

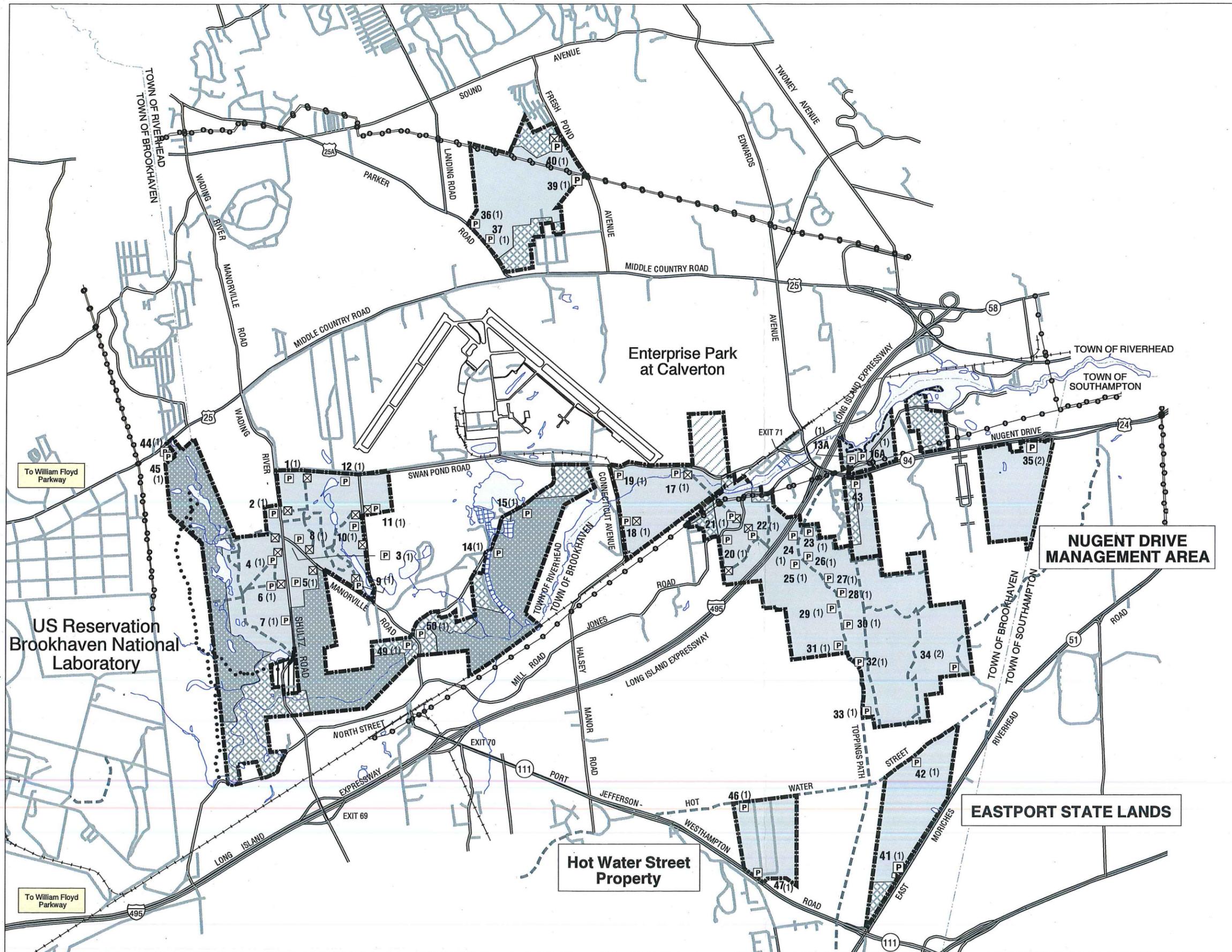


Peconic Headwaters Management Area

The Peconic Headwaters Natural Resources Management Area (PHNRMA) UMP provides the basis for managing the Otis Pike Preserve and several other parcels of State land within the Long Island Central Pine Barrens Preserve core area. The planning unit consists of approximately 5,000 acres in the unincorporated areas of the Towns of Riverhead and Brookhaven, County of Suffolk. The area is approximately sixty five (65) miles east of New York City, about midway between the north and south shores of Long Island. The plan includes recommendations to protect the area's diverse forest, grassland, wetland and riverine communities while providing compatible outdoor recreational opportunities.

Requests for copies of the UMP may be faxed to: DEC Forestry at (631) 444-0272 ☎, or mailed to: NYS DEC Forestry, SUNY @ Stony Brook, 50 Circle Road, Stony Brook, NY 11790-3409.

OTIS PIKE PRESERVE Cooperative Hunting Area



LEGEND

- Gate
- Parking area
- number (1) indicates quota
- A indicates Archery only
- Town boundary
- Managed area boundary
- Interstate
- Major road
- Local road
- Minor road
- Dirt road
- Foot trail
- Utilityline
- Railroad
- Stream
- DEC land
- Excluded area - no trespassing
- Restricted area - no hunting
- Cooperative hunting area
- Restricted area - no trespassing
- Waterbody
- Interstate highway
- State highway
- County highway



Prepared by the Habitat Inventory Unit July 2001.



Peconic Headwaters Natural Resource Management Area

(formerly Navy Cooperative Area / Otis Pike Preserve)

[View Eastport Conservation Area Mountain Biking Map](#) || [View Eastport Conservation Area Mountain Biking Map in PDF \(212 KB\)](#)

[View Hunting Map \(eastern portion\)](#) || [View Hunting Map in PDF \(294 KB\)](#)

[View Hunting Map \(western portion\)](#)

The Peconic Headwaters is composed primarily of mixed oak, pine barrens, and open habitat.

Access is by daily permit Nov. 1-Dec. 31 & January deer season (Reservations are required for weekends, holidays, and January deer season), and by seasonal permit Jan. 2-Oct. 31. Contact the DEC Region 1 Headquarters for more information.

Recreational Opportunities

Trails are provided for hiking, biking, and horseback riding. The area features excellent seasonal hunting. Many ponds provide ample opportunity for fishing and canoeing. Areas are available for dog training.

Consult hunting on Long Island for information on hunting opportunities and obtaining hunting permits.

Recreationists must observe regulations for use of NYSDEC managed lands in Suffolk County.

Eastport Conservation Area

The Eastport Conservation Area features a nine-mile mountain bike trail through 316 acres of oak-pine woods and open fields. Seasonal hiking and hunting are also available. Trail access is from County Road 51 (Moriches-Riverhead Road) immediately north of County Road 111.



Accessibility

The Peconic River at Edwards Avenue fishing and canoe access site has been designed to provide universal access to people of all abilities.

[Full listing of DEC's Accessible Recreation Destinations.](#)

Peconic River at Edwards Avenue

The six acre Peconic River at Edwards Avenue fishing and canoe access site is located at the eastern end of an impoundment of the Peconic River, known as Brown's Bog or Cranberry Bog, created by the Edwards Avenue Dam.

During the latter part of 1990's the Department acquired from The Nature Conservancy 5.4 acres consisting of impounded waters, marshy shoreline and the dam itself. The Department constructed the "Edwards Avenue Canoe Portage," a pair of stairs that allowed Peconic River paddlers to easily and safely portage around the dam. In 2005, the Department acquired an adjoining .5 acre parcel from Suffolk County, which has since been developed by DOT through its Environmental Initiative, to include

a parking lot and canoe launch. Fishing regulations and other information are posted on signs in the parking lot, which is located on the north side of Mill Road, just west of Edwards Avenue in the hamlet of Calverton.

The vegetated areas include mainly freshwater wetlands species such as red maple, tupelo, swamp azalea and buttonbush. The impoundment is a popular fishing spot for largemouth bass, chain pickerel, sunfish and catfish. The property is located in the Peconic River Wild, Scenic and Recreational River corridor and the Core Preservation Area of the Long Island Central Pine Barrens.

Edwards Avenue Site Recreational Activities

Hand launch of canoes and kayaks, portage, fishing. NYSDEC Managed Lands Access Permits are NOT required at this site.

Edwards Avenue Site Directions

I-495 (Long Island Expressway) to exit 71. North on Edwards Avenue a short distance, left on Mill Road, parking lot on right.

Peconic Headwaters Directions

Rt. 495 (L.I.E.) to exit 69 north. 2 miles north on Schultz Road. Permit station for property is located at the Ridge Conservation Area.

More about Peconic Headwaters Natural Resource Management Area:

Eastport Conservation Area Mountain Biking Map - Map of the mountain biking trails on the Eastport Conservation Area in Suffolk County.

Eastport Mountain Bike Trail Map - To provide the people of New York with the opportunity to enjoy all the benefits of the wildlife of New York State, now and in the future.

Otis Pike Preserve Cooperative Hunting Area Map (East) - Map of the Cooperative Hunting Area around the Otis Pike Preserve in Suffolk County.

Otis Pike Preserve Cooperative Hunting Area Map (West) - Map of the Cooperative Hunting Area around the Otis Pike Preserve in Suffolk County.



Peconic River Headwaters BCA Management Guidance Summary

Site Name: Peconic River Headwaters

State Ownership and Managing Agency: Department of Environmental Conservation

Location: Suffolk County, Towns of Brookhaven and Riverhead

Size of Area: 4267 acres

DEC Region: 1

General Site Information: This site consists of several parcels along the Peconic River. The majority of the property was formerly owned by the US Navy as a buffer around the Grumman Corporation operated aircraft development center in Calverton. The habitats range from ponds and riverine wetlands to upland grasslands/oldfields to pine barrens habitat on rolling terrain. This area lies within the core of the Long Island Pine Barrens and provides the largest areas of grassland habitat in state ownership on Long Island as well as the habitat supporting the only remaining population of ruffed grouse on Long Island.

Grasslands are found in 3 large blocks (>200 acres) adjacent to other large grassland areas on non-state-owned lands. Extensive wetland systems along the Peconic River include two chains of coastal plain ponds (a rare habitat type). Extensive areas of pine/oak forest including a large block that in conjunction with the surrounding county owned lands forms the core of the Long Island Pine Barrens

Breeding species of birds include grasshopper sparrow, whip-poor-will, vesper sparrow, yellow-breasted chat, common nighthawk, Cooper's hawk, ruffed grouse, northern bobwhite, plus upwards of 50 other more common species recorded on breeding season surveys. Migration and winter species include various raptors (northern harrier, possibly short-eared owl, Cooper's hawk, sharp-shinned hawk) and a wide variety of songbirds and waterfowl.

Vision Statement: Continue management activities to conserve the bird species and habitats in the area. Expand management to enhance bird populations where possible by restoring degraded habitats.

Key BCA Criteria: Diverse species concentration site, individual species concentration site, species at risk site (ECL §11-2001, 3. f,g and i.). Birds of interest include grasshopper sparrow (Special Concern), whip-poor-will (Special Concern), vesper sparrow (Special Concern), northern harrier (Threatened), short-eared owl (Endangered), and ruffed grouse (rare and on verge of extirpation on Long Island).

Critical Habitat Types: Grasslands, pitch pine-oak-heath woodlands and pitch pine-oak forest along with coastal plain ponds and riparian wetlands associated with the Peconic River headwaters.

Operation & Management Considerations:

- *Identify habitat management activities needed to maintain site as a BCA.*
Maintain grasslands and early successional habitats through mowing and prescribed fire.
Mowing and/or burning should be done outside the bird nesting season and should not impact

more than 30 percent of the habitat area of any one parcel. General guidelines would be to avoid mowing or burning from May 1-August 15, as directed in the Unit Management Plan (UMP). Treatment should be rotated from year to year with each area being treated at least once every three years to minimize invasion by woody vegetation.

- *Identify seasonal sensitivities; adjust routine operations accordingly.*
Dog trials/training currently allowed throughout the breeding season should be limited. Disturbance of nesting birds by dog training/trialing should be minimized during the peak of the breeding season (late May-mid July). The restrictions outlined in the UMP are a good start, but dogs should be kept out of all bird nesting habitat during the peak breeding season (May-July).
- *Identify state activities or operations which may pose a threat to the critical habitat types identified above; recommend alternatives to existing and future operations which may pose threats to those habitats.*
Lack of grassland management is allowing succession to convert open areas into pitch pine forest. Maintain grasslands and early successional habitats through active management.
- *Identify any existing or potential use impacts; recommend new management strategies to address those impacts.*
Overuse of wetland areas is degrading habitat and disturbing breeding birds. Dog trials during the breeding season is impacting reproduction. Restrict dog training/trial activities to non-nesting habitat during May-July. Monitor and possibly restrict other activities such as fishing or canoeing/kayaking if they begin to impact the nesting habitat or cause excessive disturbance. Efforts to reduce the illegal ATV activity are also needed.

Education, Outreach, Research Considerations:

- *Assess current access; recommend enhanced access, if feasible.*
Access is more than adequate at this time.
- *Determine education and outreach needs; recommend strategies and materials.*
Information kiosks listing rules of use are needed as well as a BCA info kiosk.
- *Identify research needs; prioritize and recommend specific projects or studies.*
Continue breeding quail surveys and integrate with a breeding bird survey.

Other Issues:

This site is also very well suited for designation as a Natural Heritage Area due to its many species and communities of special concern. The coastal plain ponds support a wide variety of threatened and endangered plants and animals as well as being a rare ecosystem type. This site is heavily used during most of the year by people hiking, horseback riding, and training dogs, as well as hunting and fishing. Portions of the property are stocked with pheasants during November and December and are heavily hunted at these times.

Contacts:

DEC Region 1 Office, 631-444-0345

Sources:

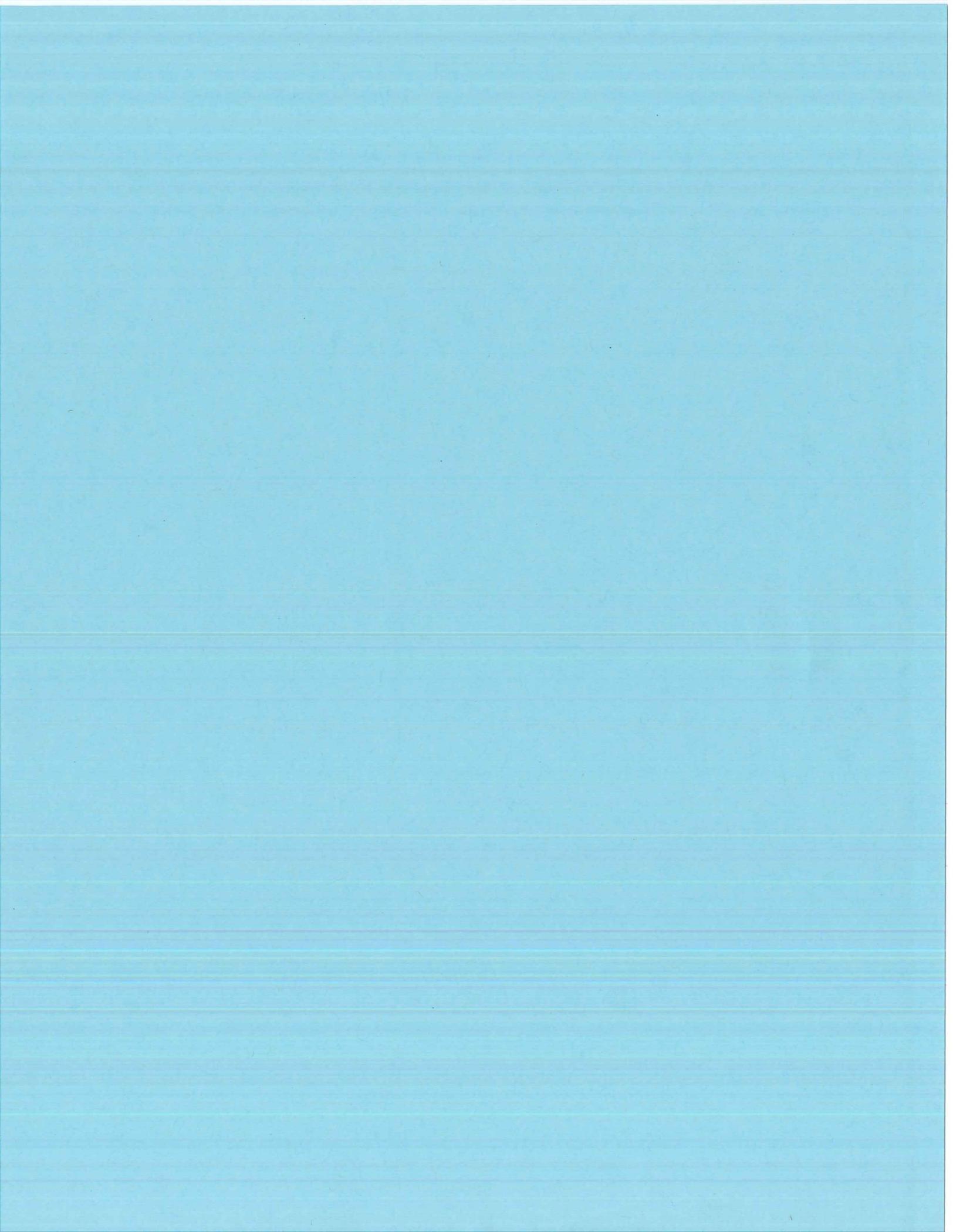
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Wells, J.V. 1998. *Important Bird Areas in New York State*. National Audubon Society, Albany, NY

Date BCA Designated: 9/25/06

Date MGS Prepared: 3/6/06; revised 8/2/06



**Northeast Coastal Areas Study
Significant Coastal Habitats**

Site 5 (NY)

Map

I. SITE NAME: Peconic River - Pinelands Complex

II. LOCATION: The headwaters of the Peconic River arise near Brookhaven National Laboratory and the community of Ridge in the heart of the central Long Island Coastal Plain pine barrens, or pinelands. Just east of the Laboratory, the river flows in a west to east direction past the Town of Riverhead and enters into Flanders Bay, a distance of about 12 miles (19 km). The pinelands in this area extend in a broad belt several miles in width north, south and west of the river.

TOWNS: Brookhaven, Riverhead, Southampton

COUNTY: Suffolk

STATE: New York

USGS 7.5 MIN QUADS: Moriches, NY 40072-77; Mattituck, NY 40072-85; Riverhead, NY 40072-86; Wading River, NY 40072-87; Middle Island, NY 40072-88

USGS 30x60 MIN QUAD: Long Island, East 40072-E1

III. GENERAL BOUNDARY: The boundary outline of this area is delineated on the accompanying map. Although the river itself begins a short distance west of Brookhaven National Laboratory in the Town of Brookhaven, just south of Ridge, the primary area of focus on the river is from its headwater ponds east and northeast of the Laboratory eastward for a distance of approximately 15 miles (24 km) to the river's terminus in Flanders Bay, between the two forks of eastern Long Island. The pinelands of eastern Long Island as a whole cover an area approximately 25 miles (40 km) in an east-west direction and 7-8 miles (12 km) in its widest dimensions in a north-south direction. The Peconic River bisects the pinelands into northern and southern sections, with the majority of the areas of interest and significance lying immediately adjacent to and south of the river.

At least three major areas of significance to fish and wildlife resources, unique plant communities or regional biological diversity can be recognized within this complex, but because of their functional and structural interrelatedness and proximity to each other, as well as the need to consider their management in the aggregate, they are grouped here as part of a greater ecological entity, the Peconic River-Pinelands complex. These areas are: 1) **Peconic River and Headwaters**; 2) **Dwarf Pine Plains**; and 3) **Bald Hills Pine Plains**. Each of these major areas, or macrosites as they are sometimes called, is delineated on the accompanying map. The approximate dimensions of this rectangular core area of significant habitats is 12 miles (19 km) in an east-west direction and 6 miles (10 km) in a north-south direction.

IV. OWNERSHIP/PROTECTED STATUS: Approximately half of the area is owned by Suffolk County and managed in cooperation with The Nature Conservancy, and the rest by multiple private landowners and the U.S. Government.

V. GENERAL HABITAT DESCRIPTION: Throughout most of its length, the Peconic River is a rather warm, slow-moving, naturally acidic, and nutrient poor freshwater stream ecosystem. In its upper reaches the river has a wilderness character, bordered by marshes dominated by such species as water willow (*Decodon verticillatus*), blunt manna-grass (*Glyceria obtusa*), tussock sedge (*Carex stricta*), and bluejoint grass (*Calamagrostis canadensis*), red maple (*Acer rubrum*) and Atlantic white cedar (*Chamaecyparis thyoides*) swamps, upland forests of pitch pine (*Pinus rigida*) (including excellent stands

of pine barrens) and white oak (*Quercus alba*), and a small number of houses. In this headwater area the river is generally very narrow, heavily vegetated, and bordered with a variety of bog plant species, including leatherleaf (*Chamaedaphne calyculata*), pitcher plant (*Sarracenia purpurea*), round-leaved sundew (*Drosera rotundifolia*), and several species of sphagnum or peat mosses. Further downstream, commercial and residential development increases as the river approaches the Town of Riverhead. Shallow, groundwater-fed Coastal Plain ponds, some formerly cultivated for cranberries (*Vaccinium macrocarpon*), are found throughout the headwaters area, many in pristine condition. These ponds are characterized by seasonally and annually fluctuating water levels with well-developed shoreline vegetation.

South of the Ronkonkoma Moraine, along the outwash plain, is the dwarf pine plains area where a pygmy forest of dwarf pitch pines and scrub or bear oaks (*Quercus ilicifolia*) forms the dominant vegetation. The canopy is generally less than 6 feet (2 meters) in height and often forms a dense thicket. Almost all of the cones produced by these pine trees are of the closed cone (serotinous) type, characteristic of pineland areas experiencing frequent wildfires. Soils in this area are extremely sandy and nutrient poor. The shrub and herb layers are generally dominated by ericaceous plants such as huckleberry (*Gaylussacia baccata*), bearberry (*Arctostaphylos uva-ursi*), blueberry (*Vaccinium pallidum*) and wintergreen (*Gaultheria procumbens*), as well as little bluestem (*Schizachyrium scoparium*). The groundcover frequently consists of a dense and diverse lichen flora.

Within the central pinelands is a large and undeveloped area marked by low, rolling hills of the Ronkonkoma Moraine which contains a dense pitch pine and oak (*Quercus coccinea*, *Q. rubra*, *Q. alba*, *Q. velutina*) forest with an understory dominated by scrub/bear oak and ericaceous shrubs (blueberries and huckleberry) in what is commonly called the Bald Hill Pine Barrens or Manorville Hills. The herbaceous layer is often sparse. The area is also characterized by having many kettlehole ponds.

VI. SIGNIFICANCE/UNIQUENESS OF AREA: The Peconic River is one of four major rivers on Long Island and much of its upper watershed remains relatively undisturbed. It is not only the longest river on Long Island, but the longest groundwater river in New York State. It has been nominated as a potential Wild and Scenic River by the U.S. Department of the Interior and is under review by the State of New York for designation as a "Wild, Scenic or Recreational River". The river is a productive warmwater fishery, with naturally reproducing populations of largemouth bass (*Micropterus salmoides*), chain pickerel (*Esox niger*), swamp darter (*Etheostoma fusiforme*) and banded sunfish (*Enneacanthus obesus*), the latter a native species and occurring here in one of only two localities in New York State and certainly the most significant. Many species of birds inhabit the wetlands bordering the river, particularly several species of special emphasis in the region, including Canada goose (*Branta canadensis*), American black duck (*Anas rubripes*), mallard (*Anas platyrhynchos*), American wigeon (*Anas americana*), pied-billed grebe (*Podiceps grisegena*) and American bittern (*Botaurus lentiginosus*). The headwaters of the Peconic River support a number of extremely rare natural communities in pristine condition, most notably Coastal Plain ponds. Because the water levels of the groundwater-fed Coastal Plain ponds fluctuate seasonally and annually, the composition of the pond shore vegetation varies with the water levels. During dry periods more substrate is exposed and whole assemblages of globally rare plants, mostly annuals, are abundant on the pond shores. Included in this group of rare plants are short-beaked bald-rush (*Psilocarya nitens*), slender arrowhead (*Sagittaria teres*), southern bladderwort (*Utricularia juncea*) and pink tickseed (*Coreopsis rosea*). In some years the Coastal Plain ponds dry up completely, making them uninhabitable for fish. This phenomenon makes them ideal breeding habitat for salamanders, including the regionally rare tiger salamander (*Ambystoma tigrinum*), found principally in the Long Island pinelands. The best New York example of a Coastal Plain Atlantic white cedar swamp is found in the Peconic River drainage. This globally rare natural community occurs in depressions on poorly drained organic soils of the Coastal Plain. Dominated by Atlantic white cedar, this community characteristically supports a number of rare butterflies and moths, including several rare and interesting

species such as Hessel's hairstreak (*Mitoura hesseli*) and Lemmer's noctuid moth (*Lithophane lemmeri*).

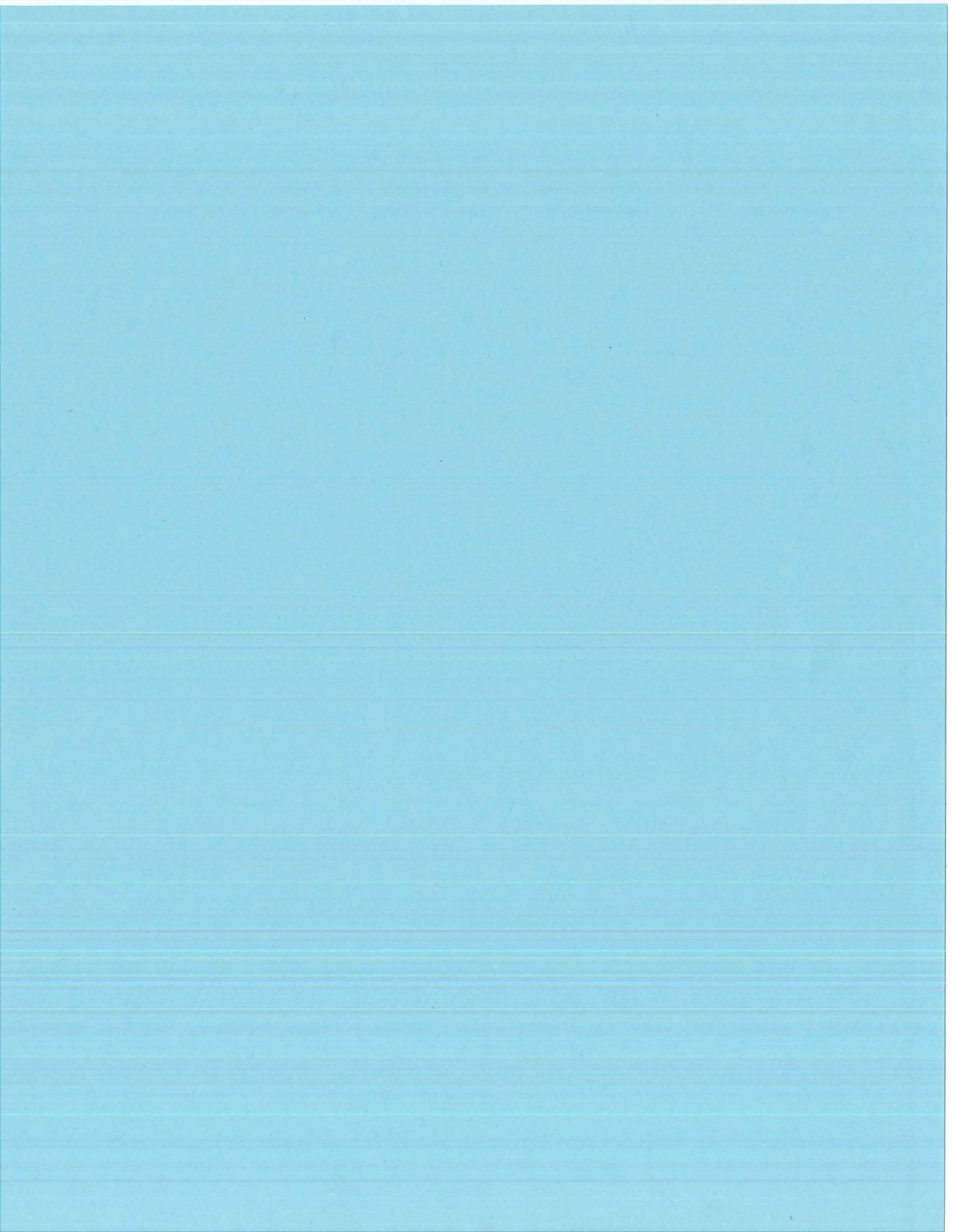
Dwarf pine plains are known from only three sites in the world: the New Jersey Pygmy Pine Plains, Shawangunk Mountain Dwarf Pine Plains, and the Long Island Dwarf Pine Plains. The Long Island site harbors several rare plant and animal species including one of the largest and best populations of the rare pine barrens buck moth (*Hemileuca maia*) in New York. A breeding population of at least three pairs of northern harriers (*Circus cyaneus*) within the dwarf pine plains is of regional interest and significance.

VII. THREATS: The lowermost reaches of the Peconic River are commercially and residentially developed, and development continues to encroach upstream. Although massive suburbanization has not yet hit the Peconic pineland region, some areas are already threatened with subdivisions and other development schemes. Increased development of the region could degrade water quality, increase turbidity, alter the hydrology and increase discharges of pesticides or hazardous materials into the river or ponds to the detriment of aquatic species. Eutrophication from fertilizers, septic tanks, road runoff and farmlands is of considerable concern, as such over-enrichment of naturally acidic and nutrient-poor waters could lead to invasions and dominance by exotic, nutrient-loving weedy plants and displacement of the native flora. Elimination or disturbance of adjacent wetland and forest habitat would adversely impact rare or uncommon wildlife and plant species. Suppression of wildfires - so essential to the maintenance of the pine barrens ecosystem - could result in marked vegetation changes and loss of the characteristic pinelands biota, including many of its rare species.

VIII. CONSERVATION CONSIDERATIONS: This remarkable river and pinelands complex, particularly its headwater ponds and pygmy pine plains, is of high regional significance and should be protected and managed to the greatest extent possible to ensure the perpetuation of its unique natural communities and rare species, many of which are not found elsewhere in the region, or as well-developed or in such concentrations. Protection of water quality in the river and its tributaries and the maintenance of its resident fish populations should be given high priority by Federal and State regulatory agencies. In addition to developing cooperative conservation and management agreements between or among private landowners, the State, County and Town governments and The Nature Conservancy, acquisition of certain headwater areas and ponds should be considered as an option in certain areas imminently threatened with development, as should also regulatory and zoning options. Fire management plans need to be developed and implemented over the whole of the region, but especially in the Bald Hill and Pygmy Plain areas.

[Map](#)

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COASTAL FISH & WILDLIFE HABITAT ASSESSMENT FORM

Name of Area: **Peconic River**
 Designated: **March 15, 1987**
 Date Revised: **May 15, 2002**
 County: **Suffolk**
 Town(s): **Brookhaven, Riverhead, Southampton**
 7½' Quadrangle(s): **Wading River, NY; Moriches, NY; Riverhead, 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: The longest river on Long Island; the Peconic is a relatively large, slow moving, acidic river with a very undeveloped watershed. Unique on Long Island.

Calculation: $\sqrt{(25 \times 64)} =$ 40

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: Tiger salamander (E), banded sunfish (T), eastern spadefoot toad (SC), eastern hognose snake (SC), spotted turtle (SC), southern sprite damselfly (T), coastal barrens buckmoth (SC), painted bluet (T), and pine barrens bluet (T) present.

Calculation: $36 + (25/2) + (25/4) + (25/8) + (25/16) =$ 59.44

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 fishing for warmwater species attracts anglers from throughout Long Island.

9

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: One of only 2 locations in the state supporting banded sunfish. One of only 4 major documented alewife spawning areas in Peconics region.

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] = 124.44

Significance = HI x R =

NEW YORK STATE
SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT
NARRATIVE

PECONIC RIVER

LOCATION AND DESCRIPTION OF HABITAT:

The Peconic River is located in central Long Island, in the Towns of Brookhaven, Riverhead, and Southampton, Suffolk County (7.5' Quadrangles: Wading River, NY; Moriches, NY; and Riverhead, NY). The river flows in a west to east direction, beginning near Brookhaven National Laboratory, and emptying into Flanders Bay. The fish and wildlife habitat is the freshwater portion of the river, which extends approximately 15 miles, from County Route 63 in the center of Riverhead, to the headwaters in Peconic River County Park. The coastal plain pond complexes to the north of the river are also included in this habitat, encompassing Horn Pond, Round Pond, Peasys Pond, Woodchopper's Pond, Duck Pond, Sandy Pond, Grassy Pond, Twin Ponds, Jones Pond, Zeeks Pond, North Pond, Prestons Pond, Forest Pond, Linus Pond, Fox Pond, Sandy Pond, and Swan Pond. This stretch of the river is a warm, slow-moving, naturally acidic, and nutrient poor, freshwater stream ecosystem. Early settlers dammed the river in many places to create mill ponds, and to control water levels for cranberry farming; today, there are a number of small ponds and large impoundments on the main river channel and its tributaries. The rare coastal plain pond and pond shore communities, as well as coastal plain poor fen and pine barrens swamp, occur at the headwaters of the river. Above Connecticut Avenue, the river winds through the undeveloped Peconic River County Park, and has a wilderness character, bordered by marshes, swamps, upland forest (including pine barrens, pitch pine-oak forest, and red maple-black gum swamp), and a small number of houses. In this stretch, the Peconic River is generally very narrow, heavily vegetated, and bordered with a variety of bog plant species. Between Connecticut Avenue and Peconic Lake (also called Forge Pond), the river is similar in nature to the upstream segment, but is bordered by greater numbers of residences and farms. The river widens below Peconic Lake, and commercial and residential development along the shore increases considerably as one approaches Riverhead. Average river discharge at Riverhead is approximately 37 cubic feet per second, from a total drainage area of approximately 75 square miles. River flows are regulated to some extent by pond discharges and by a discharge of treated effluent from Brookhaven National Laboratory. The Peconic River is part of the Central Pine Barrens Core Preservation Area.

FISH AND WILDLIFE VALUES:

The Peconic River is one of four major rivers on Long Island, and nearly all of the upper watershed area remains in a relatively undisturbed condition. This is especially rare on Long Island. The Peconic River has been designated as a candidate Wild and Scenic River by the U.S. Department of the Interior, because it represented the last significant undeveloped river within the unique Long Island pine barrens area; New York State designated it as a Scenic and

Recreational River under the Wild, Scenic, and Recreational Rivers System Act (under Article 15, Title 27 of the Environmental Conservation Law) to encourage preservation and restoration of its outstanding natural resource qualities. The Peconic River and its estuary were also designated as an estuary of national significance by the U.S. EPA in 1992, part of the National Estuary Program. The river supports extensive areas of bog and freshwater marsh communities, which serve as valuable fish and wildlife habitats in the region.

The entire length of the Peconic River is a productive habitat for warmwater fisheries. Some of the more abundant species which naturally reproduce here include largemouth bass, chain pickerel, bluegill, carp, brown bullhead, yellow perch, black crappie, pumpkinseed, and white perch. The New York State Conservation Department stocked walleye, bass, and yellow perch in the river (below Forge Pond, primarily) during the 1930's. Currently, natural reproduction sustains the fisheries resources. Above Connecticut Avenue, the Peconic River is one of only two localities in New York State supporting populations of banded sunfish (T), and is the most significant area for the species in New York State. The banded sunfish has habitat requirements that restrict it to sluggish, heavily vegetated, acidic waters of the coastal plain, but little is known of the species' life history and environmental tolerances. The banded sunfish is one of the truly native species of Long Island. The Peconic River is one of four documented alewife spawning habitats on Long Island, extending upstream to the dam immediately west of Peconic Avenue.

The Peconic River is an outstanding habitat for a variety of wildlife. Many species of birds inhabit the wetlands bordering the river, including Canada goose, American black duck, mallard, wood duck, American wigeon, pied-billed grebe, green-winged teal, American bittern, mute swan, and great blue heron. Other species found in the area include white-tailed deer, mink, raccoon, woodcock, spotted turtle (SC), stinkpot, and little brown bat. Tiger salamander (*Ambystoma tigrinum*, E) are found in the coastal plain pond complexes adjacent to the Peconic River. The New York Natural Heritage Program documents the presence of coastal barrens buckmoth (*Hemileuca maia*, SC) in the Peconic River area.

The coastal plain pond communities of the Peconic River headwaters also support rare insect species including lateral bluet (*Enallagma laterale*), painted bluet (*Enallagma pictum*, T), and pine barrens bluet damselflies (*Enallagma recurvatum*, T), southern sprite damselfly (*Nehalennia intergricollis*, T), violet dart (*Euxoa violaris*), and pink sallow (*Psectraglaea carnosus*). Coastal plain pond habitats sometimes dry up completely, making them uninhabitable for fish but providing favorable habitat for rare flora and fauna, including the endangered tiger salamander. Long Island is the northern limit of the tiger salamander in the eastern part of its known range, and the Long Island Pine Barrens and Peconic River area is a stronghold for this species, with over 60 known occurrences. Other amphibians using these ponds include spotted salamander, common red-backed salamander, wood frog, northern spring peeper, and eastern spadefoot toad (*Scaphiopus holbrookii*, SC). Regionally rare reptile species found within the habitat complex include spotted turtle (SC) and eastern hognose snake (SC).

Due to the abundant fisheries resources in the Peconic River, it supports a recreational freshwater fishery of regional significance. Access to the river is generally limited by the dense vegetative border and private land ownership. The New York State Department of Environmental

Conservation currently manages 3 fishing access points on the river, and acquisition of a fourth was proposed in 1984. Increasing numbers of anglers and other recreationists are exploring the river by canoe. Peconic River County Park provides access for local birdwatchers, naturalists, and school groups, to enjoy the river's fish and wildlife resources.

The rare coastal plain pond and pond shore communities occur at the headwaters of the river. Plants found in the Peconic River habitat include the following: quill-leaf arrowhead (*Sagittaria teres*, E), knotted spikerush (*Eleocharis equisetoides*, T), long-tubercled spikerush (*Eleocharis tuberculosa*, T), short-beaked bald-rush, long-beaked bald-rush, horned beaked-rush, reticulated nutrush, slender blue flag, pine barren bellwort (*Uvularia puberula* var *nitida*, E), slender crabgrass, panic grass, bog aster, rose coreopsis, northeastern smartweed, Nuttall's lobelia, Carolina redroot (*Lachnanthes caroliana*, T), comb-leaved mermaid-weed, two-flowered bladderwort, fibrous bladderwort, rush bladderwort, small floating bladderwort, globe-fruited ludwigia, golden dock (*Rumex maritimus* var *fueginus*, T), primrose violet, and pine barren gerardia. Above Connecticut Avenue a variety of bog plant species are found, including sphagnum and peat mosses, leatherleaf, sundews, highbush blueberry, sweet pepperbush, buttonbush, red maple, tupelo, and Atlantic white cedar.

IMPACT ASSESSMENT:

Any activity that would degrade water quality, increase turbidity or sedimentation, or alter flows in the Peconic River would have an impact on the fish and wildlife species using the area. Discharges or runoff of sewage effluent, pesticides, or other hazardous materials into the river would be detrimental to many of the resident aquatic species and also to the potential human uses of those resources. Total phosphorus levels in the upper Peconic are unusually high, but no specific source has been linked to this phenomenon to date. Increased development of the region would degrade water quality, increase turbidity, alter hydrology, and increase discharges of pesticides or hazardous materials into the river or ponds. Significant localized contamination of groundwater with petroleum products and organic solvents has occurred near major facilities such as Brookhaven National Laboratory. Eutrophication caused by runoff from fertilizers, septic tanks, roads, farmlands, and lawns is of considerable concern, as such over-enrichment of naturally acidic and nutrient-poor waters could lead to invasions and dominance by exotic, nutrient-loving, weedy plants and concurrent displacement of the native flora.

The lowermost reaches of the Peconic River (currently outside the habitat boundary) are commercially and residentially developed, but development continues to encroach upstream. Some areas of the adjacent Pine Barrens are threatened with subdivision and development. Increased public access to the area may be desirable, but such developments must be planned to avoid valuable natural areas that have not previously been disturbed. The Town of Southampton lists the Peconic River and adjacent wetlands as a top priority for land acquisition and planning to control growth and development.

Impediments to movement and migration of aquatic species through the river corridor should be prohibited, and plans to mitigate the impact of existing structures should be developed. In 1995 the New York State Department of Environmental Conservation lifted spawning alewife over the

first dam. Survival and growth of the young fish will be monitored to determine the feasibility of providing additional fish passage in the river. Other commercially and recreationally harvested fish and waterfowl should be monitored to ensure that optimum sustainable populations are maintained over the long term.

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.

Elimination or disturbance of adjacent wetland and forest habitats would adversely affect certain wildlife species that are relatively uncommon on Long Island, and would diminish the existing wilderness character of the Peconic River. Human disturbance of wetlands includes illegal dumping of household and commercial waste, the use of all-terrain vehicles on trails and shorelines, disruption of pond shores (including raking, mowing, trampling, or clearing of native vegetation), and destruction or removal of plants as a result of development or poor land management. Significant changes in the water quality or hydrologic regime of coastal plain ponds would result in the loss of rare species and degradation of the ecological character and value of pond and pond shore communities. Illegal restocking of these ponds with non-native species by local anglers results in displacement of native species. Permanent drawdown of the water table would result in the invasion of woody species into the pond shore zones, while prolonged flooding would inhibit the germination and growth of pondshore plants. Introduction of exotic plant species from the backyard aquarium trade (such as the already present parrot's-feather), from gardens and commercial landscaping, and other sources threaten the natural diversity of aquatic and riverine wetland plant species. 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.

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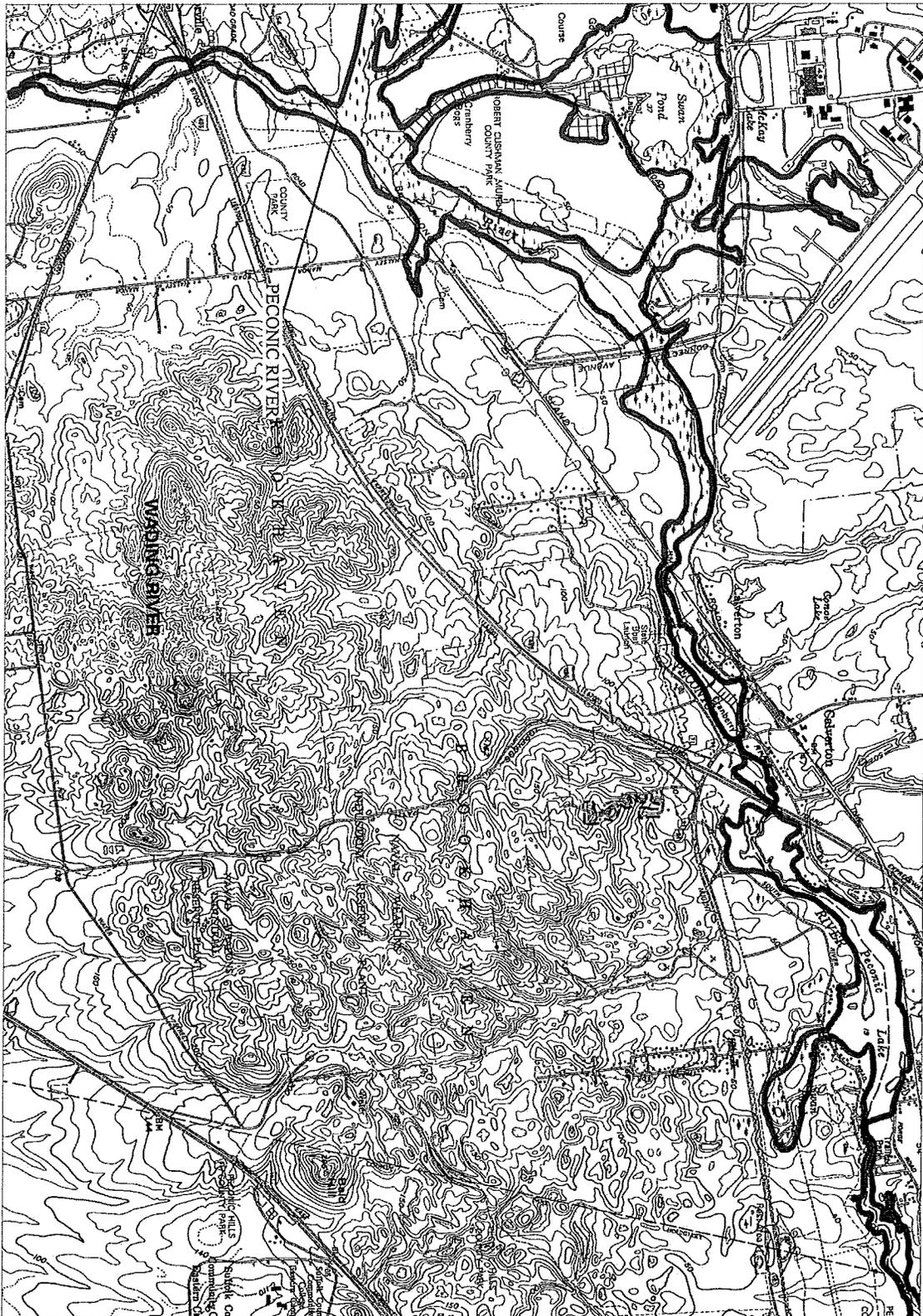


Significant Coastal Fish and Wildlife Habitats

New York State
 Department of State
 Division of
 Coastal Resources

Peconic River (In part)
 Part 1 of 3





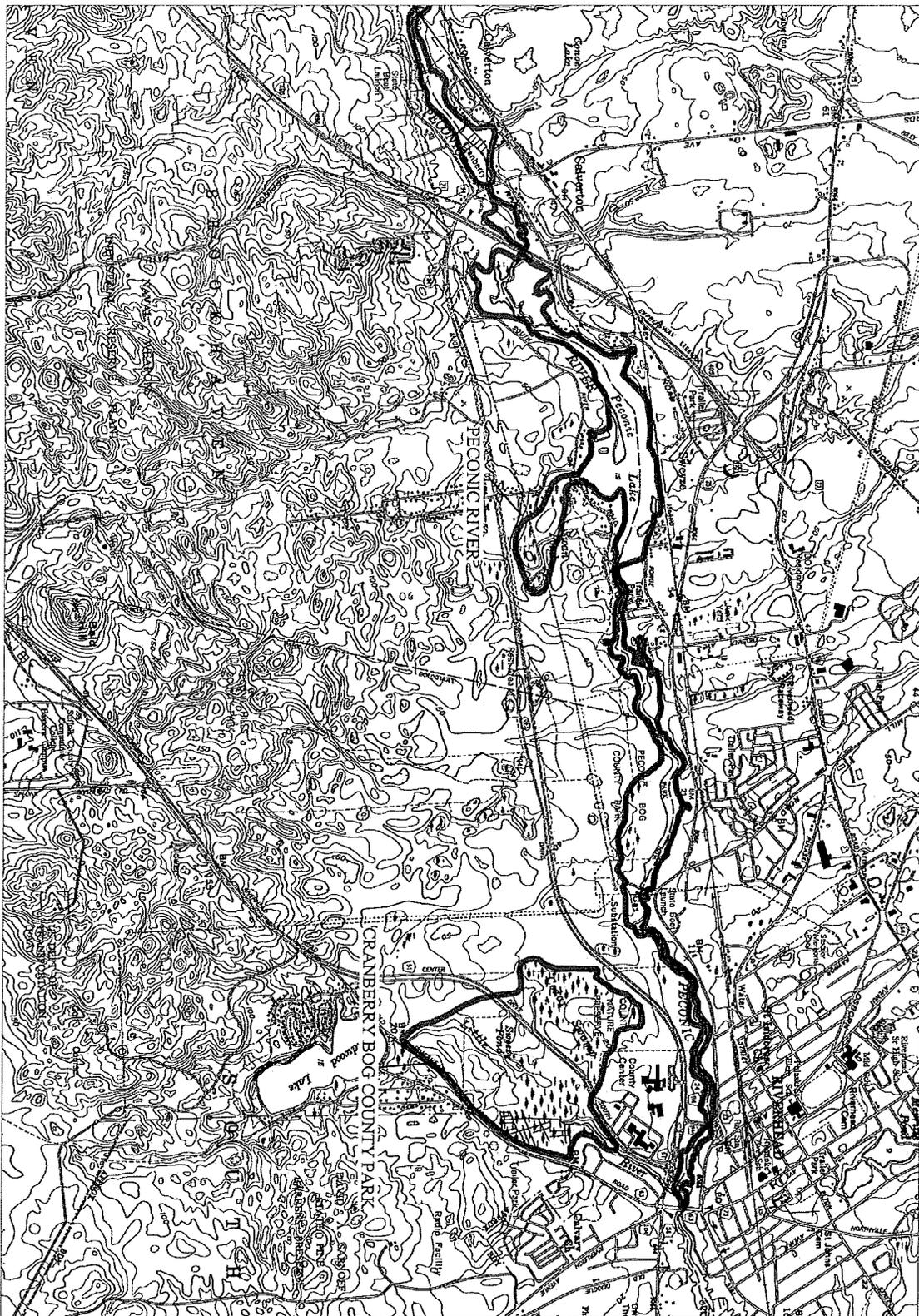
Significant Coastal Fish and Wildlife Habitats



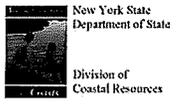
New York State
Department of State
Division of
Coastal Resources

Peconic River (In part)
Part 2 of 3





Significant Coastal Fish and Wildlife Habitats



Cranberry Bog County Park
Peconic River (In part)
Part 3 of 3

