COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area:	**Accabonac/Hog Creek Point Shallows**
Designated:	**May 15, 2002**
County:	**Suffolk**
Town(s):	**East Hampton, NY**
7½' Quadrangle(s):	**Gardiner's Island West, 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: Eelgrass meadows of state 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), loggerhead (T), and green (T) turtles documented in this area. Calculation: 36 + (25/2) + (25/4) = 54.75

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: Bay scallop fishery of recreational and commercial significance in the State of New York. 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: Bay scallop population of significance at a level in between the State of New York and the Mid-Atlantic region of the United States. Calculation: $\sqrt{}(16 \times 25) =$ 20

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] = 154.75 **Significance = HI x R = 185.7**

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

ACCABONAC/HOG CREEK POINT SHALLOWS

LOCATION AND DESCRIPTION OF HABITAT:

The Accabonac/Hog Creek Point Shallows area is located in East Hampton, NY (7.5" Quadrangle: Gardiner's Island West, NY) stretching southeastward from the eastern shore of Hog Creek inlet and Lionhead Rock offshore, to below the southern end of Gerard Park. The habitat consists of marine shallows and submerged aquatic vegetation on gravelly sand substrate approximately within the twelve foot bathymetric contour. SAV accounts for around 60% of bottom cover, and is dominated almost exclusively by eelgrass (*Zostera marina*) between the shore and the six foot depth. At between six and seven feet in depth, bottom cover changes to a mixed green fleece (*Codium fragile*) and rockweed (*Fucus* spp.) community.

FISH AND WILDLIFE VALUES:

The Accabonac/Hog Creek Point Shallows habitat is one of only a few remaining eelgrass meadows in the State of New York. Eelgrass habitats are among the most productive ecosystems in the world and and play a critical role in supporting coastal food webs.

Eelgrass meadows provide critical habitat for a variety of aquatic species, including recreationally and commercially important bay scallop (*Argopecten irradians*) populations. Juvenile bay scallops use the canopy for refuge from predators. Adult bay scallops settle at the base of the shoots. The Accabonac/Hog Creek Point Shallows eelgrass meadows support an important population of bay scallop, and the bay scallop fishery in this area is of statewide importance.

Hermit crabs, rock crabs, spider crabs, and whelk (locally called conch) have been documented in the Accabonac/Hog Creek Point Shallows habitat. Spider crabs are an important prey item for juvenile Atlantic ridley (E) and loggerhead sea turtles (T), and these turtle species as well as green turtles (T) have been documented in the Accabonac/Hog Creek Point Shallows area. Green turtles (T) feed directly on eelgrass and other species of submerged aquatic vegetation including green fleece (*Codium fragile*) and sea lettuce (*Ulva lactuca*). Horseshoe crabs also forage in eelgrass beds. This species itself is prey for juvenile loggerhead turtles, crabs, whelks, and sharks.

Other species found in eelgrass meadows include shellfish such as hard clam and juvenile finfish such as tautog (also called blackfish) and oyster toadfish. Many finfish species with demersal eggs use eelgrass meadows for spawning and nursery areas. Atlantic silversides spawn in the eelgrass beds of the Peconic Bays. The eggs of this species are an important food source for sea birds, waterfowl, and blue crab. Adult Atlantic silversides are an important prey species for bluefish, summer flounder, rainbow smelt, white perch, Atlantic bonito, and striped bass. Brant, a goose

frequently found overwintering in embayments of the Peconics region feeds directly on eelgrass.

IMPACT ASSESSMENT:

Any activity that would substantially degrade water quality in the Accabonac/Hog Creek Point Shallows would affect the biological productivity of this area. Eelgrass beds are particularly sensitive to alterations in water quality parameters including temperature, salinity, light penetration, organic matter concentration, and the presence of pollutants. 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. It is essential that high water quality be maintained in the area to protect the eelgrass meadows and 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.

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 Accabonac/Hog Creek Point Shallows. 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 any proposed new docks in the Accabonac/Hog Creek Point Shallows area should be conducted with potential impacts to eelgrass beds fully considered. Restoration opportunities for eelgrass may exist if water quality parameters are appropriate.

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.

Dredging to maintain existing boat channels in the area should be scheduled between September 15 and December 15 to minimize potential impacts on aquatic organisms, and to allow for disposal when wildlife populations are least sensitive to disturbance. Dredged material disposal in this area would be detrimental.

KNOWLEDGEABLE CONTACTS:

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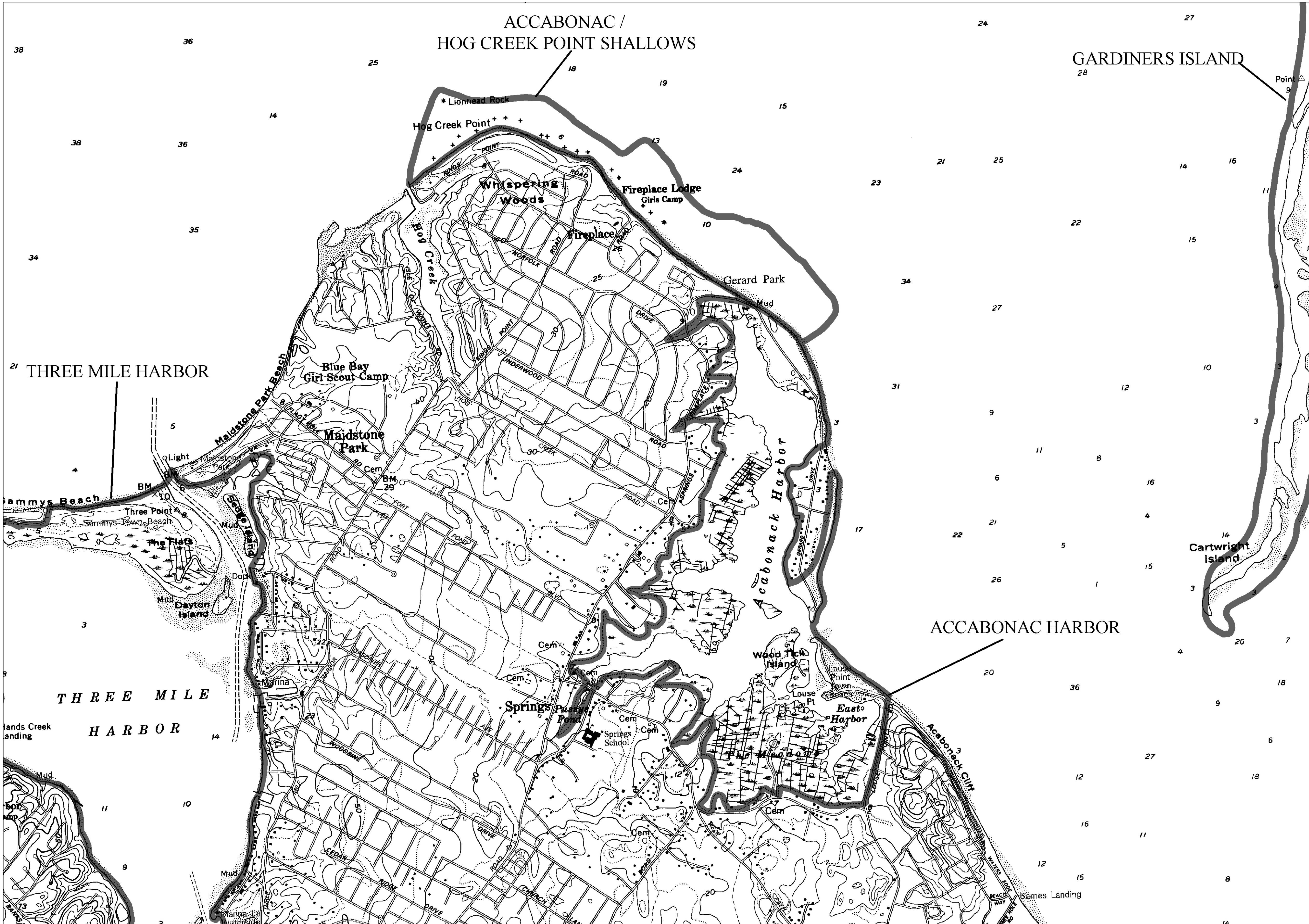

Significant Coastal Fish and Wildlife Habitats

Accabonac Harbor
Accabonac / Hog Creek Point Shallows
Gardiners Island (In part)
Three Mile Harbor (In part)

New York State
Department of State

Division of
Coastal Resources