

Attachment B:

COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area: **Smith Point County Park**
Designated: **March 15, 1987**
Date Revised: **December 15, 2008**
County: **Suffolk**
Town(s): **Brookhaven**
7½' Quadrangle(s): **Moriches, NY; Pattersquash Island, NY**

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 segments of an undeveloped barrier beach ecosystem on Long Island; 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) and least tern (T) nesting and breeding area. Peregrine falcons (E), northern harrier (T) and Cooper’s hawk (SC) use the area during fall migration. Additive division: $36 + 36/2 + 25/4 + 25/8 + 16/16 = 64.375$ **64.375**

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: Waterfowl hunting area of county-level significance. Mobile sportfishing in the area is of county level significance. **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: Concentrations of migrating falcons are unusual in New York State, but somewhat common on Long Island. Geometric mean: $\sqrt{9} \times \sqrt{16} = 12$. **12**

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) = 144.375

Significance: (HI x R) = 173.25

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

SMITH POINT COUNTY PARK

LOCATION AND DESCRIPTION OF HABITAT:

Smith Point County Park is an approximate six mile segment of barrier island which forms the southern border of Moriches Bay, west of Moriches Inlet. This approximately 825 acre area is located in the Town of Brookhaven, Suffolk County (7.5' Quadrangles: Pattersquash Island, N.Y.; and Moriches, N.Y.). The fish and wildlife habitat includes open beach and a broad primary dune zone, reaching elevations of 10 to 15 feet. Due to the dynamic nature of the Atlantic shoreline, the southern boundary of the Smith Point County Park significant habitat will reflect the most current land forms, extending to mean low water. The fish and wildlife habitat encompasses all of Smith Point County Park east of the developed camping area. The park receives very heavy recreational use during the summer months, and much of the area is subject to disturbance by pedestrians and off-road vehicle traffic. As many as 1,200 beach vehicles in one day have been reported in the area, with an estimated average of 400 - 800 per day during summer weekends.

Maritime beach, a sparsely vegetated community dominated by beach grass (*Ammophila breviligulata*), is the dominant ecological community within Smith Point County Park. Maritime beach occurs on unstable sand, gravel, or cobble ocean shores above mean high tide, where the shore is modified by storm waves and wind erosion. The community serves as an important nesting ground for beach nesting shorebirds. Also included in the Smith Point County Park area are extensive salt marshes bordering Moriches Bay. These wetland communities support associations of smooth cordgrass (*Spartina alterniflora*), salt hay (*Spartina patens*), spike grass (*Distichlis spicata*), and glassworts (*Salicornia spp.*). In the past, portions of the dunelands have been fenced and posted to restrict off-road vehicle disturbance to the vegetation.

Seabeach amaranth (E, T-Fed) (*Amaranthus pumilus*), commonly associated with piping plovers (E, T-Fed), has been observed at this site. Seabeach amaranth (E, T-Fed) has been eliminated from two-thirds of its historic global range with typically fewer than 5 occurrences in New York State. Seabeach knotweed (T) (*Polygonum glaucum*) has also been observed at this site. Seabeach knotweed (T) is rare in New York State with fewer than 35 occurrences. Globally, seabeach knotweed (T) is rare and restricted throughout its range with between 21 and 100 occurrences.

FISH AND WILDLIFE VALUES:

Smith Point County Park is one of the largest segments of undeveloped barrier beach on Long Island, and represents a rare ecosystem type in New York State. This area contains the largest extent of salt marsh in Moriches Bay, and is an important habitat for many fish and wildlife species throughout the year. Shorebird surveys for Smith Point County Park for the 17 year period from 1989-2005 indicate average annual concentrations of 36 least tern (T) breeding pairs (198 in peak year) and 6 pairs (18 in peak year) of nesting piping plover (E, T-Fed). Both of these species inhabited the beaches of Smith Point County

Park in the 1970's, but were not present in the early and mid-1980's. Least tern (T) nest in large colonies located in sand, gravel, shells, and seaweed above the high tide mark. Piping plover (E, T-Fed) nest well above the high tide mark in generally grassless sand beaches.

The dunelands at Smith Point County Park comprise a significant segment of the fall migration corridor for raptors moving south along the Atlantic coast. Undeveloped dune areas such as this provide critical feeding and resting areas for thousands of migrating raptors each year. The most numerous species utilizing this area are the falcons, such as American kestrel, merlin, and peregrine falcon (E), and the accipiters, such as Cooper's hawk (SC) and sharp-shinned hawk. Also, the northern harrier (T) occurs in relatively large numbers, along with the less common osprey (SC). Northern harrier (T) did not traditionally use this site as a breeding area, but in recent years breeding has been documented. These birds forage extensively among the undeveloped barrier beaches, where concentrations of small mammals, migrating white-tailed deer, eastern cottontail, raccoon, and red fox also inhabit Smith Point County Park. The beach at Smith Point County Park provides important access for mobile sportsfishermen who use off-road vehicles to reach the valuable surf fishery at this site.

The salt marshes in Smith Point County Park are an important component of the fish and wildlife habitat. Probable or confirmed nesting bird species in these areas include green-backed heron, black skimmer (SC), black-crowned night heron, great egret, snowy egret, black duck, mallard, gadwall, willet, clapper rail, Virginia rail, fish crow, marsh wren, sharp-tailed sparrow, American oystercatcher, and seaside sparrow (SC). The salt marshes are also used extensively as feeding areas by birds nesting in the area, and for a variety of herons, egrets, and other shorebirds, during spring and fall migrations. These wetlands are valuable feeding areas for waterfowl wintering on Moriches Bay, including scaup, American black duck, Canada goose, brant, and mallard. Portions of Smith Point County Park are open to the public for waterfowl hunting, and the area supports hunting pressure of county-level significance. In addition to having significant bird concentrations, the salt marshes in Smith Point County Park contribute heavily to the biological productivity of Moriches Bay.

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. Nesting shorebird species inhabiting the barrier beaches of Long Island are highly vulnerable to disturbance by humans from March 15 through August 15. Significant pedestrian traffic or recreational use (e.g., boat and personal watercraft landing, off-road vehicle use, picnicking) of the upper beach, dune, and wetland areas could easily eliminate the use of this site as a nesting area and should be controlled during the bird nesting season and the fall raptor migration period (September - October, primarily). Reduction, or loss of the area presently utilized by nesting colonies could significantly affect the bird populations in this vicinity. 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. Appropriate placement of trash receptacles and signs promoting proper trash disposal would be beneficial to the habitat as beach lying trash may attract additional predators to sensitive populations. Fencing and/or annual posting of the bird nesting area should be provided to help protect the nesting bird species. Unregulated dredged material placement in this area would be detrimental to the habitat area, but such activities may be designed to maintain or improve the habitat, by setting back vegetative succession.

Construction of adjacent recreational facilities should be designed to minimize impacts to the nesting areas. Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in

areas not previously disturbed by development, may result in a loss of productive areas which support the fish and life resources of Smith Point County Park. Construction of new or maintenance of existing erosion control structures which interfere with natural coastal process should be carefully evaluated for need and where possible, non-structural solutions should be utilized.

HABITAT IMPAIRMENT TEST:

A **habitat impairment test** must be applied to any activity that is subject to consistency review under federal and State laws, or under applicable local laws contained in an approved local waterfront revitalization program. If the proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area.

The specific **habitat impairment test** is as follows.

In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions would:

- destroy the habitat; or,
- significantly impair the viability of a habitat.

Habitat destruction is defined as the loss of fish or wildlife use through direct physical alteration, disturbance, or pollution of a designated area or through the indirect effects of these actions on a designated area. Habitat destruction may be indicated by changes in vegetation, substrate, or hydrology, or increases in runoff, erosion, sedimentation, or pollutants.

Significant impairment is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include but are not limited to reduced carrying capacity, changes in community structure (food chain relationships, species diversity), reduced productivity and/or increased incidence of disease and mortality.

The *tolerance range* of an organism is not defined as the physiological range of conditions beyond which a species will not survive at all, but as the ecological range of conditions that supports the species population or has the potential to support a restored population, where practical. Either the loss of individuals through an increase in emigration or an increase in death rate indicates that the tolerance range of an organism has been exceeded. An abrupt increase in death rate may occur as an environmental factor falls beyond a tolerance limit (a range has both upper and lower limits). Many environmental factors, however, do not have a sharply defined tolerance limit, but produce increasing emigration or death rates with increasing departure from conditions that are optimal for the species.

The range of parameters which should be considered in applying the habitat impairment test include but are not limited to the following:

1. physical parameters such as living space, circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth (including loss of littoral zone), morphology, substrate type, vegetation, structure, erosion and sedimentation rates;

2. biological parameters such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, meristic features, behavioral patterns and migratory patterns; and,
3. chemical parameters such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxics and hazardous materials).

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed in the Impact Assessment section to assist in applying the habitat impairment test to a proposed activity.

KNOWLEDGEABLE CONTACTS:

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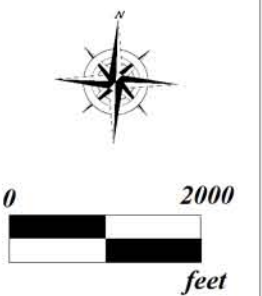
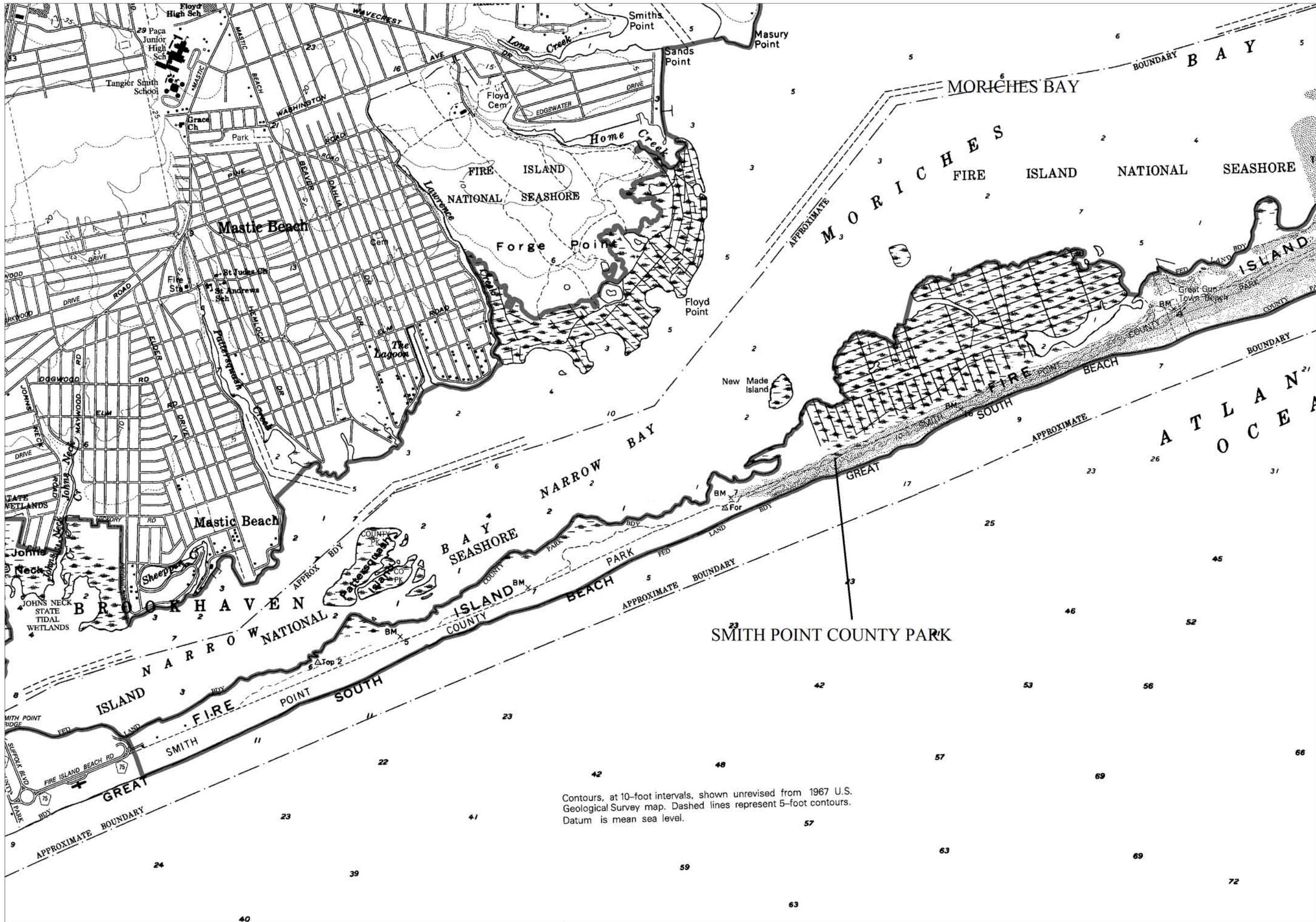
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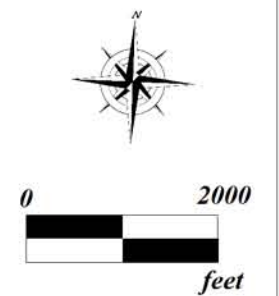
Contours, at 10-foot intervals, shown unrevised from 1967 U.S. Geological Survey map. Dashed lines represent 5-foot contours. Datum is mean sea level.

Significant Coastal Fish and Wildlife Habitats

Smith Point County Park (In Part)
 part 1 of 2
 Moriches Bay (In Part)

New York State
 Department of State
 Division of
 Coastal Resources





Significant Coastal Fish and Wildlife Habitats

- Smith Point County Park (In Part)
- part 2 of 2
- Copsoque County Park
- Moriches Bay (In Part)
- Westhampton Beach and Dunes (In Part)