COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area:	**Napeague Beach**
Designated:	**March 15, 1987**
Date Revised:	**May 15, 2002**
County:	**Suffolk**
Town(s):	**East Hampton**
7½' Quadrangle(s):	**Napeague Beach, 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: A large area of undeveloped barrier beach and back dune ecosystem, 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: Least tern (T), piping plover (E, T-Fed), spotted turtle (SC), eastern spadefoot toad (SC), horned lark (SC), and eastern hognose snake (SC).
Calculation: 36 + (25/2) + (16/4) + (16/8) + (16/16) = 55.5

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: Recreational surf fishery at this site important 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: Populations of spadefoot toad and other coastal duneland species 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] = 139.5 **Significance = HI x R =167.4**

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

NAPEAGUE BEACH

LOCATION AND DESCRIPTION OF HABITAT:

Napeague Beach is located southeast of Napeague Bay, on the south shore of Long Island, in the Town of East Hampton, Suffolk County (7.5' Quadrangle: Napeague Beach, NY). The fish and wildlife habitat consists of an approximately 2 mile segment within Napeague State Park and a 1.5 mile segment of ocean beach extending east to the boundary of Hither Hills State Park. The approximately 490 acre area within the park consists of open sandy beach, a broad, undeveloped, interdune zone situated between the primary dune and Montauk Highway, and a back dune area north of the LIRR tracks, including an excellent example of the maritime pitch pine dune woodland community. Along the ocean beach, the primary dune system reaches elevations of 20 to 30 feet. There is no permanent standing water, but there are numerous low areas flooded with freshwater from the high water table, and an excellent example of the maritime freshwater interdunal swales community is found here. The 1.5 mile segment between Napeague State Park and Hither Hills State Park consists of sandy beach and primary dune. The ocean beach receives moderate recreational use (*e.g.*, bathing, off-road vehicles) during the summer months and supports an active surf fishery. The segment outside of the State Park has moderate residential development and a number of condominium resorts.

FISH AND WILDLIFE VALUES:

Napeague Beach is one of the largest remaining areas of undeveloped barrier beach and back dune ecosystem on Long Island, representing a rare ecosystem type in New York State. The New York Natural Heritage Program has identified excellent examples of maritime freshwater interdunal swales and pitch pine dune woodlands at this site. Portions of the habitat have been designated as part of the national Coastal Barrier Resources System, one of 67 such areas on Long Island. This outstanding natural area is important to many coastal wildlife species, and provides valuable opportunities for ecological research. Napeague Beach was investigated by the U.S. Fish and Wildlife Service in 1982 as one of four primary sites for baseline studies of coastal wildlife habitats on Long Island's south shore. These studies documented the presence of at least 33 species of breeding birds and 8 species of mammals.

Rare species inhabiting the Napeague Beach habitat area include horned lark (SC), spotted turtle (SC), eastern hognose snake (SC), and eastern spadefoot toad (SC). This is one of the few locations in New York State where eastern spadefoot toads are found in abundance. Other amphibians and reptiles include eastern newt, spotted salamander, four-toed salamander, red-backed salamander, Fowler's toad, green frog, bullfrog, pickerel frog, spring peeper, grey tree frog, northern black racer, eastern milk snake, eastern garter snake, eastern ribbon snake, painted turtle, box turtle, and snapping turtle.

Napeague Beach was also found to have relatively high densities of white-footed mouse, which provides a significant prey base for raptors migrating through the area. Peregrine falcon (E) migrate through the dunes during summer months.

Napeague Beach is a valuable nesting area for least tern (T) and piping plover (E, T-Fed) with both species present continuously from 1983 through 1997. There have been two active nesting sites throughout this period: One located on the beach in Napeague State Park and one two miles east near the boundary of Hither Hills State Park. At these sites, piping plover averaged 3 nesting pairs per year for the 1987-1996 period; a peak number of 5 pairs occurred in 1995. Town of East Hampton plover monitoring documented an average of 4 nesting pairs between 1995 and 1999, producing an average of 8 fledges annually.

Least tern had a ten-year (1987-1996) average of 44 nesting pairs annually; number of pairs of this species was variable from year to year, ranging from 0 to 126 pairs, with peak numbers in 1990 (126 pairs) and 1995 (90 pairs). However, no young fledged in this area between 1994 and 1999. In general, it appears that this relatively undisturbed stretch of ocean beach and primary dunes is a critical area of tern and plover nesting habitat within which colony sites are chosen by the birds each year.

Both the front and back slopes of the primary dunes and large areas of the interdune zone are colonized by associations of beachgrass (*Ammophila breviligulata*) and seaside goldenrod (*Solidago sempervirens*). In addition, associations of beach heather (*Hudsonia tomentosa*), bearberry (*Arctostaphylos uva-ursi*), beach plum (*Prunus maritima*)**,** bayberry (*Myrica pensylvanica*), and pitch pine (*Pinus rigida*) dot the area. Also present are several low-lying saturated soil areas that are colonized by stands of cranberry and various rushes. North of the interdune zone, the upland transition zone supports mixed communities of trees and shrubs, containing pitch pine, highbush blueberry (*Vaccinium corymbosum*), bayberry, bear oaks (*Quercus illicifolia*), black raspberry (*Rubus allegheniensis*), and poison ivy (*Toxicodendron radicans*). A pine-oak woodland occupies most of the northern part of this site between the upland transition zone and the Montauk Highway, and encompasses an excellent example of the maritime pitch pine dune woodland community. The back dune area has more diverse vegetation including pinweed (*Lechea* spp.), slender wormwood, beach plum (*Prunus maritima*), jointweed (*Polygonella articulata*), wild rose (*Rosa virginiana*), salt spray rose (*Rosa rugosa*), yellow thistle (*Cirsium horridulum*), bearberry, beach heather, seaside and slender fragrant goldenrods (*Solidago* spp.), golden aster (*Chrysopsis falcata*), bayberry (*Myrica pensylvanica*) and reindeer lichens (*Cladonia* or *Cladina* spp.). Several New York Natural Heritage Program rare plants are found at this site, including slender blue flag (*Iris prismatica*), pine barren sandwort (*Minuartia caroliniana*), curly grass (*Schizaea pusilla*, E), and southern arrowwood (*Viburnum dentatum* var *venosum*).

Napeague Beach supports an active recreational surf fishery and limited commercial haul seining operations. There are no significant recreational uses specifically associated with the wildlife resources at Napeague Beach. There is a recreational berry harvest in this area of local significance.

IMPACT ASSESSMENT:

The Napeague Beach habitat is potentially vulnerable to any land disturbance or increased human activity in the area. Habitat alterations, such as dredged material disposal, vegetation clearing, excavation, or ditching, would have significant adverse impacts on several unusual species inhabiting the area. Uncontrolled human use of the area, including collection of native flora and fauna (such as amphibians and reptiles), and trampling of vegetation in sensitive upper beach and dune areas, would be highly detrimental to the wildlife resources at Napeague Beach.

Nesting shorebirds inhabiting the barrier beach and dunes at Napeague 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. Predation of chicks and destruction of eggs or nests by unleashed pets (*e.g.*, dogs, cats) may also occur. Specific bird nesting areas should continue to be fenced to restrict human disturbance, and signs should be posted in the area for educational purposes. Vehicle traffic should always avoid the upper beach, and driving after dark should be discouraged. Although nesting sites may change from year to year, human disturbance of the upper beach and dunes (above the spring high tide line) must be avoided in order to preserve these sites' value as a nesting habitat.

Traditional uses on the lower beach such as pedestrian traffic, commercial haul seining and mobile sportfishing (often associated with the use of recreational or off-road vehicles) are generally compatible with the use of the upper beach and primary dune area by nesting shorebirds.

KNOWLEDGEABLE CONTACTS:

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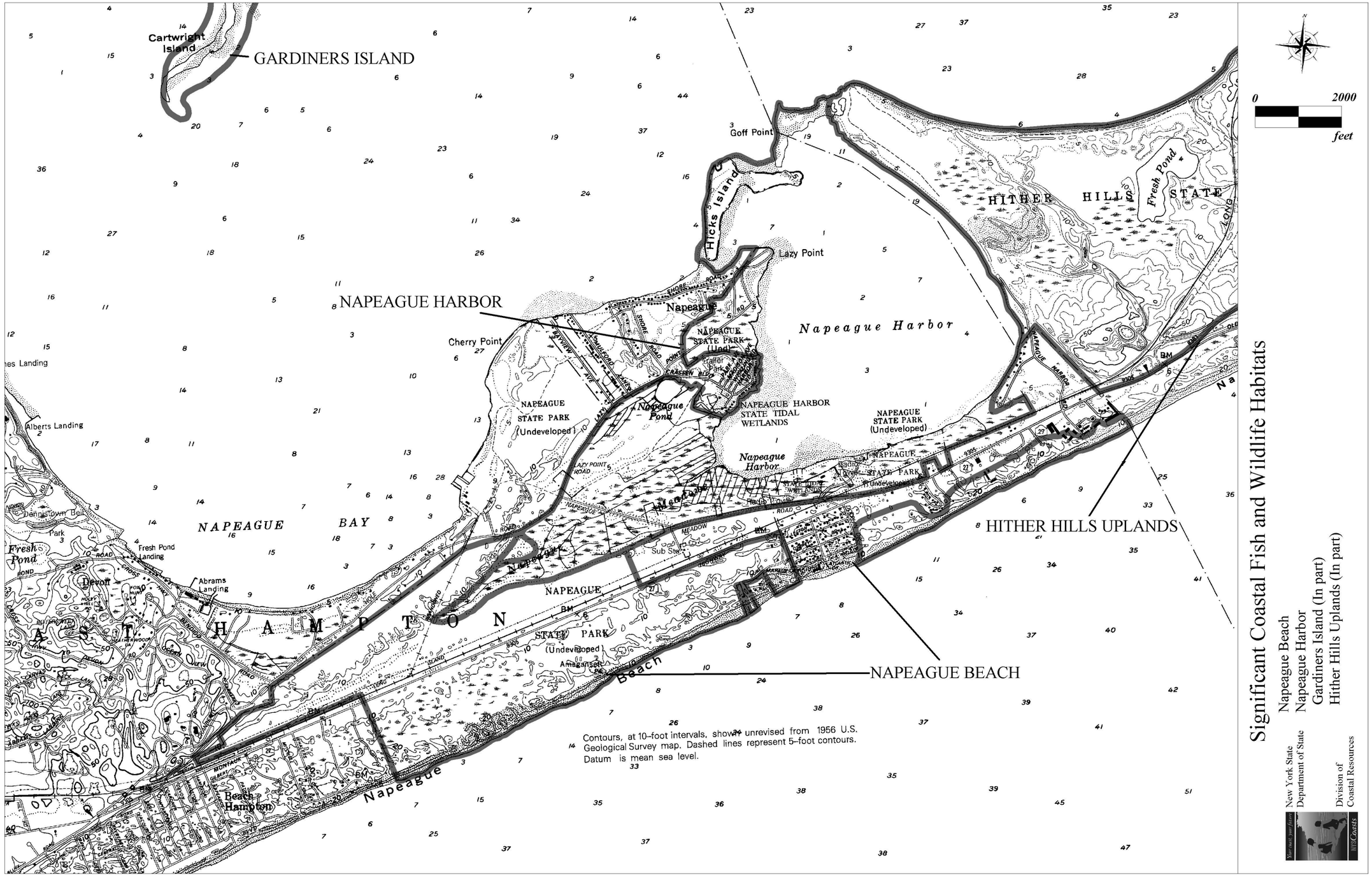

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