SECTION II

INVENTORY AND ANALYSIS

A. COMMUNITY OVERVIEW

The Town of Webster is located in the northeast sector of Monroe County approximately ten miles north northeast of the Central Business District of Rochester, the primary urban center of Monroe County. The Town is bordered on the north by Lake Ontario and on the west by Irondequoit Bay. Its eastern boundary is the Wayne/Monroe County line and to the south is the Town of Penfield.

Webster has passed through three stages of development over time. In the nineteenth century, the Town was primarily agricultural with the Village of Webster being the only concentration of residences and businesses. During the first half of the twentieth century, the Town residential development began to expand around the Village center, as well as in West Webster. Since 1950 Webster has become one of the major suburban growth centers in Monroe County.

Webster's population, from 1960 to 1990, expanded by 90 percent. Primary growth occurred in the decade between 1960 and 1970. Table I reviews the Town's population statistics and household growth pattern. It is important to note that from 1980 to 1990 household composition experienced a major downward shift, substantially increasing the demand for additional housing in the community. From 1980 to 1990 , population grew by 8.2 percent. The number of occupied housing units, however, grew by 42 percent. The data indicates that there was a shift in household size between '80 and '90 from 2.95 persons per household to 2.76 persons per household. Like much of New York State, the Town's household size is on the decline while household formation is increasing, thereby expanding the demand for new housing.

From 1990 to 1994, 1473 housing units were added to the Town as illustrated in Table II. Assuming that the Town's household size has continued to decrease and at a rate reflective of Statewide and national trends, the current estimated population is 32,200. Population projections prepared by the New York State Department of Commerce in 1994 provide a similar 1995 population estimate for the Town.

In 1990, the Town had a median household income of $44,884 and a median family income of $46,100, placing it fourth in median family income out of a total of 19 towns in Monroe County. Only 2.7 percent of the Town's population fell below the poverty level. The Town can generally be classified as a middle to upper-middle class community.

The characteristics of the Town's housing stock are beginning to change. Table II reviews the shifts in tenure types, by percentage since 1960. The Table indicates that an increasing percentage of the new construction in the Town is devoted to rental housing. The overall vacancy rate declined over the same period from six to two percent.

The median housing value for the Town in 1980 was $56,300, placing the Town in sixth position when compared to the County as a whole. The value of a single family residence rose from $109,552 in 1990 to $122,000 in 1995.

TABLE I
TOWN OF WEBSTER
POPULATION AND HOUSING
1960, 1970, 1980 AND 1990

	1960	1970	Percent Change	1980	Percent Change	1990	Percent Change
Population	16,470	24,750	+50	28,925	+17	31,298	+8.2
Housing Units	4,743	7,078	+49	9,779	+38	11,315	+15.7
Household Size	3.47	3.50	+0.01	2.95	-16	2.76	-6.5

Source: U.S. Bureau of the census, 1960, 1970, 1980, and 1990
Update: Phoenix Associates, Inc. 1990

TABLE II
HOUSING TENTURE TYPES BY PERCENTAGE
TOWN OF WEBSTER

	1960	1970	1980	1990
Owner Occupied	82.3	79.7	73.4	77.0
Renter Occupied	11.6	16.3	23.7	21.0
Vacant	6.1	3.9	3.0	2.0

Source: U.S. Census of Housing and Population, 1960, 1970, 1980, and 1990
Phoenix Associates, Inc.

The Town's primary land use is residential. As noted above, the highest density of development occurs in West Webster and in the Village. The northeast quadrant of the community is the least developed, with large parcels of land as yet undeveloped and some areas devoted to agricultural uses.

The Town's major retail centers occur in strip development along Ridge Road and in the Village of Webster. The proposed facility has received all Town approvals and will add approximately 650,000 sq. ft. of retail space to the Town.

The major industrial complex in the Town is the Xerox Corporation, located in the southeast quadrant of the Town and in the Village. There is an additional pocket of industrial land use in the southwest sector of the Town, adjacent to the Village which houses a number of small scale

manufacturing and commercial facilities. In recent years, PSC, Lawyers Co-op, and Boulter Industrial Park have expanded their facilities by 50 to 100%.

Approximately 680 acres of Town land, exclusive of school district facilities is devoted to recreational use. The two primary sites are the 550 acre Webster Park, located along the shore of Ontario Lake and operated by Monroe County and the privately operated Happy Acres Golf Course.

The Town's major east/west arterials include Lake Road to the north, which serves as the southern boundary of the LWRP Area along Lake Ontario, the Route 104 expressway, and Ridge Road. Major north/south arterials and roads include, from east to west, Bay Road, Holt Road, N.Y.S. Route 250, and Phillips, Salt and Basket Roads. All of the Town's developed areas are also served by local roads and county collector roads. There are some private roads extending from Lake Road to Lake Ontario in the northern section of the Town. These roads provide access to scattered, year-round single family residences along the lakeshore.

B. GENERAL LAND USE AND OUTSTANDING NATURAL FEATURES

The LWRP area is generally that portion of Webster that borders on the east shore of Irondequoit Bay and the Lake Ontario coastline. For a description of existing land uses in the Town of Webster Waterfront Revitalization Area, see Map 2, Existing Land Use.

For purposes of this report, the waterfront is broken down into three sub-areas:

1. **Irondequoit Bay** (see Exhibit II-1)

* Beginning at the Penfield line, the first 4,000 feet of Bay shoreline consists of a mixture of wooded steep slopes, some level areas, and a small wetland. There are no structures along the Bay at this point. The plateau area consists of minor residential and commercial uses. The area also contains a proposed residential development site.

* The next 6,000 feet of shoreline consists of generally level land. The area has been developed into homes. The plateau area consists of a single family subdivision and a large proposed development site.

* Northward, the land is generally wooded and steep around Devil's Cove, in the vicinity of Inspiration Point, and as far as the Route 104 bridge. Devil's Cove and the adjacent land is a wetland. Single family residential developments are located along Bay Road and on the high plateau above Inspiration Point.

* From Route 104 to approximately 2,000 feet from the northern end of the Bay, the shore area is steep with bluffs ending at the water's edge. The slopes are generally wooded; however, sandy areas are found intermittently. The slopes are very fragile and prone to erosion.

* The plateau is generally developed in single family housing; however, at the present time there are two residential developments under construction. Though both developments "Stony Point Landing" and "The Bluffs" provide a single family housing, "Stony Point" provides a townhouse mixture. These sites are one of the few areas north of the Route 104 bridge where the shoreline is flat enough to allow for waterfront development. Both developments proposal includes docking facilities.

2. Lake Ontario

* The land along the Lake between the Bay and Webster Park is generally wooded with several single family homes on large lots. The shoreline is stony with steep slopes up to the plateau. These slopes, however, are not as steep as the slopes around Irondequoit Bay or the slopes along the Bay in the Town of Irondequoit.

* The area south of Lake Road extends from Vosburg and Herman Roads to Pellett Road on the East and includes Ship Builders Creek. The Creek area is within a flood plain and is considered a significant wildlife habitat. The heavily wooded area between Baker and Pellett Roads is also considered a significant habitat and, like the Creek area contains steep slopes.

* Webster Park (Monroe County operated) lies approximately in the center of the Town's lake frontage. The Park is divided by Lake Road, and is generally wooded to the south of the road.

  Picnic areas, a small rocky beach, and a fishing pier are located north of the road. Presently, the Park Master Plan is being updated. Although no plans have been finalized, possibilities include an expanded beach and breakwater system and a new boat launch.

* From the Park to Nine Mile Point, the predominant land use is large lot residential. With a small portion located north of just west of the Nine Mile Point is composed of townhouses. Small rocky bluffs parallel the lake shore with narrow beaches in between.

* Nine Mile Point is located at the outlet of Four Mile Creek. The area consists of a restaurant with lodging accommodations. A residential area of cottages, small year-round homes and trailers is adjacent to the restaurant along Four Mile Creek. Small boat docks are located along the Creek.

* The remainder of the study area from Nine Mile Point to the town line is in rural residential use with very deep lots running from Lake Road to the Lake. The houses generally are close to an overlook of the Lake. Also present are a few small subdivisions. This area under the resent rezoning is zoned for predominately "Large Lot Development".

Topography in this area is flat, gently sloping down to the Lake. The lakefront is stony, with little change in grade from the Lake to the adjacent parcels. Vegetation is a combination of wooded, reverted farmland, meadows and isolated orchards.

3. Sandbar

The Sandbar is a narrow arm of land, approximately 100 to 500 feet in width, which extends for a distance of approximately 6,000 feet from the main shoreline and separates Lake Ontario from Irondequoit Bay. The area is low and flood prone. Single family residences and a few small commercial establishments occupy the northern part of the spit, while small commercial enterprises, including a marine facility and several deteriorated residential structures, are located on its south shore. Some vacant and underutilized parcels are located at the eastern end of the sandbar on both sides of the road. An abandoned railroad right-of-way parallels Route 18 on a raised road bed, obscuring views of the Lake. At the present time, the Town assembled a citizen committee to study the Sandbar Area to improve the availability of the public water, installation of sanitary sewer system, and a proposed 6.5 acre Town Waterfront Park located at the eastern portion of this area. Although the study is at the early stages, the proposed park uses would consist of boat launch, fishing, and parking facilities with a picnic area.

In the summer of 1985, the U.S. Army Corps of Engineers, as part of the Irondequoit Bay opening project, severed the bridge which formerly connected the Towns of Webster and Irondequoit. The removal of the bridge permitted open boat passage between Lake Ontario and Irondequoit Bay. The action was, however, highly controversial because of its elimination of a transportation link between the two towns.

The absence of a crossing has interrupted the travel patterns of residents on both sides of the Irondequoit Bay outlet and has adversely affected the small businesses along the approach to the outlet, again, in both Irondequoit and Webster. The Towns, along with the Monroe County legislature, have all gone on record favoring the construction of a replacement crossing for the outlet. A seasonal bridge is currently under construction.

C. AREA HISTORY, HISTORIC SITES AND STRUCTURES

The Wisconsin Glacier, the last of four successive glaciers of the Ice Age, was responsible for the formation of the Rochester and specifically the Irondequoit Bay areas. As the glacier melted, it left large amounts of water trapped at the southern edge and formed a silt-laden lake in the Irondequoit Valley, now known as Irondequoit Bay. Archaeologists have been able to find evidence of human life as early as the Archaic Period (3500 B.C.).

The area is rich in Indian history. Irondequoit Bay was considered as the gateway to the Iroquois Nation. Trails through the area ran west to Niagara, east to Oswego and north and south along both sides of Irondequoit Bay to the lakeshore.

The first recorded visit of white men took place on August 20, 1669, by the French explorer LaSalle. The area was the site of major conflicts between the French and Seneca Indians. The unsuccessful attacks were led by the Marquis de Denonville, as the governor of New France. The trail which he followed is illustrated in Exhibit II-2. The trail is noted by seven markers extending from Brighton, through Penfield and northward to the Town of Webster.

Areas of historic importance along the lakeshore include two sites known as Oklahoma Beach an Locust Glen. Oklahoma Beach is located at the junction of Bay and Lake Roads and now is developed with private homes. The site is famous for the location of the Cottreall Hotel, a popular gathering place for fishermen, as well as the site of alleged "rum running" during the days of prohibition. The hotel is now a private residence.

A short distance past Nine Mile Point on Lake Ontario is Locust Glen, once the site of tannery and a summer resort area with tennis courts, a harbor for landing small boats and camping facilities. The site is now the location of a private home.

There are no buildings or sites within the waterfront area listed, or eligible for listing, on the National Register of Historic Places.

It should be noted that the western shoreline of Irondequoit Bay and sections of the Lake Ontario shoreline are highly sensitive with respect to the presence of prehistoric archaeological sites. Sensitive areas have been noted on the "New York State Archaeological Site Inventory Map."

D. WATER RESOURCES

1. Water Surface Analysis

Lake Ontario: Lake Ontario is the twelfth largest freshwater body in the world by area (73,400 sq. miles) but because of its depth (average: 283 ft., maximum: 802 ft.), ranks as the tenth largest lake by volume (393) cubic miles of water). The Lake is 193 miles at its longest and 53 miles at its widest. It drains a watershed of 30,000 sq. miles within New York State and the Province of Ontario in Canada. Including most of the major indentations of the shore, the Lake has approximately 726 miles of coastline, with a coast which is considered fairly even. The Lake's surface elevation rests at about 244.0 feet above sea level, but well over half its floor lies below sea level.

Lake Ontario's drainage basin receives, on average, 44 inches of precipitation annually, and the Lake has a water retention period of six years. More than 6.1 million people live near the Lake's shores in Ontario Province and New York State, and 2.5 billion gallons of water are withdrawn each day for farming, power, drinking and other domestic uses, mining, manufacturing, and commercial purposes. Non-consumptive uses of lake waters include shipping, fishing, and other recreational pursuits.

Lake Ontario contains an extensive trout and salmon fishery developed by stocking programs in New York State and the Province of Ontario, as well as an important bass fishery

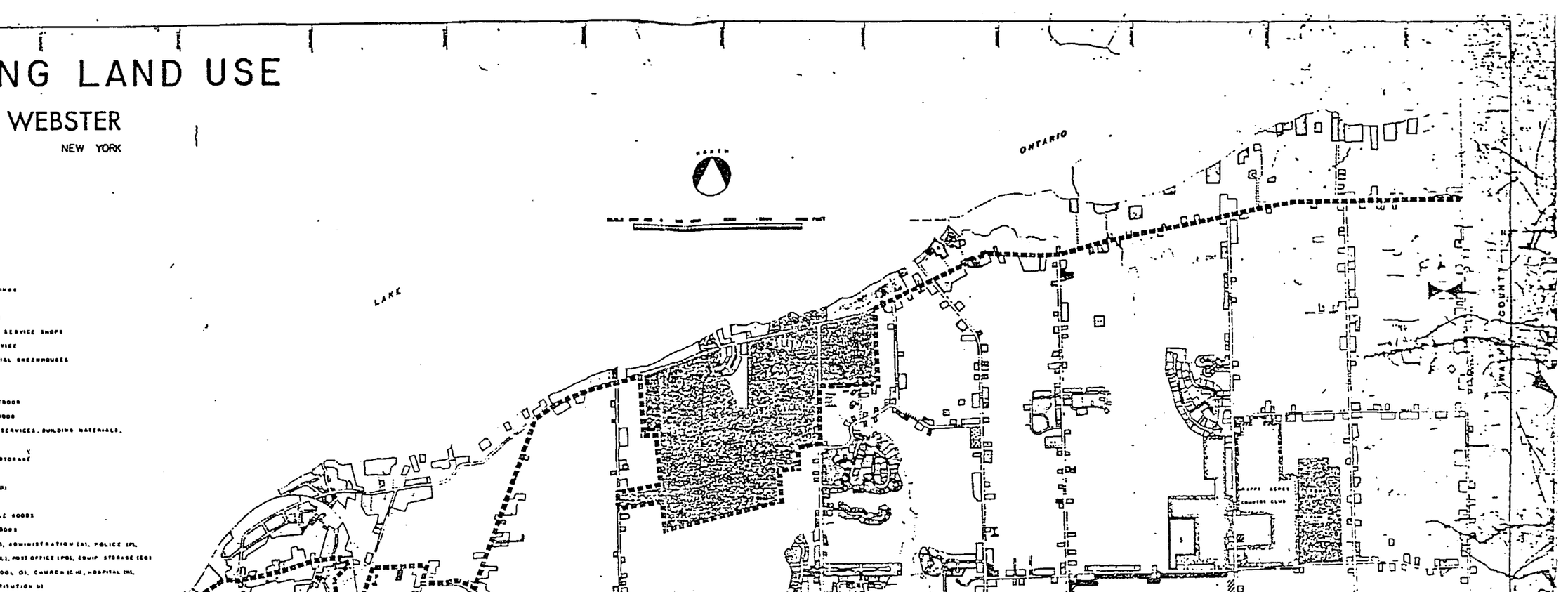
EXISTING LAND USE

TOWN OF WEBSTER

MONROE COUNTY NEW YORK

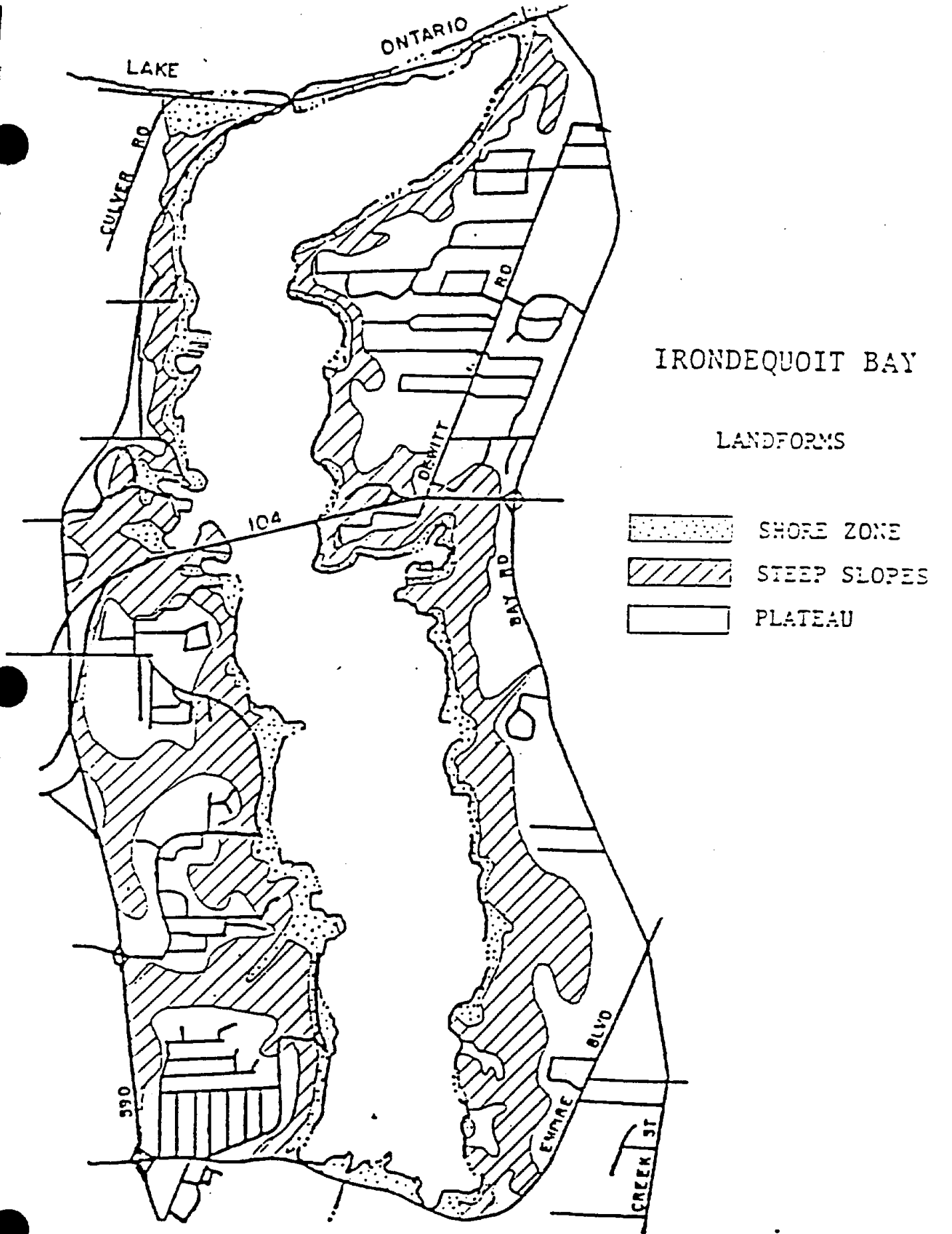
LEGEND

- ONE AND TWO-FAMILY DWELLINGS
- MULTI-FAMILY DWELLINGS
- TRAILERS AND TRAILER PARKS
- RETAIL STORES AND PERSONAL SERVICE SHOPS
- AUTO SALES, REPAIRS, AND SERVICE
- GARDEN STORES AND COMMERCIAL GREENHOUSES
- OFFICES
- HOTELS AND MOTELS
- COMMERCIAL RECREATION — OUTDOOR
- COMMERCIAL RECREATION — INDOOR
- HEAVY COMMERCIAL - GENERAL SERVICES, BUILDING MATERIALS, AND CONTRACTORS' YARDS
- WHOLESALE, WAREHOUSES, AND STORAGE
- FREIGHT TERMINALS
- JUNK YARDS (JY) AND DUMPS (D)
- QUARRIES AND GRAVEL PITS
- MANUFACTURING — NON-DURABLE GOODS
- MANUFACTURING — DURABLE GOODS
- PUBLIC BUILDINGS - SCHOOL (S), ADMINISTRATION (A), POLICE (P), FIRE STATION (F), LIBRARY (L), POST OFFICE (PO), EQUIP. STORAGE (EQ)
- SEMI-PUBLIC BUILDINGS - SCHOOL (S), CHURCH (C), HOSPITAL (H), CLUB (CL), CHARITABLE INSTITUTION (I)
- PUBLIC UTILITIES - WATER (W), GAS (G), ELECTRIC (E), RADIO (R), SEWAGE DISPOSAL (SD), TELEPHONE (T)
- AIRPORTS
- CEMETERIES
- PUBLIC PARKS
- OTHER OPEN SPACE
- WATER AREAS
- AGRICULTURAL OR VACANT LAND
- LWRP BOUNDARY LINE



WN OF
BSTER
GE ROAD,
STER N.Y. 14580 PHONE (716) 872-1000

LOCAL WATERFRONT REVITALIZATION PROJECT



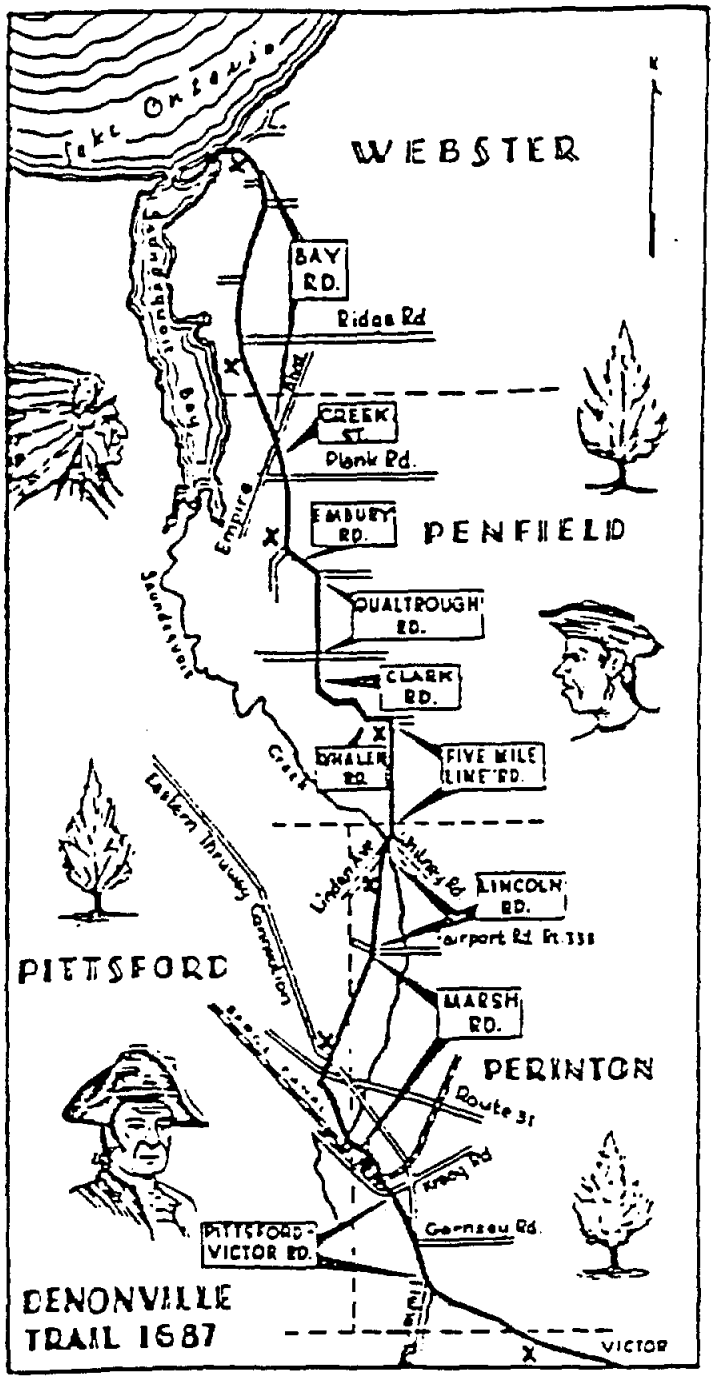
IRONDEQUOIT BAY

LANDFORMS

SHORE ZONE

STEEP SLOPES

PLATEAU



DENONVILLE TRAIL
EXHIBIT II-2

associated with the Lake Ontario shoreline. Boat and shore based fishermen catch salmon and trout in the near shore waters of the Lake, as well as in Irondequoit Bay, during the spring and fall fish migration periods.

Irondequoit Bay (see Exhibit II-3): Irondequoit Bay is located on the south shore of Lake Ontario and is about four miles east of Rochester Harbor and 29 miles west of Great Sodus Bay, the nearest Federal harbors. The Bay is bounded by the Towns of Irondequoit (north, west, and south sides), Penfield (south and east sides), and Webster (east and north sides) in Monroe County. Irondequoit Bay is a natural harbor oriented in a north-south direction with steep banks rising up to 150 feet above the water surface along the east and west shores, a barrier beach or sand bar at the north end, and a wetland at the south end.

Irondequoit Bay is about four miles long and varies in width from 1/4 to 3/4 miles, except near the Lake where it broadens to about 1-1/4 miles. The Bay has about 2.6 sq. miles of water surface and about 10 miles of shoreline (approximately two miles of which are in the Town of Penfield). The north and south ends of the Bay are shallow and generally less than six feet below Low Water Datum (which for Lake Ontario is 242.8 feet). Depths in the central portion of the Bay range from about 30 feet to a maximum depth of about 75 feet. The Bay is primarily a warm water fishery including northern pike, largemouth bass, bullhead, and other species. It should be noted that trout migrate through the Bay to Irondequoit Creek.

2. Water Quality

The water of Irondequoit Bay has suffered severely from the effects of urbanization. For several decades, sewage effluent from the City of Rochester, adjoining communities, and the municipalities along Irondequoit Creek to the south has impaired water quality in the Bay.

Because the Bay is at the foot of a large watershed (see Exhibits II-4 and II-5), water quality abuses originating in the watershed's upper reaches have had a major negative impact on the Bay's water. Such abuses have included partially treated effluent from several sewage treatment plants, as well as oil, herbicides, fertilizers, insecticides, animal wastes, road salt, and other pollutants carried into the Bay from its tributaries. High nutrient loads from partially treated effluent combined with nutrient-rich sediment from agriculture and urban runoff have been responsible for algae blooms whose decomposition causes noxious odors, unsightly conditions, increased alkalinity and reduced available oxygen in the water that adversely affects fish life.

The extensive amount of road salt carried into the Bay from its watershed inhibits the mixing of the Bay's lower waters, extending the annual period of low-oxygen, stagnant, and biologically undesirable conditions in the deeper portion of the Bay. Surface algae and sediment reduce the amount of sunlight which can penetrate to lower depths.

The inadequate operation of private septic systems on the shoreline and elsewhere in the watershed adds to the deterioration of water quality and may create unsanitary conditions at

the point of discharge. The sediments, especially in the wetlands at the mouth of Irondequoit Creek, are thought to be heavily polluted.

High water levels have eroded the steep slopes around the Bay, primarily on the east side, aggravating existing land slides and causing additional ones to occur. This has created scars along the Bay slopes. Increased erosion of the shoreline, in addition to causing property damage, has also added to the sediment load in the Bay.

The quality of the Bay's water has improved noticeably over the last several years as a result of the comprehensive sewage treatment program of Monroe County's Pure Waters Agency. (The Bay is currently rated as a Class B body of water by the State, meaning that it is suitable for bathing and other usages, except as a source of water supply for drinking, culinary or food processing purposes.) This program has diverted sewage from the treatment plants on Irondequoit Creek and Bay to an expanded and improved treatment facility which discharges directly into Lake Ontario.

Purification of Irondequoit Bay, however, will be a slow, yet continual process once all present abuses are terminated. Because of the large quantities of nutrients and salt already in the Bay, improvements in its water quality will be gradual, eventually bringing the quality to the level which existed in 1940. One potential negative impact resulting from the reduction of nutrients will be a decrease in surface algae blooms, allowing more sunlight to penetrate the Bay, thus promoting the growth of weeds in the shallow areas of the northern and southern ends of the Bay.

In addition to the improvements to sewage treatment facilities, Monroe County is actively undertaking measures to improve Bay water quality through other techniques. The County has recently, with federal and state financial assistance, taken action to reduce the phosphorous level of the Bay. An experimental program for using aluminum sulfate or alum to act as a seal on the bottom of the Bay was extremely successful. The entire Bay has since been spread with alum to keep the phosphorous from recycling in the Bay. The County is also undertaking a water quality program to reduce non-point sources of pollution in the Irondequoit Basin. The Irondequoit Bay Water Quality Management Plan has been prepared as part of that program.

E. SCENIC RESOURCES AND VISUAL QUALITY

Irondequoit Bay constitutes a major scenic resource for the Town of Webster, as well as the entire greater Rochester area. The Bay, because of its setting of steep, heavily wooded slopes and wetlands, provides views of exceptional beauty. The number of views and vistas, however, is limited by the presence of natural features such as steep slopes and woodlots.

The most accessible areas for viewing Irondequoit Bay in Webster are located on the Sandbar at the north end of the Bay, Irondequoit Bay Bridge, the State turnoff at the north side of the Route 104 Bay Bridge, and the Village of Webster well field along the plateau area of the Bay. All of these

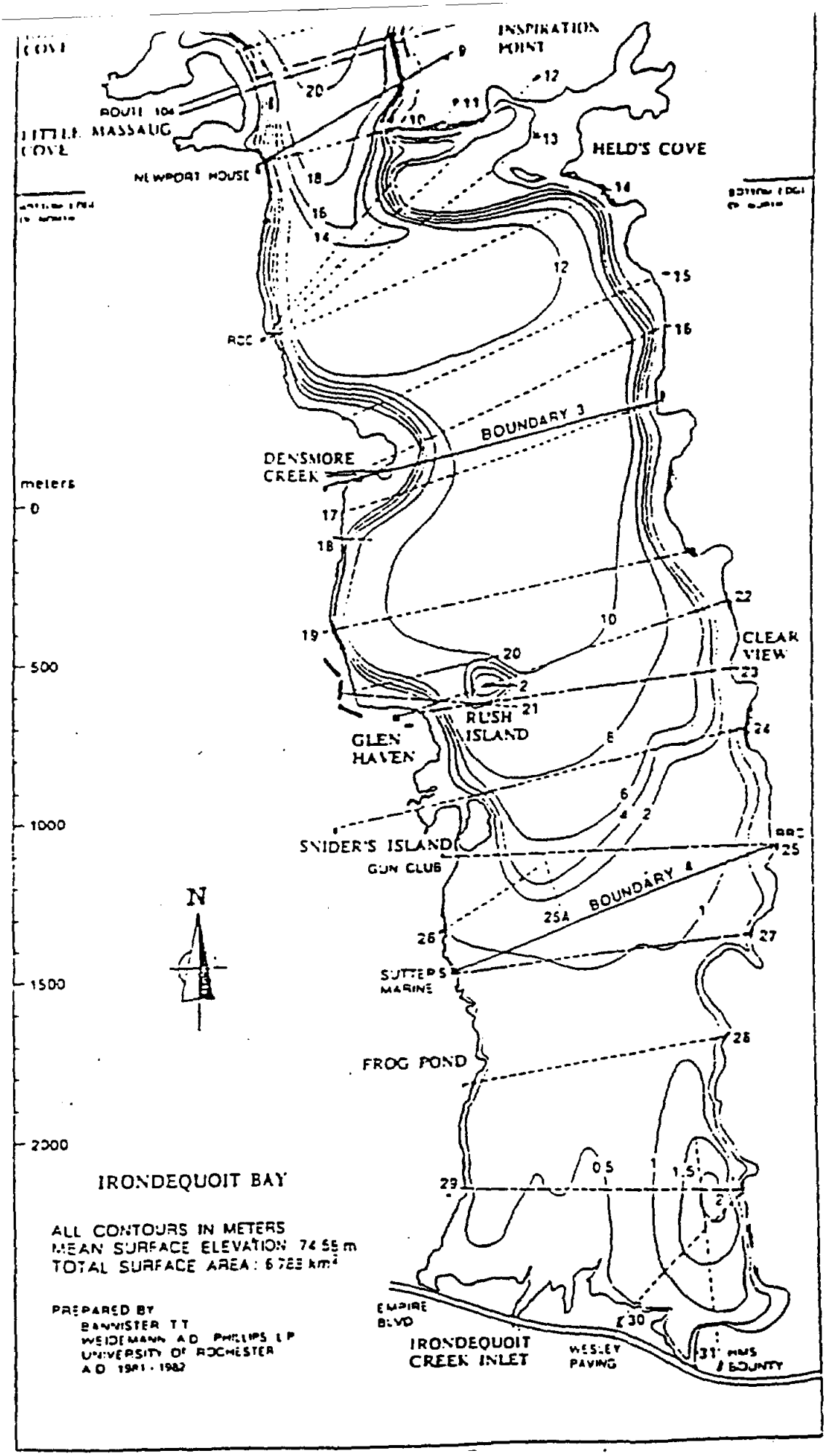


EXHIBIT II-3
IRONDEQUOIT BAY - A

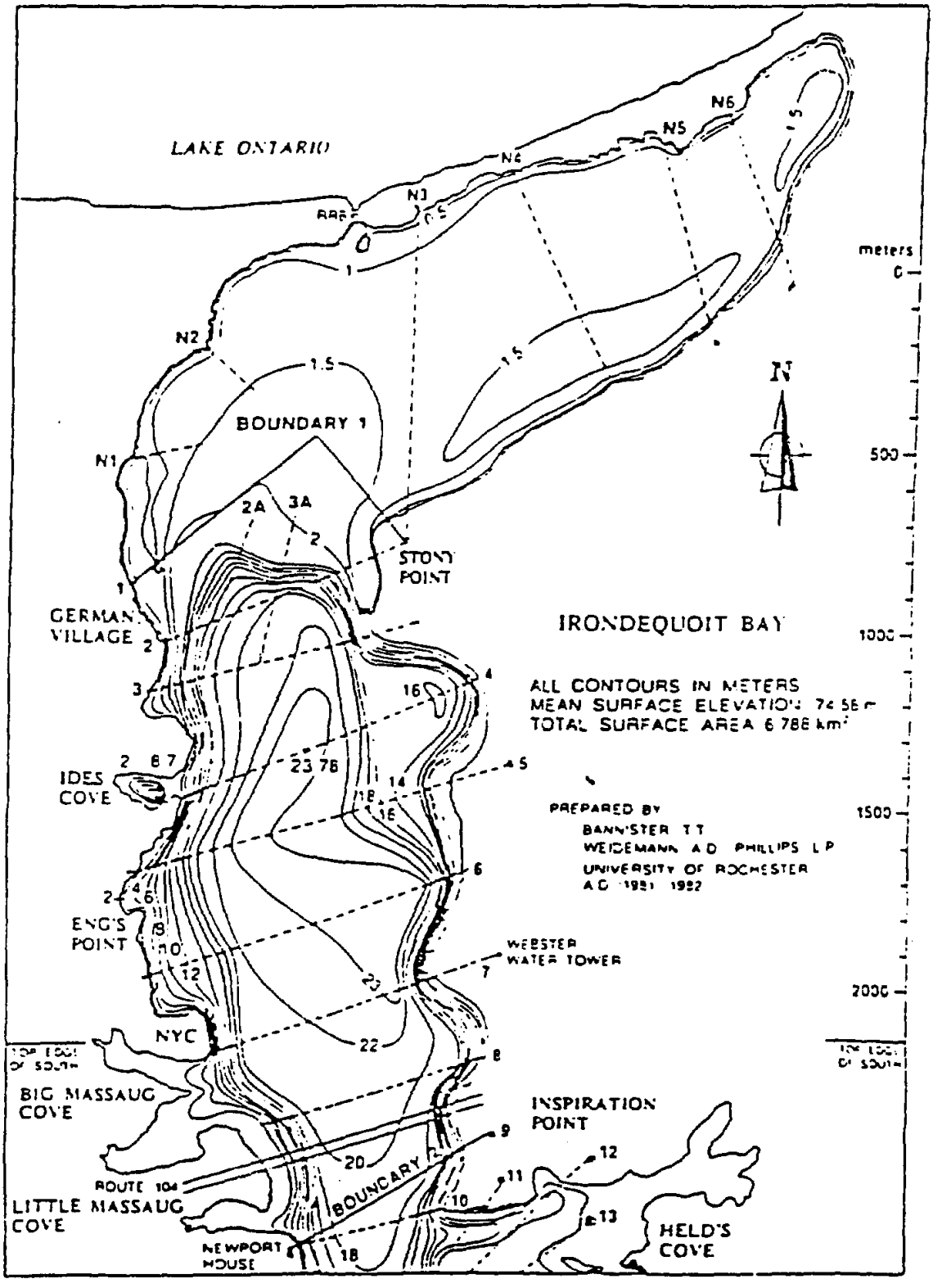
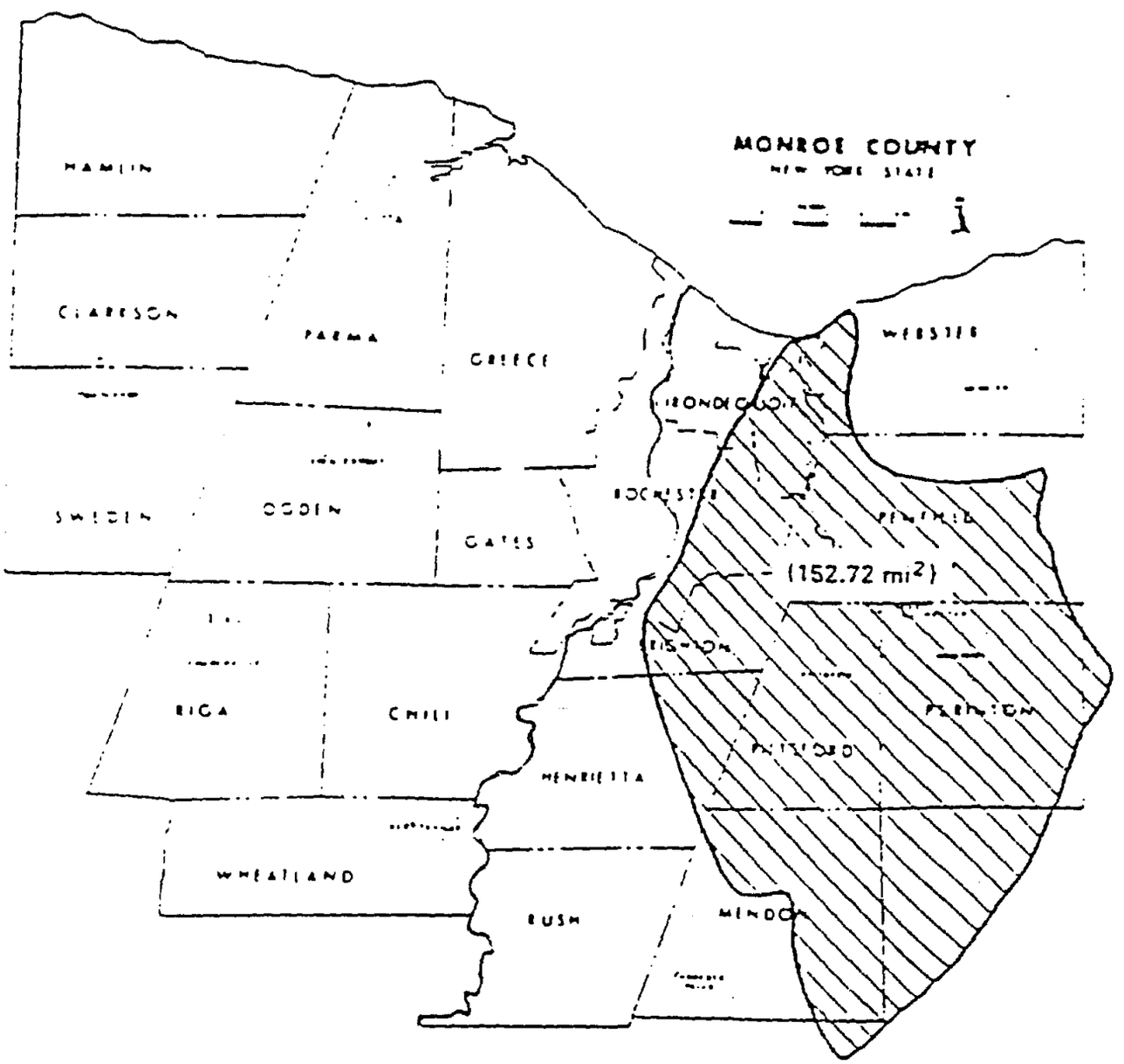


EXHIBIT II-3
IRONDEQUOIT BAY - B

IRONDEQUOIT
BAY
WATERSHED



IRONDEQUOIT BAY STUDY
PREPARED FOR THE IRONDEQUOIT BAY
POLICY COMMITTEE BY THE
MONROE COUNTY DEPT. OF PLANNING
1973

EXHIBIT 4
IRONDEQUOIT BAY WATERSHED

clearly see the Route 104 Bridge in the distance and on a clear day, the terminus of the Bay along Empire Blvd. in Penfield. Increasing development along the west shore in Irondequoit can be noticed and the undeveloped, mostly natural state shorelines of both Penfield and Webster are noticeable. Similar observations can be made from the other viewing points mentioned. One can also observe the Bay's expansive wetlands, an area that attracts numerous birds and animals.

Views of the Bay are limited not only by such natural features as steep slopes and wooded lots, but also by the pattern of land ownership that exists in Webster's waterfront. The Route 104 turnoff and the jetty provide public access to the scenic vistas and views. Areas along the Sandbar are privately controlled.

The concern for visual quality is one in which the action of one community can either enhance or destroy another Town's scenic views. A residential project in a given town may have little impact on the scenic views available along its shores while at the same time severely impacting on the scenic views from the opposing shore. This issue is a matter of concern in the Town of Webster.

Multiple views of Lake Ontario are available within Webster Park. Its shoreline presents several opportunities for views of the Lake. A restaurant located at Nine Mile Point presents an additional scenic vista of the Lake. Other properties along the Lake shoreline are privately owned and offer a unique view or vista of the Lake and its shoreline.

F. WATER DEPENDENT AND ENHANCED USES

Water dependent uses are considered by the Town of Webster to be those uses which could not exist without a waterfront location. Water enhanced uses are those uses which either benefit from or provide a complement to a waterfront location. The following narrative provides a description of sites and land uses located in the waterfront area which meet these criteria. Sites that are specifically water dependent include:

* Mayer's Marina, located on the Sandbar at the outlet between Irondequoit Bay and Lake Ontario, and the existing New York State Park which includes jetty with walkway and parking facilities.

* Existing Webster Park facilities, including a fishing jetty and waterfront walkway along Lake Ontario (to be discussed in further detail in 7 of the Inventory and Analysis).

Shoreline development that can be classified as water enhanced includes the Glen Edith Restaurant, located on Irondequoit Bay, with seasonal dining and limited docking facilities for customers, and the New York State Route 104 rest area located on the plateau of the Bay slopes. As can be seen by this review, the number of land uses which are currently water dependent is quite limited in the Town.

1. Development

As in other Irondequoit Bay communities, the pressures for development as a result of the opening of the Bay to Lake Ontario are increasing. This need/demand for increased utilization of the Town's waterfront area, along both the Bay and the lakeshore, for water dependent and water enhanced uses is evidenced by the heightened interest of the private sector in developing such sites along the Bay, particularly on plateau areas with related shoreline development. Several developers are in the process of having major residential projects reviewed and approved by the appropriate town boards and authorities. Although no proposals have as yet been presented for redevelopment along the Sandbar, property values in that area have begun to escalate dramatically. It can further be expected, that once the configuration of an outlet bridge is determined, major redevelopment proposals will be before the Town.

2. Boating

The number of boats of all types that will eventually use the Bay is speculative, but could be as high as 2,000 according to the Army Corps of Engineers. (Boats currently using the Bay number approximately 450 to 500). Webster is in a position to provide both dockage and launching facilities to respond to some of this demand. The residential proposals presented for three sites along Irondequoit Bay will likely include dockage for private residents. Again, pending the outcome of the Outlet Bridge, launching/docking facilities on the Sandbar may be possible. Two lakeshore sites for such facilities are Webster Park and Nine Mile Point.

3. General Access

There is also an acknowledged need for improving the opportunities for access to waterfront recreation available through County parkland and other publicly owned sites within the planning area. Both public and private efforts geared toward waterfront development and improved access to water resources are, however, constrained by environmentally sensitive land and water features which require protection. The area which is available to meet the demands of both the public and private sectors is therefore limited and the development which does occur must follow sound environmental practices.

G. UNDERUTILIZED AND DETERIORATED SITES

As part of Webster's LWRP, several large areas of vacant land were identified as either underutilized or somewhat deteriorated sites. Because of such characteristics as size, location, visibility, value and proximity to the waterfront, these sites possess the highest potential for development in the Town's waterfront area. These sites are discussed below and are designated by number on Map 3, Proposed Land Use, in Section IV.

1. Bay Front

Site 1: Willow Point

This site, which is the location of the former Willow Point Park, runs from Bay Road to Irondequoit Bay. A proposed development consisting of several residential units in mid-rise structures and townhouses is currently being planned for the site. Development will occur primarily on the eastern half of the site, which corresponds to the plateau area of the parcel. No waterfront development activity is proposed at this time. The potential for bayside development does exist in the future.

The site has high visibility and accessibility due to its Bay Road frontage, and is served by sewers. Further, its eastern portion is relatively flat and does not seem to contain any serious constraints to development. The other portion of the site, however, contains steep, wooded slopes and the waterfront area, which are regarded as extremely sensitive to the effects of development and as such will be protected.

Site 2: Stony Point Landing

This site, which is located along the northern portion of Irondequoit Bay and west of DeWitt Road, is the location of a proposed large-scale, residential development consisting of 109 townhouses and 50 single family units. Development constraints include the site's steep wooded slopes, which are located immediately adjacent to the parcel's long Bay frontage. Docking facilities for residents of the development are centralized to limit damage to the slopes and waterfront area, and points up the sensitive nature of this site and the continued care that must be exercised when developing it.

Site 3: Bay Road/Bay Bridge Area

There is a large parcel of privately owned vacant land located at the intersection of Bay Road and Bay Bridge. The area is immediately adjacent to Devil's Cove along Irondequoit Bay. The site contains extensive woodlots and steep slopes and is one of the finest scenic resources along Irondequoit Bay. The most eastern portion of the parcel borders Bay Road and is relatively flat. Surrounding land uses include both single family and multiple residential with some small retail uses to the south. The site has high potential, but can only be developed in such a manner so as not to destroy the natural resources of the area.

Site 4: The Damascus Temple

The Damascus Temple property is located off of Bay Road. The site's extensive plateau area is flat and vacant with the exception of a private club facility. No use is made of the waterfront area which contains both steep slopes and woodlots.

Site 5: DeWitt Road and Landfill

There is a large undeveloped area bordered by DeWitt Road on the east, Route 104 on the south, and the Village of Webster's water supply on the west. The northern portion of the site is vacant and appears to contain no physical features which would constrain development. However, because the site has been subdivided into several small parcels and because ownership of these parcels is in the hands of many different individuals, as well as the Town and the County governments, acquisition and assembly of the site for development will be very difficult and time consuming. The southern portion of the site contains a landfill.

The landfill is also listed on the NYS Register of Inactive Hazardous Waste Disposal Sites (No. 828035). The site is suspected of having received hazardous waste and is therefore classified as "2 A", a temporary classification indicating insufficient site data and the need for further information before any actions are undertaken on the site.

Site 6: The Bluffs

This 48 single family unit subdivision located near the intersection of DeWitt and Backus Roads offers great physical beauty and privacy, as well as a location near the intersection of Bay and Lake Roads. The site's topography, however, with steep slopes on three sides and a somewhat irregular configuration. To preserve these natural features, the development was clustered in exchange for 4.0 acres of open space or parkland. Docking facilities for the residents of this development are centralize to limit damage to steep slopes and shoreline.

2. Lakeshore

Site 7: Nine Mile Point

This site is located between Lake Road and Lake Ontario, opposite Phillips Road and Webster Road. Even though the majority of this area is vacant, Hedges Lakeside Villas, composed of a mixture of 21 townhouses and 20 villas, is located opposite Webster Road intersection. In addition to its beauty and lakefront location, the site has the added advantage of having direct access to Xerox's Webster complex via Phillips Road. Possible public access and use of Nine Mile Point in a way that is compatible with any future development of the site will be explored by the Town as part of its planning project review processes. The site presents an opportunity for providing additional access to Lake Ontario.

Site 8: Vosburg Road

A large, vacant parcel at the intersection of Vosburg and Baker Roads seems well suited for low-density residential development. If properly planned, such development should have a minimal negative impact on the surrounding area, which includes large-lot residential uses, farmland, vacant parcels and wooded lots.

The site's scenic surroundings and good vehicular access, as well as the availability of utilities, should make it attractive to potential developers. Adding to the site's potential for development is the relatively large size of the parcels which comprise the site and the absence of sensitive natural features that would inhibit development and add to construction costs.

3. Sandbar

Site 9: The Sandbar

The now completed opening of Irondequoit Bay to Lake presents Webster with a unique opportunity to realize the full potential of what has been an underutilized natural resource. The Sandbar's location between the Lake and Bay and the absence of steep slopes make it ideal for the development of water-related commercial and recreational facilities, which will greatly increase public access to these two bodies of water. Such facilities could include marinas, boat launches, fishing piers, parks and promenades, beaches, restaurants, and various types of water-related commercial activities.

Several obstacles, however, stand in the way of utilizing this site in a way that will ensure its highest and best use, including the existence of numerous residential uses located on undersized parcels. These uses, many of which are in substandard condition and in close proximity to the road, have cut off views and public access to the Bay and Lake. Because of the large number of these uses and the small number of large parcels in single ownership, acquisition for redevelopment purposes will, no doubt, be slow and expensive.

Redevelopment will be further constrained by the present location of Route 18 and the railroad right-of-way. Sewer and water systems are inadequate to accommodate area redevelopment.

Replacement of the Route 18 bridge over the Bay outlet is currently underway. Therefore, the nature and timing of the Sandbar's redevelopment can be resolved. The replacement of the bridge with a seasonal pivot bridge will have a profound impact upon the future development of the Sandbar. Major projects should proceed now that this critical issue is resolved.

To ensure that the eventual redevelopment of the Sandbar is carried out in a comprehensively planned manner and in such a way as to ensure maximum public access to the Bay and Lake, the Town must begin now to provide the necessary land use and zoning guidelines, regulations, and safeguards. Also necessary will be an ongoing, working relationship with other levels of government, including the County and the State, whose jurisdiction over this area overlaps that of the Town. Even with such cooperative arrangements, however, it must be recognized that redevelopment of the Sandbar will take several years to complete and the expenditure of large sums of both public and private funds.

H. PUBLIC ACCESS AREAS AND RECREATIONAL FACILITIES

The Webster LWRP area contains Webster Park, one of Monroe County's major facilities. The park contains 567 acres of land and is rich in natural resources. Development to date has been concentrated in the northeast portion of the park, which is characterized by flat slopes and open space, and close to road access. Remaining portions of the park are in an undeveloped or minimally developed state. Resources of the park include: beachfront, mature forest, natural creeks and streams, flood plains, etc. The park's primary focus is its waterfront area. The beach was utilized in its early years for sun bathing and swimming, but has since lost its appeal.

The center of activity in the waterfront area is the fishing pier and break wall. As previously noted, the bluffs along the upper portion of the park provide dramatic, unobstructed views of the lake. In addition, the jetty on the Webster side provides for public access to the Lake from the Town's extensive shoreline. The only remaining source of public access is the State Highway rest area located at the Irondequoit Bay Bridge.

All of these public facilities present opportunities for increased public access to the waterfront. The long-range plans for the County parks recognize the need for expanded opportunities and include a program to accommodate those needs (reviewed in detail in Section IV of the LWRP). The proposed improvements would respect the environmentally sensitive nature of the parks' woodlots, steep slopes, wetlands and habitat areas.

Secondly, the Town of Webster is investigating the feasibility of a Town Park located on the eastern portion of the Sandbar. A 6.5 acre parcel on the causeway approximately one mile long is a prime location. It offers several desired recreational outlets like fishing, boating, picnicking, and the ideal location for a public boat launch. The land elevation above water level is 3 to 4 feet which would provide minimal disturbance during the construction phase of development to the bay. Once constructed, this area could provide a refuse harbor with easy launch and retrieval for trailer carried boats.

The Town has one additional area where access to Village owned property within the Town would provide for limited passive recreation and would heighten waterfront opportunities without infringing upon existing land uses - the Village well field located along the plateau of the Bay.

I. DEVELOPMENT CONSTRAINTS

The area adjoining Irondequoit Bay has many unique and sensitive environmental features. These features serve as a resource for recreation, visual beauty, and the functioning of many complex and critical natural processes. Increasing pressures for development around Irondequoit Bay, however, threaten these natural features, and care must be exercised to balance development pressures with resource protection needs.

1. Wetland and Wildlife Habitat Constraints

Irondequoit Bay and Creek, located within the City of Rochester and the Towns of Irondequoit, Webster, Perinton and Penfield in Monroe County, has been designated by the New York State Secretary of State as a fish and wildlife habitat of statewide significance. (See the Appendix to the Inventory and Analysis for a detailed description of the Irondequoit Bay and Creek habitat). The habitat includes the entire bay area, emergent wetlands immediately south of the bay and approximately seven miles upstream on Irondequoit Creek.

Irondequoit Bay has been classified by the New York State Department of Environmental Conservation as a Class 1 Wetland, which is the highest classification that can be given to a wetland. New York State retains permit granting authority for activities in Class I wetlands, and therefore regulates activities around Irondequoit Bay. (DEC is considering the entire shoreline area of the Bay as a Class 1 Wetland because of the presence of both submergent and emergent aquatic vegetation).

Types of wetlands in the Irondequoit Bay area include: submergent, emergent, shrub, and habitat. Each of these serves important functions such as: shoreline erosion protection, wildlife and fish habitat spawning and nursery areas, water quality filtration, open space and passive recreation areas. See Exhibit II-6 for the location of the various types of wetlands in the Irondequoit Bay area.

a. Wetlands - Submergent

Irondequoit Bay is substantially enclosed by a narrow band (200 - 600 feet wide) of submergent aquatic vegetation. This aquatic bed is made up of milfoil, coontail and pondweeds. As already mentioned, it constitutes a regulated Class I wetland. A major limiting factor influencing the development of this vegetative type is the amount of light reaching the bottom substrate. It is anticipated that as the quality of Bay water increases, water turbidity will decrease and allow more light to reach the bottom, and the aquatic bed will expand.

This submergent wetland plays an important role for Bay fish and wildlife populations. Fish use this habitat for spawning, feeding, escape cover, or nursery habitat. Waterfowl and wading birds use these areas to forage for food; reptiles and amphibians likewise may spend much of their life cycle in close association with the aquatic bed.

b. Wetlands - Emergent

Emergent wetlands provide excellent fish and wildlife habitats. Birds such as red-wing blackbirds, rail and marsh wrens use cattails for nesting, feeding or roosting. Waterfowl use these areas during migration and brood rearing, and pheasants winter in them. Other birds such as hawks, great blue herons and bitterns forage for food in emergent wetlands. Muskrats use cattails for food and nest building and small

mammals, such as mice, winter in marshes. Deer may use cattail areas as escape cover. These areas may also be used as spawning habitat for northern pike. When emergent vegetation is associated with other wetland cover types, such as submergent vegetation, or with upland cover types, the habitat value is increased. These "edges" between different cover types are the areas where the greatest diversity of habitat and wildlife exist.

Aquatic wetland vegetation is found in the coves and embayments, and at the south end of the Bay beyond Webster. Water lily and duckweed are the most abundant species of aquatic vegetation. This type of vegetation is valuable as a feeding and nursery area for reptiles, amphibians, fish, and waterfowl.

c. Shrub Wetlands

Shrub wetlands are found in various coves on the east and west sides of the Bay. This wetland cover type is usually adjacent to the upland area and provides a transition zone between the wetland and the upland. Red osier dogwood, willow, arrowwood, buckthorn, and red maple and green ash saplings are common shrub species found around the Bay. Shrub areas are usually only seasonally flooded in spring and fall. Waterfowl use shrub wetlands during spring and fall migration; furbearers and songbirds use these areas during various times of the year.

d. Upland Wildlife Habitat

The bulk of this habitat type is made up of "transitional hardwoods." This forested area provides habitat for characteristic woodland wildlife species such as whitetail deer, eastern cottontail, eastern gray squirrel, woodcock, raccoon, and songbirds, among others. When these woodlot areas area situated directly adjacent to the open water or wetland areas of the Bay, the habitat values increase. Great blue herons, American bittern, wood duck, osprey and others are among the common species which utilize both wetland and upland habitats.

In addition to avian wildlife, many species of mammals use the Bay area. The largest land mammal around the Bay, the whitetail deer, is common to the forested area around the Bay and is dependent upon the woods for escape cover, fawn rearing, and winter cover. Small mammals utilizing the forest and wetland environment include fox, raccoon, muskrat, mink, squirrel, rabbit, mice and others. All are dependent for some part of their existence on the cover provided by the wetlands, open water, and wooded areas.

e. Aquatic Habitat

The Bay supports a large number of freshwater fishes. This population is dominated by some warm-water species not normally considered gamefish, such as white perch, alewife, or bowfin. These species do, however, contribute to the forage base of the

IRONDEQUOIT BAY WETLANDS

Exhibit II-5

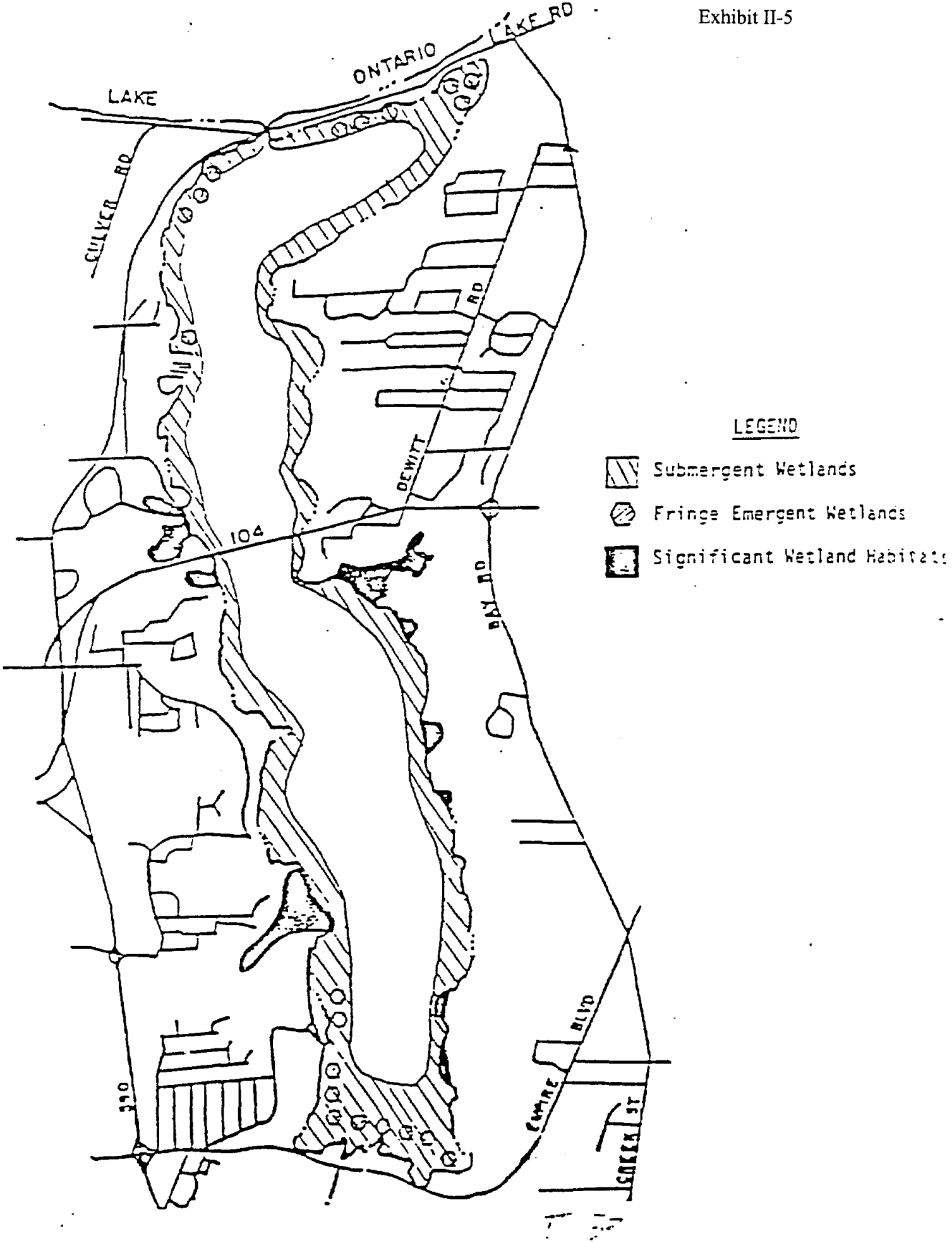


EXHIBIT II-6

FISH SPECIES AND AQUATIC PLANTS ASSOCIATED WITH IRONDEQUOIT BAY

Fish Species

Golden shiner
Carp
Spottail shiner
Emerald shiner

Largemouth bass
Smallmouth bass
Pumpkinseed
Black crappie
Rockbass

White perch

Channel catfish
Black bullhead
Brown bullhead

*Seasonal inhabitants

Walleye
Johnny darter
Yellow perch

Alewife
Gizzard shad

White sucker

Northern pike
Longnose gar

Sea lamprey

*Rainbow trout
*Brown trout
*Coho salmon
*Chinook salmon
*Atlantic salmon

Aquatic Plants

SUBMERGENT

Coontail
Watermilfoil
Sago pondweed

FLOATING

Water lily
Duckweed

EMERGENT

Longleaf pondweed
Broadleaf cattail
Narrow leaf cattail

SHRUB*

Willow
Red osier dogwood
Silky dogwood
Buckthorn
Green ash - sapling stage
Red maple - sapling stage
Arrowwood

*Shrubs are not normally considered truely aquatic plants but these species are used as wetland indicators by biologist with the DEC (Region 8).

EXHIBIT II-7

BREEDING BIRDS OF THE IRONDEQUOIT BAY AREA[1]

POSSIBLE

Chimney Swift
Red-headed Woodpecker
Alder Flycatcher
Rough-winged Swallow
Brown Creeper
Chestnut-sided Warbler

PROBABLE

Green Heron
Least Bittern
Sora
Killdeer
Common Snipe
Willow Flycatcher
Least Flycatcher
Tree Swallow
White-eyed Vireo
Yellow-throated Vireo
Mourning Warbler
Hooded Warbler
Rufous-sided Towhee

CONFIRMED

Mallard
Blue-winged Teal
Wood Duck
Red-tailed Hawk
American Kestrel
Ring-necked Pheasant
Virginia Rail
Common Gallinule
American Woodcock
Rock Dove
Mourning Dove
Yellow-billed Cuckoo
Black-billed Cuckoo
Screech Owl
Great Horned Owl
Ruby-throated Hummingbird
Belted Kingfisher
Common Flicker
Pileated Woodpecker
Red-bellied Woodpecker
Hairy Woodpecker
Downy Woodpecker
Eastern Kingbird
Great-crested Flycatcher
Eastern Phoebe
Eastern Wood Pewee
White-breasted Nuthatch
House Wren
Marsh Wren
Gray Catbird
Brown Thrasher
American Robin
Wood Thrush
Veery
Cedar Waxwing
Starling
Red-eyed Vireo
Warbling Vireo
Yellow Warbler
Cerulean Warbler
Common Yellowthroat
American Redstart
House Sparrow
Red-winged Blackbird
Northern Oriole
Common Grackle
Brown-headed Cowbird
Scarlet Tanager
Cardinal
Rose-breasted Grosbeak
Indigo Bunting
House Finch
Bank Swallow
Barn Swallow
Blue Jay
American Crow
Black-capped Chickadee
Tufted Titmouse
American Goldfinch
Chipping Sparrow
Field Sparrow
Swamp Sparrow
Song Sparrow

[1] Based on data from the N.Y.S. Dept. of Environmental Conservation and the Federation of N.Y.S. Bird Clubs Breeding Bird Atlas Project (1980-83), with additional information provided by Mr. Robert Spahn of Webster, N.Y.

Bay. With an improved water quality, a shift in abundance to species commonly sought after as sport fishes, such as largemouth bass, smallmouth bass, northern pike, and salmonids is expected.

In addition to the resident population of fish in the Bay, other species are found in great numbers seasonally. Salmonids use the Bay during spawning runs up Irondequoit Creek. It is possible that, as water quality continues to improve, some of the salmonids may become year-round residents within the Bay. The present condition of the salmonid fishery in Lake Ontario and adjoining bays and tributaries is a direct result of the State's intensive stocking program. 1984 stocking figures show that Irondequoit Creek received 19,100 Brown Trout yearlings, 17,000 Rainbow Trout yearlings, and 10,800 Atlantic Salmon yearlings.

Exhibit II-7 identifies fish species and aquatic plants associated with the Irondequoit Bay area, and Exhibit II-8 identifies breeding birds associated with this area.

2. Geological, Regulatory, and Infrastructure Constraints

a. Steep Slopes

Development activities on or adjacent to the steep slopes around Irondequoit Bay, Lake Ontario, Nine Mile Point and Shipbuilder's Creek can result in increases in erosion and sedimentation, degradation of the water quality of the Bay and the Lake and its tributary streams, slope slippage, and destruction of the natural character of the Bay areas. The manner in which storm water drainage is handled, and the disturbance of soils and removal of vegetation can affect slope stability.

Slopes of 15 percent or greater may be subject to failure if disturbed either through removal of vegetation, which acts to stabilize the slope, or grading of slope areas, which exposes them to erosion by wind and water. Natural percolation of storm water is reduced when vegetation is removed from slope areas, or impervious surfaces (such as buildings and paved surfaces) are constructed.

Concentration of surface runoff from upland development areas to slope faces may cause excessive erosion and further reduce slope stability. Development related activities may increase the risk of slope failure and cause damage to property. Additionally, increased boat traffic resulting from the Bay opening may enhance the natural erosion at critical slope toe areas. Disturbances may also contribute to water quality degradation through siltation.

Making large cuts and fills at the top or base of a steep slope, concentrating volumes of storm water in one location, or placing structures in or too close to slope areas, may disturb the established equilibrium of the soil profile to the point where the upper portion of the slope will begin to slip. This can result in extensive losses to real estate which is built on or near the top or toe of the slopes.

b. Flood plains

The shoreline area and wetlands of Irondequoit Bay, Lake Ontario, Shipbuilder's Creek, Nine Mile Point and Mill Creek (located in Webster Park) have been identified as flood prone in studies done by the Federal Emergency Management Agency. (These areas have been mapped and flood elevations cited as part of the local flood insurance program). Building activity in these flood prone areas is regulated by the National Flood Insurance Program and the Town's flood plain management ordinance. Buildings within flood prone areas can impact the flood handling capabilities of a body of water, such as Irondequoit Bay, and can become exposed to significant damage from high water levels.

c. Soil Characteristics

The characteristics of the soils in the Bay area have been determined largely by glacial history, as well as topography, drainage, and vegetation. Plateau soils in the Webster section of the Bay have a high silt and clay content. They are underlain by glacial till, the relatively dense material deposited and compacted by the glacier. These soils are generally moderately well drained and deep.

The slopes around the Bay are formed predominantly from sediments laid down in the pre-glacial Genesee River valley, although some bedrock outcrops are found in the deeper stream valleys. The material is predominantly of fine sands and silts of nearly uniform consistency, and the composition makes the material highly susceptible to erosion. The soils are stabilized by the native vegetation and are well drained.

Soils along the creeks and the flatter areas of the shoreline are alluvial, which means that they are derived from recently deposited sediments. They are usually of a fine consistency, poorly drained, and have a high water table.

d. Coastal Erosion Hazard Areas

New York State Department of Environmental Conservation has identified Coastal Erosion Hazard Areas in Monroe County. Coastal Erosion Hazard Areas are those coastal shorelines described as follows:

* Structural areas which are receding at an average rate of one foot or more per year; and

* Natural protective features areas including beaches, dunes, sandbars, spits, shoals, barrier bays, barrier islands, bluffs and wetlands.

The entire Lake Ontario shoreline and Irondequoit Bay frontage south of Held's Cove, and the area just north of the Penfield town line have been designated Coastal

Erosion Hazard Areas, and are subject to the regulations of Article 34 of the Environmental Conservation Law.

d. Public Water Supply

The waterfront revitalization area receives its water supply primarily from wells owned by the Village of Webster near the sandbar at the northern end of Irondequoit Bay. The wells draw from the Irondogenesee Acquifer. The wells are extremely deep and are constructed in such a way so as to resist contamination. Any development which may occur near these wellfields must be carefully scrutinized to avoid contamination.

e. Sanitary Sewers and Alternative Systems

Part of the waterfront revitalization area is served by sanitary sewers and part is served by on-site systems. Most of the lakeshore area is served by on-site systems. There is a section of sanitary sewers in the vicinity of Four Mile Creek. Along Irondequoit Bay, sewers are available from the intersection of Dewitt and Backus road, south along Dewitt to the Route 104 expressway. Other areas, including the Sandbar, are served by private systems. The quality of systems along the Sandbar is of concern to the Town. A study to provide a sanitary sewer to this area was started early 1995. The study is not yet completed and hopefully it will provide service in the near future.

f. Air Quality

The Town of Webster has no air quality maintenance areas within its boundaries.

INVENTORY AND ANALYSIS

APPENDIX

COASTAL FISH & WILDLIFE HABITAT RATING FORM

Name of Area: **Irondequoit Bay and Creek**

Designated: **October 15, 1987**

County: **Monroe**

Town(s): **Irondequoit, Webster, Penfield, Perinton, Rochester**

7½' Quadrangle(s): **Rochester East, NY; Webster, NY; Fairport, NY**

Score	Criterion
25	Ecosystem Rarity (ER) One of the major coastal bay and tributary systems on the Great Lakes coastal region.
24	Species Vulnerability (SV) Least bittern (SC) and sedge wren (SC) nesting. Additive division: 16 + 16/2
9	Human Use (HU) A major recreational fishing area on Lake Ontario, attracting anglers from throughout western and central New York.
9	Population Level (PL) Concentrations of many warmwater fish species and salmonids are unusual in the Great Lakes Plain ecological region.
1.2	Replaceability (R) Irreplaceable

SIGNIFICANCE VALUE = [(ER + SV + HU + PL) X R]

= **80**

SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS PROGRAM
A PART OF THE NEW YORK COASTAL MANAGEMENT PROGRAM

BACKGROUND

New York State's Coastal Management Program (CMP) includes a total of 44 policies which are applicable to development and use proposals within or affecting the State's coastal area. Any activity that is subject to review under Federal or State laws, or under applicable local laws contained in an approved local waterfront revitalization program will be judged for its consistency with these policies.

Once a determination is made that the proposed action is subject to consistency review, a specific policy aimed at the protection of fish and wildlife resources of statewide significance applies. The specific policy statement is as follows: "Significant coastal fish and wildlife habitats will be protected, preserved, and, where practical, restored so as to maintain their viability as habitats." The New York State Department of Environmental Conservation (DEC) evaluates the significance of coastal fish and wildlife habitats, and following a recommenda-tion from the DEC, the Department of State designates and maps specific areas. Although designated habitat areas are delineated on the coastal area map, the applicability of this policy does not depend on the specific location of the habitat, but on the determination that the proposed action is subject to consistency review.

Significant coastal fish and wildlife habitats are evaluated, designated and mapped under the authority of the Coastal Management Program's enabling legislation, the Waterfront Revitalization and Coastal Resources Act (Executive Law of New York, Article 42). These designations are subsequently incorporated in the Coastal Management Program under authority provided by the Federal Coastal Zone Management Act.

This narrative, along with its accompanying map, constitutes a record of the basis for this significant coastal fish and wildlife habitat's designation and provides specific information regarding the fish and wildlife resources that depend on this area. General information is also provided to assist in evaluating impacts of proposed activities on parameters which are essential to the habitat's values. This information is to be used in conjunction with the habitat impairment test found in the impact assessment section to determine whether the proposed activities are consistent with the significant coastal habitats policy.

DESIGNATED HABITAT: IRONDEQUOIT BAY AND CREEK

LOCATION AND DESCRIPTION OF HABITAT:

Irondequoit Bay and Creek are located approximately four miles east of downtown Rochester, N.Y. The bay and creek encompass approximately 2,000 acres located in the City of Rochester and the Towns of Irondequoit, Webster, Perinton, and Penfield, Monroe County (7.5' Quadrangles: Rochester East, N.Y.; Webster, N.Y.; and Fairport, N.Y.). The fish and wildlife habitat includes the entire bay area, a large emergent wetland area at the south end of the bay, and Irondequoit Creek, upstream approximately seven miles from the bay to the confluence with Thomas Creek, just south of the Penn Central Railroad tracks. Irondequoit Bay is separated from Lake Ontario by a sandy barrier beach formation, and is bordered by relatively steep wooded slopes and bluffs. However, much of the western shoreline has been developed for residential and commercial uses. Irondequoit Creek is a very large, medium gradient, coolwater stream, which drains approxi-mately 170 square miles of predominantly suburban and rural residential lands.

FISH AND WILDLIFE VALUES:

Irondequoit Bay and Creek comprise one of the few major coastal bay and tributary systems in the Great Lakes Plain ecological region of New York. The wetland area at the south end of the bay is one of the largest coastal marshes on western Lake Ontario. Irondequoit Bay supports a diverse and productive warmwater fishery, including such species as smallmouth bass, largemouth bass, northern pike, brown bullhead, white perch, white bass, longnose gar, and lake herring. Extensive beds of submergent and emergent wetland vegetation, found in most coves and tributary mouths, are important spawning and nursery areas for many of these species. Irondequoit Bay and Creek also have significant concentrations of steelhead (lake-run rainbow trout), coho salmon, and brown trout. These salmonids migrate through the bay and enter the creek to spawn (unsuccessfully in most instances) between late August and December. Steelhead also migrate into Irondequoit Creek between late February and April. Seasonal runs of salmonids occur as far inland as the confluence with Trout Creek, near the hamlet of Mendon, but actual population levels in the upper reaches (i.e., above Thomas Creek) are not well documented. Salmonid concentrations in Irondequoit Bay and Creek are the result of an ongoing effort by the NYSDEC to restore the Great Lakes salmonid fishery through stocking. In 1984, approximately 24,000 steelhead were released in Irondequoit Creek (as far inland as Trout Creek), and approxi-mately 25,000 brown trout were released in the bay. Irondequoit Creek is also one of only three Lake Ontario tributaries where the NYSDEC is conducting an experimental landlocked (Atlantic) salmon stocking program to restore this fishery in the Great Lakes. Approximately 18,000 yearling Atlantic salmon were released in the creek in 1984. In the spring, salmonids are generally found out along the Lake Ontario shoreline and provide troll fishing opportunities for many anglers. During the winter months, Irondequoit Bay is a popular ice fishing area. As a result of the abundant fisheries resources in the area, anglers from throughout western and central New York are attracted to Irondequoit Bay.

The entire Irondequoit Bay complex is used as a resting and feeding area by waterfowl during spring and fall migrations. Species that regularly occur here during these periods include common goldeneye, mergansers, mallard, blue-winged teal, wood duck, canvasback, redhead, scaup, black duck, and Canada goose. This resource provides waterfowl hunting opportunities in the fall to sportsmen in the local area. Most of this hunting activity occurs along the eastern shore of the bay, in the Town of Webster. Depending on the extent of ice cover each year, some waterfowl may remain in the bay in winter; mid-winter aerial surveys of waterfowl abundance for the ten year

period 1976-1985 indicate average concentrations of over 100 birds in the area each year (370 in peak year), dominated by mergansers, scaup, common goldeneye, and mallard. Wetland areas located around the shoreline, and especially at the south end of the Irondequoit Bay, are also productive habitats for a variety of marsh nesting birds. Probable or confirmed breeding bird species in these areas include green-backed heron, least bittern (SC), mallard, blue-winged teal, wood duck, Virginia rail, sora, common moorhen, belted kingfisher, marsh wren, sedge wren (SC), red-winged blackird, and swamp sparrow.

IMPACT ASSESSMENT:

A **habitat impairment test** must be met for 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** that must be met 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 below to assist in applying the habitat impairment test to a proposed activity.

Any activity that degrades water quality, increases temperature or turbidity, alters water depths, or reduces flows in Irondequoit Bay or Creek would adversely affect the fish and wildlife resources of this area. Discharges of sewage or stormwater runoff containing sediments, nutrients, or chemical pollutants could adversely impact on fish and wildlife resources. Warmwater species would be most sensitive during March through July, when spawning and incubation take place. Salmonids would be most sensitive during their respective spawning periods, and in the spring after hatchery-raised fish are released in the creek. Barriers to fish migration, whether physical or chemical, would have a significant effect on salmonid populations in Irondequoit Bay and Creek. Activities affecting Irondequoit Creek as far inland as Trout Creek should be evaluated for potential impacts. The fisheries resources in Irondequoit Bay could support increased recreational fishing pressure, resulting in a fishery of statewide or greater significance. Expansion of the channel connecting Irondequoit Bay with Lake Ontario may significantly increase access for human uses of fish and wildlife in this area. However, improved motorboat access may also stimulate further development of marinas and housing around the bay. Such development could have significant impacts on fish and wildlife, through disturbance or elimination of productive wetland areas and littoral zones, and through pollution of the bay from upland activities. Existing areas of natural vegetation bordering Irondequoit Bay and Creek should be maintained to provide bank cover, perching sites, soil stabilization, and buffer zones.

KNOWLEDGEABLE CONTACTS:

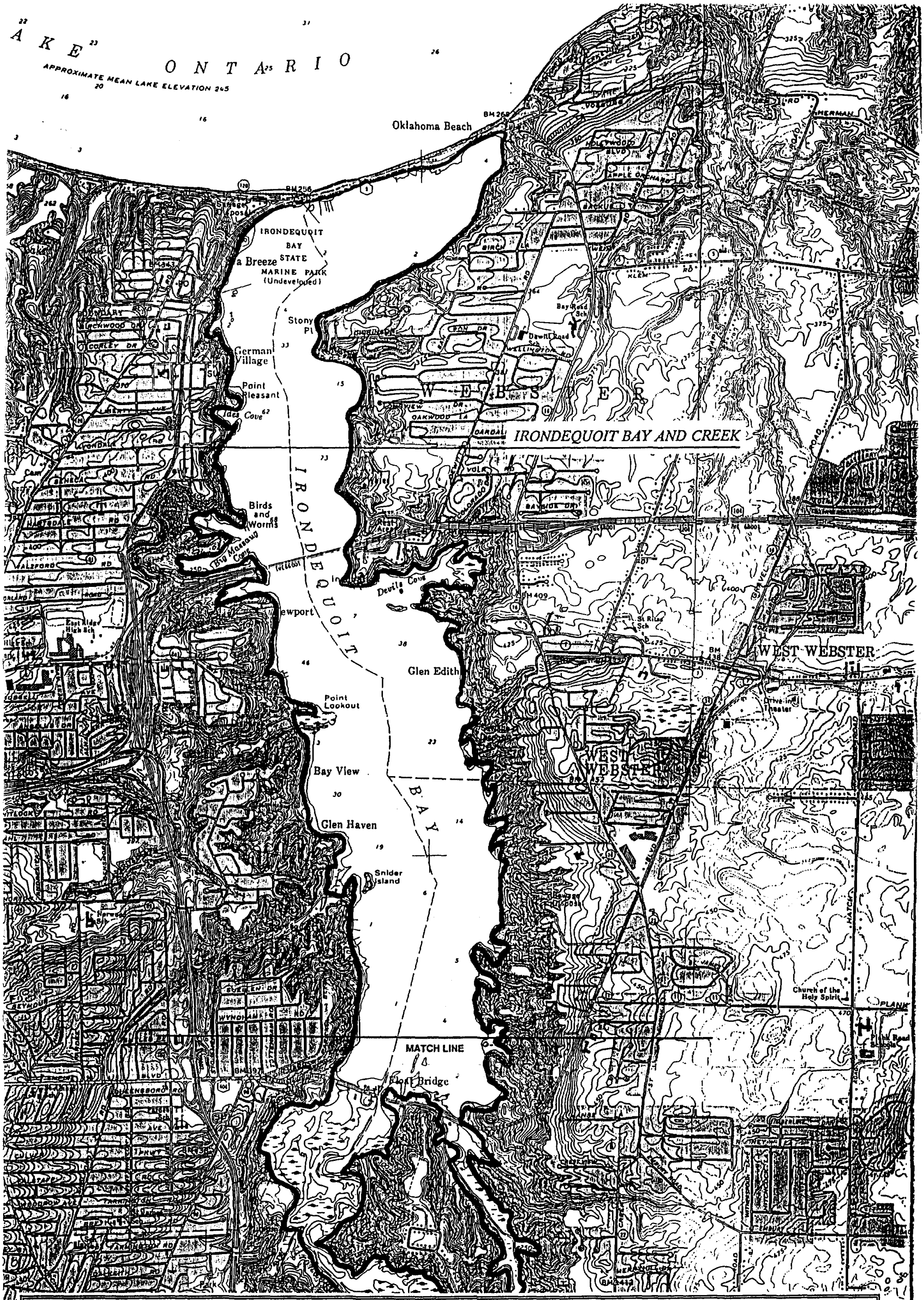
Greg Capobianco or Tom Hart
Division of Coastal Resources & Waterfront Revitalization
NYS Department of State
162 Washington Avenue
Albany, NY 12231
Phone: (518) 474-6000

Carl Widmer, Fisheries Manager
or Larry Myers, Wildlife Manager
or Matt Sanderson, Environmental Protection Biologist
NYSDEC - Region 8
6274 E. Avon-Lima Road
Avon, NY 14414
Phone: (716) 226-2466

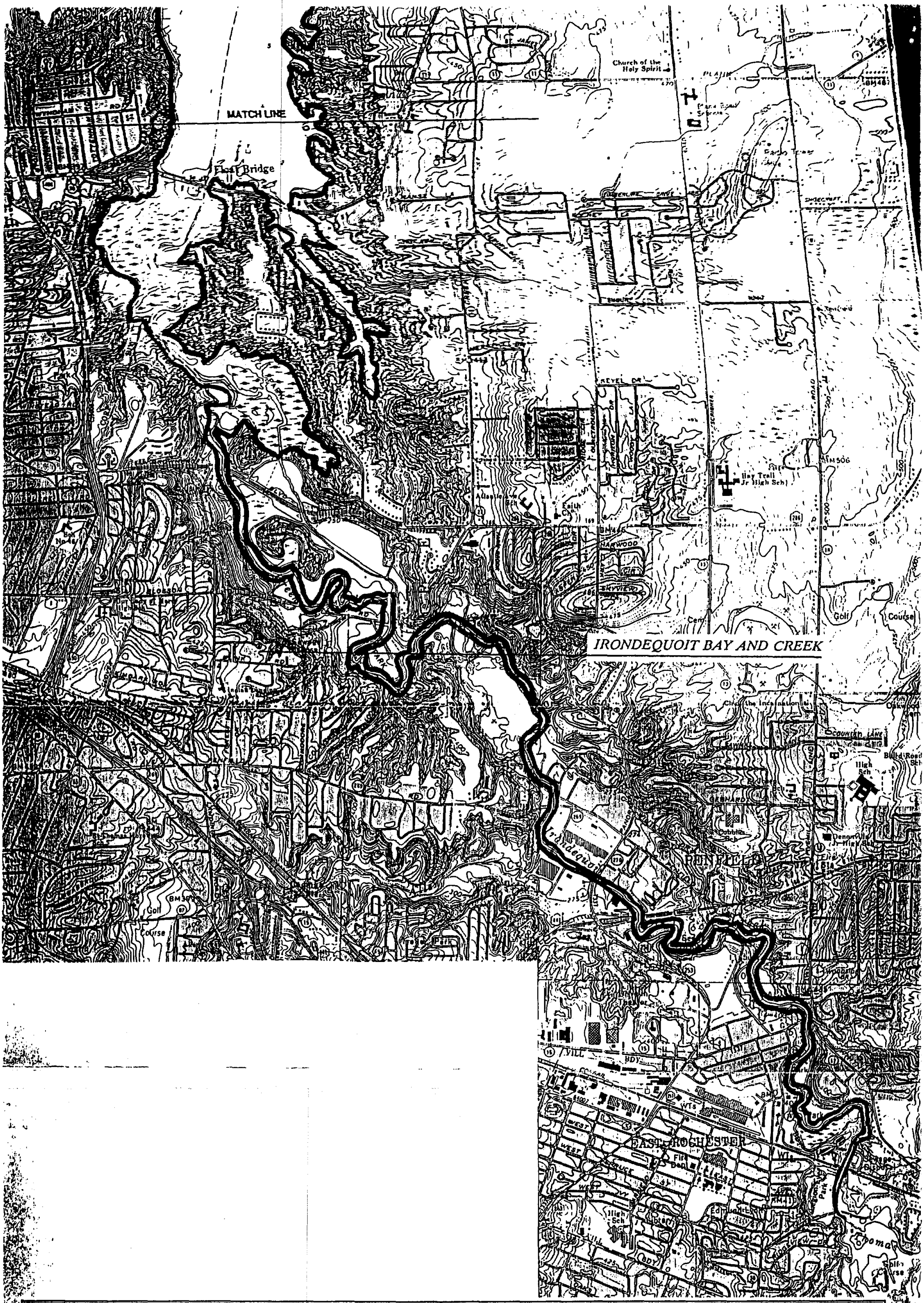
NYSDEC - Information Services
700 Troy-Schenectady Road
Latham, NY 12110
Phone: (518) 783-3932

SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

Irondequoit Bay and Creek (in part)



New York St partment of State Division of Coastal Resources and Waterfront Revitalization prepared by [illegible] art and G. Canobianco March 1991 Scale: 1" = 2000'



SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

Irondequoit Bay and Creek (in part)

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New York State Department of State Division of Coastal Resources and Waterfront Revitalization — Prepared by T. Hart and G. Capobianco March 1991 — Scale: 1" =