
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:

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Town of Southold Planning Board
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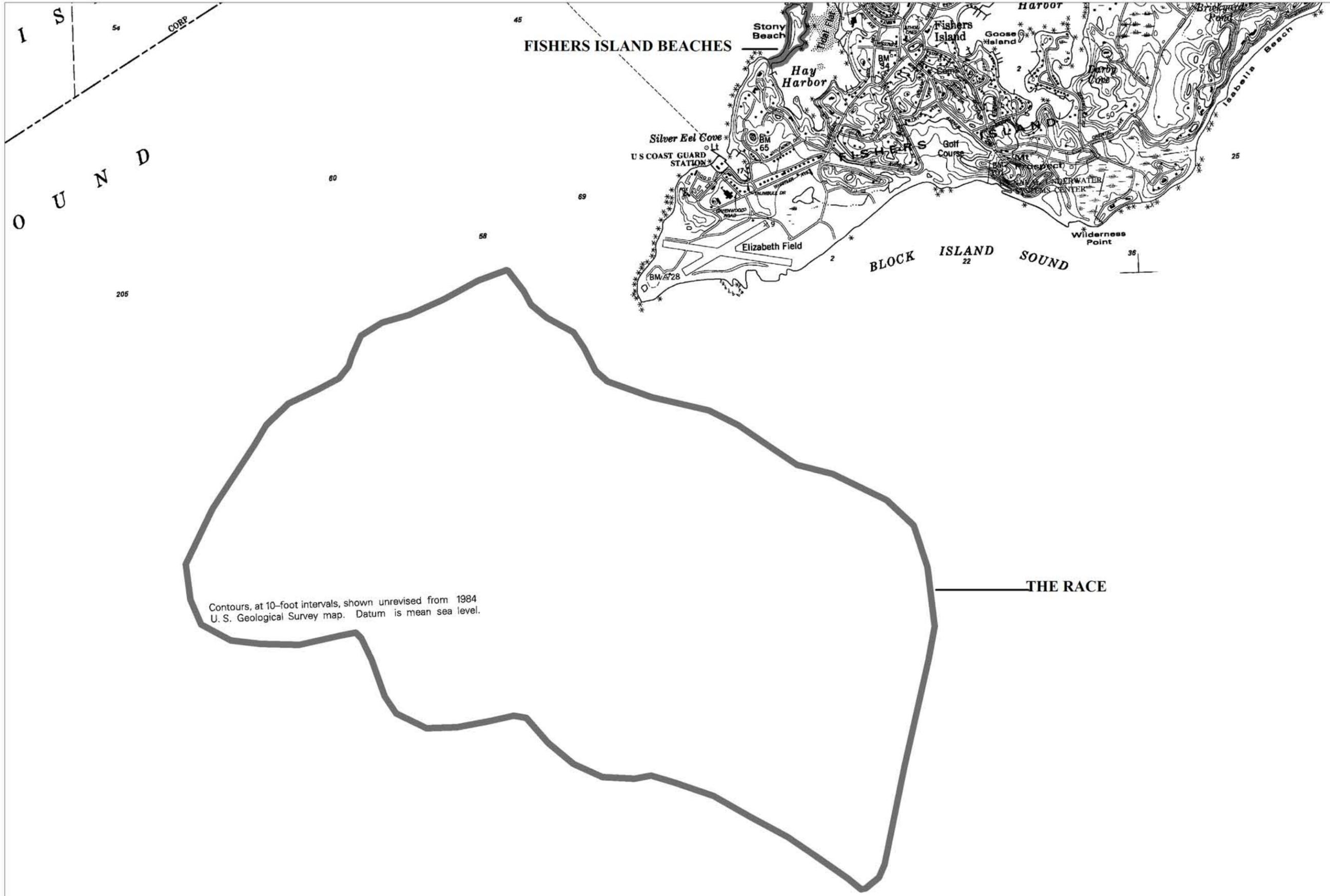
Town of Southold Trustees
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New York Natural Heritage Program
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Office of Ecology
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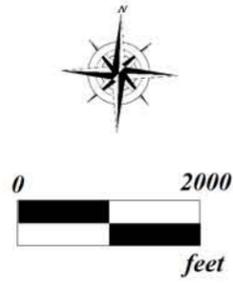
Fishers Island Conservancy
Fishers Island, NY 06390
Phone: (516) 788-7437 (summer)
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Phone: (201) 635-5470 (winter)

The Sounds Conservancy, Inc.
Marine Sciences Institute
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Contours, at 10-foot intervals, shown unrevised from 1984 U. S. Geological Survey map. Datum is mean sea level.

THE RACE



Significant Coastal Fish and Wildlife Habitats

The Race
Fishers Island Beaches (In part)

