

COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area: **Northwest Creek**
Designated: **March 15, 1987**
Date Revised: **May 15, 2002**
County: **Suffolk**
Town(s): **East Hampton**
7½' Quadrangle(s): **Gardiners Island, NY; Greenport, NY; Sag Harbor, 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: Large, undeveloped, tidal wetland ecosystem, rare on Long Island outside of the major bays on the south shore. 25

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), piping plover (E, T-Fed), northern harrier (T) and horned lark (SC) nesting and feeding.
Calculation: $36 + (25/2) + (25/4) + (16/8) + (16/16) =$ 57.8

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: Locally significant waterfowl hunting 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: Estuarine fish nursery area; concentrations of many species 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] = 86.8

Significance = HI x R = 104.2

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

NORTHWEST CREEK

LOCATION AND DESCRIPTION OF HABITAT:

Northwest Creek is located south of Northwest Harbor, on the south fork of Long Island, in the Town of East Hampton, Suffolk County (7.5' Quadrangles: Greenport, NY; Gardiners Island West, NY; and Sag Harbor, NY). The fish and wildlife habitat consists of approximately 440 acres of tidal wetlands, of which about one-third is a shallow bay (less than 4 feet deep at mean low water) which connects to Northwest Harbor through a narrow inlet. This area displays a classic zonation of natural estuarine habitats, including maritime beach and dunes, intertidal creek banks, cordgrass marshes, salt marsh shrub communities, red maple-black gum swamp, and transition areas into the surrounding oak-pine forests. The habitat area also includes approximately 25 acres of immediately adjacent upland forest areas, including coastal oak heath, coastal oak-hickory, maritime post oak, and maritime red cedar forest communities. The New York Natural Heritage Program has identified Northwest Creek as containing the best example of globally rare sea level fen in New York State. Northwest Creek is located within an undeveloped parkland owned by Suffolk County. The only human development within the area is a residential area at Northwest Landing at the northeast end of the bay. A small amount of shoreline in this area has been bulkheaded for Town of East Hampton public boat docking facilities.

FISH AND WILDLIFE VALUES:

Northwest Creek is one of only a few examples of relatively large, undisturbed, estuarine ecosystems on Long Island, outside of the major coastal bays on the south shore. The diversity and well-defined zonation of plant communities is especially rare in the region, as is its location within a watershed which is almost entirely undeveloped. This area contains the best example of globally rare sea level fen in New York State. Northwest Creek is utilized by a variety of fish and wildlife species, including several which are of special ecological and economic significance.

Osprey (SC) have nested successfully in the area. Sharp-tailed sparrow and willet nest in the creek's high marsh zone. Other probable nesting bird species at Northwest Creek include green heron, Canada goose, belted kingfisher, horned lark (SC), and red-winged blackbird. The creek serves as an important feeding area for osprey, canvasback, American black duck, bufflehead, mallard, Virginia rail, herons, egrets, and other wildlife. Northern harrier (T) feed during winter in Northwest Creek marshes. Diamondback terrapin nest on the beach bordering the creek. The tidal creek and salt marshes provide feeding areas and cover for the terrapins during their nesting period (April-July).

The sand peninsula which separates Northwest Creek from the harbor was replenished with

dredged material in 1995 and 1999, and is suitable nesting habitat for least terns (T) and piping plovers (E, T-Fed). Least terns nested here in the 1970's; during the late 1980's between 10 and 45 pairs annually were observed nesting at this location. This species was observed nesting here once again in 1996 and 1997 after a five-year absence. Piping plover were observed nesting intermittently during the 1987-1996 period (a total of three pairs over that span), and two pairs at Northwest Creek in 1997. Town of East Hampton piping plover monitoring documented three fledges at this site in both 1998 and 1999. This area may provide important breeding habitat for horseshoe crab, but additional documentation is required.

The Northwest Creek estuary and nearby portions of Northwest Harbor may be important feeding and resting habitat for juvenile Atlantic ridley sea turtles (E), especially during the late summer and fall. Prey species for Atlantic ridley (lady crab, spider crab) have been documented within and outside of Northwest Creek, and these sea turtles are frequently caught in pound nets in the Northwest Creek/Northwest Harbor area. Eelgrass beds outside the creek inlet and along the nearby eastern shore of Northwest Harbor provide suitable feeding habitat for Green sea turtles (T).

The New York Natural Heritage Program has identified a number of rare and listed plant species in the Northwest Creek site. These include: bushy rockrose (*Helianthemum dumosum*, T), marsh fimbry (*Fimbristylis castanea*, T), clustered bluets (*Hedyotis uniflora*, T), slender blue flag (*Iris prismatica*), coastal goldenrod (*Solidago eliotii*), marsh straw sedge (*Carex hormathodes*), pine barren sandwort (*Minuartia caroliniana*), and the best example of slender marsh-pink (E) in New York State.

Northwest Creek is a highly productive area for marine finfish and shellfish. This area serves as a nursery and feeding area (from April 1 - November 30, generally) for many estuarine fish species, including scup, winter flounder, and bluefish. Northwest Creek is an important fishing area at the local level. All of Northwest Creek and its tributaries, however, are closed to shellfishing year round. Extensive mosquito ditching at this site may contribute to the transport of fecal coliforms from resident wildlife. The area is also locally important for waterfowl hunting, especially American black duck, scaup, and canvasback.

IMPACT ASSESSMENT:

Any activity that would substantially degrade the water quality in Northwest 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), road runoff, oil spills, excessive turbidity, and waste disposal, including vessel waste. Forest bordering the wetlands, including Barcelona Neck, is particularly important for maintaining the water quality and habitat value of Northwest Creek, and functions as an important buffer zone.

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 Northwest Creek (*e.g.*, by modifying the inlet) could have major impacts on the fish and wildlife species present. 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 habitat for certain species of wildlife. The tidal marshes of Northwest Creek are currently threatened by the expansion of *Phragmites australis*, especially along vector control ditches. 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 Northwest Creek 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 from April 1 through July 30. 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.

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 Northwest Creek. Alternative strategies for the protection of shoreline property should be examined, including innovative, vegetation-based approaches.

KNOWLEDGEABLE CONTACTS:

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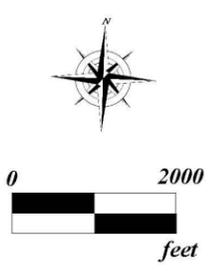
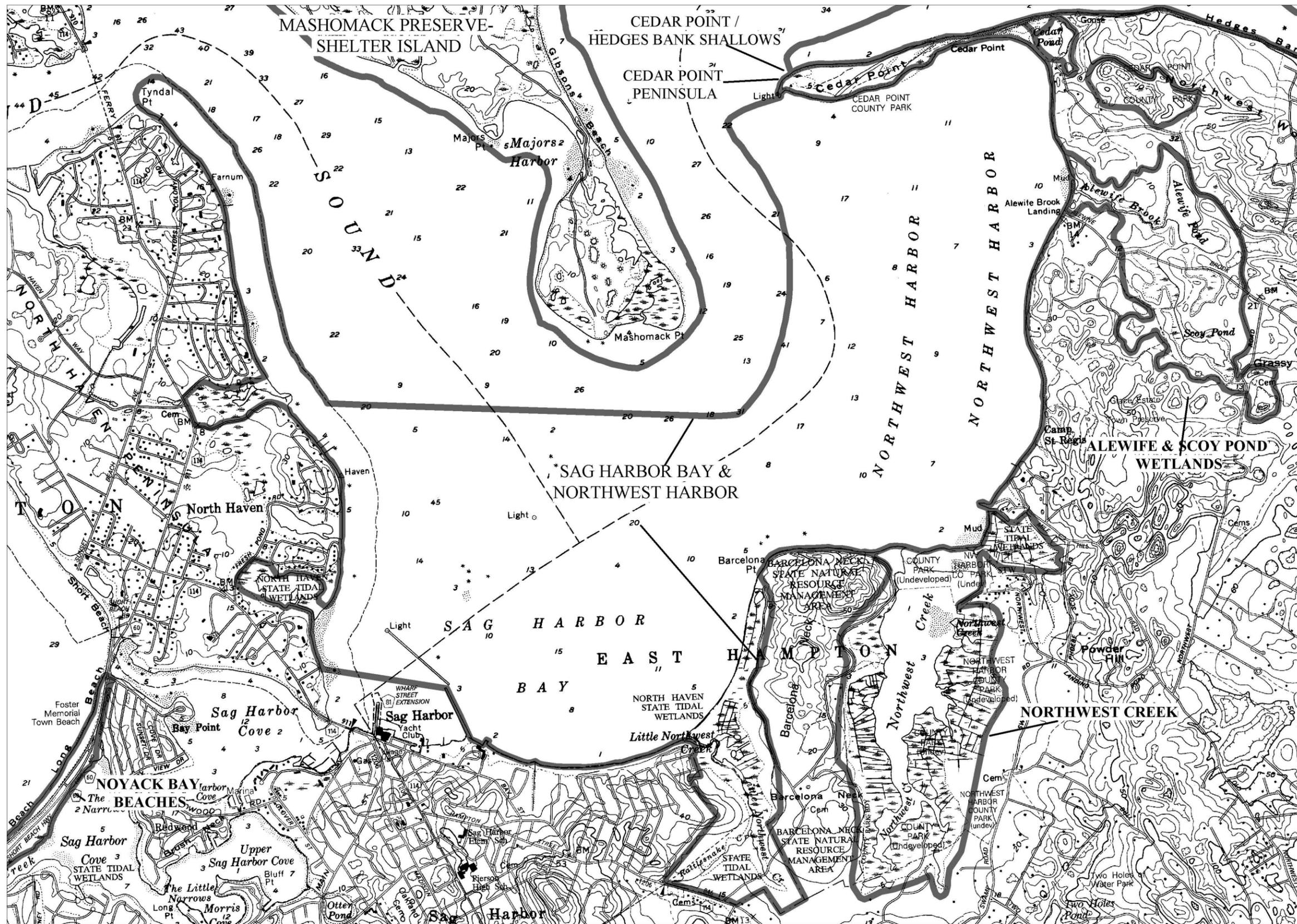
Endangered Species Unit
Non-game Unit
Wildlife Resources Center
Game Farm Road
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New York Natural Heritage Program
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Significant Coastal Fish and Wildlife Habitats

- Alewife and Scoy Pond Wetlands
- Cedar Point Peninsula
- Northwest Creek
- Sag Harbor Bay and Northwest Harbor
- Cedar Point / Hedges Bank Shallows (In part)
- Mashomack Preserve - Shelter Island (In part)
- Noyack Bay Beaches (In part)

