Appendix C Great South Bay West Significant Habitat

COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area:	Great South Bay-West
Designated:	March 15, 1987
Date Revised:	December 15, 2008
County:	Suffolk
Town(s):	Babylon, Islip
7½' Quadrangle(s):	Amityville, NY; Bay Shore West, NY; Bay Shore East, NY; West Gilgo Beach, 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 shallow coastal wetland ecosystems 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:	Roseate tern (E), common tern (T), northern harrier (T), osprey (SC) and black skimmer (SC). Black rail (E) nest in area, but not well documented. Additive division: 36 + 25/2 + 25/4 +16/8 + 16/16 = 57.75	**57.75**
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:	Sportfishing of statewide significance, waterfowl hunting of regional significance and shellfish hatcheries of local significance. Additive division: 16 + 9/2 + 4/2= 22.5	**22.5**
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:	This area supports some of the largest concentrations of wintering waterfowl, nesting northern harriers (T), estuarine fish, and the only population of black rails (E) 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) = 160.25 **Significance: (HI x R) = 192.3**

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

GREAT SOUTH BAY-WEST

LOCATION AND DESCRIPTION OF HABITAT:

Great South Bay-West is located along the south shore of Long Island, east of South Oyster Bay, in the Towns of Babylon and Islip, Suffolk County (7.5' Quadrangles: Amityville, N.Y.; West Gilgo Beach, N.Y.; Bay Shore West, N.Y.; and Bay Shore East, N.Y.). This area is approximately 34,170 acres and is generally defined by the mean high water elevation on the north and south sides, by the Amityville Cut boat channel on the west, and by the Islip-Brookhaven town line on the east. The fish and wildlife habitat is the entire western half of Great South Bay. The bay is bordered on the north by dense residential and commercial development, including extensive marina and harbor facilities. The remainder of the area is bordered by State parklands, open water, and low density residential development on Fire Island.

A number of benthic habitats make up the bay bottom; the dominant eelgrass (*Zostera marina*) community has been studied extensively. Benthic habitat in Great South Bay can be classified as muddy sandflat and sandflat habitats. Much of the bay is shallow open water habitat, but as the bay narrows on the western end open water merges into an extensive series of tidal salt marshes, salt marsh islands, and intertidal mudflats. Extensive salt marshes also line the bay where tidal creeks and rivers feed into the bay from the mainland. Cordgrasses (*Spartina alterniflora* and *S. patens)* dominate the low and high salt marsh, respectively. Dwarf glasswort (T) (*Salicornia bigelovii*) which is associated with smooth cordgrass, is one of the main species within a salt panne community on the Gilgo Beach Backbarrier Marsh portion of Great South Bay-West. Common reed (*Phragmites australis*) borders portions of the high marsh, grading to dense thickets of bayberry (*Myrica pensylvanica*), poison ivy (*Toxicodendron radicans*), groundsel-bush (*Baccharis halimifolia*), and marsh elder (*Iva frutescens*) in drier areas. On the barrier beaches bordering the Atlantic Ocean and in swales behind primary dunes, plants characteristic of stabilized older dune and coastal shrub communities are found.

Water depths in this area are generally less than 6 feet below mean low water, except in Fire Island Inlet and in some dredged navigation channels. Tidal range in the bay averages approximately 2.61 feet at the inlet and approximately 0.7 feet at the mouth of the Connetquot River. Great South Bay is the only bay on Long Island's south shore that has major riverine input (from the Carmans Rivers in the east and Connetquot River in the west). In addition, the bay receives as much as 11% of its freshwater input directly from groundwater flows through its floor. Fire Island Inlet is the only direct connection to the sea, with indirect connections through South Oyster Bay.

FISH AND WILDLIFE VALUES:

Great South Bay-West comprises approximately one-half of the largest protected, shallow, coastal saltwater bay in New York State. A tremendous diversity of fish and wildlife species occur in this vast wetland area. Many species of migratory birds nest among the salt marshes and dredged material islands

in Great South Bay-West. The Captree Island vicinity is recognized as an Important Bird Area by the National Audubon Society of New York State, and serves as foraging habitat for peregrine falcon (E) and other migrating raptors. According to data from 1993-2005, Great South Bay-West is home to an average of 12 nesting pairs of roseate terns (E) per year (28 in peak year). In New York, this species breeds only on Long Island. In recent years, common terns (T) have been confirmed nesting on Elder Island, Dock Island, Goose Flat, Thatch Island, The Grouts, and Captree Island. From 1993 to 2005, an average of 1,046 breeding pairs of common tern (T) per year were reported in Great South Bay-West (2,333 in peak year). Recent data for least tern (T) is only available for 1992 and 2002, with 10 breeding pairs and 86 breeding pairs, respectively, in Great South Bay-West. Terns typically nest in simple scrapes built above the high tide mark in sand or gravel, and may be sparsely lined with shells and other debris (e.g. seaweed). Tern breeding colonies may contain several hundred to several thousand birds, including roseate (E), least (T), common (T), and gull-billed terns, along with black skimmer. Productivity of the surrounding waters is of vital importance to common terns (T) because they feed on small fish, shrimp, and aquatic insects.

Several rookeries have been located on islands within Great South Bay-West, including Gilgo Island, Sexton Island, Seganus Thatch, Ox Island, Pipe Island, Nazeras Island, the Cedar Island Group, and an unnamed dredged material island southwest of Nazeras Island. These birds use a network of islands in the bays, with shifts in island use from year to year. Species nesting in these areas include great egret, snowy egret, yellow-crowned night heron, black-crowned night heron, green-backed heron, little blue heron, tri-colored heron, and glossy ibis. Although the numbers of black-crowned night heron appear to be declining, records for the years 1993, 1995, 1998, 2001, and 2004 (the years in between were not surveyed) indicate an annual average of approximately 58 breeding pairs (195 in peak year) in Great South Bay-West. Other bird species which nest in Great South Bay-West include Canada goose, herring gull, great black-backed gull, American oystercatcher, black skimmer (SC), American black duck, mallard, gadwall, willet, Virginia rail, clapper rail, marsh wren, sharp-tailed sparrow, and seaside sparrow (SC). The vast salt marshes, intertidal flats, and shallows in this area provide valuable feeding areas for birds throughout the year, including species nesting in the area and large concentrations of shorebirds during migration, including whimbrel, yellowlegs, and black-bellied plover.

Great South Bay-West is also home to several raptor species. In Great South Bay-West, an estimated annual average of 12 breeding pairs of osprey (SC) were observed from 1998 to 2003 on the salt marsh islands. One pair of peregrine falcon (E) was observed in Great South Bay-West on Captree Island in 2004, but nesting was not confirmed. Peregrine falcons generally return to the same nesting location annually and mate for life. At least 2 to 3 northern harrier (T) nests have been observed in stands of common reed and poison ivy in the Gilgo Beach backbarrier marsh by the New York State Breeding Bird Atlas Project, but additional surveys are needed to better establish how many breeding pairs are regularly using the area. Northern harriers (T) here may reach their highest breeding densities in the state and, possibly, the region. It is the only area in New York State where black rails (E) have been found, and is the only historically documented breeding location for soras on Long Island. The first nesting record for black rails (E) was recorded in 1937, and since 1968 they have been present along the backbarrier marshes of Gilgo State Park during approximately half of the breeding seasons. Northern harriers (T) and short-eared owls (SC) are common winter residents of the marshes in Great South Bay-West. An observer for the New York State Breeding Bird Atlas Project recorded probable breeding for short-eared owl (SC) in June of 2001. All of the salt marsh and dune areas north of the Ocean State Parkway on Jones Beach Island represent suitable short-eared owl (SC) habitat and any breeding owls present could be expected to forage over the majority of this area.

In addition, Great South Bay-West is one of the most important waterfowl wintering areas (November - March) on Long Island, especially for brant and scaup. Mid-winter aerial surveys of waterfowl abundance from 1986 to 1998 (excluding 1997) for all of Great South Bay indicate average concentrations of over 7,000 birds in the bay each year (18,008 in peak year), including 4,085 greater and/or lesser scaup (15,405 in peak year), 583 American black duck (1,255 in peak year), 417 (common, hooded, and/or red-breasted) merganser (1,025 in peak year), 648 brant (2,260 in peak year), 691 Canada goose (1,285 in peak year), and 314 common goldeneye (990 in peak year), along with lesser numbers of bufflehead, mallard, canvasback, long-tail duck, and American coot. Waterfowl abundance in the waters surrounding East and West Fire Island (located in Great South Bay-West) were surveyed separately for the years from 1986 through 1998. The records from this survey indicate average concentrations of 1,299 birds in the bay each year, including 496 greater and/or lesser scaup (4,900 in peak year), 209 (common, hooded, and/or red-breasted) merganser (1,800 in peak year), and 113 American black duck (387 in peak year). Based on these surveys, Great South Bay-West supports one of the largest concentrations of wintering waterfowl in New York State although flocks of waterfowl are not evenly distributed throughout the bay. Dabbling ducks, including American black duck and mallard, are concentrated in the shallow water and marsh areas behind the barrier islands and the Connetquot River Estuary. Generally, brant and geese feed in open water areas through midwinter, while later in spring (prior to migration), the birds feed extensively in the salt marshes. Waterfowl use of the bay during winter is influenced in part by the extent of ice cover each year. Concentrations of waterfowl also occur in the area during spring and fall migrations (March - April and October - November, respectively). Nearly all of Great South Bay-West is open to the public for waterfowl hunting, and the area supports regionally significant hunting pressure.

In addition to having significant bird concentrations, Great South Bay-West is an extremely productive area for marine finfish, shellfish, and other wildlife. Much of this productivity is directly attributable to the extensive salt marshes and tidal flats that line the mainland and barrier islands, the estuarine habitats around stream and river outlets on the mainland, and the sandy shoals and extensive eelgrass beds that characterize the open water areas of the bay. During eight years of surveys by the New York Department of Environmental Conservation, 85 species of fish have been identified, 40 of which occur regularly in the bay. Silversides, Atlantic menhaden, killifishes, and bay anchovy account for over 90% of all the fish caught and are the most abundant fish species in the bay. Atlantic silversides are found virtually everywhere throughout the bay. Bay anchovy is a main inhabitant of the mid-bay water column during its spawning time in late June and July. The killifishes include mummichog in the salt marshes, striped killifish over sandy habitats, and sheepshead minnow which occupy both the salt marsh and sandy habitats. Sticklebacks spawn in association with the submerged aquatic vegetation (SAV) in the spring and summer.

The abundance of forage species in Great South Bay-West contributes to its importance as a major nursery and feeding area (April - November, generally) for a number of estuarine-dependent, commercially and recreationally important species, including summer flounder, winter flounder, bluefish, striped bass, weakfish, tomcod and tuatog. The bay is particularly significant as a nursery area for the young-of-the-year and juvenile Hudson River striped bass and juvenile bluefish, as well as older striped bass during the summer months. The bay area also serves as an important nursery area for reef species, including tuatog, cunner, and black sea bass due to the cover and prey species provided by areas of vegetation. Fire Island Inlet is an especially significant component of the habitat; as a corridor for fish migrations, as a source for the exchange and circulation of bay waters, and as an area where feeding by many fish and wildlife species is concentrated (including adult striped bass and bluefish). The most abundant winter species in the bay, the plankton-eating American sandlance, is important as a forage

base for both predatory fish and roseate terns (E). As a result, the inlet is the most important foraging area for roseate terns (E) on western Long Island. As a result of the abundant fisheries resources in the bay (summer flounder especially), Great South Bay-West receives heavy recreational fishing pressure, of statewide significance. Commercial baitfisheries have been established in shoal areas near Fire Island Inlet.

Other common aquatic species occurring in Great South Bay-West include blue mussel, bay scallop, horseshoe crab, American eel, Atlantic croaker, northern kingfish, and northern puffer. Historically, the bay supported an economically significant shellfishery for northern quahog and the bay still remains a major spawning, nursery, and foraging area for blue crab. The entire bay area is inhabited by hard clams and the islands along the south shore support soft clams and ribbed mussels. Most of the bay waters are certified for shellfishing, resulting in a commercial and recreational harvest of local significance. Hard clam densities within the Babylon waters of Great South Bay averaged 3.35 clams per square meter from 2001 to 2002, with an average of 2.85 hard clams per square meter in certified waters. Landings data reported by the New York State Department of Environmental Conservation indicate an annual average of 2,371 total bushes of hard clams harvested within the Town of Babylon's waters within Great South Bay from 1993 to 2003. Clam Pond, on the north shore of Fire Island, also contains a population of bay scallops which have been reintroduced to the area. There are a number of shellfish aquaculture sites along the south shore of Long Island. Within Great South Bay-West, there are three small-scale shellfish hatcheries (grow-out rafts or floating upweller systems) and one significant hatchery.

Other wildlife species within the habitat include harbor seals that frequently use both sides of the Fire Island Inlet as haulout sites and are frequently sighted in the bay during the winter months. In recent years, sightings of grey seal have increased in this area as well. Sea turtles, including juvenile Atlantic ridley (E), juvenile loggerhead (T), and juvenile and adult green sea turtles (T), regularly use the Great South Bay. Diamondback terrapin reside among the salt marsh islands in the bay, and utilize sandy areas along the south shore for egg-laying.

Great South Bay-West has over 10,818 acres of submerged rooted aquatic vegetation beds, accounting for approximately 33% of the entire habitat area. These beds are dominated primarily by eelgrass with some wigeon grass (*Ruppia maritima*). Submerged aquatic vegetation beds provide spawning and foraging habitat for an array of mollusks, crustaceans, juvenile fish, as well as diving ducks. The distribution and abundance of benthic species in the bay's eelgrass community are likely controlled by a number of factors that include eelgrass stem density, water temperature and salinity, sediment type, predation, food supply, and human harvest.

IMPACT ASSESSMENT:

Any activities that would degrade water quality, increase turbidity, increase sedimentation, or alter flows, temperature, or water depths would affect the biological productivity of this area. All species would be adversely affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity or sediment loading, non-point source run-off, waste disposal (including vessel wastes), and stormwater runoff. Efforts should be made to improve water quality in the bay, including the reduction or elimination of discharges from vessels and upland sources, effective oil and toxic chemical spill prevention and control programs, upgrading of wastewater treatment plants, enactment of pet waste ordinances to reduce coliform contributions to the bay, and the implementation of erosion control and stormwater pollution prevention best management practices. Vegetated upland buffer zones (e.g. wetlands, dunes, and forested areas) should be protected or

established to reduce non-point source pollution and sedimentation from upland sources.

Alteration of tidal patterns in Great South Bay-West, by modification of inlet configurations or other means (e.g., sediment removal by dredging, channelization, bulkheading), would have negative impacts on the biotic communities present. No new navigation channels should be excavated within the area. Dredging to maintain existing boat channels in the bay should be scheduled in between September 15 and December 15 to minimize adverse effects on aquatic organisms. Unregulated dredged material placement in this area would be detrimental to the habitat, but such activities may be designed to maintain or improve the habitat for certain species of wildlife.

Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in areas not previously disturbed by development (e.g., natural salt marsh, tidal flats, or shallows), would result in the loss of productive areas which support the fish and wildlife resources of Great South Bay -West. Elimination of salt marsh and intertidal areas, through loss of intertidal connection, ditching, excavation, or filling, would result in a direct loss of a valuable habitat. Restoration of previously connected portions of the habitat, including the removal of structures (e.g. bulkheads, groins, jetties) which disrupt natural sedimentation and deposition patterns and physically alter the habitat may be beneficial. Construction of new and maintenance of existing erosion control structures which interfere with natural coastal processes should be carefully evaluated for need and where possible, non-structural solutions should be utilized.

Unrestricted use of motorized vessels, including personal watercraft, in shallow waters can have adverse effects on the benthic community, and on fish and wildlife populations through resuspension of seafloor sediments and through shoreline erosion which may reduce water clarity and increase sedimentation. Use of motorized vessels should be controlled (e.g., no wake zone, speed zones, zones of exclusion) in and adjacent to shallow waters and adjacent wetlands. Docks, piers, catwalks, or other structures may be detrimental to submerged aquatic vegetation (SAV) beds through direct or indirect effects from shading, mooring chain scarring, and other associated human uses. Where environmental parameters are appropriate, opportunities for restoration of SAV beds may exist. Any restoration of SAV beds should utilize the best available science and implement proper monitoring protocols.

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 significant impact on juvenile (and adult, in some cases) fish concentrations, through impairment or entrainment. Activities that would enhance migratory, spawning, or nursery fish habitat, particularly where an area is essential to a species' life cycle or helps to restore a historic species population would be beneficial. Where appropriate, hydrological modifications (e.g. dams, dikes, channelization, bulkheading, sedimentation, etc.) should be mitigated or removed, including the rejoining of formerly connected tributaries, and the removal of obstructions or improvements to fish passage.

Nesting birds inhabiting the islands, marshes and barrier beaches of Great South Bay -West 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 marsh islands 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) and natural predators may also occur, and predator control should be implemented where feasible. Fencing and/or annual posting of the bird nesting area should be provided to help protect the nesting bird species.

Activities to protect or restore wetland habitat in Great South Bay -West, consistent with best

management practices, (including the restoration of historic tidal regime, planting of native vegetation, control of invasive species, etc.) may enhance habitat values for fish and wildlife species.

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.

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Town of Islip
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Significant Coastal Fish and Wildlife Habitats

Great South Bay - West (In Part) part 1 of 7

Jones Beach East

South Oyster Bay (In Part)

Tobay Sanctuary (In Part)

New York State Department of State

Division of Coastal Resources

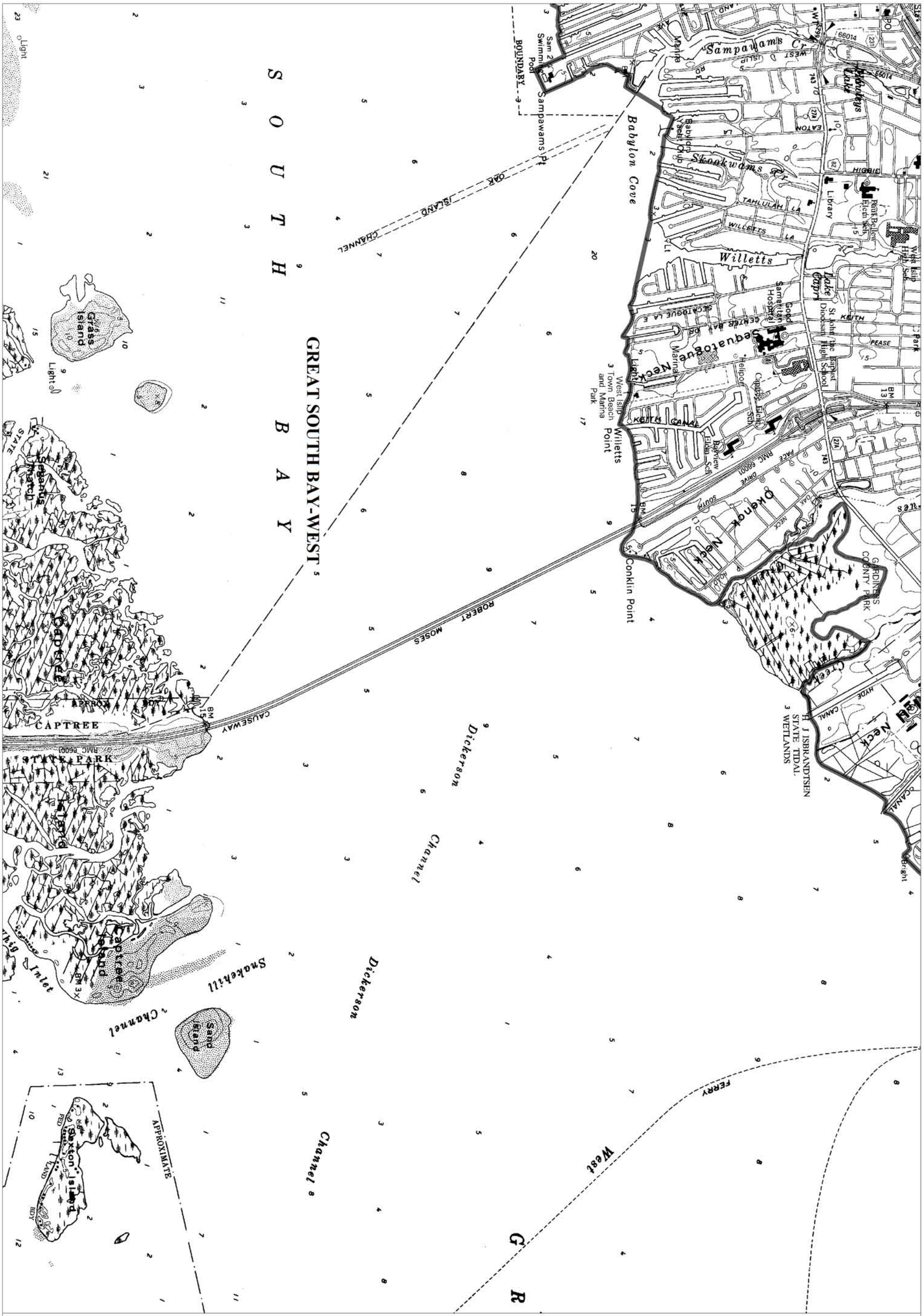

G R E A T S O U T H B A Y
GREAT SOUTH BAY-WEST
JONES BEACH EAST
DEMOCRAT POINT
Little Neck
Strongs Point
Santapogue Point
Bergan Point
Venetian Shores Park
Marinas
Sampawams Pt
BERGENS POINT COUNTY GOLF COURSE
Waste Treatment Facility
APPROXIMATE BOUNDARY
OAK ISLAND CHANNEL
FOX CREEK CHANNEL
EAST WEST CHANNEL
ROBERT MOSES
Grass Island
Oak Island
Sexton Island
Captree
Cedar Island
Tidal Flat
Light
OCEAN PARKWAY
STATE BOAT CHANNEL
Oak Beach
Cedar Overlook Beach
Cedar Beach
Golf Course
Parking
Gilgo
Democrat
Point
F I R E I S L A N D
Tidal Flat

0 2000 feet

Significant Coastal Fish and Wildlife Habitats

Great South Bay - West(In Part)
part 2 of 7
Jones Beach East (In Part)
Democrat Point (In Part)

New York State Department of State
Division of Coastal Resources



Significant Coastal Fish and Wildlife Habitats

New York State Department of State

Division of Coastal Resources

Great South Bay - West(In Part)
part 3 of 7

0 2000 feet

0 2000 feet

Significant Coastal Fish and Wildlife Habitats

Great South Bay - West(In Part)

part 4 of 7

New York State Department of State

Division of Coastal Resources

SEATUCK NATIONAL WILDLIFE REFUGE

Champlin

South Shore Town Nature Center

East Islip Marina Park

Quinnuck Creek

HECKSCHER STATE PARK

Water

Campground

Marina

Parking

Boat Launch

Islip Town Beach

Town Beach

Light

West Beach

Overlook Beach

Nicoll Point

NICOLL BAY

APPROXIMATE BOUNDARY

FERRY (SEASONAL - PASSENGER ONLY)

North Channel

I S L I P

GREAT SOUTH BAY-WEST

G R E A T S O U T H B A Y

GREAT SOUTH BAY -EAST

B R O O K L A V E N

Channel

Range

0 2000 feet

Significant Coastal Fish and Wildlife Habitats

Great South Bay - West (In Part)
part 5 of 7
Great South Bay - East (In Part)

New York State Department of State
Division of Coastal Resources

FERRY (SEASONAL – PASSENGER ONLY)

North Channel

FERRY

I S L I P

G R E A T S O U T H B A Y

GREAT SOUTH BAY-WEST

GREAT SOUTH BAY -EAST

B R O O K H A V E N

Channel

FERRY (SEASONAL – PASSENGER ONLY)

Range

Channel

East

FERRY

Fire Islands

The Hassock

West Fire Island

Whad

Tidal Flat

Penny Island

Money Island

East Fire Island

FIRE ISLAND NATIONAL SEASHORE

FERRY (SEASONAL – PASSENGER ONLY)

BOUNDARY

Marina

Lt

Point o' Woods

Fire Sta

Ocean Bay Park

Seaview

Ocean Beach

Hall

Fire Sta

Woodhull

Robbins Rest

FIRE ISLAND BEACH

Atlantique

Lonesville

Dunewood

Atlantique Park

Atlantique Beach

Fair Harbor

Clam Pond

Light

Sidewalk

Hall

Farm Shoals

Tidal Flat

BOUNDARY

0 2000 feet

Significant Coastal Fish and Wildlife Habitats

Great South Bay - West(In Part)
part 6 of 7
Great South Bay East (In Part)

New York State Department of State

Division of Coastal Resources

Significant Coastal Fish and Wildlife Habitats

Great South Bay - West (In Part)
part 7 of 7
Democrat Point (In Part)

0 2000 feet

New York State
Department of State

Division of
Coastal Resources

GREAT SOUTH BAY-WEST

DEMOCRAT POINT