

## Appendix A

### Significant Coastal Fish and Wildlife Habitats

---

**COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM**

---

Name of Area: **Fishers Island Beaches, Pine Islands and Shallows**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Mystic, CT-NY-RI**  
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: A combination of marine shallows with significant eelgrass populations, small segments of undeveloped sand and pebble beach, and undisturbed rock and salt marsh islands; unusual in the coastal lowlands subzone.

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. Osprey (SC) feeding. Historic nesting by roseate tern (E) and common tern (T) but not in recent years. 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 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: The Pine Islands area contains one of the largest nesting concentrations of double-crested cormorants in New York State, and is an important area for wintering harbor seals in the state.

16

**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] =84.5****Significance = HI x R = 101.4**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**FISHERS ISLAND BEACHES, PINE ISLANDS, AND SHALLOWS**

LOCATION AND DESCRIPTION OF HABITAT:

The Fishers Island Beaches, Pine Islands, and Shallows habitat incorporates much of the shallows area along the north shore of Fishers Island on Fishers Island Sound up to 14 feet deep at mean low water, including two beach areas and a small group of rocky islands. A beach area on the island's south central shoreline on Block Island Sound is also included. The approximately 786 acre habitat lies within the Town of Southold, Suffolk County (7.5' Quadrangle: Mystic, CT-NY-RI). The shallows area provides important habitat for eelgrass (*Zostera marina*) in what is the most extensive series of beds of this submerged aquatic vegetation along the New York State shore of Long Island Sound. The maximum depth at which eelgrass was identified during the 2002 United States Fish and Wildlife Service Eelgrass Survey along the north shore of Fishers Island was 14 feet in depth at mean low water.

The north shore portion of the habitat commences at Stony Beach on Hay Harbor near the western end of the island and extends easterly to East Point. The Middle Farms Beach area (a.k.a. Beach Pond Fishers Island) is an approximately 17 acre sand, gravel and cobble beach interspersed with shrubs adjoining Island Pond and Beach Pond. There is some human disturbance at the western end of the beach. Island Pond is currently being leased for oyster aquaculture. The Mud Pond Beach (a.k.a. East End Fishers Island) area is approximately 8 acres in size, consisting of beach and rocky strand with a protective barrier of dense shrubs between the beach area and Mud Pond and further on, between the beach and golf course. The western part of this area has been posted to protect beach nesting shorebirds. The area is mostly under private ownership and is partly abutted by the golf course of the Fishers Island Club. There is some recreational disturbance of the beach habitat from boaters, picnickers, golfers and occasionally from four-wheel drive vehicles. The third area, Hay Harbor Spit (a.k.a. Stony Beach), is an approximately ten-acre spit of sand, gravel, and pebbles dividing Hay Harbor from Fishers Island Sound at the far western end of the island. There is very little human disturbance here, due to inaccessibility. The Pine Islands are located along the north shore of Fishers Island, approximately one and one-half miles from the eastern end of the island. These small islands (each less than three acres in size) consist almost entirely of exposed rock with small clumps of trees and salt marsh. The Pine Islands are currently undeveloped and privately owned.

Several rare plant species have been documented by the New York Natural Heritage Program in the Stony Beach area, including saltmarsh aster (*Aster subulatus*), large calyx goosefoot (*Chenopodium berlandieri* var. *macrocalycium*), and fireweed (*Erechtites hieraciifolia* var. *megalocarpa*).

## FISH AND WILDLIFE VALUES:

The Fishers Island Beaches, Pine Islands, and Shallows habitat is an important nesting area for a variety of shorebirds. An estimated annual average of 11 pairs of nesting least tern (T) were observed along the habitats beaches from 1993 to 2001, with a peak of 26 pairs in 1993. Small numbers of common terns (T) nested at Stony Beach in the early 1980s, but they have been absent since 1985. One pair of nesting common terns (T) was documented at Beach Pond on Fishers Island in 1999. Roseate terns (E) were observed at Mud Pond Beach in 1984 but nesting was not documented. Piping plover (E, T-Fed) also nested historically within the habitat area.

In addition to colonial waterbirds, there are double-crested cormorant, herring gull, and greater black-backed gull rookeries on the rocks offshore of all three of these beach areas; most predominantly near Hay Harbor. Data from 1995, 1998, and 2001 indicate an annual average of 475 nesting pairs of double-crested cormorants within the habitat area. This represents one of the largest nesting concentrations of this species in New York State. For these same years, an average of 42 nesting pairs of herring gull, and 31 nesting pairs of great black-backed gull were observed. The gulls and cormorants are thought to be the major deterrent to nesting of terns and plovers on these beaches. Other species nesting within the habitat include American oystercatcher and black skimmer (SC). There are three active osprey (SC) nests on poles adjacent to Middle Farms Beach and one active osprey (SC) nest adjacent to Mud Pond Beach. Other bird species using these beach areas include great blue heron, little blue heron, green-backed heron, black-crowned night heron, great egret, snowy egret, mallard, American black duck, gadwall, green-winged teal, wood duck, common goldeneye, red-breasted merganser, spotted sandpiper, solitary sandpiper, greater yellowlegs, lesser yellowlegs, belted kingfisher, eastern kingbird, tree swallow, barn swallow, and brown thrasher. No significant human activities are associated with the fish and wildlife resources on these three beaches.

In addition to significant bird concentrations, a concentration of harbor seals has been regularly documented at and in the vicinity of the Pine Islands during the winter months and early spring (December 1 - April 1). The exposed rocks in this area provide an important haulout area, which seals use for resting and sunning. This location serves as an activity center for seals feeding in the Fishers Island vicinity, and is part of a larger harbor seal use area which includes Gardiners Island and Orient Point. There are no significant human use activities associated with the wildlife resources of Fishers Island Beaches, Pine Islands, and Shallows.

The 2002 U.S. Fish & Wildlife Service eelgrass (*Zostera marina*) survey for Eastern Long Island Sound, Connecticut, and New York has documented moderate to heavy densities of this submerged aquatic species within much of the marine shallows areas along the north shore of Fishers Island. Eelgrass beds range at depths from 4.5 to 14 feet at mean low water; about 194 acres of beds have been documented and mapped. Eelgrass meadows provide critical habitat for a great diversity of aquatic species, including numerous finfish, shellfish, and crustacean species. These eelgrass meadows represent the only substantive populations of this species along the New York State shoreline portion of Long Island Sound. Historically, eelgrass beds were documented along the south shore of Fishers Island as well as within some of island's coves and harbors. According to the survey results, these sites no longer support eelgrass beds.

## IMPACT ASSESSMENT:

Any activity that would substantially degrade the water quality in the Fishers Island Beaches, Pine Islands, and Shallows habitat 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 or sedimentation, non-point source run-off, and waste disposal (including vessel wastes). Specifically, activities which could adversely impact the water quality of the ponds and coves adjacent to the beaches would likely have detrimental effects on the suitability of the area for feeding and nesting. 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 the Fishers Island Beaches, Pine Islands, and Shallows habitat could have negative impacts on the fish and wildlife communities present. No new navigation channels should be excavated in 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 upland placement of dredged material 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.

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 Fishers Island Beaches, Pine Islands, and Shallows habitat. 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 of the protection of shoreline property should be examined, including innovative, vegetation-based approaches.

Unrestricted use of motorized vessels including personal watercraft in the protected, shallow waters of this habitat 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 the area's shallow waters and vegetated wetlands.

Eelgrass beds are particularly sensitive to alterations in water quality parameters including temperature, salinity, light penetration, organic matter concentration, and the presence of pollutants. Docks may be detrimental to eelgrass beds because of shading, and review of any proposed new docks in this habitat area should be conducted with potential impacts to eelgrass beds fully considered. Restoration opportunities for eelgrass may exist if water quality parameters are appropriate.

Any activity that significantly disturbs or destroys a portion of the habitat, including human use, would likely cause a reduction in the fish and wildlife resource value of the Fisher Island Pines, Pine Islands, and Shallows habitat. Specifically, if the privately owned islands of the Pine Islands were to be developed there would be a major impact on that area's fish and wildlife values; town, state

or federal governments should consider acquisition of the Pine Islands if the opportunity arises. Any permanent alteration or human disturbance of the Pine Islands area would adversely affect the ecological integrity of the habitat. Disturbance of the harbor seal haulout area, especially from December 1 through May 15, or obstruction of seal migrations, would adversely affect this species. Significant underwater noise, from dredging or other activities, could also preclude marine species from using the area.

Nesting shorebirds inhabiting the Fishers Island Beaches, Pine Islands, and Shallows habitat 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 area's beaches (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. Management activities to reduce the gull population may enhance the suitability of beaches as nesting sites.

#### 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

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

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

Town of Southold Trustees  
Town Hall  
53095 Main Road  
Southold, NY 11971  
Phone: (631) 765-1892

New York Natural Heritage Program  
625 Broadway, 5<sup>th</sup> Floor  
Albany, NY 12233-4757  
Phone: (518) 402-8935

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

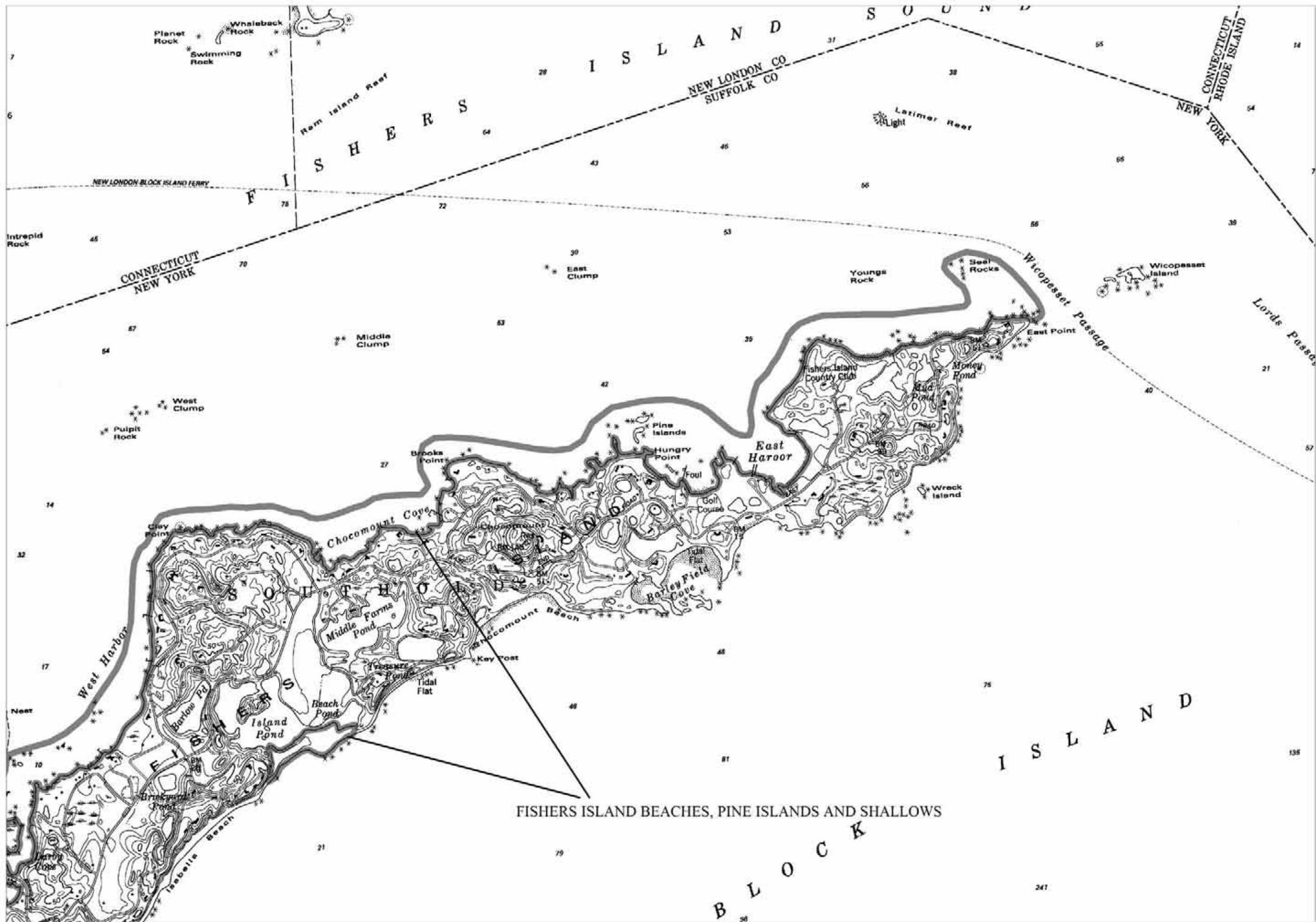
Charles Ferguson  
Fishers Island, New York 06390  
Phone: (516) 788-7479

Edwin H. Horning  
The Henry L. Ferguson Museum  
Fishers Island, NY 06390  
Phone: (516) 788-7293

Fishers Island Conservancy  
Fishers Island, NY 06390  
Phone: (516) 788-7437 (summer)  
P.O. Box 132  
Green Village, NJ 07935  
Phone: (201) 635-5470 (winter)

Town of Southold  
Planning Department  
Town Hall  
53095 Main Road  
Southold, NY 11971  
Phone: (631) 765-1938





FISHERS ISLAND BEACHES, PINE ISLANDS AND SHALLOWS

Significant Coastal Fish and Wildlife Habitats

Fishers Island Beaches, Pine Islands and Shallows (In Part)  
Part 2 of 2





---

**COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM**

---

Name of Area: **Mattituck Inlet Wetlands and Beaches**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Mattituck Hills, 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: Relatively small, undeveloped tidal wetland with strong tidal flushing into Long Island Sound; rare in Suffolk 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. Roseate tern (E) observed, but nesting not adequately documented. 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 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 occur 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] = 61.5**

**Significance = HI x R = 73.8**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**MATTITUCK INLET WETLAND AND BEACHES**

**LOCATION AND DESCRIPTION OF HABITAT:**

The Mattituck Inlet Wetland and Beaches habitat area is located north of the Village of Mattituck on Long Island Sound, in the Town of Southold, Suffolk County (7.5' Quadrangle: Mattituck Hills, NY). The fish and wildlife habitat consists of approximately 60 acres of tidal wetland and creek, 10 acres of shoals and mudflats, and 80 acres of protected park district land (including beaches) located on either side of the Mattituck Inlet jetties. North of the wetland, Mattituck Inlet, a deepwater inlet with strong tidal flushing, enters Long Island Sound. South of the inlet, Mattituck Creek extends south for one mile with moderate residential and marina development. The wetland is undisturbed, with the majority of the acreage is owned by the New York State Department of Environmental Conservation.

**FISH AND WILDLIFE VALUES:**

Small, undisturbed tidal wetlands with good tidal flushing are unusual in northern Suffolk County. The Mattituck Inlet Wetland exhibits high primary productivity, supporting a large variety of fish and wildlife species both in the wetland and around the mouth of the inlet to Long Island Sound.

Mattituck beaches both east and west of the inlet have recently provided significant nesting habitat for least terns (T): An annual average of 43 breeding least tern (T) pairs were recorded for the three year period 2000-2002 (281 in peak year). Previous surveys for this species along the beaches during the late 80's and through the 90's yielded no evidence of nesting. An annual average of one pair of piping plover (E, T-Fed) has nested at Mattituck beaches over the 10 year period 1993 through 2002, with a peak of three pairs in 1996. Roseate tern (E) loafing has been noted along Mattituck beaches, but nesting has not been documented. Osprey (SC) have nested consistently on platforms in the state owned portion of the wetland since 1984 and feed in Mattituck Creek.

Mattituck Creek supports a productive local recreational fishery, including bluefish, striped bass, weakfish, fluke, flounder, and porgies. The wetland also serves as an important habitat for a variety of other wildlife as well as marine finfish and shellfish. Surf clams, hard clams, oysters, and blue mussels have been harvested in or adjacent to the habitat area, but there have been pollution problems due to marina development and non-point source inputs, resulting in consequent shellfish closures. Within the habitat, Mattituck Creek is conditionally certified for shellfish harvesting.

**IMPACT ASSESSMENT:**

Any activity that would substantially degrade the water quality in Mattituck Creek and the Mattituck Inlet Wetlands would adversely affect the biological productivity of this area. Degradation of water



quality, from 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. 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 Mattituck Creek and the Mattituck Inlet Wetlands could have adverse effects on the fish and wildlife communities present. 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 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 Mattituck Creek and the Mattituck Inlet Wetlands. 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 Mattituck Creek 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, such as sea turtles and overwintering waterfowl. Installation and operation of water intakes could have a significant impact on juvenile (and adult, in some cases) fish concentrations, through impingement or entrainment.

#### 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

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

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

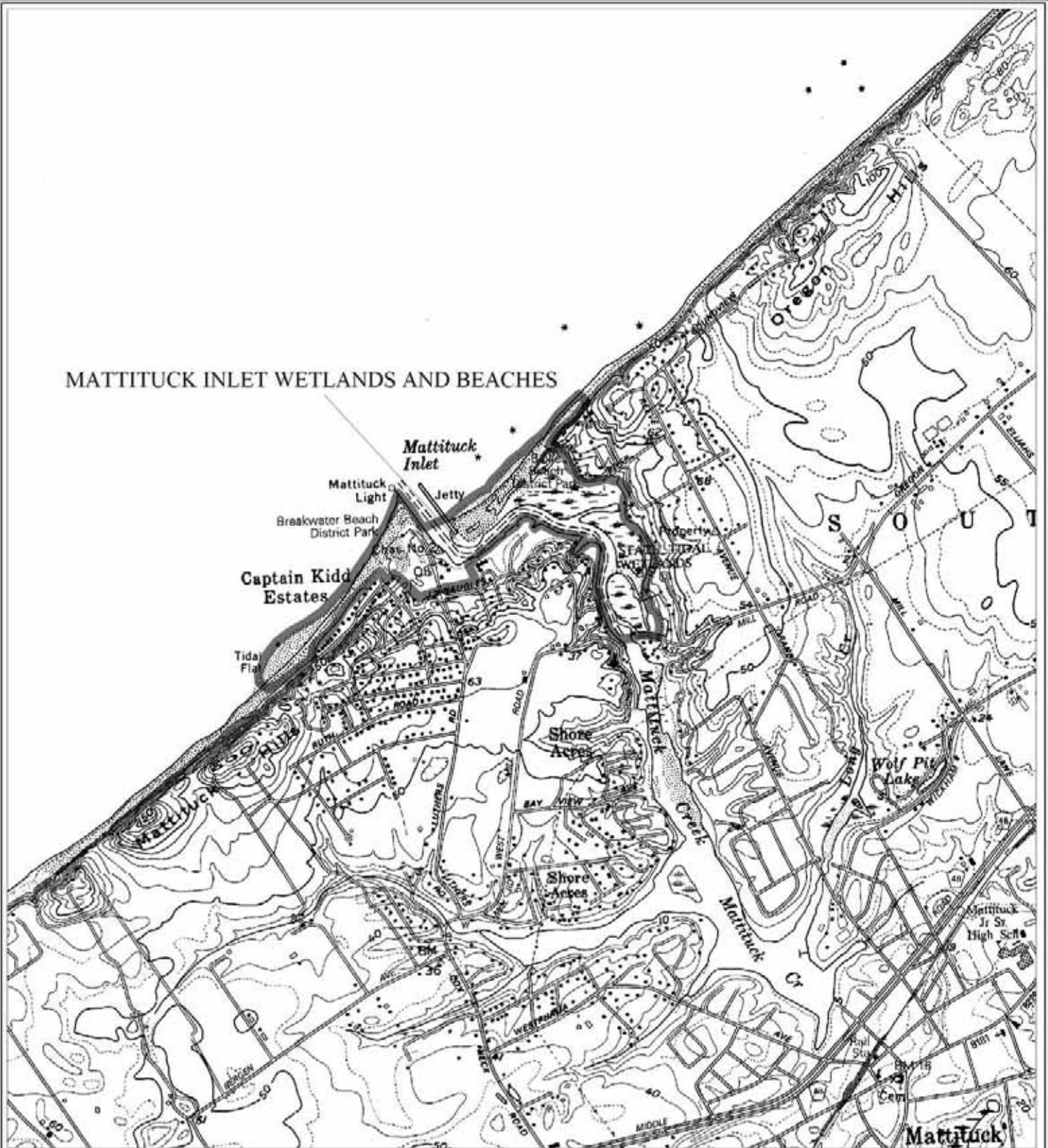
Town of Southold Trustees  
Town Hall  
5309 Main Road  
Southold, NY 11971  
Phone: (631) 765-1892

New York Natural Heritage Program  
625 Broadway, 5<sup>th</sup> Floor  
Albany, NY 12237  
Phone: (518) 402-8935

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

Town of Southold Planning Board  
Town Hall  
53095 Main Road  
P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1938

# MATTITUCK INLET WETLANDS AND BEACHES



## Significant Coastal Fish and Wildlife Habitats



New York State  
Department of State

Division of  
Coastal Resources

Mattituck Inlet Wetlands and Beaches





---

**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:

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

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

Town of Southold Trustees  
Town Hall  
53095 Main Road  
Southold, NY 11971  
Phone: (631) 765-1892

Town of Southold Planning Board  
Town Hall  
53095 Main Road  
Southold, NY 11971  
Phone: (631) 765-1938

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

New York Natural Heritage Program  
625 Broadway, 5<sup>th</sup> Floor  
Albany, NY 12233-4757  
Phone: (518) 402-8935

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077



## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Orient Harbor**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Orient, NY-CT; Greenport, NY**

---

### Assessment Criteria

**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: Moderately shallow open water bay area; common in Peconic Bays area, but rare on Long Island. Eelgrass beds of statewide significance.

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.**

SV assessment: Osprey (SC) nesting. Atlantic ridley turtle (E), green turtle (T), loggerhead turtle (T) occur in the area. Calculation:  $36 + (25/2) + (25/4) + (16/8) =$

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: Commercial bay scallop shellfishery is significant in the northeast region of the United States.

25

**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: Concentrations of bay scallops significant in the northeast region of the United States; waterfowl concentrations significant between county and regional level.

25

**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] = 170.75**

**Significance = HI x R =  
204.9**



NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**ORIENT HARBOR**

**LOCATION AND DESCRIPTION OF HABITAT:**

Orient Harbor is located near the eastern end of the north fork of Long Island, in the Town of Southold, Suffolk County (7.5' Quadrangles: Orient, NY-CT; and Greenport, NY). This area is approximately 1900 acres in size, consisting primarily of open water area in the harbor, along with an undeveloped tidal wetland area and Dam Pond area on its north shore. Water depths in most of the harbor are generally less than 20 feet below mean low water. The harbor is bordered by much undeveloped land, including Orient Beach State Park to the east and south, and low density residential development on the west.

**FISH AND WILDLIFE VALUES:**

Orient Harbor is generally representative of the Peconic Bays ecosystem, in being a broad expanse of moderately shallow water. This habitat type is unlike the very shallow bays on the south shore of Long Island or the relatively narrow bays on the north shore. The tidal wetlands area adjoining Orient Harbor are an important component of this ecosystem, contributing to the biological productivity of the area. The Harbor supports extensive, healthy eelgrass beds, of statewide importance. Orient Harbor is an important habitat for a variety of fish and wildlife species.

From November through March, Orient Harbor supports wintering waterfowl concentrations of regional significance. Mid-winter aerial surveys of waterfowl abundance for the ten year period 1975-1984 indicate average concentrations of over 500 birds in the area each year (1,825 in peak year); for the 1986-1996 period the annual average concentration of birds was almost 200 (354 in peak year). Species observed included American black duck, mallard, mute swan, merganser, scaup, goldeneye, bufflehead, oldsquaw, and Canada goose. Orient Harbor is also inhabited by several nesting pairs of osprey (SC) during the breeding season, which utilize man-made nesting platforms located in the salt marsh north of the harbor. The potential exists for additional nesting pairs at this site. Diamondback terrapin have been observed here but the extent to which the area is used by this species is not adequately documented. This area may also provide important breeding habitat for horseshoe crab, but additional documentation is required.

Orient Harbor is a productive habitat for marine finfish and shellfish. A 1996 Peconic Estuary Program study found extensive eelgrass beds fringing Orient Harbor, supporting abundant bay scallop populations. This area is one of the top scallop producing areas on Long Island, supporting a commercial shellfishery significant in the northeast region of the United States. Between May 15 and October 31, an administrative closure for shellfishing is in effect for the area immediately north of the Orient Yacht Club.

The harbor also serves as a nursery and feeding area (from April-November, generally) for many estuarine fish species, and is an important spawning area for weakfish, winter flounder, and scup. Recent research has shown that this general area may be an important summer feeding and nursery area for juvenile Atlantic ridley sea turtle (E). Atlantic ridley, green (T), and loggerhead (T) turtles have all been documented in this habitat.

#### IMPACT ASSESSMENT:

Any activity that would substantially degrade water quality in Orient Harbor would affect the biological productivity of this area. All species of fish and wildlife would be adversely affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity or sedimentation, stormwater or road runoff, and waste disposal (including boat wastes). It is essential that high water quality be maintained in the area to protect the bay scallop fishery.

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.

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 adult, in some cases) fish concentrations, through impingement or entrainment.

Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in areas not previously disturbed by development (*e.g.*, natural beach or salt marsh), may result in the loss of productive areas which support the fish and wildlife resources of Orient Harbor. 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. Docks may be detrimental to nearshore eelgrass beds because of shading, and review of proposed new docks in Orient Harbor should be conducted with these potential impacts to eelgrass beds in mind. Restoration opportunities for eelgrass may exist in the bay if water quality parameters are appropriate, and should be explored.

## KNOWLEDGEABLE CONTACTS:

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

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

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

Finfish and Crustaceans  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0436

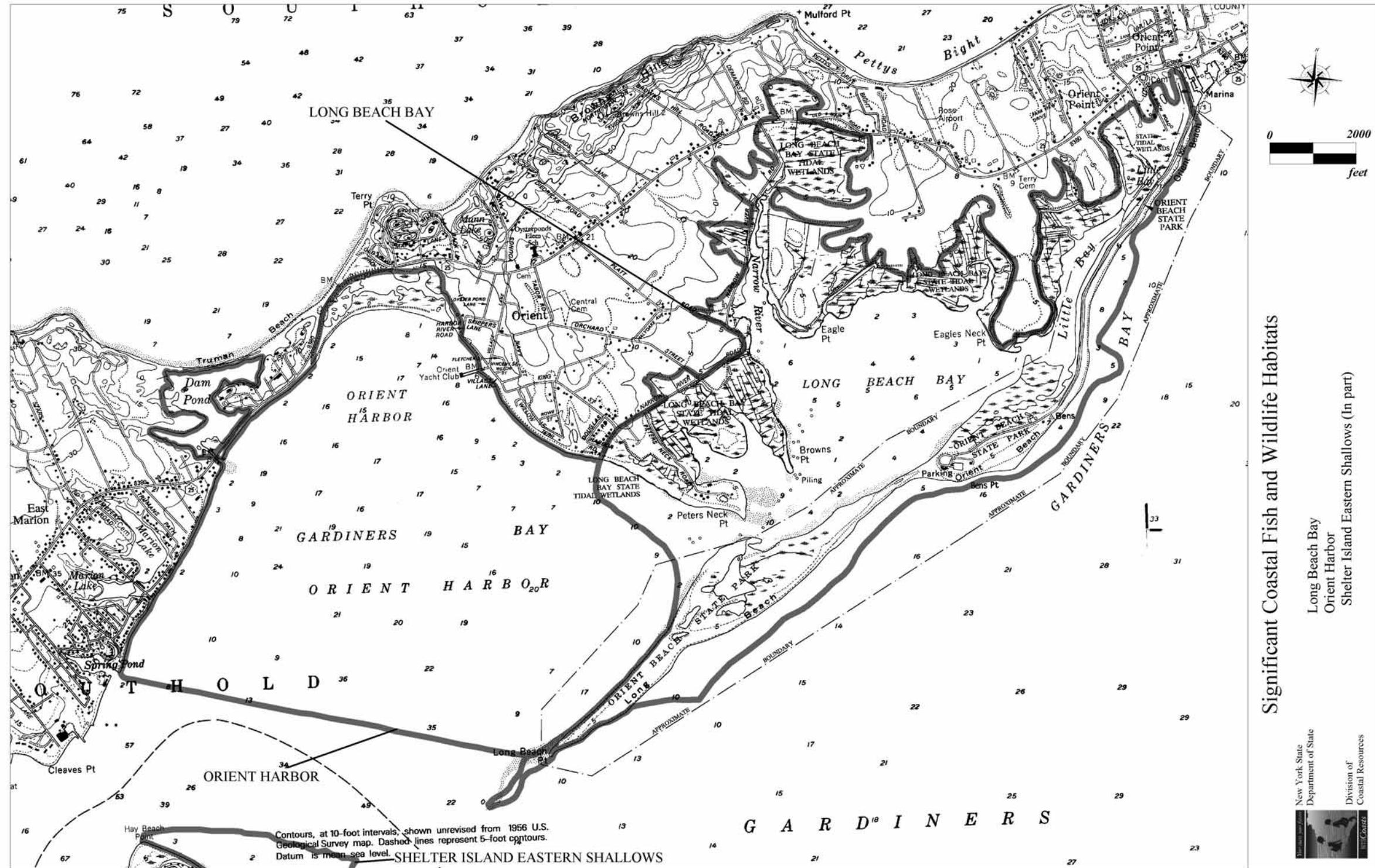
Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

NYS Sea Grant Extension Service  
Cornell University Laboratory  
3905 Sound Avenue  
Riverhead, NY 11901  
Phone: (631) 727-3910

Cornell Cooperative Extension  
Marine Program  
3690 Cedar Beach Road  
Southold, NY 11971  
Phone: (631) 852-8660

Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605



# Significant Coastal Fish and Wildlife Habitats

Long Beach Bay  
Orient Harbor  
Shelter Island Eastern Shallows (In part)



To print on 8.5 x 11 set printer to Fit to Print or reduce to 64%

## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Long Beach Bay**  
 Designated: **March 15, 1987**  
 Date Revised: **May 15, 2002**  
 County: **Suffolk**  
 Town(s): **Southold**  
 7½' Quadrangle(s): **Orient, NY-CT**

---

### **Assessment Criteria**

**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: Large undisturbed coastal wetland and beach ecosystem, rare in New York State. Eelgrass beds of statewide significance.

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.**

SV assessment: Atlantic ridley (E), green (T), and loggerhead (T) turtles documented in area. Osprey (SC), piping plover (E, T-Fed), and least tern (T) nesting.

Calculation:  $36 + (36/2) + (25/4) + (25/8) + (25/16) =$

64.98

**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: Commercial shellfishing area of significance in the northeast region of the United States. Various fish and wildlife recreational activities including clamming are important to Suffolk County residents. Calculation:  $25 + (4/2) =$

27

**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: Concentrations of scallops unusual in northeastern United States; nesting osprey unusual in the State; nesting piping plover and least terns unusual in Suffolk County.

25

**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] = 180.98**

**Significance = HI x R = 217.2**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**LONG BEACH BAY**

**LOCATION AND DESCRIPTION OF HABITAT:**

Long Beach Bay is located on the northeastern fork of Long Island, one mile east of the hamlet of Orient, in the Town of Southold, Suffolk County (7.5' Quadrangle: Orient, NY-CT). This approximately 1,300 acre habitat includes Long Beach Bay, the adjacent State-owned tidal salt marsh areas, and Orient Beach State Park, which is comprised of a long, narrow, sand peninsula protecting the bay area. This area contains a rare example of maritime cedar forest. A salt marsh restoration project, conducted by Cornell Cooperative Extension Marine Program, has occurred on site. Most of the open water area of Long Beach Bay is less than 6 feet deep at mean low water. The Long Beach Bay area also includes the eelgrass beds to the south of the peninsula, to a depth of approximately 10 feet along Long Beach and along the northern portion of Orient Beach State Park.

**FISH AND WILDLIFE VALUES:**

Long Beach Bay and Orient Point Marshes comprise a large and relatively undisturbed coastal estuarine ecosystem. Areas such as this are rare in New York State, and provide habitat for a diversity of fish and wildlife species.

The Long Beach Bay area is one of the largest nesting concentrations of osprey (SC) in New York. Almost all of the nests are located on man-made platforms placed around the perimeter of the bay. Significant populations of piping plover (E, T-Fed) and least tern (T) nest annually on Orient Beach. During 1987-1996, numbers of plover nesting pairs have increased; an annual average of 8 pairs and a peak number of 12 pairs (1989) was observed. Least tern averaged 44 nesting pairs annually during the same period, with actual numbers ranging from 7 to 123 pairs (1991 peak).

A variety of seabirds, shorebirds, and wading birds use this area for feeding or for stopovers during migration. This area is especially significant as a feeding area for herons, egrets, and ibis which nest on nearby Plum Island. Diamondback terrapin are frequently observed in the marsh. This area may provide important breeding habitat for horseshoe crab, but additional documentation is required.

Long Beach Bay is also an important waterfowl wintering area in Suffolk County. Annual aerial surveys of waterfowl abundance during winter for the 1975-1984 period observed average concentrations of over 300 birds in the bay; for the 1986-1996 period an average of over 100 birds were observed each year. Species observed by aerial survey included American black duck, goldeneye, Canada goose, mute swan, and lesser numbers of merganser, bufflehead, and

oldsquaw. The 1996 Christmas Bird Count for Orient Point found several hundred individuals of each of the following species: greater scaup, oldsquaw, Canada goose, white-winged scoter, surf scoter, common goldeneye, and red-breasted merganser.

A 1996 Peconic Estuary Program study documented a number of eelgrass beds within Long Beach Bay itself, as well as beds of moderate size to the south of Orient Beach and at the bay mouth west of Peters Neck Point. These beds provide important habitat for benthic macrofauna such as the bay scallop. Atlantic ridley (E), green (T), and loggerhead (T) turtles have been documented in the habitat area south of the peninsula.

Fish and wildlife recreational activities in the area important to the residents of Suffolk County include waterfowl hunting, fishing, and birdwatching. Bay scallops are abundant in Long Beach Bay, contributing to a commercial shellfishery of significance in the northeastern United States. Also, the bay is one of the top three areas for clams in the Town of Southold, of significance in Suffolk County. Waters of the Narrow River are closed to shellfishing year round. The canal in Hallocks Bay and half of Little Bay are closed to shellfishing between May 1 and October 31.

The New York Natural Heritage Program has documented several listed and rare plant species in this area, including: scotch lovage (*Ligusticum scoticum*, E), dwarf glasswort (*Salicornia bigelovii*), and seabeach knotweed (*Polygonum glaucum*).

#### IMPACT ASSESSMENT:

Any activity that would degrade water quality, disrupt tidal patterns, increase sedimentation, or eliminate wetlands would adversely affect the birds and shellfish found in this area. All species of fish and wildlife may be affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, waste disposal (including boat wastes) and stormwater and road runoff. Tidal wetlands habitats, which assist in maintaining water quality, are especially vulnerable to activities that disrupt tidal patterns, and reduce or eliminate tidal connection. Eelgrass beds are also particularly sensitive to water quality degradation. Restoration opportunities for eelgrass may exist in the Long Beach Bay if water quality parameters are appropriate, and should be explored. It is essential that high water quality be maintained in the bay to protect the bay scallop and hard clam fishery.

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.

Development of harbor facilities and construction of breakwalls or bulkheads would result in the loss of productive areas which support the fish and wildlife resources of Long Beach Bay. Alternative strategies for the protection of shoreline property should be examined, including innovative, vegetation-based approaches. Docks may be detrimental to nearshore eelgrass beds because of shading, and review of proposed new docks in the Long Beach Bay area should be conducted with these potential impacts to eelgrass beds in mind.



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.

Nesting shorebirds inhabiting Long Beach Bay are highly vulnerable to disturbance by humans, especially during the nesting and fledging 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 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.

## KNOWLEDGEABLE CONTACTS:

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

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

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

Finfish and Crustaceans  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0436

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

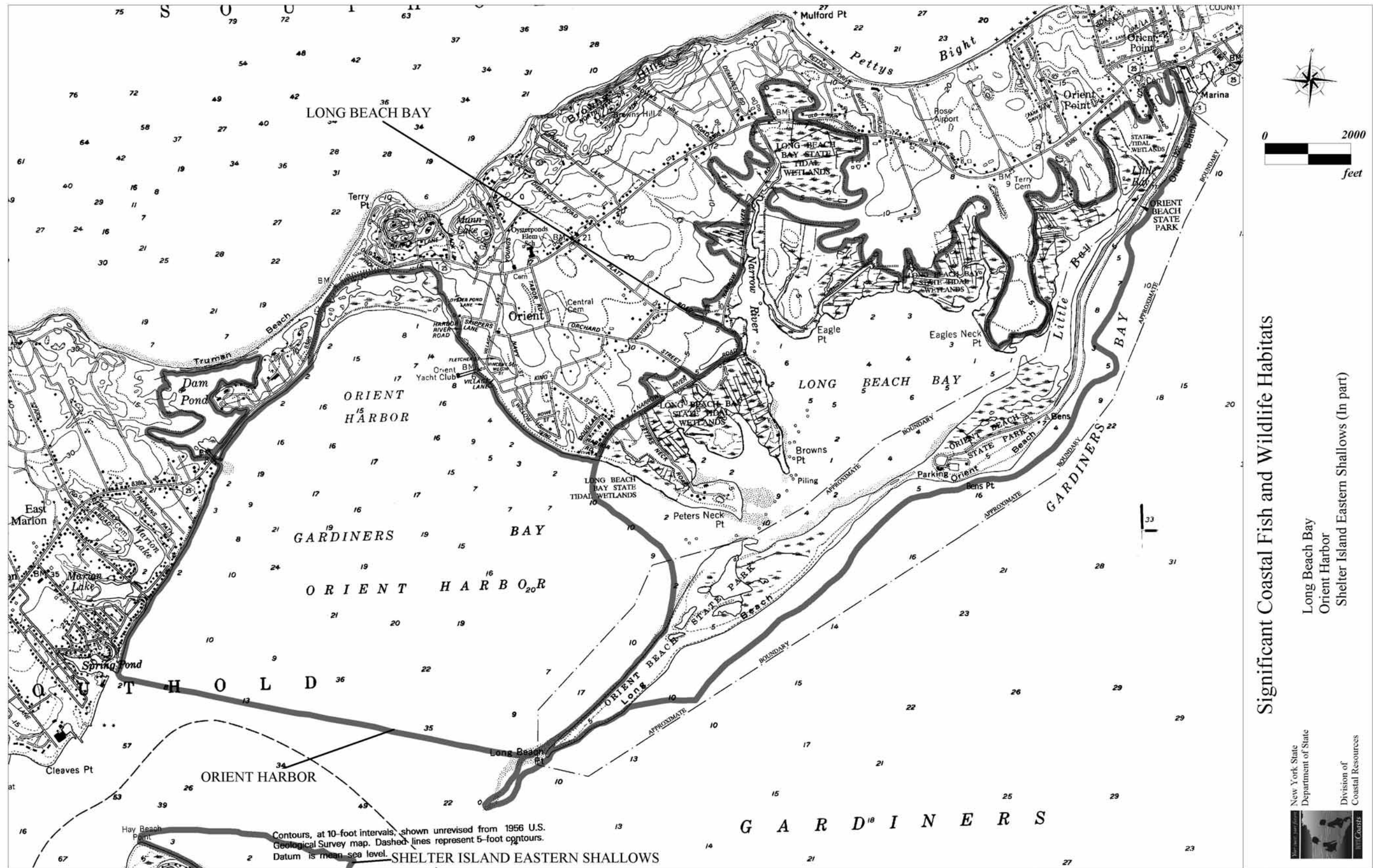
Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

NYS Sea Grant Extension Service  
Cornell University Laboratory  
3905 Sound Avenue  
Riverhead, NY 11901  
Phone: (631) 727-3910

Cornell Cooperative Extension  
Marine Program  
3690 Cedar Beach Road  
Southold, NY 11971  
Phone: (631) 852-8660

Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605



To print on 8.5 x 11 set printer to Fit to Print or reduce by 64%

---

**COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM**

---

Name of Area: **Plum Gut**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Plum Island, NY; See also NOAA NOS Chart #12354**  
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: A primary area of tidal exchange between Long Island Sound and Gardiners Bay; contains a deepwater channel with very turbulent currents passing through it. 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: Atlantic ridley (E) and loggerhead (T) sea turtles use the area.  
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: This area supports one of the most valuable sportfisheries in the northeastern United States.

**25**

**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: Concentrations of finfish foraging and passing through the area are unusual in New York State.

**16**

**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] = 153.5****Significance = HI x R = 184.2**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**PLUM GUT**

**LOCATION AND DESCRIPTION OF HABITAT:**

Plum Gut is an area of open water located between Orient Point and Plum Island, in the Town of Southold, Suffolk County (7.5' Quadrangle: Plum Island, N.Y.). The fish and wildlife habitat is a deep channel (over 60 feet in depth), approximately one-half mile across, and bordered by steep underwater slopes rising up to the relatively shallow (less than 20 feet deep) Midway Shoal. This is approximately a 500 acre area is the primary opening in the underwater ridge separating Long Island Sound and Gardiners Bay, and is an area of turbulent tidal exchange. Plum Gut is on the ferry boat route from Orient Point to Plum Island and New London, Connecticut.

**FISH AND WILDLIFE VALUES:**

Plum Gut represents an unusual physical environment in New York State. The turbulent marine deepwater habitats and shoals combine to produce a productive and diverse habitat for marine fishes and invertebrates.

Significant concentrations of many fish species forage in this area, including striped bass, bluefish, tautog, summer flounder, and scup. Plum Gut is one of two major passage corridors for striped bass, which move into Long Island Sound in spring en route to their spawning grounds, and return to southern overwintering areas during fall. Plum Gut is also thought to be the major corridor for Atlantic salmon returning to the Connecticut (CT) and Pawtucket (RI) Rivers in the early spring.

As a result of the abundant fisheries resources in the area, Plum Gut is one of the most popular areas in the northeastern United States for recreational fishing, with an extensive fishery occurring throughout spring, summer, and fall. Much of this activity is due to the involvement of charter boats from Greenport and Montauk Harbor as well as Connecticut. In addition to sportfishing, the commercial trap net fishery and lobster fishery in Plum Gut are of regional significance. The richness and productivity of this area are also reflected in the use of Plum Gut by marine mammals, particularly bottlenosed dolphin, harbor porpoise, harbor seal, and by sea turtles, especially juvenile Atlantic ridley (E) and loggerhead (T) sea turtles.

**IMPACT ASSESSMENT:**

Any activity that would substantially degrade the water quality in Plum Gut would adversely affect the biological productivity of this area. Degradation of water quality in this area, 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.

Barriers to fish migration, whether physical or chemical, would have a significant effect on the

biological resources of this area. The fisheries resources of Plum Gut would be most affected by any activities that would substantially alter water currents in the area. Also, installation and operation of water intakes would have a significant impact on juvenile (and, in some cases, adult) fish concentrations, through impingement or entrainment. Thermal discharges, depending on time of year, may also have variable effects on use of the area by marine species. The significant human use which this area supports is dependent upon maintaining or enhancing opportunities for compatible recreational and commercial fishing, within the productivity limits of the fisheries resource.

#### 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

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

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

Town of Southold  
Planning Board  
Town Hall  
53095 Main Road  
P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1938

New York Natural Heritage Program  
625 Broadway, 5<sup>th</sup> Floor  
Albany, NY 12233-4757  
Phone: (518) 402-8935

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

The Sounds Conservancy, Inc.  
Marine Sciences Institute  
University of Connecticut  
Groton, CT 06340  
Phone: (203) 445-1868

Town of Southold Trustees  
Town Hall  
53095 Main Road  
Southold, NY 11971  
Phone: (631) 765- 1892



## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Great Gull Island**  
Designated: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Plum Island, NY-CT**

---

### Assessment Criteria

**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: Relatively small, undisturbed, rock island; unusual in Suffolk 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.**

SV assessment: Roseate tern (E) and common tern (T) nesting.  
Calculation:  $36 + (25/2) =$  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: Scientific research and monitoring of statewide significance. 16

**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: The second largest nesting concentration of roseate terns in North America. The largest nesting common tern site in New York State. One of five haul-out sites in New York State for harbor seals. 36

**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] = 109.5**

**Significance = HI x R = 131.4**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**GREAT GULL ISLAND**

LOCATION AND DESCRIPTION OF HABITAT:

Great Gull Island is located approximately 2 miles east of Plum Island along the underwater ridge running between Plum Island and Fishers Island, in the Town of Southold, Suffolk County (7.5' Quadrangle: Plum Island, NY-CT). The fish and wildlife habitat is a relatively small island, approximately 60 acres in size, consisting of exposed rock with low, sparse vegetation. The island is owned by the American Museum of Natural History and primarily used for scientific research and monitoring of colonial waterbirds.

FISH AND WILDLIFE VALUES:

Great Gull Island comprises a relatively small, but valuable, coastal habitat type that provides ideal conditions for roseate tern (E) and common tern (T) nesting. Isolation from predators and human disturbance may be the most important component of the Great Gull Island habitat, distinguishing this area from many other rock islands in Suffolk County.

Large numbers of nesting shorebirds have been well documented at Great Gull Island for many years. Average concentrations of nesting pairs of roseate terns and common terns over the ten year period from 1987 to 1996 were 1 128 pairs and 7245 pairs, respectively. In 1997, more than 1,900 pairs of roseate tern and 11,200 pairs of common tern nested at Great Gull Island. This represents one of the largest nesting concentrations of roseate terns in the United States, and the largest common tern colony in New York State.

In addition to these birds, a population of harbor seals have been regularly documented at Great Gull Island during the winter months (December - early May). The exposed rocks in this area provide an important "haulout" area, which seals use for resting and sunning. This location is one of five major haulouts around Long Island, serving as an activity center for seals feeding in the Great Gull/Plum Island area. Great Gull Island is also documented to be an active seal pupping site.

The island is the site of scientific research and monitoring as part of the Great Gull Island Project of the American Museum of Natural History. The colony is monitored and studied throughout the breeding season by researchers.

IMPACT ASSESSMENT:

Nesting shorebirds inhabiting Great Gull Island 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 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 permanent alteration or human disturbance of the harbor seal haulout area, obstruction of seal migrations, or other disturbances when seals are in the area (December 1 through May 15) would have a significant adverse impact on the populations of these species in the Long Island region. Significant underwater noise, from dredging or other activities, could also preclude harbor seals from using the area.

## KNOWLEDGEABLE CONTACTS:

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

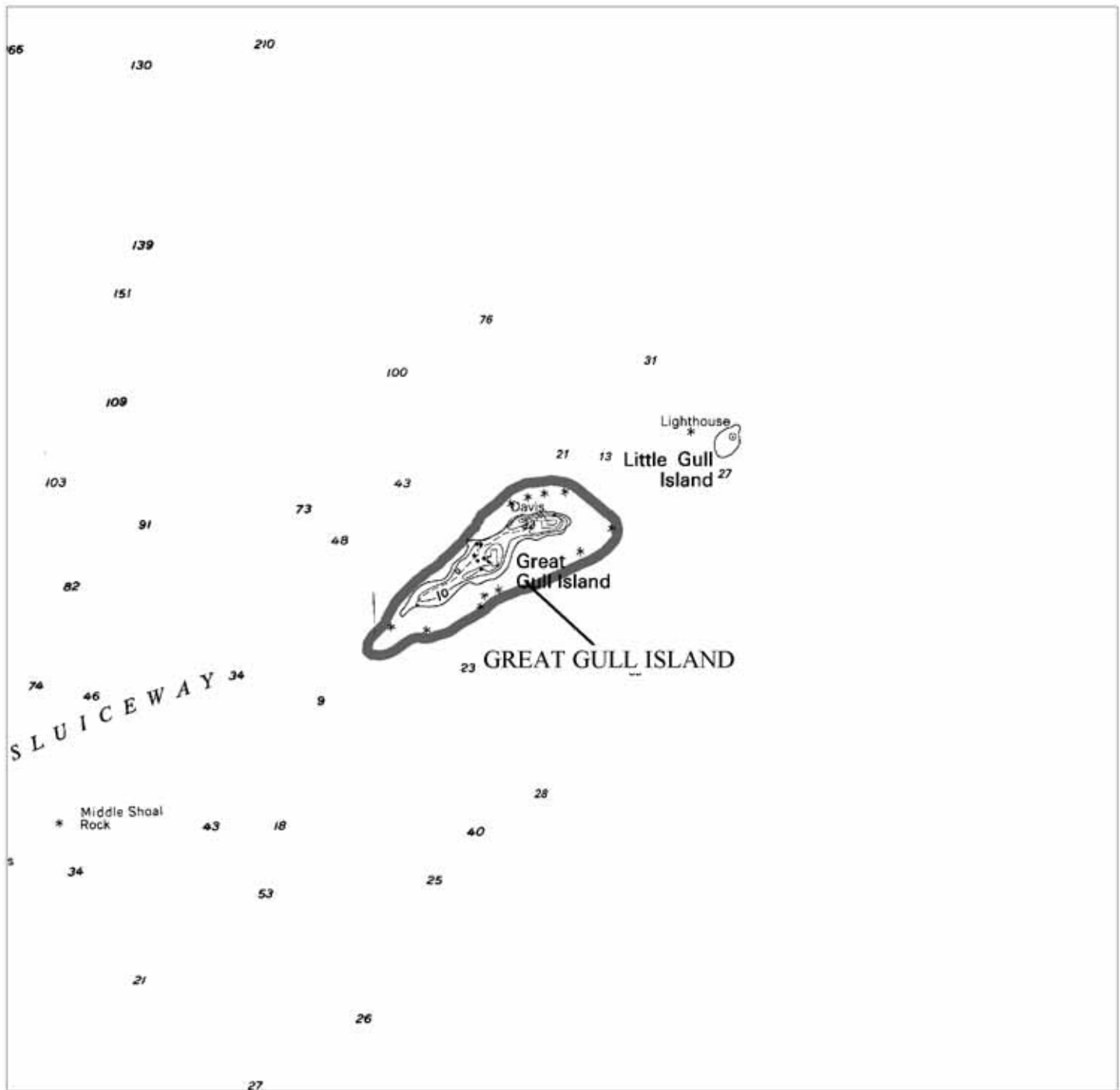
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790-2356  
Phone: (631) 444-0354

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

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



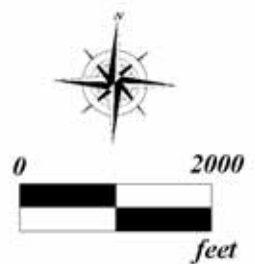
## Significant Coastal Fish and Wildlife Habitats

### Great Gull Island



New York State  
Department of State

Division of  
Coastal Resources



## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Hashamomuck Pond**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Southold, NY**

---

### Assessment Criteria

**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: Relatively large brackish pond, with some undeveloped shoreline and marsh; rare on the north fork, but rarity diminished by human disturbance. 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.**

SV assessment: Osprey (SC) nesting. 16

**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: Commercial and recreational shellfishing of town-level significance. 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: Concentrations of shellfish, especially hard clams, significant in the town. 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] = 16.0**

**Significance = HI x R = 19.2**



NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**HASHAMOMUCK POND**

**LOCATION AND DESCRIPTION OF HABITAT:**

Hashamomuck Pond is located west of Conkling Point emptying through Mill Creek into Shelter Island Sound in the Town of Southold, Suffolk County (7.5' Quadrangle: Southold, NY). The fish and wildlife habitat consists of an approximately 220 acre area consisting of a large, shallow brackish pond with a hard bottom, marsh and inlet creek (Mill Creek). There is moderate to high density residential development on the north and northwest sides of the pond and marina development at the mouth of Mill Creek. The southwest side of the pond remains largely undeveloped, and a large parcel on the eastern side of the pond (Cassidy Farm) has been preserved.

**FISH AND WILDLIFE VALUES:**

Hashamomuck Pond is a valuable pond/wetland on the north fork of Long Island but its value is reduced by human disturbance and water pollution. The pond still provides a valuable habitat for a variety of fish and wildlife.

Osprey (SC) nest on platforms at several locations in the pond and utilize the pond and marshes for feeding areas. A variety of waterfowl also utilize this area for feeding, including merganser, scoter, Canada goose, and oldsquaw. Several species of migratory hawks use Hashamomuck Pond. Diamondback terrapin nest at the head of Mill Creek.

The pond also serves as a habitat for finfish and shellfish including bay scallops and hard clams. The pond is one of the top areas for the harvesting of clams and scallops in Southold. Long Creek and the northwestern end of the pond are closed to shellfishing year round; Mill Creek south of the Long Island Railroad tracks is closed to shellfishing year round. All of Hashamomuck Pond and its tributaries are closed to shellfishing from May 1-November 30. Most of Long Creek at the southwest end of the pond is closed year-round. Mill Creek is also closed year-round. The pond remains the most important clamming site in the Town during the winter.

**IMPACT ASSESSMENT:**

Any activity that would further degrade the water quality in Hashamomuck Pond would adversely affect the biological productivity of this area. All species of fish and wildlife are affected by water pollution such as chemical contamination (including food chain effects resulting in bioaccumulation), oil spills, excessive turbidity, stormwater runoff, and waste

disposal, including marina and boat wastes. Hashamomuck Pond is presently polluted from several point and non-point sources of sewage and nutrient-laden runoff. Particular threats to water quality are caused by road runoff from Route 48 to the north, and from surface streets to the west (north of Long Creek). In addition, there is no sewage treatment in this area. Both point and non-point sources of pollution should be reduced or eliminated to enhance this habitat for shellfish and other fish and wildlife species.

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.

Alteration of tidal patterns in Hashamomuck Pond (*e.g.*, by modifying the Mill Creek inlet) could have major impacts in the fish and wildlife species present. Barriers to fish migration whether physical or chemical would have major impacts on the fisheries resources in Hashamomuck Pond. Restoration of fish populations in the pond should be considered. There is currently a marina at the mouth of Mill Creek; any alteration in the current configuration, or changes in use and activities of this marina should be carefully examined with respect to fish and wildlife habitat impacts.

Elimination of marsh and intertidal areas, through loss of tidal connection, dredging, ditching, excavation, or filling, would result in a direct loss of valuable habitat area. 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. 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 Hashamomuck Pond area. The Town of Southold has identified acquisition of the remaining available parcels bordering the pond as a high priority.

Diamondback terrapin inhabiting the area may be vulnerable to disturbance by humans from April 1 through August 15. Recreational activities near these nesting sites, *e.g.*, boat landing, pedestrian traffic, use of off-road vehicles and personal watercraft, and picnicking, should be minimized during this period.

## KNOWLEDGEABLE CONTACTS:

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

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

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

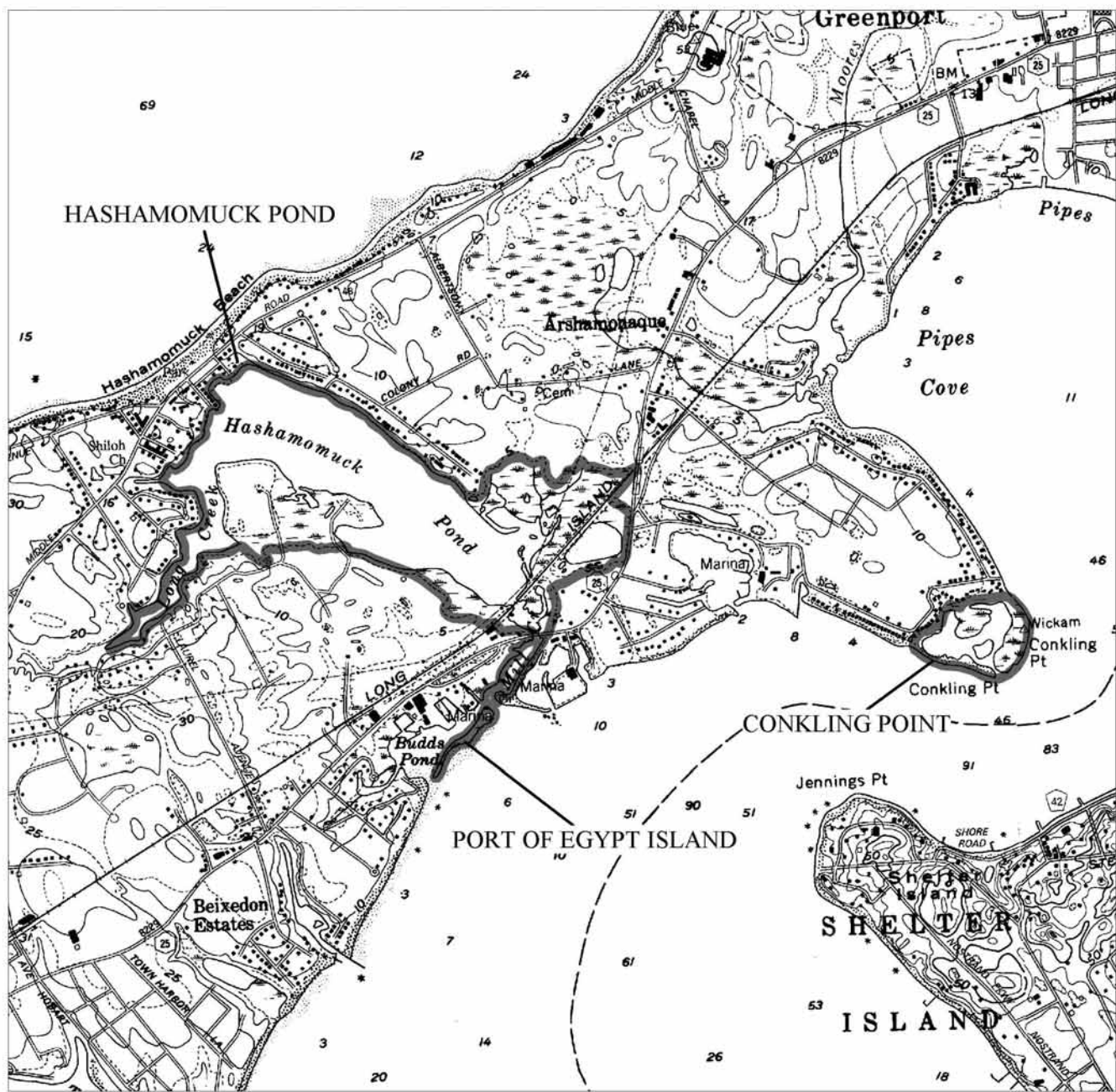
Finfish and Crustaceans  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0436

Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

NYS Sea Grant Extension Service  
Cornell University Laboratory  
3905 Sound Avenue  
Riverhead, NY 11901  
Phone: (631) 727-3910

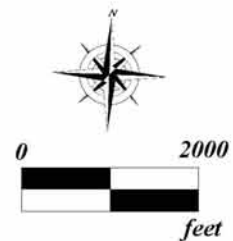
Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605



## Significant Coastal Fish and Wildlife Habitats



Conkling Point  
Hashamomuck Pond  
Port of Egypt Island



## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Conkling Point**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Greenport, NY; Southold, NY**

---

### **Assessment Criteria**

**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: Relatively small, undeveloped sand spit and marsh, rare on north fork of Long Island.

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.**

SV assessment: Least tern (T) and piping plover (E, T-Fed) nesting. Common tern (T) nesting has occurred, but additional documentation for this species is required.

Calculation:  $36 + (25/2) =$

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 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 fish and wildlife species occur 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: Uncertain of ability to replace.

1.0

---

**Habitat Index = [ER + SV + HU + PL] = 48.5**

**Significance = HI x R = 48.5**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**CONKLING POINT**

**LOCATION AND DESCRIPTION OF HABITAT:**

Conkling Point is located approximately two miles southwest of the Village of Greenport, on Shelter Island Sound, in the Town of Southold, Suffolk County (7.5' Quadrangles: Greenport, NY; and Southold, NY). The fish and wildlife habitat is approximately 25 acres in size, consisting of a narrow, sparsely vegetated, sand island, a small protected bay, salt marsh, and tidal flats. Conkling Point is generally undeveloped and privately owned. However, the area is bordered by high density residential development to the north, resulting in some recreational disturbance of the habitat.

**FISH AND WILDLIFE VALUES:**

Conkling Point is a relatively small coastal wetland area, similar in nature to many other points around the Peconic Bays shoreline, but important as a habitat for wildlife.

This area has served for many years as a nesting site for least tern (T) and piping plover (E, T-Fed). Approximately 1 pair of piping plover annually nested at Conkling Point during the 1987-1996 period. These numbers have decreased slightly since the early 1980s, when around 3 pairs of plover nested at this site annually.

The concentrations of terns nesting at Conkling Point were the second largest and largest on the north fork of Long Island in 1983 and 1984, respectively. During these years concentrations reached 45 and 100 nesting pairs. Least tern nested at Conkling Point consistently during the 1987-1996 period, with annual number of pairs ranging from 0-42, and the annual average at 19 pairs. The peak of 42 pairs occurred in 1988, with numbers declining to zero in 1996. This species reappeared in abundance in 1997 (68 pairs), but did not nest in 1998.

Around 11 nesting pairs of common tern (T) were documented annually at Conkling Point during the early 1990s, but this species has not been observed since 1993. Historically, the population levels of least terns and piping plovers were unusual in Suffolk County.

The tidal wetlands at Conkling Point serve as feeding areas for the terns and many other wildlife species. The recreational soft-shell clam and hard clam shellfisheries, as well as a finfishery, at this location are of local importance.

## IMPACT ASSESSMENT:

The fish and wildlife resources of this area could be affected by modification of public access to and/or use of the area. Habitat modifications which substantially change the natural character of the area, such as residential, commercial, or industrial developments would have a significant impact on many wildlife species in the area. Undeveloped areas in and nearby Conkling Point that are currently privately owned have been identified as acquisition priorities by the Town of Southold.

Nesting shorebirds inhabiting Conkling 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 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 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.

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.

Loss of the salt marsh habitat, through elimination of tidal connection, ditching, excavation, or filling, would result in a direct loss of valuable habitat and value as a food resource for many wildlife species. 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 Conkling Point. 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.



## KNOWLEDGEABLE CONTACTS:

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

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

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

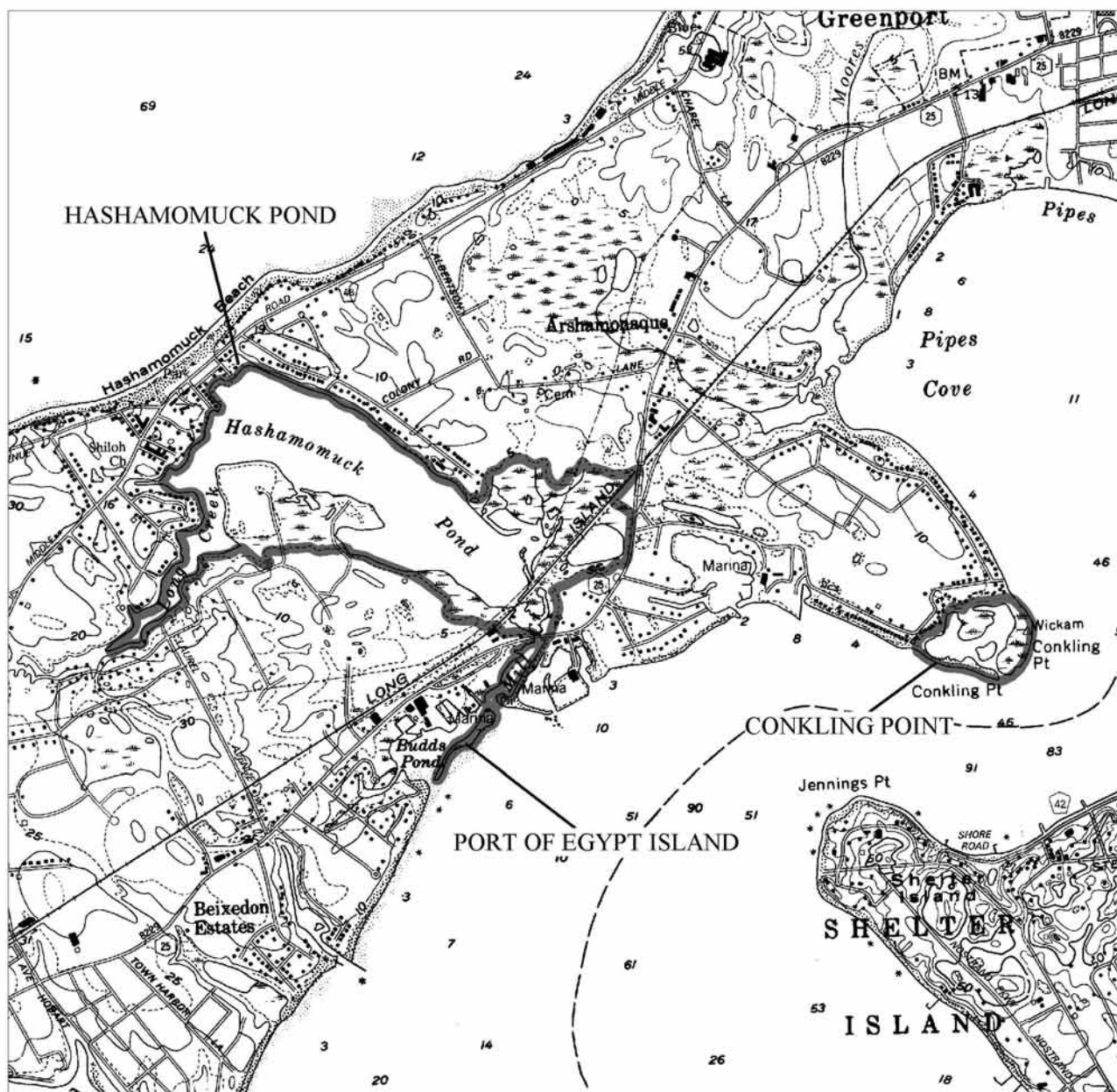
Finfish and Crustaceans  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0436

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

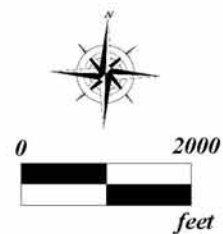
Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605



## Significant Coastal Fish and Wildlife Habitats



Conkling Point  
Hashamomuck Pond  
Port of Egypt Island



## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Port of Egypt Island**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Southold, NY**

---

### **Assessment Criteria**

**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: Small, sparsely vegetated sand island; not a rare ecosystem type. 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.**

SV assessment: Common tern (T), least tern (T), piping plover (E, T-Fed), black skimmer (SC) and osprey (SC) nesting. Calculation:  $36 + (25/2) + (25/4) + (16/8) + (16/16) =$  57.75

**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: One of the largest common tern concentrations in Suffolk County. 4

**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: Techniques for habitat replacement allow reasonable likelihood for success, but uncertain of ability to replace the population levels. 1.0

---

**Habitat Index = [ER + SV + HU + PL] = 73.75**

**Significance = HI x R = 73.8**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**PORT OF EGYPT ISLAND**

**LOCATION AND DESCRIPTION OF HABITAT:**

Port of Egypt Island is located approximately two miles east of the hamlet of Southold, on Shelter Island Sound, in the Town of Southold, Suffolk County (7.5' Quadrangle: Southold, NY). The fish and wildlife habitat is a narrow, sparsely vegetated, sand island, approximately 4 acres in size. This island is located at the mouth of Mill Creek, just offshore from an area that is heavily developed with marina and port facilities.

**FISH AND WILDLIFE VALUES:**

Port of Egypt Island is a very small sand island, similar in nature to many other areas around the Peconic Bays shoreline, but very important as a habitat for wildlife.

The island has served for many years as a major nesting site for common tern (T), least tern (T), piping plover (E, T-Fed), and black skimmer. Roseate terns (E) nested here sporadically prior to the 1980s, but have not been documented since that time. Common tern averaged 67 nesting pairs annually from 1987-1996. Peak pair numbers of 110-180 were reached in the late 1980s and have declined through 1996. Even these peak numbers have decreased from those in the mid-1980s, when 200-500 breeding pairs of common tern were documented at this site annually. The concentration of common terns at this site was historically among the largest on Long Island, of statewide significance. Least tern averaged 32 nesting pairs annually during the same period, with a peak number of 72 pairs in 1989 and gradually declining numbers since that year. During the 1987-1996 period, an average of 2 nesting pairs of plovers were observed on the island annually. During this same period, black skimmer (SC) nested sporadically on Port of Egypt Island, with a peak number of 7 pairs and an annual average of 2 pairs. Osprey (SC) nest at the western end of the island.

This area may provide important breeding habitat for horseshoe crab, but additional documentation is required. There are no significant human use activities associated with the wildlife resources at Port of Egypt Island.

**IMPACT ASSESSMENT:**

Nesting shorebirds inhabiting the Port of Egypt Island are highly vulnerable to disturbance by humans, especially during the nesting and fledging 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 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.

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.

## KNOWLEDGEABLE CONTACTS:

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

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

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

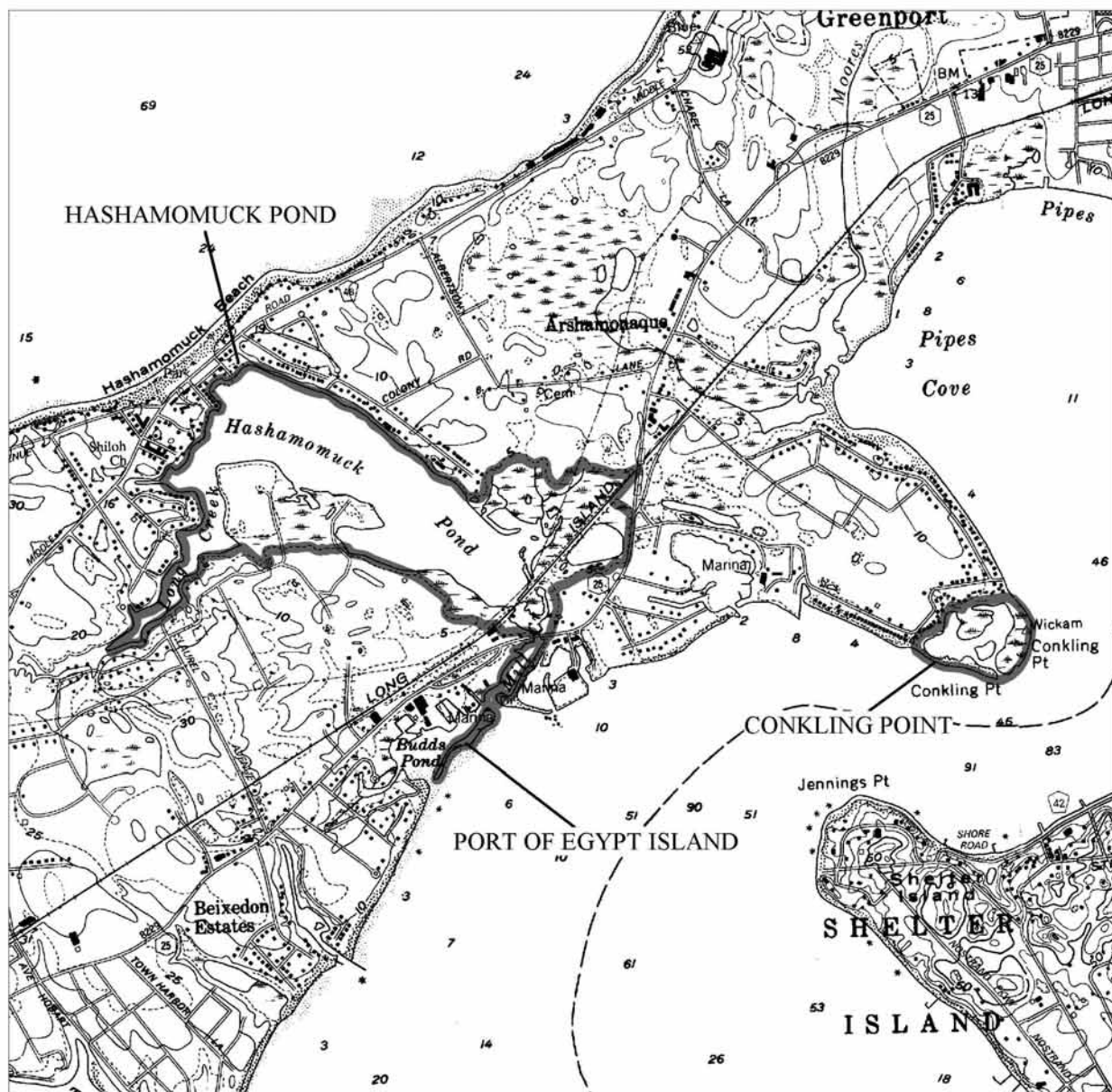
Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

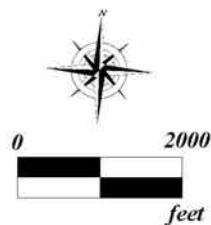
Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605



## Significant Coastal Fish and Wildlife Habitats



Conkling Point  
Hashamomuck Pond  
Port of Egypt Island





---

**COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM**

---

Name of Area: **Pipes Cove Creek and Moore's Drain**  
Counties: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Southold, NY, and Greenport, 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: One of the largest saltwater/freshwater wetland complexes on Long Island; rare in the coastal lowlands 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), and common tern (T) use the Pipes Cove area for foraging and loafing, but extent of use not well documented.

**0**

**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 clamming, kayaking, boating and fishing significant at the county level.

**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 species of fish or wildlife 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] = 20**

**Significance = HI x R = 24**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**Pipes Cove Creek and Moore's Drain**

LOCATION AND DESCRIPTION OF HABITAT:

The Pipes Cove Creek and Moores Drain habitat is located on Long Island's North Fork, between Hashamomuck Pond and the Village of Greenport in the Town of Southold and Village of Greenport, Suffolk County (7.5' Quadrangles: Southold, NY, and Greenport, NY). The fish and wildlife habitat is approximately 570 acres in size, and is comprised of several habitat types, including a portion of the shallow waters of Pipes Cove, the tidal creeks and marshes associated with Pipes Creek and Pipes Cove Creek, the freshwater swamps of the Arshmonaque wetlands and the Moore's Drain basin, open grasslands, and upland woods. Moore's Woods, which lies north of State Route 25, is protected land owned by the Village of Greenport. The Arshamanaque Wetlands between Chapel Lane and Albertson Lane is under town or county ownership, and is managed as protected open space lands. The habitat is bounded by Middle Road on the north, Albertson Lane and Kerwin Boulevard on the west, Pipes Cove and State Route 25 on the south, and the residential areas of the Village of Greenport to the east. Water depths in the portion of Pipes Cove and associated creeks within the habitat are less than three feet at mean low water. The habitat complex is bordered by light and dense residential development, woodlands, and scattered commercial sites.

The Arshamanaque Wetlands and Moore's Woods portions of this habitat both provide habitat for swamp cottonwood (*Populus heterophylla*), a species designated as rare in New York State by the New York Natural Heritage Program.

FISH AND WILDLIFE VALUES:

The Pipes Cove Creek and Moore's Drain habitat contains one of the largest tidal/freshwater wetland complexes on Long Island, and is unusual within the coastal lowlands subregion. This habitat area, including its diversity of upland ecological communities, is important to fish and wildlife throughout the year. Suitable nesting habitat for common tern (T) and least tern (T) is available on the maritime beaches along Pipes Cove, but nesting by these species has not been well documented. However, during a survey in 2000, six least terns (T) were observed on the beach, and two common terns (T) were seen feeding in the waters of Pipes Cove. A 1996 record shows that 60 least tern (T) individuals were observed in the vicinity of the beach at Pipes Cove, with no nesting documented.

Pipes Cove is a valuable waterfowl wintering area (November-March) on the north shore, providing shallow water habitat for red-breasted merganser, bufflehead, and American black duck, with smaller concentrations of greater and/or lesser scaup, American widgeon, common goldeneye, and long-tailed duck. Waterfowl use of the bay during winter is influenced in part by the extent of ice cover each year.

The habitat has long been recognized as a critical environmental area. The NYS Department of Environmental Conservation (in partnership with The Nature Conservancy) and the Town of Southold recently acquired approximately 140 acres of tidal, brackish, and freshwater wetlands between the Arshamanaque Wetlands and Pipes Cove. Despite the presence of mosquito ditches and other disturbances, tidal wetlands (and the tidal creeks) within the area of acquisition are of a high quality nature.

Pipes Cove provides important birdwatching, hiking, nature study, environmental interpretation, kayaking, and boating opportunities for the public. Recent acquisitions of lands within the Pipes Creek Cove and Moore's Drain habitat area may contribute to the importance of the area to recreationists.

#### IMPACT ASSESSMENT:

Any activity that would substantially degrade the water quality in the Pipes Cove Creek and Moore's Drain habitat would adversely affect the biological productivity of this area. Degradation of water quality in the creek, 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.

Any expansion of fishing, small boat use, and educational activities should be compatible with the preservation of natural habitats. Alteration of tidal patterns in Pipes Cove and associated tidal creeks would have major impacts on the fish and wildlife communities present. 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 dredged material placement when wildlife populations are least sensitive to disturbance. Unregulated 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 Pipes Cove Creek and Moore's Drain. 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.

The fish and wildlife resources of the Pipes Creek Cove and Moore's Drain area could be affected by modification of public access to and/or use of the areas. Habitat modifications which substantially change the natural character of the area, such as residential, commercial, or industrial developments could have a significant impact on many wildlife species in the area.

Unrestricted use of motorized vessels including personal watercraft in the protected, shallow waters of the cove and tidal creeks of this area 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.

#### 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

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

Town of Southold  
Town Hall  
53095 Main Road  
P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

Town of Southold Trustees  
Town Hall  
53095 Main Road  
Southold, NY 11971  
Phone: (631) 765-1892

Office of Ecology  
Suffolk County Dept. Of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

New York Natural Heritage Program  
625 Broadway, 5<sup>th</sup> Floor  
Albany, NY 12233-4757  
Phone: (518) 402-8935

Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605



## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Jockey Creek Sandspit**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Southold, NY**

---

### Assessment Criteria

**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: Small dredged material island and a sand peninsula in a heavily developed tidal creek mouth; not a rare ecosystem type. 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.**

SV assessment: Least tern (T), piping plover (E, T-Fed), common tern (T), and osprey (SC) nesting. Calculation:  $36 + (25/2) + (25/4) + (16/8) =$  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: 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: Concentrations of least tern and common tern significant in Suffolk County. 4

**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: Habitat easily replaced by well understood means, although few potential replacement sites exist in the vicinity. 0.6

---

**Habitat Index = [ER + SV + HU + PL] = 60.75**

**Significance = HI x R = 36.5**



NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**JOCKEY CREEK SANDSPIT**

**LOCATION AND DESCRIPTION OF HABITAT:**

The Jockey Creek Sandspit is located at the mouth of Jockey Creek just north of the Great Hog Neck on Shelter Island Sound in the Town of Southold, Suffolk County (7.5' Quadrangle: Southold NY). The fish and wildlife habitat is an approximately 10 acre sand spit and dredged material island in the mouth of a tidal creek. There is heavy residential and marina development in the creek and consequent pollution, mostly from runoff.

**FISH AND WILDLIFE VALUES:**

The sand spit and dredged material island is not a rare ecosystem type but the area serves as a nesting site for least tern (T) and common tern (T). Piping plover (E, T-Fed) nested at this site in the mid-1980s, but have not been documented since then. Least tern were absent during the late 1980s through 1992, since then a population of 12-26 pairs have been documented annually. Common tern have been using this site since 1989, and in the mid-1990s annual nesting populations have increased to 14-19 pairs. Osprey (SC) also nest at this site. This area may provide important breeding habitat for horseshoe crab, but additional documentation is required.

There are no significant human use activities associated with the fish and wildlife resources at the Jockey Creek Sandspit. The majority of Jockey Creek waters are uncertified for shellfishing between April 15 and December 31. The back end of the creek is closed to shellfishing year-round.

**IMPACT ASSESSMENT:**

Nesting shorebirds inhabiting the Jockey Creek Sandspit are highly vulnerable to disturbance by humans, especially during the nesting and fledging period (March 15 through August 15). 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 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.

Pollution in the area, from road runoff into Town Creek and boat waste discharges into Jockey Creek, should be minimized or eliminated to improve water quality and enhance habitat value for local fish and wildlife species. Innovative shore stabilization approaches using vegetation and/or

other “soft” technologies, and restoration of fringing salt marshes should be considered to improve water quality and enhance fish and wildlife habitat value.

## KNOWLEDGEABLE CONTACTS:

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

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

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

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605



To print on 8.5 x 11 set printer to Fit to Print or reduce by 64%

## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Cedar Beach Point**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Southold, NY**

---

### **Assessment Criteria**

**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: Relatively small, undeveloped, salt marsh, beach, and dredged material deposits on the north fork of Long Island. 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.**

SV assessment: Least tern (T), piping plover (E, T-Fed) and osprey (SC) nesting. Black skimmer (SC) and common tern (T) have been seen, but importance of area to these species is not adequately documented. Calculation:  $36 + (25/2) + (16/4) =$  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: This area serves as an important natural area for research and education by the Cornell Cooperative Extension Marine Program; of regional significance. 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: One of the largest concentrations of nesting least terns on the north fork, of county-level significance. 4

**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] = 65.5**

**Significance = HI x R = 78.6**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**CEDAR BEACH POINT**

LOCATION AND DESCRIPTION OF HABITAT:

Cedar Beach Point is located at the tip of Great Hog Neck, north of Little Peconic Bay, in the Town of Southold, Suffolk County (7.5' Quadrangle: Southold, NY). The fish and wildlife habitat is approximately 85 acres in size, consisting of sparsely vegetated sand beach and dredged material deposits, a small protected bay (Cedar Beach Creek), mud flats, and salt marsh. The New York Natural Heritage Program has documented seabeach knotweed, a rare plant species, in this area. The area is owned by Suffolk County and houses the Cornell Cooperative Extension Marine Program. The habitat is generally bordered by low to medium density residential development. The mouth of the creek is subject to periodic maintenance dredging.

FISH AND WILDLIFE VALUES:

Cedar Beach Point is a small coastal wetland area, similar in nature to many other points around the Peconic Bays shoreline, but important as a habitat for various fish and wildlife species.

This area has served for many years as a nesting site for least terns (T). In 1982 and 1983, approximately 80-90 pairs of least terns nested in the area, making this colony one of the largest on the north fork of Long Island, of county-level significance. However, human disturbance of the area, including pedestrian traffic and recreational vehicle use, has been a serious problem for many years, and least tern populations have declined to around 5-6 pairs annually by the late 1980s. During the 1987-1996 period, however, the annual average number of pairs of least tern nesting at this site was 15; nesting populations appear to be on the rise in the late 1990s, with a peak number of 63 pairs observed in 1996. Common tern (T) nested at Cedar Beach Point in the mid-1990s, ranging from 1-14 pairs. More information about the importance of this site for common tern nesting is needed.

Piping plover (E, T-Fed) nest regularly at Cedar Beach, with an annual average of 1 pair observed during the 1987-1996 period. The peak number, 2 pairs, was observed in 1995. The appearance of this species has become more regular throughout the 1990s.

Osprey (SC) have nested in the area for many years, using man-made nesting platforms located in the habitat. The tidal wetlands at Cedar Beach Point serve as feeding areas for both least tern and osprey, as well as for many other wildlife species. Black skimmer (SC) have appeared at Cedar Beach Point in high concentrations (several hundred). Low marsh areas of these wetlands support healthy populations of fiddler crabs. Diamondback terrapin are also present here; more information is needed to determine importance of this population. Cedar Beach Point may provide important breeding habitat for horseshoe crab, but additional documentation is required.

In addition to its ecological values, Cedar Beach Point is an important area for marine sciences education and research. The Cornell Cooperative Extension Marine Program is located at Cedar Beach, and the area is heavily used by faculty and students as a "living laboratory".

#### IMPACT ASSESSMENT:

It is essential that any potential impacts on Cedar Beach Point be evaluated with respect to the established science program here, and the need to maintain natural or controlled experimental conditions. Any activity that would substantially degrade the water quality in Cedar Beach Creek 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, stormwater runoff, and waste disposal. It is essential that high water quality be maintained in the area, primarily by controlling discharges of sewage and other pollutants from upland sources.

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.

Alteration of tidal patterns at Cedar Beach Point would have major impacts on the fish and wildlife communities present. Elimination of salt marsh and intertidal areas, through loss of tidal connection, excavation, ditching or filling, would result in a direct loss of valuable habitat area. Construction and maintenance of shoreline structures, such as docks, piers, bulkheads, or revetments, in any part of this area, may have a significant impact on the fish and wildlife resources of Cedar Beach Point. 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.

Maintenance dredging in the Cedar Beach Point area should be scheduled between September 15 and December 15. Dredged material disposal in this area would be detrimental, but such activities may be designed to maintain or improve the habitat for certain species of wildlife, especially nesting birds. There is some indication, however, that as a result of the potential for overwash onto salt marshes, this site does not exhibit optimal conditions for dredged material placement.

Nesting shorebirds inhabiting Cedar Beach 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 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 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.

#### KNOWLEDGEABLE CONTACTS:

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

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

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

Finfish and Crustaceans  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0436

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

Cornell Cooperative Extension  
Marine Program  
3690 Cedar Beach Road  
Southold, NY 11971  
Phone: (631) 852-8660

Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

Seatuck Research Program  
Cornell University Laboratory of Ornithology  
P.O. Box 31  
Islip, NY 11751  
Phone: (631) 581-6908

Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605





# Significant Coastal Fish and Wildlife Habitats

Cutchogue Harbor and Wetlands (In part)  
Noyack Bay Beaches (In part)

Cedar Beach Point  
Corey Creek  
Jockey Creek Sandspit  
Little Creek and Beach  
Richmond Creek and Beach



## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Corey Creek**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Southold, NY**

---

### Assessment Criteria

**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: Small, partially developed creek/marsh/beach area; 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.**

SV assessment: Osprey (SC), least tern (T) and piping plover (E, T-Fed) present historically, but importance of the area to these species is not adequately documented.

Calculation:  $36 + (25/2) + (16/4) =$

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: Clamming is significant at the local level.

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: Concentrations of scallops significant in Suffolk County.

4

**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] = 56.5**

**Significance = HI x R = 67.8**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**COREY CREEK**

**LOCATION AND DESCRIPTION OF HABITAT:**

Corey Creek and Beach is located on the southwestern shoreline of Great Hog Neck on Little Peconic Bay, in the Town of Southold, Suffolk County (7.5' Quadrangle: Southold, NY). The fish and wildlife habitat consists of approximately 130 acres of tidal creek, salt marsh, mudflats and beach. The area around the western shoreline of Corey Creek and Moyle Cove is a developed residential area and some portions of the creek have been dredged and bulkheaded. The beach is a small sand beach and dredged material area which is somewhat degraded by human disturbance.

**FISH AND WILDLIFE VALUES:**

The small disturbed tidal creek and beach found at Corey Creek is not a rare ecosystem type but the area functions as an important habitat for a variety of fish and wildlife.

Osprey (SC) historically have nested on platforms at this site. A small population of least tern (T) was present on the beach in 1984, but this species was documented only once more through 1996. Piping plover (E, T-Fed) were sporadically documented at Corey Creek beach, ranging from 0-2 pairs annually during the 1987-1996 period.

Diamondback terrapin have also been seen but the importance of this area to this species is not well documented. This area may also provide important breeding habitat for horseshoe crab, but additional documentation is required. The creek serves as a feeding area for the osprey along with waterfowl, shorebirds and other wildlife. Waterfowl species observed overwintering in the Corey Creek area include Canada goose, American black duck, mallard, oldsquaw, bufflehead, red-breasted merganser, surf scoter, and common goldeneye. The creek is a productive area for marine finfish and shellfish. The area serves as a important nursery area and habitat for shellfish including bay scallops and hard clams.

The creek was once one of the top three areas in Southold for scalloping, however there is no longer any scalloping in Corey Creek. It is one of the top clamming areas in the town. The creek area is also locally important for waterfowl hunting. Concentrations of Canada geese at this site currently present a nuisance and water quality problem.

## IMPACT ASSESSMENT:

Any activity that would substantially degrade the water quality in Corey Creek 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, stormwater runoff, and waste disposal. It is essential that water quality be maintained in the area to protect the bay scallop fishery. The Town of Southold recommends that use of sprinklers and lawn chemicals be minimized or prohibited on creek waterfront property.

Alterations of tidal patterns in Corey Creek (*e.g.*, by modifying the inlet) would have major impacts on the fish and wildlife species present. Dredging in the creek should be scheduled from September 15 through December 15 to minimize potential impacts on aquatic organisms and to allow for dredged material disposal when wildlife populations are least sensitive to disturbance. Dredged material disposal that alters the creek inlet or tidal flow would negatively impact the habitat value of this site. Barriers to fish migration, whether physical or chemical, would have a major impact on the fisheries of Corey Creek. Restoration of fisheries habitat through removal of such barriers, or other means, should be considered for Corey Creek.

Elimination of salt marsh and intertidal areas, through dredging, loss of tidal connection, excavation or filling, would result in a direct loss of habitat area. Construction of shoreline structures such as docks, piers, bulkheads or revetments, in areas not previously disturbed by development (*e.g.*, natural beach or salt marsh) may result in a loss of productive areas which support the fish and wildlife resources of Corey Creek. 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 Corey Creek are highly vulnerable to disturbance by humans, especially during the nesting and fledging 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 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. The Corey Creek site is particularly disturbed by

use of off-road bikes and other vehicles; recreational vehicles should be prohibited from the area during the March 15-August 15 shorebird nesting period.

## KNOWLEDGEABLE CONTACTS:

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

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

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

Finfish and Crustaceans  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0436

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

Seatuck Research Program  
Cornell University Laboratory of Ornithology  
P.O. Box 31  
Islip, NY 11751  
Phone: (631) 581-6908

Cornell Cooperative Extension  
Marine Program  
3690 Cedar Beach Road  
Southold, NY 11971  
Phone: (631) 852-8660

NYS Sea Grant Extension Service  
Cornell University Laboratory  
3905 Sound Avenue  
Riverhead, NY 11901  
Phone: (631) 727-3910

Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605





## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Richmond Creek and Beach**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Southold, NY**

---

### **Assessment Criteria**

**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: Tidal creek, undeveloped sand peninsula, and salt marsh unusual in Suffolk County, but rarity diminished by dredging and development along the creek. 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.**

SV assessment: Least tern (T) nest in the area. Piping plover (E, T-Fed) have nested in the area, but the importance of the colony is not adequately documented. 25

**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: Crabbing and clamming of local importance. 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 occur 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: Uncertain of ability to replace. 1.0

---

**Habitat Index = [ER + SV + HU + PL] = 25.0**

**Significance = HI x R =  
25.0**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**RICHMOND CREEK AND BEACH**

LOCATION AND DESCRIPTION OF HABITAT:

Richmond Creek and Beach is located just west of Great Hog Neck with an inlet into Little Peconic Bay, Town of Southold, Suffolk County (7.5' Quadrangle: Southold, NY). The fish and wildlife habitat is approximately 135 acres in size consisting of a sand peninsula, salt marsh, and tidal creek. The New York Natural Heritage Program has documented the occurrence of seaside plantain, a rare plant species, at Richmond Creek. There is moderate residential development along the borders of the creek, portions of which have been dredged and bulkheaded. Much of the creek is lined by *Spartina alterniflora* (smooth cordgrass). The creek itself tends to be muddy.

FISH AND WILDLIFE VALUES:

The creek/beach/marsh ecosystem at Richmond Creek is similar to other creeks in the area but serves as an important habitat to several vulnerable wildlife species.

Diamondback terrapin nest on the beach. The tidal creek and salt marshes provide feeding areas and cover for terrapins during this period (April - July). This area may provide important breeding habitat for horseshoe crab, but additional documentation is required.

The beach has historically been a nesting area for least terns (T) and piping plover (E, T-Fed). Least tern nested annually at this site between 1987 and 1996 in variable abundances. A peak number of 52 nesting pairs occurred in 1989, and numbers have declined during the 1990s. Piping plover nested in small numbers at Richmond Beach during the late 1980s, but have been documented only twice since that time (in 1995 and 1997). Further information on the importance of this beach to the piping plover population is needed. Two pairs of common tern (T) nested on Richmond Creek Beach in 1988. Waterfowl species observed overwintering in the Richmond Creek area include Canada goose, American black duck, mallard, oldsquaw, bufflehead, red-breasted merganser, surf scoter, and common goldeneye.

Richmond Creek is also a productive habitat for finfish, shellfish and crustaceans, including blue claw crabs, clams and scallops. The creek is one of the top two creeks for crabbing in the town and is also important for clamming. Richmond Creek is seasonally closed to shellfishing from April 1 through October 31.

## IMPACT ASSESSMENT:

Diamondback terrapin are vulnerable to disturbance by humans from April 1 through August 15. Nesting shorebirds inhabiting Richmond Creek 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 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 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.

Elimination of salt marsh vegetation, through loss of tidal connection, landfilling, dredged material disposal or excavation would result in a direct loss of habitat area. Alterations of tidal patterns in the marsh (*e.g.*, by modifying the inlet) could have major impacts on the fish and wildlife species present. Construction of bulkheads, breakwaters, revetments, and other “hard” shoreline structures negatively impact tidal wetland habitats. 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.

Any activity that would substantially degrade the water quality of Richmond Creek would adversely affect the biological productivity of this area. All species of fish and wildlife are affected by water pollution, such as chemical contamination (including food chain effects as a result of bioaccumulation), oil spills, sedimentation, excessive turbidity, stormwater runoff, and waste disposal (including boat wastes). Impacts to water quality in the creek should be minimized or eliminated to enhance locally important shellfish and crustacean populations. Barriers to fish migration, whether physical or chemical would have a major impact on the fisheries in Richmond Creek.

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.

## KNOWLEDGEABLE CONTACTS:

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

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

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

Finfish and Crustaceans  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0436

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605







## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Little Creek and Beach**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Southold, NY**

---

### **Assessment Criteria**

**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: Relatively small, undeveloped salt marsh, creek and sand beach, unusual on the north fork of Long Island. 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.**

SV assessment: Osprey (SC) and diamondback terrapin (SC) nesting. Piping plover (E, T-Fed) may nest, but not adequately documented. 24

**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: Commercial and recreational crabbing, scalloping, and clamming of local importance. 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 concentration of any fish or wildlife species occur 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: Uncertain of ability of replace. 1.0

---

**Habitat Index = [ER + SV + HU + PL] = 24**

**Significance = HI x R = 24**



NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**LITTLE CREEK AND BEACH**

**LOCATION AND DESCRIPTION OF HABITAT:**

The Little Creek and Beach habitat area is located just north of Little Hog Neck facing Little Peconic Bay in the Town of Southold, Suffolk County (7.5' Quadrangle: Southold, NY). The fish and wildlife habitat is approximately 45 acres in size, consisting of sparsely vegetated sand beach, a tidal inlet, a small protected bay and creek (Little Creek), mud flats and salt marsh. There is low density residential development, concentrated on the west side, bordering the area.

**FISH AND WILDLIFE VALUES:**

Little Creek and Beach is a small coastal beach/creek/wetland area, similar in nature to other creeks around the Peconic Bays shoreline, but unusual in that it is mostly undeveloped. The area is important as a habitat for various fish and wildlife species.

The habitat is a confirmed nesting area for diamondback terrapin which are relatively uncommon on the north fork. This species lays its eggs on the sand beaches bordering the marsh. The tidal creek and salt marsh provide feeding and cover for diamondback terrapin during this period (April 1 through August 15). This area may provide important breeding habitat for horseshoe crab, but additional documentation is required.

Piping plover (E, T-Fed) nested on the beach in 1983, and have been documented only once again (1996, one pair) in the 1986-1996 period. Osprey (SC) nesting has been confirmed on Little Creek Beach. The tidal marsh serves an important feeding area for the terrapin, osprey, shorebirds and other wildlife. The creek is also important for various species of marine shellfish and finfish. Fish species reported from this area include flounder, weakfish, and snappers. Little Creek is one of the better areas in the town for crabbing and is also locally important for clamming and scalloping.

**IMPACT ASSESSMENT:**

Nesting shorebirds inhabiting Little Creek and Beach are highly vulnerable to disturbance by humans, especially during the nesting and fledging period (March 15 through August 15). Diamondback terrapin are vulnerable to disturbance by humans from April 1 and 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 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.

The creek is dredged annually; these activities should be scheduled to occur between September 15 and December 15 to minimize potential impacts on aquatic organisms and to allow for dredged material disposal when wildlife populations are least sensitive to disturbance. Dredged material disposal in this area would be detrimental but such activities may be designed to maintain or improve the habitat by setting back vegetative succession.

Elimination of salt marsh vegetation, through loss of tidal connection, ditching, shoreline hardening, landfilling, dredged material disposal or excavation would result in a direct loss of habitat area. Alternative strategies for the protection of shoreline property should be examined, including innovative, vegetation-based approaches. Alteration of tidal flow patterns in the marsh (*e.g.*, by modifying the inlet) could have major impacts on the fish and wildlife as well as the salt marsh. 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.

Any activity that would substantially degrade the water quality of Little Creek would adversely affect the biological productivity of this area. All species of fish and wildlife are affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, stormwater or road runoff, and waste disposal. Barriers to fish migration, whether physical or chemical, would have a major impact on the fisheries in Little Creek.

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.

## KNOWLEDGEABLE CONTACTS:

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

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

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

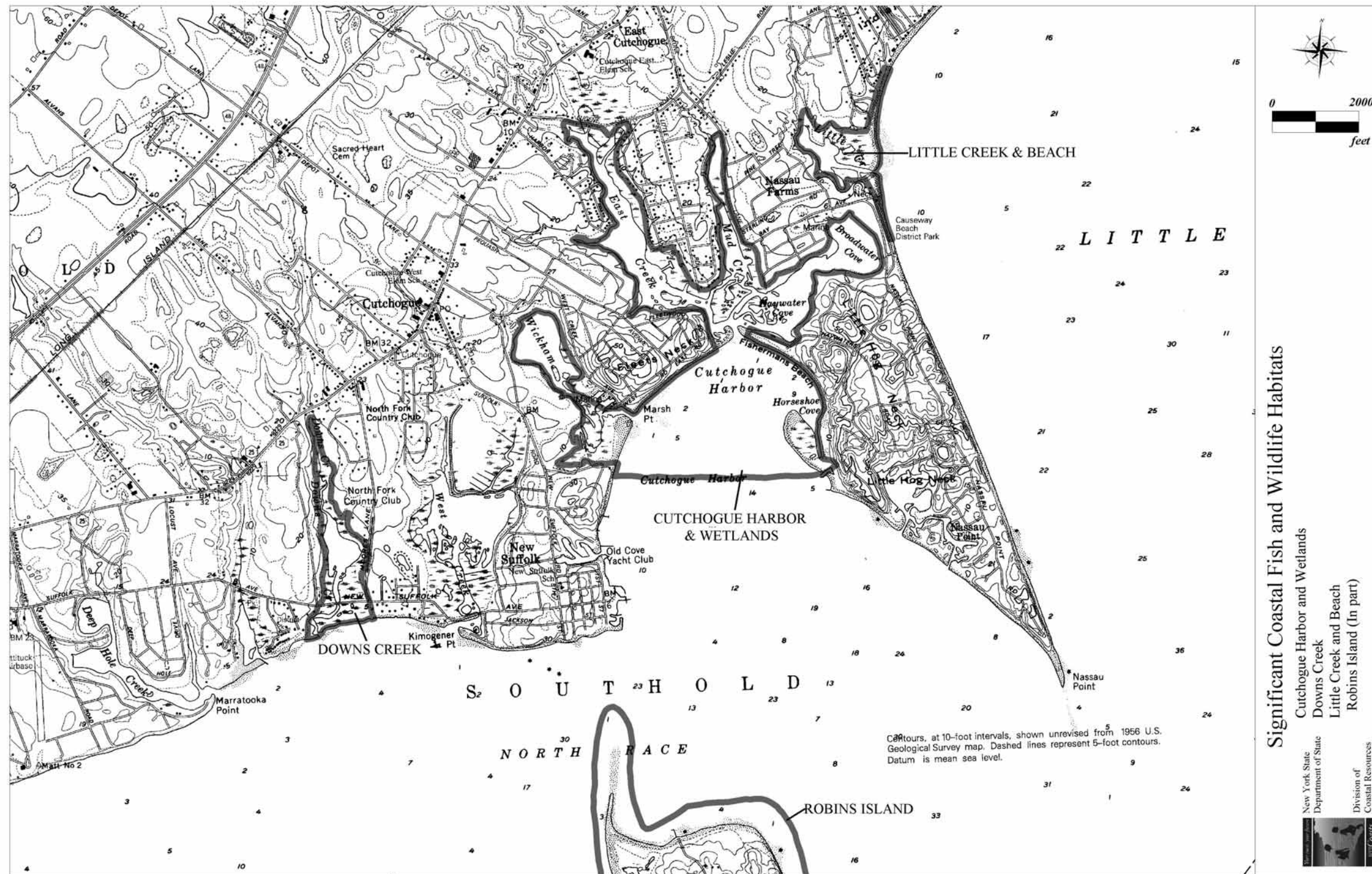
Finfish and Crustaceans  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0436

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605



To print on 8.5 x 11 set printer to Fit to Print or reduce by 64%



## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Cutchogue Harbor and Wetlands**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Southold, NY; Southampton, NY**

---

### Assessment Criteria

**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: Bay-wetland complex, unusual in northern Long Island, but degraded in places by marina/residential development. Calculation:  $\sqrt{(16 \times 9)} =$  12

**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.**

SV assessment: Least tern (T), piping plover (E, T-Fed), and osprey (SC) nesting.  
Calculation:  $36 + (25/2) + (16/4) =$  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: Commercial and recreational scalloping significant to Suffolk County.  
Clamming significant at the town level. 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: Concentration of osprey is significant at the county-level. 4

**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] = 72.5**

**Significance = HI x R = 87.0**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**CUTCHOQUE HARBOR AND WETLANDS**

**LOCATION AND DESCRIPTION OF HABITAT:**

Cutchogue Harbor and its adjacent wetlands are located west of Little Hog Neck, opening into Little Peconic Bay in the Town of Southold, Suffolk County (7.5' Quadrangles: Southold, NY and Southampton, NY). This approximate 490 acre habitat includes the shallow open water area of Cutchogue Harbor (205 acres) and three adjacent, distinct tidal wetland/creek areas: Wickham Creek, Haywater Cove, and Meadow Beach (Horseshoe Cove). The Wickham Creek area contains approximately 70 acres of undisturbed tidal creek and Salt Marsh located behind a low beach on Cutchogue Harbor. The Haywater Cove area consists of approximately 190 acres of Salt Marsh islands, mudflats, open water and tidal Creek including East Creek, Mud Creek and Broadwater Cove. All three of these tidal creeks have been disturbed to some extent by adjacent residential and recreational development. The Meadow Beach area is an approximate 25 acre area, including a 15 acre wetland preserve owned by the Nature Conservancy, bordered by undeveloped wooded shoreline. Much of the Cutchogue Harbor and Wetlands area receives moderate summer recreational use, including recreational boating in the coves and creeks.

**FISH AND WILDLIFE VALUES:**

The Cutchogue Harbor and Wetlands complex represents a valuable ecosystem area in northern Long Island. Although the three wetland sites are relatively small, and subject to human disturbances, they provide suitable habitat for a variety of coastal wildlife species, including osprey (SC), least tern (T), piping plover (E, T-Fed) and diamondback terrapin.

Osprey have nested in the area for many years using man-made nesting platforms placed at Wickham Creek and Meadow Beach. The Meadow Beach nesting site has been especially productive in past years, and has served as a source of young birds for the NYSDEC's "hacking" program in western New York. A nesting platform in Haywater Cove historically has been active and is an important potential nesting site.

Meadow Beach supported a relatively small nesting colony of least terns of 20-60 pairs during 1982-1985. These numbers declined between 1986-1991 (ranging from 13-24 pairs). Least tern have nested sporadically since 1991 (1 pair in 1993; 14 pairs in 1997). Up to 4 pairs of piping plover nested at Meadow Beach and Wickham Creek during the early 1980s, but similarly, numbers of this species have declined to an annual average of 1 nesting pair between 1987 and 1996. The peak number of nesting piping plover pairs in the area during this period was 2, occurring in 1994.

Diamondback terrapin nest in the Haywater Cove area, and up to 20 nests were reported from the



marsh areas at the mouth of Wickham Creek in 1996. This area may provide important breeding habitat for horseshoe crab, but additional documentation is required. The Cutchogue Harbor Wetlands serve as valuable feeding areas for the species noted above, as well as for herons, egrets, waterfowl, shorebirds, and a variety of other wildlife species. Bird species that are probable or confirmed inhabitants of the area include green heron, yellow-crowned night heron, Canada goose, mallard, American black duck, clapper rail, killdeer, belted kingfisher, red-winged blackbird, and sharp-tailed sparrow. Double-crested cormorant reportedly use surrounding creeks.

Cutchogue Harbor and Wetlands are very productive areas for marine finfish and shellfish. The marshes, mudflats and tidal creeks contribute significantly to the biological productivity of Cutchogue Harbor and adjoining portions of the Peconic Bays. Historically, eelgrass beds were present in the southwestern portion on the harbor, supporting a large number of commercial scallop houses in New Suffolk to the west.

The Cutchogue Harbor area is one of the top areas in Southold for the harvesting of scallops and clams. The level of scalloping is significant at the county level. Clamming is significant to the Town of Southold. There is also a conch fishery of local importance. An administrative closure is in effect between May 15 and October 31 for Broadwater Cove and Wickham Creek. East Creek is closed to shellfishing year round. Blue crab are harvested locally for recreational purposes. The wetlands and tidal creeks serve as nursery and feeding areas (April-November, generally) for many estuarine fish species, including scup and winter flounder.

#### IMPACT ASSESSMENT:

Any activity that would substantially degrade the water quality in Cutchogue Harbor or the adjacent wetlands and creeks, would adversely affect the biological productivity of this area. All species of fish and wildlife may be affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, stormwater runoff, and waste disposal, including boat wastes. It is essential that high water quality be maintained in the area, through control of sewage discharges from recreational boats and upland sources.

Alteration of tidal patterns in the Cutchogue Harbor Wetlands (*e.g.*, by modifying the inlets) could have major impacts on the fish and wildlife species present. Dredging in Cutchogue Harbor should be scheduled from September 15 through December 15 to minimize potential impacts on aquatic organisms and to allow for dredged material disposal when wildlife populations are least sensitive to disturbance. Dredged material disposal that alters creek inlets or tidal flow would negatively impact the habitat value of this site. Such impacts are reported to exist already at a dredged material disposal site in the Meadow Beach area, where tidal flow has been altered causing erosion of the marsh and shoaling to the north. Barriers to fish migration, whether physical or chemical, into Wickham Creek or Haywater Cove would have a major impact on the fisheries. Restoration of fisheries habitat through removal of such barriers, or other means, should be considered for the Cutchogue Harbor and Wetlands area.

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.

Elimination of salt marsh and intertidal areas, through loss of tidal connection, dredging, excavation, or filling, would result in a direct loss of valuable habitat area. Dredged material disposal in this area would be detrimental, but such activities may be designed to maintain or improve the habitat for certain species of wildlife, especially nesting shorebirds. 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 Cutchogue Harbor 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.

Restoration opportunities may exist for eelgrass habitat in the western nearshore area of the harbor mouth. Eelgrass beds require high water quality for survival, and the existence of appropriate environmental conditions for eelgrass restoration should be carefully examined.

Nesting shorebirds inhabiting Cutchogue Harbor and Wetlands are highly vulnerable to disturbance by humans, especially during the nesting and fledging 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 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.

## KNOWLEDGEABLE CONTACTS:

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

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

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

Finfish and Crustaceans  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0436

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

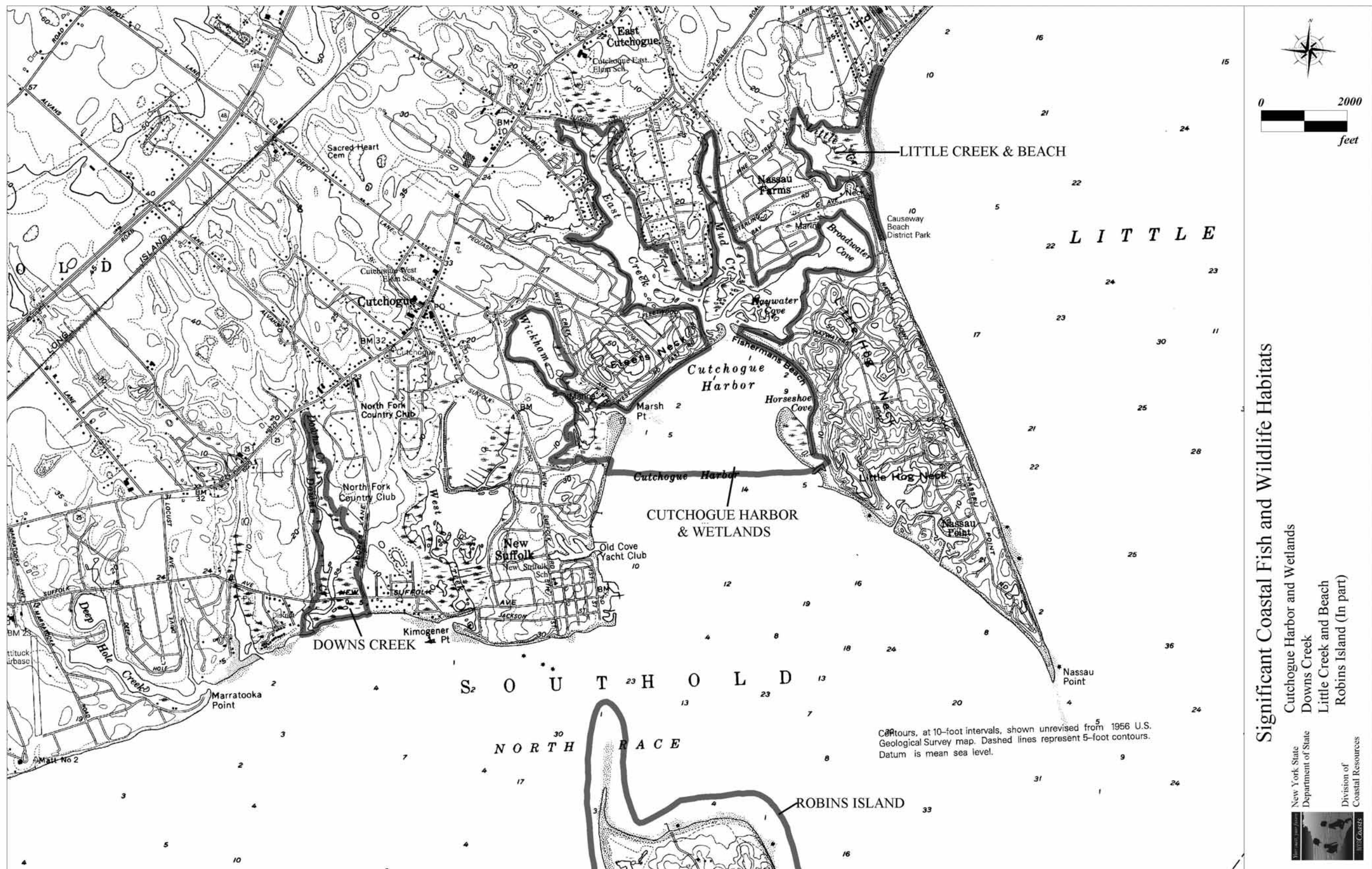
Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

Seatuck Research Program  
Cornell University Laboratory of Ornithology  
P.O. Box 31  
Islip, NY 11751  
Phone: (631) 581-6908

NYS Sea Grant Extension Service  
Cornell University Laboratory  
3905 Sound Avenue  
Riverhead, NY 11901  
Phone: (631) 727-3910

Cornell Cooperative Extension  
Marine Program  
3690 Cedar Beach Road  
Southold, NY 11971  
Phone: (631) 852-8660

Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605



To print on 8.5 x 11 set printer to Fit to Print or reduce by 64%



## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Robins Island**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Southampton, NY**

---

### Assessment Criteria

**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: Undeveloped marine island is 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.**

SV assessment: Eastern mud turtle (E) found here. Osprey (SC) nesting. Piping plover (E, T-Fed) and least tern (T) also nest periodically.

Calculation:  $36 + (36/2) + (25/4) + (16/8) =$

62.25

**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: Access to this island is restricted and, therefore, there is no recreational or commercial fish and wildlife related human use.

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: The concentration of nesting ospreys is unusual in the State of New York.

16

**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] = 142.3**

**Significance = HI x R =  
170.7**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**ROBINS ISLAND**

**LOCATION AND DESCRIPTION OF HABITAT:**

Robins Island is situated between Great and Little Peconic Bays, Long Island. This island lies approximately one and one-quarter miles southwest of Little Hog Neck, in the Town of Southold, Suffolk County (7.5' Quadrangle: Southampton, NY). Robins Island is an undeveloped marine island, approximately 450 acres in size. It includes approximately four miles of stony beach, several freshwater and tidal saltwater marshes, an island pond and bog, mature wooded areas, grassland and maritime shrublands. The island is privately owned with a protective easement on all land except pre-existing built areas, and one new single family house.

**FISH AND WILDLIFE VALUES:**

Undeveloped marine islands of this size are rare in New York State. Robins Island provides a secluded habitat for a variety of wildlife species, including several endangered and threatened species. The New York Natural Heritage Program has documented occurrences of a number of rare plants and ecological communities on the island, including salt-marsh spikerush, purple everlasting, seabeach knotweed, and the coastal salt pond community.

Osprey (SC) nests have often been observed on the shores of the island with 8 active nest sites currently documented. Robins Island is the only area on Long Island where osprey are known to nest on natural structures rather than man-made platforms.

Least terns (T), roseate terns (E), and common terns (T) were reported nesting on the island's beaches in 1976; however, only least tern have been documented since then. Small numbers of least tern nested here on two occasions in the late 1980s. In 1996, 206 pairs of this species were documented. Piping plover (E, T-Fed) have nested sporadically and in small numbers (1-2 pairs) since the mid-1980s.

During the 1970s and early 1980s, black-crowned night herons, snowy egrets, yellow-crowned night herons, and green herons nested in an extensive heronry which is no longer present. These species still feed in and around the marshes located at the northwestern end of Robins Island. Red-tailed hawks and great-horned owls may also nest on the island. Shorebirds utilize the shores and marshes as feeding grounds during migration, including black-bellied plover, ruddy turnstone, lesser yellowlegs, greater yellowlegs, sanderling, and semi-palmated sandpiper. The Robins Island nearshore area is an important overwintering area for populations of American black duck, and for sea ducks such as white-winged scoter, surf scoter, and black scoter. A colony of bank swallows nest in the sandy bluffs located on the western shoreline of the island. Approximately 400 acres of upland oak-hickory woods provide habitat for a variety of passerine birds and a population of white-tailed deer.



Wetlands on the island support one of the best populations of eastern mud turtle (*Kinosternon subrubrum*, E) in New York State. Spotted salamander are also found on Robin's Island.

The waters in the vicinity of Robins Island provide an important recreational fishery and lobster harvest, as well as some scallop harvesting opportunities. However, because access is restricted, there is currently no recreational use of the island itself.

#### IMPACT ASSESSMENT:

Human disturbance of any part of Robins Island, including the beaches, marshes or woodlands would adversely affect the wildlife species which nest and feed on and around this almost uninhabited island. Any activity affecting the water quality in this area would adversely impact the bay scallop and other fisheries here.

Any alteration of hydrology on the island, such as artificial openings to the bay or water diversions for construction or other activities, could negatively impact the rare coastal salt pond habitat. Elimination of open water or wetland areas, through excavation, filling, or shoreline hardening, would result in a direct loss of valuable habitat in coastal ponds and other habitats on the island. 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.

Nesting shorebirds inhabiting Robins Island are highly vulnerable to disturbance by humans, especially during the nesting and fledging 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 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.

The feasibility of restoring historical nesting bird populations on the island, such as common tern and roseate tern populations and the diverse heronry should be studied.

## KNOWLEDGEABLE CONTACTS:

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

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

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801

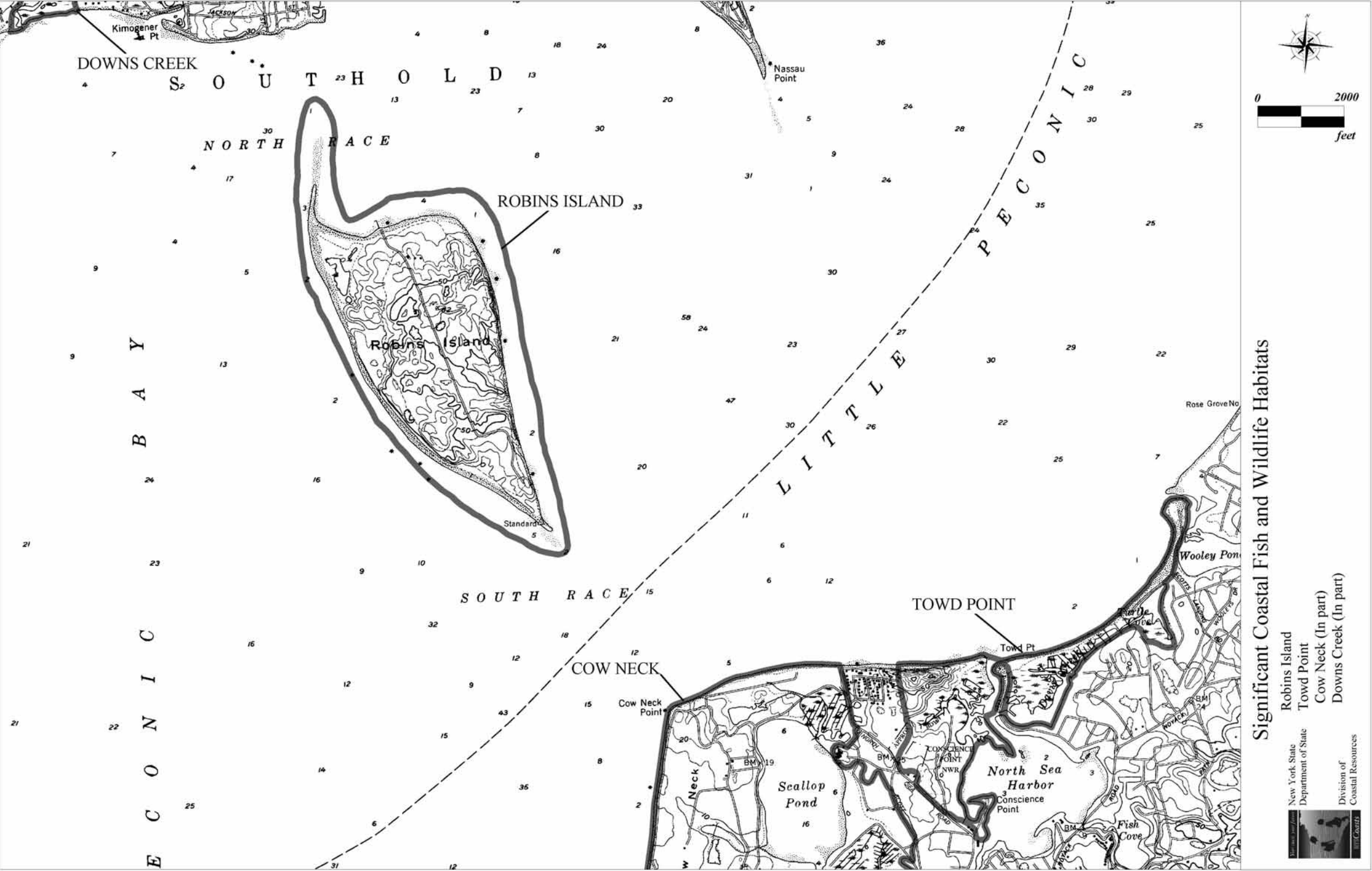
Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

Cornell Cooperative Extension  
Marine Program  
3690 Cedar Beach Road  
Southold, NY 11971  
Phone: (631) 852-8660

Mike Scheibel  
The Nature Conservancy  
Mashomack Preserve  
79 South Ferry Road  
Shelter Island, NY 11964  
Phone: (631) 749-1637

Norman Soule  
Cold Spring Harbor Fish Hatchery  
P.O. Box 535  
Cold Spring Harbor, NY 11724  
Phone: (631) 692-6768

Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605



To print on 8.5 x 11 set printer to Fit to Print or reduce by 64%

## COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Downs Creek**  
Designated: **March 15, 1987**  
Date Revised: **May 15, 2002**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **Southold, NY; Southampton, NY**

---

### Assessment Criteria

**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: Relatively large, undeveloped salt marsh and tidal creek which has never been dredged; unusual in Suffolk 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.**

SV assessment: Osprey (SC) nesting. Piping plover (E, T-Fed) have nested, but importance of this area to these species not adequately documented. 16

**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: Bank mussel (*Geukensia demissa*) harvesting of local significance. 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 occur 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] = 25**

**Significance = HI x R = 30.0**

### NEW YORK STATE SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT NARRATIVE

## DOWN'S CREEK

### LOCATION AND DESCRIPTION OF HABITAT:

Downs Creek is located approximately one mile southwest of the hamlet of Cutchogue, in the Town of Southold, Suffolk County (7.5' Quadrangles: Southold, NY; and Southampton, NY). The fish and wildlife habitat is an approximate 70 acre tidal estuary, containing salt marsh, open water, and mudflats. Historic Fort Corchaug lies at the head of the creek. The area surrounding Downs Creek is almost entirely undeveloped, with mature woodlands bordering the marsh. There is a golf course bordering Downs Creek to the east.

### FISH AND WILDLIFE VALUES:

Downs Creek is a relatively small coastal wetland area, but is unusual in Suffolk County because it exists in a nearly natural, undisturbed condition and has never been dredged. This area is utilized by variety of fish and wildlife species, including osprey (SC).

Osprey have nested on a man-made platform located near the mouth of Downs Creek since at least 1982. Piping plover (E, T-Fed) in small numbers nested sporadically at the mouth of the creek during the late 1980s through 1992, but have not been documented since then. Sharp-tailed sparrow are also reported to nest at Downs Creek. The estuary serves as a feeding area for osprey, along with herons, egrets, waterfowl, shorebirds, and other wildlife.

Diamondback terrapin have been seen nesting here but the importance of this area to the species has not been documented. Downs Creek is also a highly productive area for marine finfish and shellfish. This area serves as a nursery and feeding area (from April-November, generally) for many estuarine fish species, including scup and winter flounder. Ribbed mussels (*Geukensia demissa*; also called bank mussels) and fiddler crabs are abundant in the tidal creek banks within the marsh. Ribbed mussels (*Geukensia demissa*) are commercially harvested for bait fish in the creek.

### IMPACT ASSESSMENT:

Any activity that would substantially degrade the water quality in Downs Creek would adversely affect the biological productivity of this area. To preserve the pristine nature of this creek, no dredging should occur unless necessary to stabilize the inlet. 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, stormwater runoff, and waste disposal.

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.

Alteration of tidal patterns in Downs Creek (*e.g.*, by modifying the inlet) would have major impacts on the fish and wildlife species present. Elimination of salt marsh and intertidal areas, through loss of tidal connection, dredging, ditching, excavation, or filling, would result in a direct loss of valuable habitat area. Construction and maintenance of shoreline structures, such as docks, piers, bulkheads, or revetments, or disturbance of adjacent woodland habitats may have a significant impact on the fish and wildlife resources of Downs Creek. 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.

## KNOWLEDGEABLE CONTACTS:

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

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

Wildlife Manager  
NYSDEC—Region 1  
State University of New York, Building 40  
Stony Brook, NY 11790  
Phone: (631) 444-0310

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

Finfish and Crustaceans  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0436

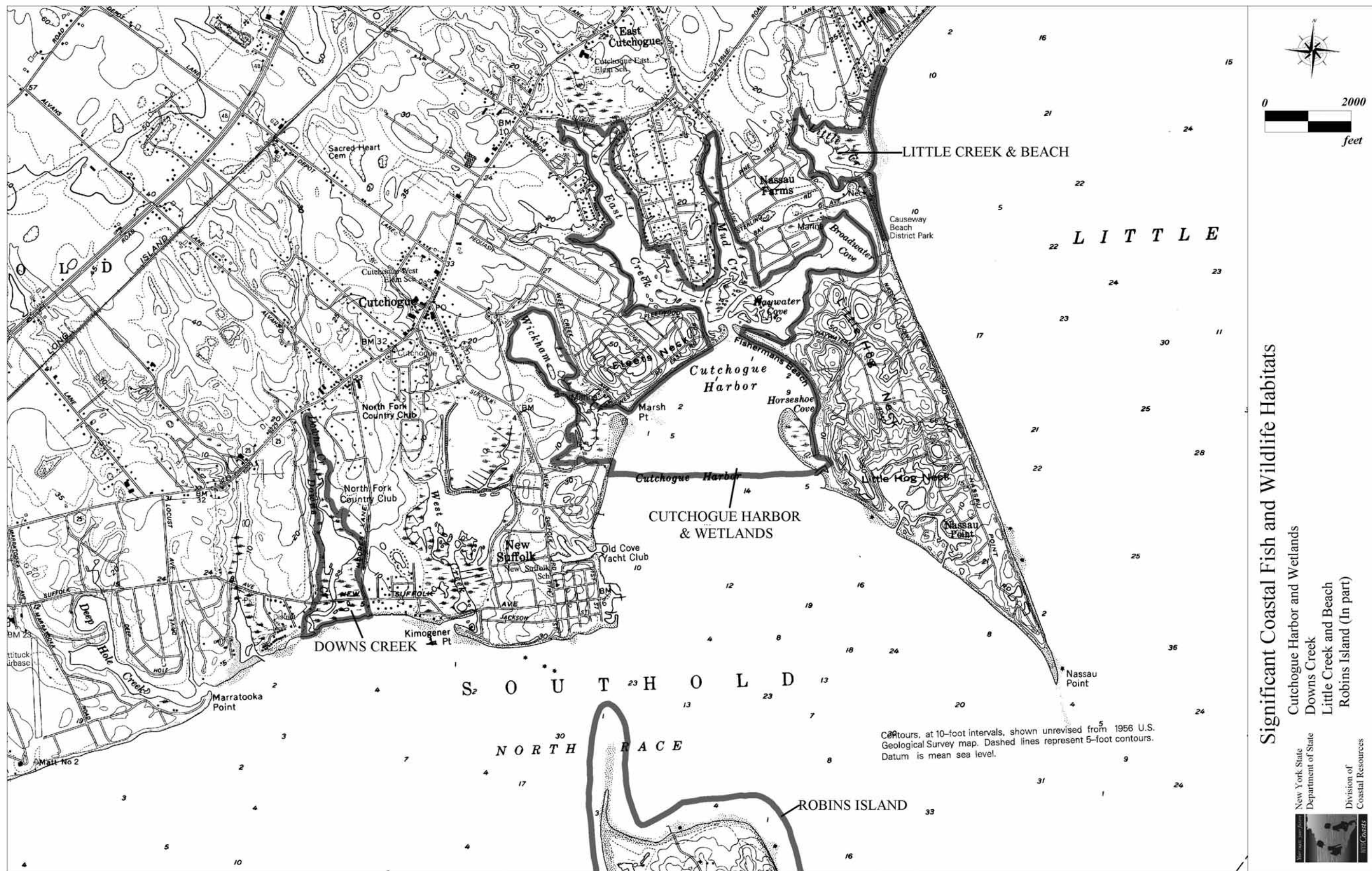
New York Natural Heritage Program  
Wildlife Resources Center  
700 Troy-Schenectady Road  
Latham, NY 12110  
Phone: (518) 783-3932

Town of Southold  
Town Hall  
53095 Main Road; P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1801



Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

Paul Stoutenburgh  
4015 Skunk Lane  
Cutchogue, NY 11935  
Phone: (631) 734-6605



---

COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **The Race**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **N/A; see NOAA National Ocean Survey Chart #13205**  
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: A deepwater area of turbulent tidal exchange between the Long Island and Block Island Sounds; 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: No endangered, threatened or special concern species reside in the area.

0

**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 sportfishing of national significance and commercial lobster fishery of regional significance. Additive Division:  $36 + 9/2 = 40.5$

40.5

**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: Concentration of foraging and migrating finfish unusual in the northeastern United States.

25

**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] = 129.5**

**Significance = HI x R = 155.4**

NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**THE RACE**

**LOCATION AND DESCRIPTION OF HABITAT:**

The Race is an area of open water located between Race Point, at the western end of Fishers Island, and Valiant Rock, located approximately one and one-half miles southwest of Fishers Island, in the Town of Southold, Suffolk County (NOAA Nautical Chart No. 13205). The fish and wildlife habitat is a natural channel over 150 feet in depth, approximately one mile wide, bordered by steep underwater slopes rising up to shallow water less than 30 feet deep on each side. This approximately 2,650 acre area is the primary opening in the underwater ridge separating Long Island Sound and Block Island Sound, and is an area of turbulent tidal exchange.

**FISH AND WILDLIFE VALUES:**

The Race's deep, turbulent waters and shoals combine to generate a productive and diverse habitat for marine fishes. The habitat area represents a physical environment unusual to New York State. Significant concentrations of many fish species forage in this area, including striped bass, bluefish, tautog, summer flounder, and scup. The Race is also one of two primary migration corridors for striped bass, which move into Long Island Sound in spring en route to their breeding grounds. As a result of the abundant fisheries resources in the area, The Race is a nationally renowned sportfishing area and supports an extensive recreational fishery throughout spring, summer, and fall. Much of this activity is by charter boats from Greenport, Montauk Harbor, and Connecticut. In addition to sportfishing, The Race supports a commercial lobster fishery of regional significance.

**IMPACT ASSESSMENT:**

Any activity that would substantially degrade the water quality in The Race 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).

The fisheries resources of The Race may be most affected by any activities that would substantially alter water currents in the area. Thermal discharges, depending on time of year, may also have variable effects on use of the area by marine species. Installation and operation of water intakes would likely have a significant impact on juvenile (and, in some cases, adult) fish concentrations, through impingement or entrainment. The significant human use this area supports is dependent upon the maintenance and/or enhancement of compatible recreational and commercial fishing opportunities, within the productivity limits of the fisheries resource.

Barriers to fish migration, whether physical or chemical, would have a significant effect on the

biological resources of 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:

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

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

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

Town of Southold Planning Board  
Town Hall  
53095 Main Road  
P.O. Box 1179  
Southold, NY 11971  
Phone: (631) 765-1938

Town of Southold Trustees  
Town Hall  
53095 Main Road  
Southold, NY 11971  
Phone: (631) 765-1892

New York Natural Heritage Program  
625 Broadway, 5<sup>th</sup> Floor  
Albany, NY 12233-4757  
Phone: (518) 402-8935

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

Fishers Island Conservancy  
Fishers Island, NY 06390  
Phone: (516) 788-7437 (summer)  
P.O. Box 132  
Green Village, NJ 07935  
Phone: (201) 635-5470 (winter)

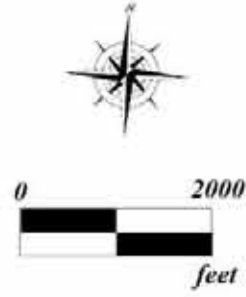
The Sounds Conservancy, Inc.  
Marine Sciences Institute  
University of Connecticut  
Groton, CT 06340  
Phone: (203) 445-1868



Contours, at 10-foot intervals, shown unrevised from 1984 U.S. Geological Survey map. Datum is mean sea level.

# Significant Coastal Fish and Wildlife Habitats

The Race  
Fishers Island Beaches (In part)





---

COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

---

Name of Area: **Dumpling Islands and Flat Hammock**  
County: **Suffolk**  
Town(s): **Southold**  
7½' Quadrangle(s): **New London, CT-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: Small, undisturbed islands in Long Island Sound; unusual in Suffolk 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: No endangered, threatened or special concern species reside in the area. 0

**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: Significant concentration of nesting colonial waterbirds, including great egret, herring gull, and double-crested cormorant, unusual in the coastal lowlands area of New York State. 9

**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] = 18**

---

**Significance = HI x R = 21.6**



NEW YORK STATE  
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT  
NARRATIVE

**Dumpling Islands and Flat Hammock**

LOCATION AND DESCRIPTION OF HABITAT:

The Dumpling Islands and Flat Hammock cluster of islands located approximately 3/4 mile north of Fisher Island's West Harbor, in the Town of Southold, Suffolk County (7.5' Quadrangle: New London, CT-NY). The fish and wildlife habitat is a cluster of three small islands, totaling approximately 30 acres. North and South Dumpling Islands are rocky, with sparse vegetation; Flat Hammock is a low, sparsely vegetated sand island. The three islands are privately owned; South Dumpling Island is owned by the Audubon Society and managed as a bird sanctuary. Angelica (*Angelica lucida*), a state-endangered plant species, has been documented on South Dumpling Island.

FISH AND WILDLIFE VALUES:

The Dumpling Islands and Flat Hammock comprise a relatively small, but valuable, coastal habitat type that provides ideal conditions for nesting colonial waterbirds. Isolation from predators and human disturbance (a single residence is located on North Dumpling Island) may be one of the most important components of the Dumpling Islands and Flat Hammock habitat, distinguishing this area from many other islands in Suffolk County.

South Dumpling Island serves as an important nesting site for a variety of gull and colonial wading bird species. Flat Hammock and North Dumpling Island have been surveyed irregularly, and adequate documentation regarding their use is unavailable. Long Island Colonial Waterbird Surveys for South Dumpling Island for 1995, 1998, and 2001 estimate annual averages of 48 nesting pairs of great egret (100 in peak year), 146 nesting pairs of herring gull (300 in peak year), 60 nesting pairs of great black-backed gull (100 in peak year), with lesser numbers of glossy ibis, black-crowned night heron, little blue heron, tri-colored heron, and snowy egret. Approximately 100 pairs of double-crested cormorant nested on South Dumpling Island in 2001, but no other documentation is available. Flat Hammock, a narrow, sinuous island of unconsolidated coarse waterborne materials, is an important nesting area for great black-backed gull, with regular nesting noted since 1992. Data available for 1995 and 2001 indicate an annual average of 73 pairs of great black-backed gulls nesting on Flat Hammock. American oystercatcher, although in lesser numbers, have also been reported nesting on Flat Hammock.

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 shorebird species inhabiting the Dumpling Islands and Flat Hammock are highly vulnerable to disturbance by humans, especially during the nesting and fledging period (April 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. Recreational activities 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.

Any activity that would substantially degrade the water quality near the shores of the Dumpling Island or Flat Hammock shores 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) 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 habitat. 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 habitat wetland 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:

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

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

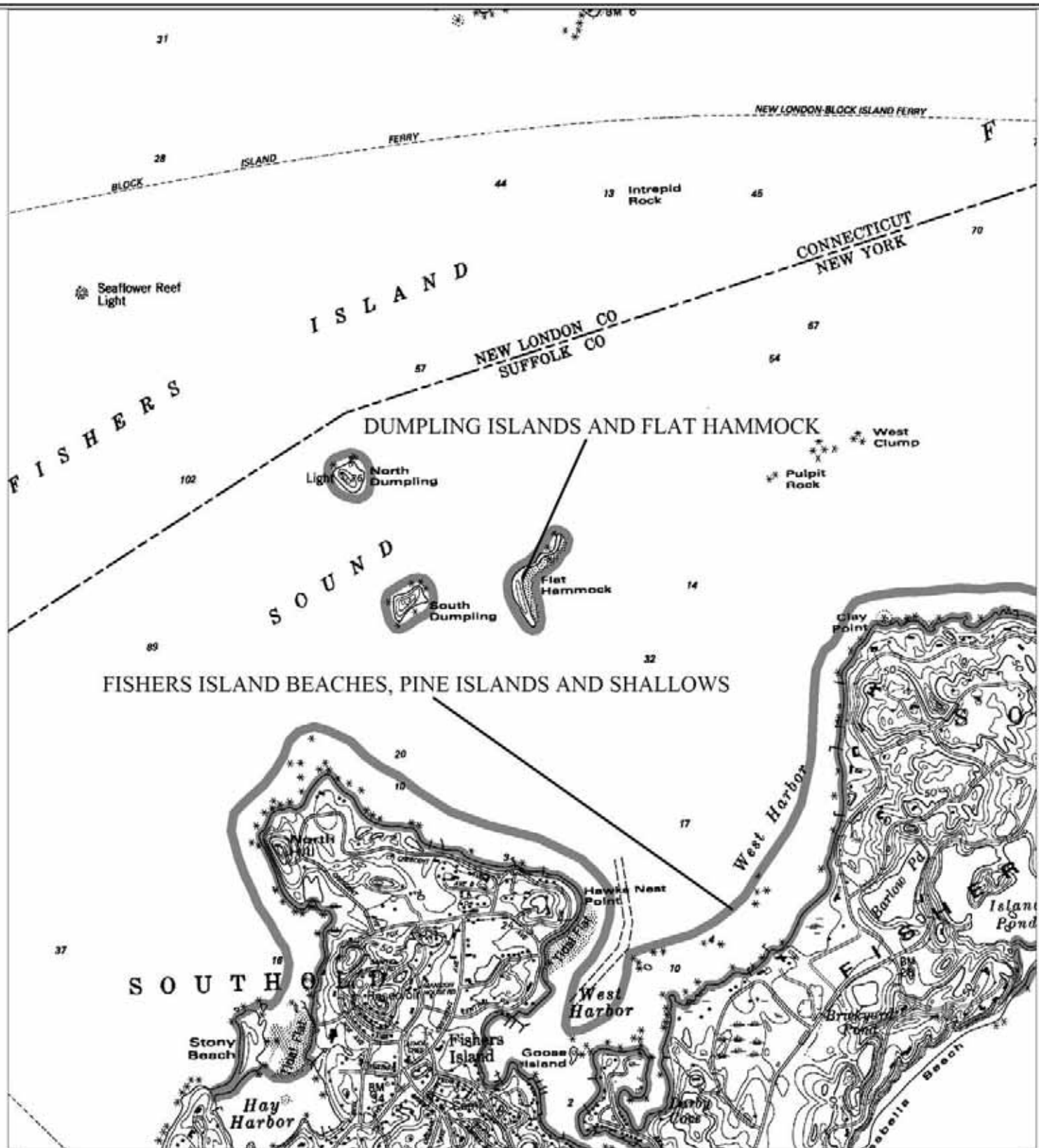
Town of Southold Trustees  
Town Hall  
53095 Main Road  
Southold, NY 11971  
Phone: (631) 765-1892

Bureau of Marine Resources  
NYSDEC  
205 N. Belle Meade Road, Suite 1  
East Setauket, NY 11733  
Phone: (631) 444-0430

New York Natural Heritage Program  
635 Broadway, 5<sup>th</sup> Floor  
Albany, NY 12233-4757  
Phone: (518) 402-8935

Office of Ecology  
Suffolk County Dept. of Health Services  
Bureau of Environmental Management  
County Center  
Riverhead, NY 11901  
Phone: (631) 852-2077

Department of Planning  
Town of Southold  
Town Hall  
53095 Main Road  
Southold, NY 11971  
(631) 765-1938



## Significant Coastal Fish and Wildlife Habitats



New York State  
Department of State

Division of  
Coastal Resources

Dumpling Islands and Flat Hammock  
Fishers Island Beaches (In part)



2000 1000 0 2000 feet