

# COASTAL FISH & WILDLIFE HABITAT RATING FORM

Name of Area: **Carmans River**  
 Designated: **March 15, 1987**  
 County: **Suffolk**  
 Town(s): **Brookhaven**  
 7½' Quadrangle(s): **Bellport, NY; Middle Island, NY**

<u>Score</u>	<u>Criterion</u>
<b>25</b>	Ecosystem Rarity (ER) One of only four major riverine ecosystems on Long Island, and bordered by extensive undeveloped lands.
<b>37.5</b>	Species Vulnerability (SV) Osprey (T) nesting and feeding area; mud turtle (T) nesting confirmed in 1984. Northern barrier (T) also use the area, but the importance of the area to the species is not well documented. Additive division: $25 + 25/2 = 37.5$ .
<b>9</b>	Human Use (HU) Recreational fishing for brook trout and brown trout attracts anglers from throughout Long Island; birdwatching important at the county level.
<b>9</b>	Population Level (PL) One of the five streams on Long Island that support concentrations of sea-run brown trout and wild brook trout.
<b>1.2</b>	Replaceability (R) Irreplaceable.

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SIGNIFICANCE VALUE =  $[(ER + SV + HU + PL) \times R] = \mathbf{97}$

\*\*\*SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT\*\*\*

PROJECT DESCRIPTION

CARMANS RIVER

LOCATION AND DESCRIPTION OF HABITAT:

The Carmans River is located in central Long Island, extending approximately ten miles from near the hamlet of Middle Island to Bellport Bay (part of Great South Bay), in the Town of Brookhaven, Suffolk County (7.5' Quadrangles : Bellport, N.Y.; and, Middle Island, N.Y.). The fish and wildlife habitat includes approximately eight miles of freshwater river (from the headwaters in Cathedral Pines County Park south to the Sunrise Highway) and approximately two miles of tidal river from the Sunrise Highway to Bellport Bay. The freshwater segments vary from 10 to 30 feet in width and up to 10 feet in depth. There are four dams along the upper sections of the river located at Upper Mill Pond, Lower Mill Pond, Southaven Park, and the Sunrise Highway. Vegetation along the freshwater sections includes pine-oak forest and deciduous forested wetlands. Below the Sunrise Highway, the river widens and is bordered on both sides by extensive salt marshes, much of which is in the Wertheim National Wildlife Refuge. All lands within the Wertheim National Wildlife Refuge are federally excluded from the New York coastal area. The federally excluded portions of the habitat are marked on the boundary map. The Carmans River drains approximately 71 square miles and has an average annual discharge of about 25 cubic feet per second. The land area is mostly undeveloped park and private land and there is only minor residential and commercial development within the watershed.

FISH AND WILDLIFE VALUES:

The Carmans River is one of only 4 relatively large, undisturbed, riverine ecosystems on Long Island. Despite the presence of small dams on the river, it remains an outstanding fish and wildlife habitat in the region. All of the river encompassed by the habitat has been designated by New York State as either a "Scenic River" or a "Recreational River" (under Article 15, Title 27 of the Environmental Conservation Law) to encourage preservation and restoration of its natural scenic and recreational qualities. The tidal segment of the Carmans River is somewhat unique on Long Island in that it has extensive salt marshes on both sides of the river. This habitat is important to a great diversity of fish and wildlife species throughout the year. During the spring and summer months, the Carmans River provides suitable nesting habitat for osprey (T). Three pair of osprey have nested along the upper beaches of the river since at least 1983. Other bird species which utilize the area but are not confirmed nesters include: rough-legged hawk, broad-wing hawk, red-tail hawk, northern harrier (T), and marsh wren. The river is frequented by many species of waterfowl in the fall and winter including canvasback, hooded merganser, ruddy duck, redhead, northern shoveler, pintail, gadwall, American wigeon, black duck and mallard. Birdwatching along the river is significant in Suffolk County.

Other wildlife species which use the area include a variety of mammals, such as white tailed deer, eastern cottontail, gray squirrel, racoon, opossum, and to a lesser extent - red fox, woodchuck, long-tailed weasel, mink, and muskrat. The Carmans River watershed also provides habitat for various reptiles and amphibians including mud turtle (T) in the tidal portion and the uncommon four-toed salamander in the upper segments.

The freshwater and tidal portions of the Carmans River support over 40 species of fish. Freshwater fish in the river and ponds include: brook trout (naturally reproducing population), brown trout, rainbow trout, yellow perch, white perch and carp. New York State also stocks trout in the river each year. Large numbers of alewife spawn during the spring below the Southaven Dam; this is one of the few documented alewife spawning areas on Long Island. Sea-run brown trout occur in the tidal segment below the Sunrise Highway during their fall spawning period (September - November) providing a recreational fishery of regional significance. Anglers from throughout Long Island are attracted to the area for brook trout fishing. Blue claw crab occurs in the salt marshes near the mouth of the river.

## IMPACT ASSESSMENT:

Any activity that would substantially degrade water quality, increase temperature or turbidity, alter water depths or reduce flows, would adversely affect the fish and wildlife along the Carmans River. The alewife would be especially sensitive during spring spawning (April - July) and the sea-run brown trout would be especially sensitive during their fall spawning period (September - November). Additional barriers to fish migration whether physical or chemical would have significant effects on biological resources of the Carmans River. Clearing of natural vegetation or bulkheading along the stream could also affect the habitat. Elimination of salt marsh and intertidal areas, through excavation or filling, would result in a direct loss of valuable habitat area. Discharges of stormwater runoff containing sediments or other pollutants (including septic leachate, herbicides, and fertilizers) may also result in adverse impacts on the Carmans River fish and wildlife habitat. Increased public access to the area may be desirable, but any such developments must be planned to avoid valuable natural areas that have not previously been disturbed.

## **KNOWLEDGEABLE CONTACTS:**

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# Significant Coastal Fish and Wildlife Habitats

Carmans River (In Part)

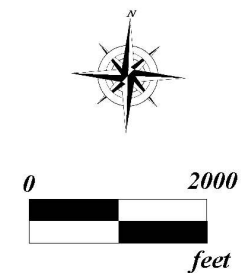
part 1 of 3

Beaverdam Creek

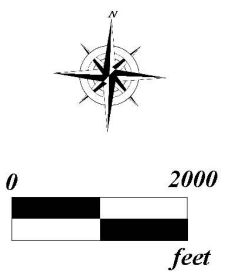
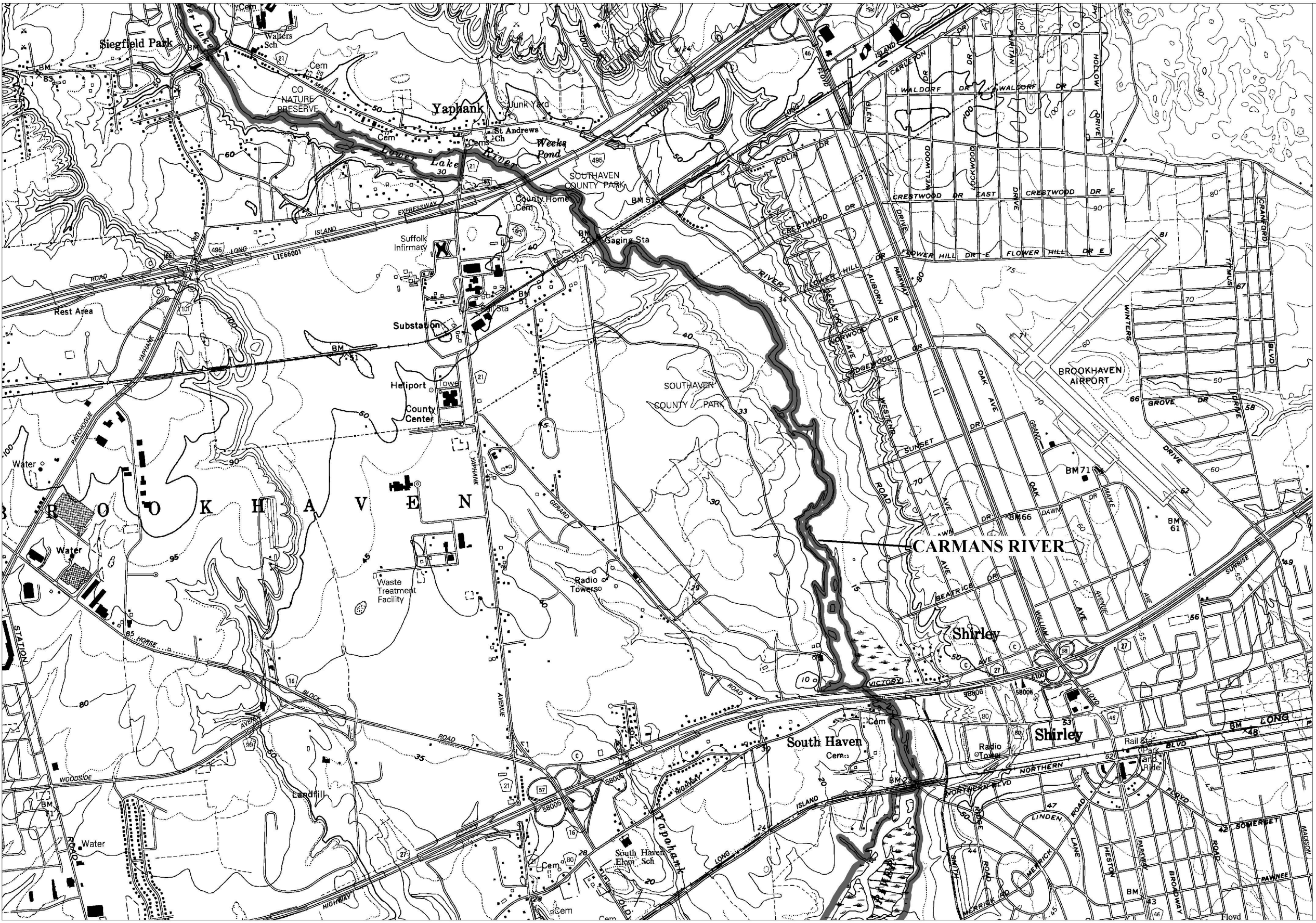
Great south Bay - East (In Part)

New York State  
Department of State

Division of  
Coastal Resources



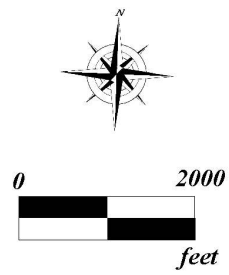




Significant Coastal Fish and Wildlife Habitats

Carmans River (In Part)  
part 2 of 3





Significant Coastal Fish and Wildlife Habitats

Carmans River (In Part)  
part 3 of 3

