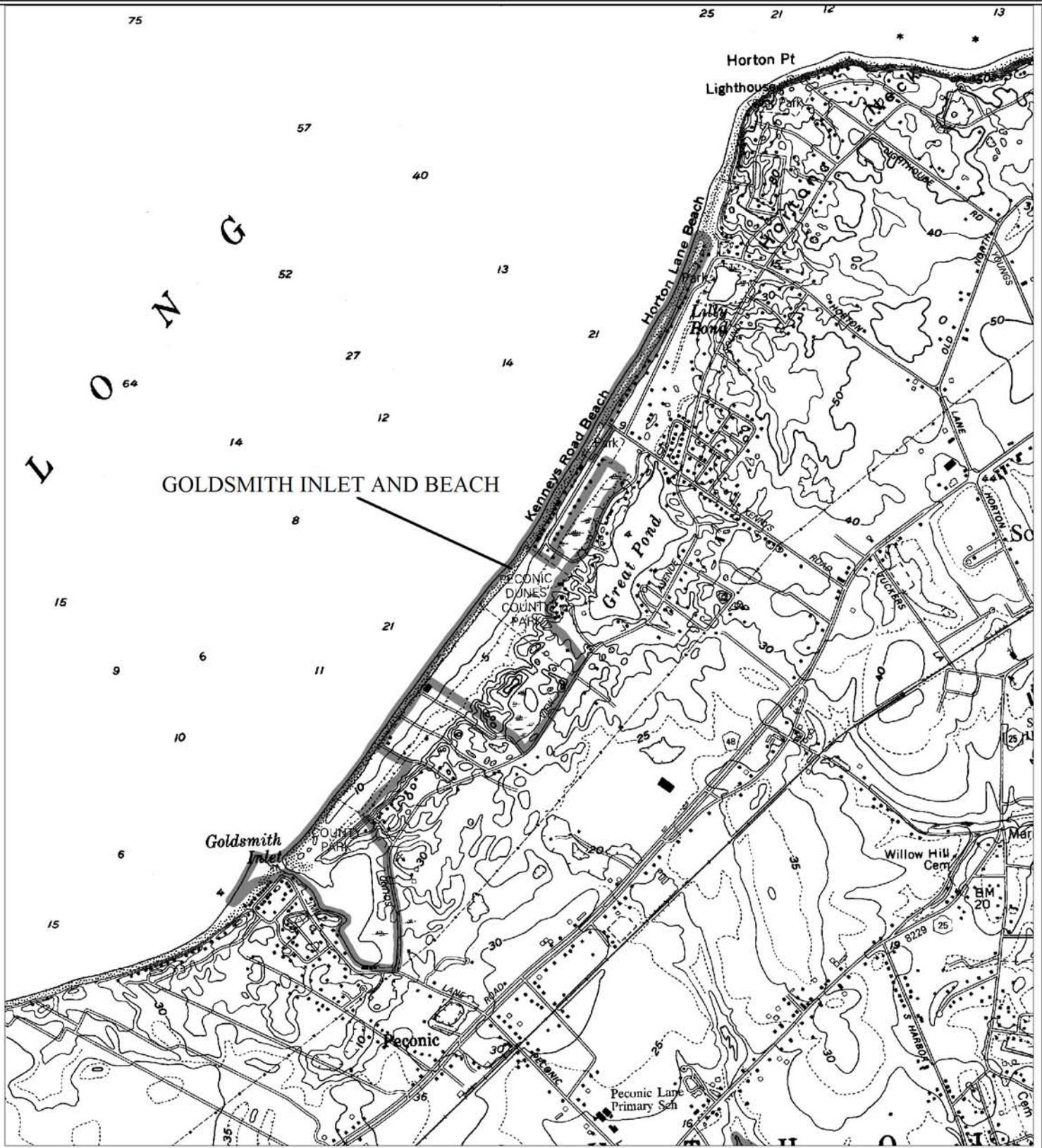
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Significant Coastal Fish and Wildlife Habitats

Goldsmith Inlet and Beach

