

SECTION I

INVENTORY AND ANALYSIS

INVENTORY AND ANALYSIS

TOWN OVERVIEW

The Town of Irondequoit, located in the northcentral portion of Monroe County immediately to the north of the City of Rochester, incorporates approximately 16.5 square miles of land area. The community is bounded on three sides by water -- the Genesee River on the west, Lake Ontario on the north, and Irondequoit Bay on the east, and contains approximately 7 miles of shoreline.

THE WATERFRONT

This waterfront setting is one of the community's greatest assets, offering significant potential for recreational enjoyment and opportunities for selective new development which will enhance the Town's living environment, as well as expanding its tax base. However, the natural characteristics of Irondequoit's waterfront also present environmental concerns and development constraints. These special characteristics have not always been adequately addressed in past development decisions.

UNDEVELOPED LAND

Very little undeveloped, non-park land remains in Irondequoit (less than 1,500 acres, constituting approximately 14% of the Town's total area.) The Town Conservation Board has estimated that almost two-thirds of this undeveloped land (approximately 1,000 acres) is environmentally sensitive and presents constraints which would require development controls. These areas are characterized by steep slopes and/or wetlands and are located (1) along Irondequoit Bay, (2) to the south and west of Durand Eastman Park, and (3) in the Seneca Flats area near the Genesee River. The remainder of Irondequoit's potential development sites, which do not present significant natural constraints on development, are relatively small infill parcels, dispersed throughout the southcentral portion of the community.

POPULATION GROWTH

Although Irondequoit's population grew rapidly between 1950 and 1970 (reaching a total of 63,675 persons), the population has declined over the last decade (to 57,648 in 1980). This decline is not considered particularly serious, however, because it reflects national demographic trends and is counterbalanced by an increase in the number of households over the same period.

More importantly, Irondequoit experienced a significant shift in the age composition of its population over the 1970-80 period, with population in the 24 years and under age group declining sharply and elderly population increasing dramatically. As a result, Irondequoit now has a larger percentage of elderly as a proportion of total population (16.7%) than Monroe County as a whole (10.9%) and the Rochester SMSA (11.0%).

INCOME AND EMPLOYMENT

Household income data from the 1980 Census shows that Irondequoit households compare quite favorable with those in Monroe County and the Rochester SMSA as a whole. Mean household income in Irondequoit in 1980 was over 8% higher than the mean for all Monroe County households, and over 11% higher than that of Rochester SMSA households. Irondequoit also had a larger percentage of all households with incomes over \$35,000 than either the County or the SMSA and a lower percentage of households with incomes under \$20,000. Employment data shows that the pattern of jobs held by Irondequoit residents is similar to that for the County as a whole, with the bulk of jobs in the manufacturing category.

PROPERTY OWNERSHIP

A complex set of jurisdictional relationships exists within Irondequoit. Monroe County owns approximately 110 acres along Irondequoit Bay. This area is known as Irondequoit Bay Park West. Monroe County also owns 17 acres of tax-foreclosed land in the Seneca Flats area. The Town and its waterfront revitalization program boundary are actually divided into two distinct sections, or areas, due to the fact that the Culver Road right-of-way which runs north from the City of Rochester, as well as the 965 acre Durnad-Eastman Park, are actually contiguous to and physically a part of the City. The City leases Durand-Eastman Park to Monroe County for operational and maintenance purposes.

The State also owns some important parcels of land in Irondequoit. The majority of these land holdings are included in or adjacent to the Keeler (Route 104) and Sea Breeze (Route 47) Expressway rights-of-way. In addition, the State Office of Parks, Recreation and Historic Preservation owns an important 20-acre parcel of land on the northwest shore of Irondequoit Bay in the Sea Breeze area. (This parcel is to be used in developing a boat launch and fishing pier as part of the larger U.S. Army Corps of Engineers project opening a channel between the Bay and Lake Ontario.)

The Town itself owns relatively little land. Major Town-owned parcels include the Town Hall site on Titus Avenue (35 acres), the Pinegrove Senior Citizen and Community Center, the Bateau Terrace Tot Lot on Lake Ontario, the Newport Road Landfill (27 acres), and Winton Park (4.5 acres). The Town also owns several small sites formerly used as sewage treatment plants and pumping stations. Two of these (one located on Pattonwood Drive in the Summerville area and the other adjacent to the Sea Breeze Amusement Park) present special opportunities for re-use because of their waterfront locations, and the Town is currently seeking developers for these sites.

EXISTING LAND USE AND ZONING (see Existing Land Use Map in attached map envelope)

(see Existing Zoning Map in attached map envelope)

RESIDENTIAL

As an older suburb of the City of Rochester, Irondequoit is a predominantly single family, "white collar," residential community. Although the character and median value of Irondequoit's residential areas vary, the Town as a whole is known for its good quality housing and pleasant neighborhoods.

Over 70% of Irondequoit's housing stock was constructed before 1960. Some Irondequoit neighborhoods (including Sea Breeze and Summerville/White City in the waterfront area) were developed as summer cottage colonies prior to the adoption of minimum development standards. Although 80% of the Town's housing units are owner-occupied, a large percentage of the community's newer residential development has taken the form of multifamily rental units. This higher density housing is located primarily in southeast Irondequoit, along the western portion of the Ridge Road corridor, and in the vicinity of the Irondequoit Plaza/Titus Mall shopping center.

RETAIL/COMMERCIAL

Although Irondequoit does not have a traditional downtown district, there are a number of important retail areas within the community including the Ridge Road corridor (which contains several subregional shopping centers, as well as a substantial amount of strip commercial development), the Titus/Hudson commercial district; and several small scale shopping centers and neighborhood commercial concentrations.

OFFICE AND INDUSTRIAL

Industrial investment in Irondequoit has been sporadic. The most significant operations are two facilities of the Eastman Kodak Company (which are located within the Ridge Road corridor). Irondequoit has accommodated a greater number of office projects than it has industrial developments. A modest, but constant flow of moderately-sized office buildings has resulted from investments mostly by local entrepreneurs. These buildings are located primarily along the Ridge Road corridor and on Titus and Hudson Avenues in the vicinity of Irondequoit Plaza/Titus Mall.

PARKS AND RECREATION

The major parks in, or adjacent to, Irondequoit (Durand Eastman, Seneca, and Bay Park West) are owned and/or operated by Monroe County. Although the ratio of parkland to total area in Irondequoit is quite acceptable for an older, established community, the Town itself controls relatively little park land and has, therefore, entered into agreements with the two school districts within Irondequoit for part-time use of school recreation facilities.

Major Town facilities include the Pinegrove Community Center (with adjacent playfields owned by the West Irondequoit School District), the 4.5 acre Winton Park, the 15 acre Woodcraft Day Camp located behind the Town Hall,

and the 16 acre Densmore playfield (leased from the East Irondequoit School District). The Town has also provided a number of small tot lots and has cooperated with the East and West Irondequoit School Districts in developing neighborhood recreational facilities at six school sites. The Town provides library facilities at two locations: on Ridge Road in East Irondequoit and on Cooper Road in west Irondequoit.

TRANSPORTATION

Irondequoit's existing street system adequately serves the community's current access and circulation needs. Existing and projected traffic volumes are such that, in general, only light to moderate levels of traffic g-congestion are found now and are anticipated to occur over the next 10-15 years. Connections to the regional expressway system are good, although congestion levels at the existing Stutson Street and Route 104 bridges across the Genesee River result in some difficulty for Irondequoit residents. The Route 104 Expressway on the community's southern border, and the Sea Breeze Expressway in eastern Irondequoit (bordering the waterfront area) provide the Town with an excellent arterial highway system.

WATER SERVICE

The extent of the availability of public water within Irondequoit is impressive. Nearly every road, public or private, has some type of water service. Water Service, therefore, is generally not a limiting factor for land development around the Bay and Lake, excepting as it affects fire protection. The Sea Breeze Water District (which serves the northeastern portion of Irondequoit's waterfront area) buys water from the Monroe County Water Quthority. The older lines in this district are of substandard size and, therefore, cannot support additional development. The County Water Authority, which obtains water from Lake Ontario, serves the remainder of the development in Irondequoit and most of Monroe County.

SANITARY SEWERS

Most of Irondequoit is served by sanitary sewers, however some sections of the Town's waterfront remain dependent upon on-site systems. Areas not served by sanitary systems include the older residential sections on or in the vicinity of the Bay's southern end. The on-site systems found in these areas are often inadequate due to such factors as: age, proximity to the water, lack of sufficient space, difficult topography, and high water tables. The replacement of such systems with public sewers is very costly due to the necessity of providing pumping facilities or force mains.

INVENTORY OF STUDY AREA

Irondequoit's LWRP study area is generally that portion of the Town of Irondequoit which adjoins the west shore of Irondequoit Bay and the south shore of Lake Ontario (excluding that portion of the lakeshore within Durand Eastman Park which is in the City of Rochester). For purposes of description, the study area has been divided into four sub-areas which correspond to sections identified for special study in Irondequoit's recently completed Master Plan.

SOUTHEAST IRONDEQUOIT AREA

This area is bounded on the west by the Keeler Street and Sea Breeze Expressways, on the south by the City of Rochester line, and on the north by the northern property line of Irondequoit Bay Park West. For purposes of this description, the boundary has been extended easterly to the wetlands located immediately to the south of Empire Boulevard along Irondequoit Creek. This area has the following features:

- * The wetlands immediately south of Empire Boulevard are owned partially by the County of Monroe and partly by private individuals. The wetlands are considered part of Ellison Park and include two channels, the largest being Irondequoit Creek. The remainder of the land is generally covered with cattails and small areas of other marsh plants, including purple loosestrife. The entire area, to some extent, acts as a filter for water entering the Bay. Management of the wetlands will eventually have an impact on the water quality of Irondequoit Bay. The Ellison Park Park Master Plan recommends that private lands in the wetlands should eventually be purchased by Monroe County and added to the Park. Little development is proposed for this area in the Plan. The Town notes the City of Rochester's support for the purchase by Monroe County of the private lands contained within the wetland areas of Ellison Park to help ensure further protection and enhancement of sensitive environmental areas.
- * Empire Boulevard separates the wetlands from Irondequoit Bay proper. This major east-west arterial contains scattered commercial establishments built on fill, and affords excellent views of the Bay and its surrounding wooded slopes. Small undeveloped areas, above flood level, exist on both sides of Empire Boulevard.
- * Older, established residential areas are located between the Sea Breeze Expressway and Bay Park West. Monroe County owns a narrow piece of land along the Bay from the Boulevard to the Park along which are located a few houses. Topography in this area is typical of most of the west side of Irondequoit Bay, with a narrow strip of low flood-prone waterfront abutting steep wooded slopes. The plateau areas above the slopes are level and have been almost fully developed with single family homes.

- * Bay Park West is typical of the topography in the area. Steep slopes continue into a series of heavily wooded ridges and valleys covering most of the Park. The Park presently contains a road running along the shore servicing local traffic, a small run-down marina, and a gravel launch ramp capable of launching small boats. The water depth in this area is shallow, limiting the size of boats that can be accommodated. This situation will worsen as the water quality of the Bay improves, producing a thicker and healthier weed growth in the shallow areas.
- * For this reason, the Park Master Plan has called for little additional marina activity in Bay Park West. The existing marina will be rehabilitated and stabilized for the short term, before weed growth becomes a serious barrier to operation. A boat launch might be added, with fishing piers and observation areas taking advantage of the view along the shoreline. The interior of the Park should remain predominantly wooded and undisturbed except for a trail system. A new entrance road will probably be added at the Park's west end adjacent to the Sea Breeze Expressway, eliminating the necessity of driving through residential areas to get to the Park.
- * The Plan also recommended purchasing the Isaac Property, a large vacant parcel adjoining the Park on the north. This property has recently been purchased by the State for inclusion in the Park. It will eventually contain the majority of the Park's active water activities, since it contains some open and flat land and has a shoreline bordering on deeper water. (A consultant will be hired by the County to prepare detailed plans and studies of this area.)

IRONDEQUOIT BAY CENTRAL AREA

This area begins at the northern edge of Bay Park West and continues north to the Route 104 Bay Bridge. It is bounded on the east by Irondequoit Bay and on the west by the Sea Breeze Expressway.

The area includes:

- * A small rod and gun club adjacent to the Isaac Property noted above.
- * Immediately north of the Isaac Property is a large condominium complex, Bay Village, which includes a limited number of private docking spaces. A vacant parcel suitable for low density residential development is located to the west of the complex on Glen Haven Road.
- * Densmore Creek, and the steep wooded slopes that border the creekbed, bisect the area. An extensive wetlands area extends from the lower portion of Densmore Creek to the point where it empties into Irondequoit Bay.
- * A series of small cottage-type residences line the shore from the Bay Village complex to the Newport House, a restaurant and party

house presently undergoing redevelopment as a marina/restaurant facility. (A force main is planned to service the sanitary wastes of this structure.) The redevelopment of the property will also include a parking lot.

- * The Town Landfill lies between Newport Road and the approach to the Irondequoit Bay Bridge and is partially bordered by wetlands. The landfill closed and it is anticipated that the site will be turned into a passive recreation facility. However, because the landfill is listed on the New York State Inactive Hazardous Waste Disposal Sites Registry, detailed investigations of the site will have to be conducted in order to provide sufficient data with which to assess the potential hazards to public health.
- * Steeply wooded slopes divide the narrow waterfront in this area from the plateau above. The plateau is predominately in single family, low density residential use. Most of the prime development sites on the plateau have been developed leaving little additional land suitable for development, with the exception of the State Tunnel site located at the intersection of the Keeler Street and Sea Breeze Expressways.

SEA BREEZE/IRONDEQUOIT BAY NORTH AREA

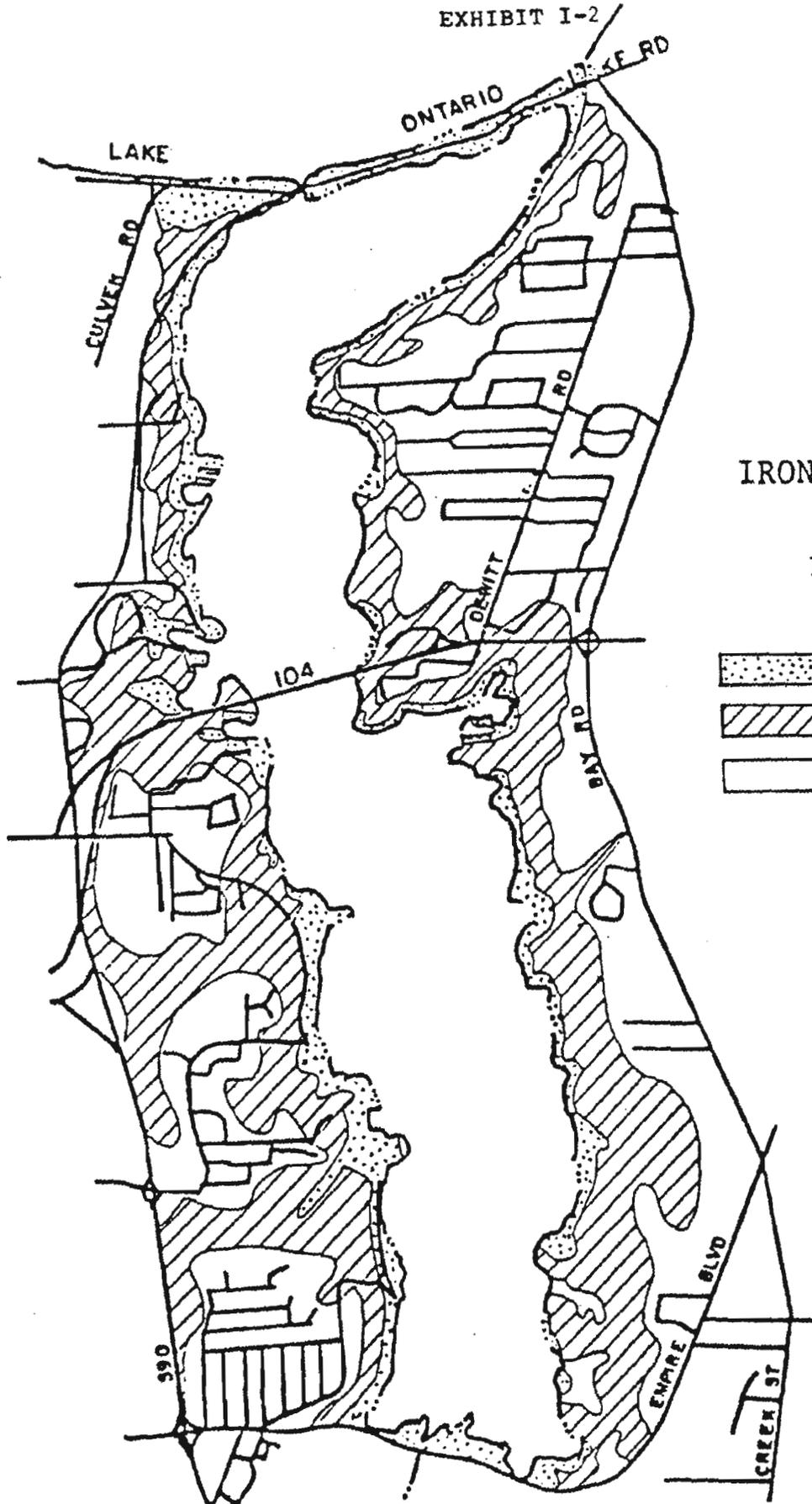
This area, which includes the Sea Breeze neighborhood, is bounded on the north by Lake Ontario and on the east by Irondequoit Bay north of the Route 104 Bay Bridge.

This area is characterized by:

- * A generally narrow strip of waterfront along the Bay. The shoreline area backs up to steep wooded slopes, except in the vicinity of the low lying sand spit which separates Irondequoit Bay from Lake Ontario.
- * Small residences, a few small marinas, and a sailing school occupy the bayshore to Point Pleasant. Many of these uses are located in the flood zone of the Bay.
- * The most predominant feature along this section of the Bay is Point Pleasant, which is the site of a recently constructed sixteen unit luxury condominium development.
- * German Village, a row of older residences located on a narrow strip of land between the Bay and very steep slopes, is situated immediately north of the Point Pleasant development, with which it shares parking facilities. Over the last few years, this area has experienced rising property values and extensive rehabilitation efforts.

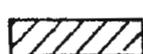
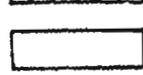
- * The northwest shore of the Bay is generally undeveloped. Much of this land, however, is in a flood plain and is a designated wetland. The area between the top of the wooded slopes and the Expressway is, typically, in single family residential use.
- * The area west of the Expressway, south of Lake Ontario, and east of Durand Eastman Park is known as Sea Breeze and contains a large number of older, single family residential uses. These homes, some of which are in need of rehabilitation, are generally located on small lots and in close proximity to each other.
- * The Sea Breeze area is divided by Culver Road, which functions as the neighborhood's main arterial. Culver Road, in Sea Breeze, is characterized by strip-commercial development generally in need of upgrading and a large amusement park, Dreamland Park, which is a Rochester area landmark. The lower end of Culver Road, in the vicinity of its terminus at the Expressway, is characterized by fast-food restaurants and vacant land suitable for development, including the former site of a Town sewage treatment plant which has been cleared.
- * The sand spit dividing Lake Ontario from Irondequoit Bay is bisected by a channel which separates the Town of Webster from Irondequoit. The channel has been widened and deepened by the Army Corps of Engineers to enable large boats to enter the Bay. As part of this project the bridge which carried Route 18 traffic over the outlet was severed. The removal of the Route 18 bridge opened the way for construction of the navigation channel, a breakwater on the west side and a jetty on the east side of the channel. Associated recreational improvements are being developed by the New York State Office of Parks and Recreation and Historic Preservation. The need to replace the Route 18 bridge continues to be very controversial, with the Towns of Irondequoit and Webster and Monroe County supporting the construction of a replacement. However, questions relating to cost, responsibility, and the size and type of replacement which should be built have, to date, complicated resolution of this critical issue.
- * The sand spit is divided, north and south, by Route 18 and the adjacent right-of-way of the Hojack Line, which has been abandoned in this area. Except for the raised roadbed of the former railroad, the spit is flat for its entire length. Land uses on the Irondequoit side include a row of cottages located on small lots in a narrow strip of land between the railroad right-of-way and the Lake.

EXHIBIT I-2



IRONDEQUOIT BAY

LANDFORMS

-  SHORE ZONE
-  STEEP SLOPES
-  PLATEAU

DURAND EASTMAN PARK

- * Irondequoit's lakefront and LWRP area are divided by Durand Eastman Park, which is located within the City of Rochester. The Park encompasses approximately 7,500 feet of shoreline along Lake Ontario and contains 965 acres. A contiguous piece of land to the west, owned and operated by the Monroe County Pure Waters Authority, is the site of a large sewage treatment plant.

The beach within the Park is a long, narrow sand and pebble strip which backs up to the elevated right-of-way of the abandoned Hojack Line. Paralleling the railroad right-of-way is Lakeshore Boulevard, bisecting the beach area from the rest of the Park. The Park, south of Lake Shore Boulevard, consists of a public golf course, natural areas used for picnicking and hiking, and a number of small lakes and streams. The topography of the Park consists primarily of steep ridges divided by narrow valleys and its vegetation is mostly mature deciduous material with a smaller percentage of evergreens.

SUMMERVILLE/WHITE CITY PLANNING AREA

This area is located immediately south of Lake Ontario and extends from Durand Eastman Park to the City line in the vicinity of the mouth of the Genesee River. To the south, it is bordered by the Hojack Line, St. Paul Boulevard, Pattonwood Drive, and Thomas Avenue. The Genesee River, which adjoins the Summerville area on the west, is entirely within the City of Rochester.

- * White City, due to its origins as a summer colony, suffers from an inadequate infrastructure system and is characterized by high densities and small narrow houses, some of which are substandard. The Bateau Terrace Tot Lot found in this area is presently the only Town-owned recreation facility located on the water. It consists of two distinct parts: a beach area and the tot lot proper, which is located at the top of the bluffs that overlook the Lake.
- * The Gold Coast area, which is located on the Lake between White City and Durand Eastman Park, consists of luxury housing on large parcels.
- * Summerville (which is bordered by White City on the east, Lake Ontario on the north, and the City of Rochester on the west) is an older residential neighborhood in generally good condition, with the exception of the First, Second, and Third Streets area. Some neighborhood commercial uses are located near the terminus of St. Paul Blvd. Housing located south of Rock Beach Road and the Hojack Line is mostly newer and in better condition.
- * The lakefront in the Summerville/White City area consists of a wide, sandy beach which backs up to bluffs that diminish in height in the vicinity of the Genesee River. The beach, while private, is used by the public.

- * Single family homes are located on the bluffs south of the beach, with the exception of a large condominium complex located at the terminus of St. Paul Boulevard.
- * A number of commercial enterprises are located south of the condominium complex and east of the City controlled land along the Genesee River, and include large marinas, boat sales operations, and the Rochester Yacht Club with its large boat basin. Adjoining this area to the east are two large vacant parcels; one of which is the site of a former Town sewage treatment plant on Pattonwood Drive. Abandoned structures belonging to the treatment plant remain on the Town-owned site.
- * Immediately south of the Stutson Street Bridge, the area's only river crossing, is an underutilized parcel which is in close proximity to the Genesee River and adjacent to a marina that leases City-owned land.

VACANT/DETERIORATED/UNDERUTILIZED SITES

As part of the Inventory and Analysis of Irondequoit's Local Waterfront Revitalization Program, eight (8) sites have been identified which possess development potential. These sites consist of either vacant parcels or areas which are deteriorated and/or underutilized. Because of such characteristics as size, location, visibility, value, and proximity to the waterfront, the sites which have been identified are considered to have the highest potential for development in the waterfront study area.

In its attempt to identify potential development sites, the Town took into consideration the presence of such environmentally sensitive features as wetlands, steep slopes, watercourses, flood plains, and wood lots. Also taken into consideration were such limiting factors as: site accessibility, surrounding land uses, and the absence of utilities and other infrastructure improvements.

The eight sites that were ultimately identified are located on or near the three bodies of water which abut Irondequoit (the Genesee River, Lake Ontario, and Irondequoit Bay), with the greatest number being situated in proximity to Irondequoit Bay. Most of the sites consist of more than one parcel and vary greatly in size and current use. The sites are in both private and public ownership.

SITE 1: STUTSON ST.- THOMAS AVE.

The area bounded by Stutson Street Bridge on the north, the City line on the west, the Conrail right-of-way on the south, and Thomas Avenue on the east consists of approximately eight acres of land in private ownership. The site, which is 80 percent wooded, contains the vacant and deteriorated buildings of the former Morse Lumber Company.

The site is separated from the Genesee River by narrow strip of land in the City of Rochester, which is leased from the City for marina use. Joint development of both parcels for water-related recreational use is both

feasible and desirable. In this regard, it should be noted that the City of Rochester, in the draft of its LWRP, has proposed for the same site a boat launch facility, as well as associated public access and water-related recreational activities.

SITE 2: MUNICIPAL TREATMENT PLANT SITE

The eleven acre former Irondequoit Northwest Treatment Plant site and the adjoining nine acre parcel owned by Shumway Marina represent the best prospect for development in the Summerville/White City section of Irondequoit's waterfront. The potential exists for combining the Town-owned parcel and the adjacent Shumway property and developing the site for mixed uses having a maritime theme. However, the Town-owned portion of the site is listed on the State's Registry as the location of inactive hazardous waste site. The N.U.S. Corporation sampled this site on May 9, 1984 and results indicate hydrocarbons in the soil. The site is being investigated under the New York State Superfund. Until such time as the site is completely tested and there is no risk from contaminants, development of the site is prohibited.

SITE 3: LAKESHORE DEVELOPMENT SITE

The area, which includes First, Second, and Third Streets off of Saint Paul Boulevard, may present an attractive waterfront redevelopment opportunity. This area (which currently contains a mix of vacant parcels, older housing and small commercial establishments) represents the only suitable waterfront location in Summerville/White City for the development of higher density residential uses. Not only is the area located adjacent to an existing condominium development, but it is already zoned for more intensive residential use.

SITE 4: NORTHEAST SEA BREEZE AREA

The Sea Breeze area is bounded by Lake Ontario on the north, Irondequoit Bay on the east, and Durand Eastman Park on the west. The area's waterfront location represents a tremendous asset which is not now being used to its maximum advantage. Underutilized and vacant land in the northeastern portion of the area represents Irondequoit's most outstanding opportunity to capitalize on the waterfront's development and recreational potential.

The opening of the Irondequoit Bay to Lake Ontario, and the development of a State marina, fishing pier, and boat launch located adjacent to the new outlet will create a powerful incentive for new development in the northeastern portion of the Sea Breeze area. These public recreational improvements can be coordinated with new private development to take maximum advantage of Sea Breeze's enhanced recreational and economic development potential.

IRONDEQUOIT BAY OPPORTUNITY SITES

The remaining four opportunity sites are located on or near Irondequoit Bay east of the Sea Breeze Expressway, and are situated on the plateau and slopes overlooking the Bay, as well as on the waterfront.

Most of the prime development parcels in this area have already been used for low-density, single family residential development; several multifamily residential projects have also been developed in this area. In addition, a former research facility (Ward's) has been converted to office space and a few bayfront parcels are currently zoned for water-related use. The opening of the channel connecting Irondequoit Bay and Lake Ontario is expected to greatly increase the value of the remaining Bay area vacant and underutilized sites.

SITE 5: NEWPORT ROAD

This site contains three major parcels including the Town's 27 acre municipal landfill located on Newport Road, the site of the Newport House situated on the Bay at the end of Newport Road, and an extensive vacant parcel (known as the Cassara property) located adjacent to the Newport House parcel and consisting of bay frontage and steep, wooded slopes. Development potential of this area is limited due to environmental and other constraints. The Town landfill site was used for the disposal of landscaping and C&D debris from 1957. However, the site received 15,000 tons of waste from the Rubbish Disposal Company. The site is now closed but is generating leachate. The site is located up gradient from a designated wetland and a principal aquifer. A phase I investigation report has been completed for the site but no groundwater, surface water or air sampling has ever been conducted at the site. Until such time as the site is completely tested and there is no risk from contaminants development of the site is prohibited.

SITE 6: STATE TUNNEL PROPERTY

The 27 acre vacant site, which is located at the junction of the Sea Breeze and Keeler Street Expressways, could be donated to the Town by the State in the next few years. The site has been considered for use as a park; however, given its non-central location and proximity to the County's Bay Park West, the appropriateness of the site for town-wide recreational use is questionable. The overall scarcity of developable land in Irondequoit and this site's outstanding visibility and accessibility suggest that a high image office/industrial or mixed use development should be given serious consideration.

SITE 7: GLEN HAVEN

This site consists of two separate areas in the vicinity of the Bay Village condominium complex: a vacant parcel located on South Bay View Road immediately to the west of the Bay Village condominium project, and three undeveloped parcels located south of Bay Village on the bayshore (these parcels have recently been acquired by the State for incorporation into Bay Park West, and negotiations are now underway between the State and the County regarding their operation and development).

SITE 8: EMPIRE BLVD.

An underutilized site located on either side of Empire Blvd. at the southern end of Irondequoit Bay offers an excellent opportunity for new

waterfront commercial development. The site's high visibility, excellent accessibility via Empire Boulevard, and waterfront location make it ideal for this type of use. However, for this type of development to become attractive on this site, sanitary sewers must be provided in Empire Boulevard. (Feasibility studies for the Empire Boulevard sewer have been conducted and the legal process for establishing a sewer district is progressing.)

MAJOR AREAS OF CONCERN

1. BAY DEVELOPMENT CONSIDERATIONS

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.

a. WETLANDS/WILDLIFE HABITATS: Irondequoit Bay has been classified by the New York State Department of Environmental Conservation as a Class I Wetland, which is the highest classification that can be given to a wetland. Therefore, New York State will retain permit granting authority for activities in wetlands around Irondequoit Bay. (At the present time, DEC is considering the entire shoreline area of the Bay as a Class I Wetland.)

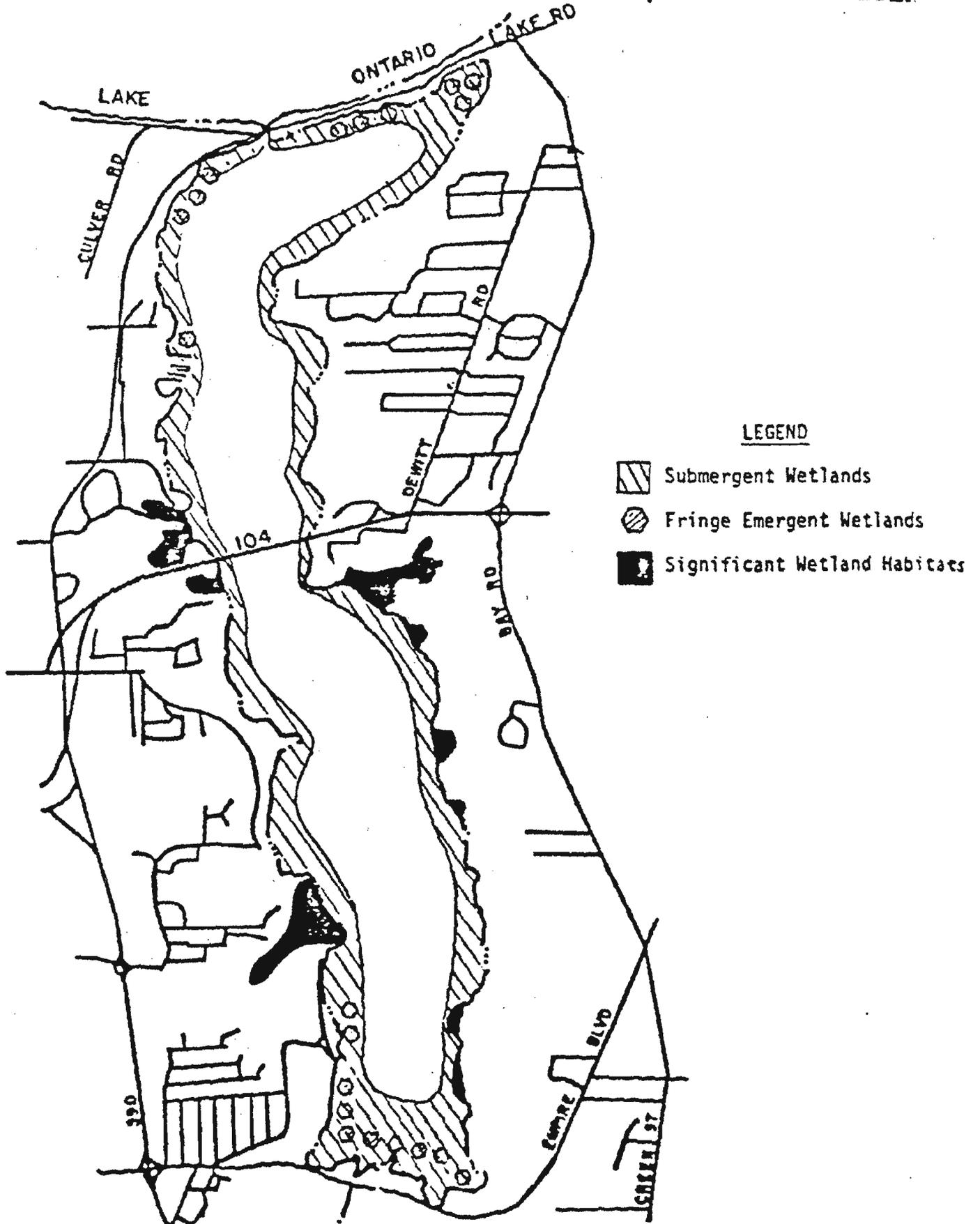
DEC has identified three types of wetlands in the Irondequoit Bay area: Significant Wetland Habitats, Fringe Emergent Wetlands, and Submergent Wetlands and Aquatic Resource Areas. Each of these serves such important functions as: shoreline erosion protection, wildlife habitat, fish habitat, spawning and nursery areas, improving water quality, open space and passive recreation areas.

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, and constitutes a 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 to 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.

Emergent wetlands are found at various locations around the Bay. (Large cattail marshes are found south of Empire Boulevard in the vicinity of Irondequoit Creek.) Emergent wetlands provide excellent fish and wildlife habitats, and when associated with other wetland cover types (such as submergent vegetation), or with upland cover types, the habitat values are increased. The "edges" between different cover types are the areas where the greatest diversity of habitat and wildlife exist.

IRONDEQUOIT BAY WETLA



Floating wetland vegetation is found in the coves and embayments of the Bay and at the Bay's south end. (Water lily and duckweed are the most abundant species of floating vegetation.) This type of vegetation is valuable as a feeding and nursery area for reptiles, amphibians, fish, and waterfowl. Again, when in association with other wetland types, diversity is added.

Shrub wetlands are found in various coves on both sides of the Bay. This wetland covertype is normally adjacent to the upland area and provides a transition zone between the wetlands and the upland. (Shrub areas are usually only seasonally flooded in spring and fall.) Waterfowl use shrub wetlands during spring and fall migration; furbearers and song birds use these areas during various times of the year.

DEC and the U.S. Corps of Engineers, in conjunction with the U.S. Fish and Wildlife Service, have performed several wildlife habitat surveys of Irondequoit Bay. Although these surveys are preliminary in nature, they indicate that there are several important wildlife habitats in the Bay area that are worthy of protection.

Four types of wildlife habitat areas have been identified for Irondequoit Bay:

1. Wetland habitats including submergent wetlands (Class 1 wetlands within 200-600 feet of the shore), emergent cattail marshes, floating wetlands, and shrub wetlands found in coves around the Bay (see above).
2. Aquatic resources habitat, including shoreline structures important to fish feeding and spawning.
3. Upland habitat, including wooded slope areas.
4. Significant fish and wildlife resource areas (both wetland and upland areas) that have unique combinations of several of the above wildlife habitats. In Irondequoit, these areas have been tentatively identified as: Massaug Cove, Newport Cove, Densmore Creek Wetland, Glen Haven/Snyder Island, and the south end emergent fringe area.

Irondequoit Bay supports a large number of freshwater fishes dominated by some warm-water species not normally considered gamefish, such as: white perch, alewife, or bowfin. With 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. The following map shows those areas of the Bay where good shoreline structure, vital for a productive and diverse fishery, exists. This structure is composed of natural wave-washed beaches, submergent vegetation, overhanging shoreline vegetation, gravel/rubble bottoms, and/or submerged trees and woody debris.

EXHIBIT I-4

FISH SPECIES COMMON TO THE IRONDEQUOIT BAY

Golden shiner
Carp
Spottail
Emerald shiner

Walleye
Johnny darter
Yellow perch

Largemouth bass
Smallmouth
Pumpkinseed
Black crappie
Rockbass

Alewife
Gizzard shad

White sucker

Northern pike

White perch

Longnose gar

Channel catfish

Sea lamprey

Black bullhead
Brown bullhead

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

*Seasonal inhabitants

EXHIBIT I-5

COMMON AQUATIC PLANTS ASSOCIATED WITH IRONDEQUOIT BAY

SUBMERGENT

Coontail
Watermilfoil
Sago pondweed

EMERGENT

Longleaf pondweed
Broadleaf cattail
Narrow leaf cattail

FLOATING

Water lily
Duckweed

SHRUB*

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

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

EXHIBIT I-6

BREEDING BIRDS OF THE IRONDEQUOIT BAY AREA

POSSIBLE

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

Green Heron
 Least Bittern
 Sora
 Killdeer
 Common Snipe
 Willow Flycatcher
 Least Flycatcher

PROBABLE

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
 Bank Swallow
 Barn Swallow
 Blue Jay
 Common Crow
 Black-capped chickadee
 Tufted Titmouse

White-breasted Nuthatch
 House Wren
 Long-billed March 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
 American Goldfinch
 Chipping Sparrow
 Field Sparrow
 Swamp Sparrow
 Song Sparrow

¹Based 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.

The present improved condition of the sports fishery in Lake Ontario and its adjoining bays and tributaries, including Irondequoit Bay, is a direct result of the State's intensive stocking program. 1984 stocking figures show that Irondequoit Creek alone received 19,100 Brown Trout yearlings, 17,000 Rainbow Trout yearlings, and 10,800 Atlantic Salmon yearlings.

The major portion of upland wildlife habitat 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 are 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 use both wetland and upland habitats. In addition to avian wildlife, many species of mammals use the Bay area. All are dependent for some part of their existence on the cover provided by the wetlands, open water, and wooded areas.

Irondequoit Bay and Creek habitat located within the City of Rochester and the Towns of Irondequoit, Webster, Perinton and Penfield in Monroe County is expected to be designated by the New York State Secretary of State as a fish and wildlife habitat of statewide significance. The habitat includes the entire bay area, emergent wetlands immediately south of the bay and approximately seven miles upstream on Irondequoit Creek. The Bay and Creek supports a significant warm water fishery and provides angling opportunities for salmonids especially utilized by migrating waterfowl during the spring and fall as a staging and feasting area.

Detailed information of this habitat is appended to the Inventory and Analysis section including: a description of its location, physical features and fish and wildlife values, a location map and a listing of knowledgeable contacts.

b. STEEP SLOPES: Development activities on or adjacent to the steep slopes around Irondequoit Bay, which consist of silty sands, can result in increases in erosion and sedimentation, degradation of the water quality of the Bay and its tributary streams, slope slippage, destruction of the natural character of the Bay area, and property damage. The manner in which stormwater drainage is handled, disturbance of soils, and removal of vegetation can all 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 stormwater 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 stormwater 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 slope.

c. WATER LEVEL/FLOODPLAINS: The level of Irondequoit Bay is determined by Lake Ontario. The levels of the two bodies of water are the same (the mean high elevation under the IGLD datum is 246.8 feet and under the USGS datum 248.03 feet), except for brief periods when the Lake is tilted from strong winds or when the volume of discharge from Irondequoit Creek is exceptionally high. (The level of the Lake is controlled by international agreement, through which the Lake is permitted to fluctuate between 242.8 and 246.8 feet.) The levels of the Lake and the Bay will, however, vary significantly due to major fluctuations in the cycle of precipitation.

The shoreline area and wetlands of Irondequoit Bay have been identified as floodprone in studies done by the Federal Emergency Management Administration. (These areas have been mapped and flood elevations cited as part of the local flood insurance program.) Building activity in these floodprone areas is regulated by the National Flood Insurance Program and the Town's Floodplain Management ordinance. Building activity within floodprone areas can affect the flood handling capabilities of a body of water such as Irondequoit Bay, as well as being exposed to significant damage from high water levels.

d. 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 north of Ridge Road are predominantly deep, sandy, and very well drained and they have considerable amounts of gravel. Plateau soils south of Ridge Road have much less gravel and sand and are higher in 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.

The sand bar at the north end of the Bay is the result of beach deposits. It is a uniform sand and has a high water table. It is relatively unstable material and has low bearing strength. 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.

e. COASTAL EROSION HAZARD AREAS: The New York State Department of Environmental Conservation has tentatively identified coastal erosion hazard areas in Monroe County. Coastal erosion hazard areas are those coastal shorelines described as follows:

- * Structural hazard 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.

All of Irondequoit's Lake Ontario shoreline and much of its Bay shoreline have been preliminarily designated as erosion-hazard areas, which will be subject to the regulations of Article 34 of the Environmental Conservation Law.

2. HISTORIC RESOURCES

The Irondequoit waterfront is rich in Indian history. Irondequoit Bay was considered 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 to the Irondequoit area took place on August 20, 1669, by the French explorer LaSalle. The area was the site of major conflicts between the French and the Seneca Indians. The unsuccessful attacks were led by the Marquis de Denonville, as the governor of New France (Canada). Even earlier, traders seeking furs for export to France, England, and the Netherlands followed the bay route, and control of the Bay was important to each of the three countries.

Historically, Lake Ontario and Irondequoit Bay have served as major resort areas and recreation resources for Monroe County and the greater Rochester area. Once accessible by trolley lines, the bayshore and lakeshore during the latter part of the nineteenth and early part of the present century were dominated by resort hotels and amusement parks which were great attractions, particularly during the summer months.

With the advent of the automobile, however, the Bay and Lake became less popular in favor of more distant recreation areas. Once flourishing commercial ventures fell into disrepair, water quality declined, and interest in these bodies of water waned. As a result, with the exception of the Dreamland Amusement Park in Sea Breeze, none of the commercial and recreational structures built during this era have survived, a fact which is reflected by the absence on either the Federal or State Historic Place Registers of structures located within Irondequoit's waterfront.

Although portions of Irondequoit's waterfront contain housing built during the early part of this century, little of historic or architectural significance is to be found in these areas. This can be explained by the fact that most early housing constructed within the waterfront began as temporary residences occupied during the summer months only. Over the years, as economic conditions changed and the summer colonies evolved into year-round residential neighborhoods, structures which had originally been designed for part-time occupancy only were converted into permanent residences. Such residences tend to be modest in scale and appearance and often lack the amenities which structures built at a later time (when more stringent building and zoning codes were in force) contain.

With regard to potentially archaeologically significant areas within Irondequoit's waterfront, it should be noted that the entire planning area has been designated as being archaeologically sensitive on the New York State Archaeological Site Inventory map.

No above ground structures or monuments have survived from Irondequoit's prehistoric past or from the period of early European exploration and settlement (seventeenth and eighteenth centuries). The only significant site dating from protohistoric times that might be in Irondequoit's waterfront area is that of a garrison constructed by Denonville in preparation for his invasion of the Senecas in 1687. However, there is controversy over the location of the garrison, and arguments, based on circumstantial evidence, have been presented for sites on both the Irondequoit and Webster sides of the Irondequoit Bay outlet.

3. SCENIC RESOURCES AND VISUAL QUALITY

Lake Ontario and Irondequoit Bay both constitute major scenic resources for the Town of Irondequoit, as well as the entire greater Rochester area. Irondequoit Bay in particular, because of its setting of steep, heavily wooded slopes and wetlands, provides views of exceptional beauty.

In the case of Lake Ontario, the best views within the waterfront available to the general public are found at four locations:

- * the channel connecting the Bay and Lake
- * the area of Culver Road's terminus in Sea Breeze
- * the top of the bluffs overlooking Windsor Beach in White City
- * Summerville Beach in Summerville

It should also be noted that excellent views of the Lake are provided from that portion of Lake Shore Boulevard which passes through Durand Eastman Park. Although the Park is located within the City of Rochester, its proximity to Irondequoit makes it and the views which it affords a resource for all Town residents, as well as a positive influence on the visual quality of Irondequoit's own waterfront.

The most accessible areas for viewing Irondequoit Bay are located at the Bay's north and south ends. From these two areas (Empire Boulevard on the south and the sand bar and Bay opening of the north), spectacular views of the entire length of Irondequoit Bay are provided. (Good views of the wetlands south of the Bay are provided from Empire Boulevard as well). Also, the Irondequoit Bay Bridge and its approaches provide excellent views of the Bay and the surrounding area at the midpoint of that body of water.

Views which are less accessible to the public due to such factors as: topography, land ownership patterns, heavy tree cover, existing development, and lack of roads are provided at several locations. These include: Point Pleasant, Birds and Worms, Newport Point, and Bay Shore Boulevard (in the vicinity of Bay View). Although undeveloped, the site of Bay Park West provides good views of the Bay from its extensive shoreline.

As alluded to above, views of both the Lake and Bay are limited not only by such natural features as steep slopes and wood lots, but also by the pattern of development and land ownership that exists in Irondequoit's waterfront. Irondequoit's waterfront, like those of many other highly developed, older communities, is primarily in private ownership. This fact explains the built-up nature of the areas abutting the water that in many cases has blocked the public's views of the Lake and Bay. Development of this type has in some cases also detracted from the visual quality of the waterfront, particularly along portions of the bayshore and lakeshore where houses and commercial uses have been built directly on the water.

4. WATER SURFACE ANALYSIS

LAKE ONTARIO: Lake Ontario is the twelfth largest freshwater body in the world by area (7,340 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. Well over half of the Lake's 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, bass and salmon fishery developed by stocking programs in New York State and the Province of Ontario. Boat and shore based fishermen catch salmon and trout in the nearshore waters of the Lake, as well as in Irondequoit Bay, during the spring and fall fish migration periods.

IRONDEQUOIT BAY: Irondequoit Bay is an extension of Lake Ontario located on the south shore of that body of water, 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 4.5 miles of which are in the Town of Irondequoit). The profile of the Bay's depth indicates large shallow areas at the north and south ends of the Bay and a deep basin near the center of the Bay.

The deep basin is a narrow, elongated feature extending from a point at mid-bay off Ides Cove to a point off the Newport Yacht Club (the maximum depth of this basin about 78 feet). The deep basin and its slightly shallower extension to the south are the ultimate deposition sites for the sediment load entering the Bay from Irondequoit Creek and the other Bay tributaries. The shallow areas, particularly during periods of low water level, present problems for navigation.

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, 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, thus causing a sterile vegetative condition.

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. (The Irondequoit Creek wetlands play a significant role in maintaining water quality in the Bay by slowing the rate of flow of creek water before it enters the Bay and, thereby, removing large quantities of suspended solids in the water.)

High water levels, combined with other natural processes and various human activities, have eroded the steep slopes around the Bay (primarily on the east side), causing additional land slides to occur and aggravating existing ones. 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. This program has diverted sewage from the treatment plants on Irondequoit Creek and Bay to an expanded and improved treatment facility in Durand Eastman Park which discharges directly into Lake Ontario. It should be noted, however, that the possibility of a discharge of combined sewage and stormwater into the Bay continues to exist under certain storm conditions, which do not occur frequently. (The overflow, when it does occur, is at Densmore Creek.)

Pursuant to the Federal Clean Water Act of 1977 (PL 95-217), the NYS DEC has classified the States coastal waters and other waters in accordance with consideration of best use in the interest of the public and has adopted water quality standards for each class of water. The classifications are currently being reevaluated. Irondequoit Bay and Creek have been classified as having "B" water quality meaning that it is suitable for bathing and other usages except as a source of water supply for drinking, culinary or food processing purposes.

Irondequoit's sole source of water supply is surface water piped in from other localities. However, the Town of Webster uses groundwater from Irondo-Genesee Acquirer. Several of Websters wells are located on Irondequoit Bay Barrier Bar immediately east of the outlet separating Webster form Irondequoit and in close proximity to Lake Ontario. Future development should be reviewed to prevent negative impacts upon the water quality in the Irondo-Genesee Acquirer.

In addition to the improvements to sewage treatment facilities, Monroe County is actively taking measures to improve Bay water quality through other techniques. (The County has recently, with Federal and State financial assistance, taken action to reduce the phosphorus level of the Bay by sealing the Bay's bottom with alum.) The County is also undertaking a water quality program to reduce non-point sources of pollution in the Irondequoit Bay Basin. (The Irondequoit Bay Water Quality Management Plan has been prepared as part of this program.) Purification of the 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 and impairing navigation in those areas.

CURRENT WATER USE: Although Irondequoit Bay provides an excellent setting for such activities as waterskiing, sailing, motorboating, fishing, snowmobiling, ice fishing, and skating, its potential as a major recreational resource for the greater Rochester area has not been fully realized. This situation can be attributed to several factors, the most significant of which include: poor water quality, limited public access points, inadequate public and private recreational facilities, and lack of a proper channel connecting the Bay with Lake Ontario.

Also, a variety of conflicts have been experienced in the recreational use of the Bay, and these can only be expected to increase as Bay usage intensifies as a result of the Bay opening project. Among the more serious conflicts are those between sail boats and motor boats and conflicts between boaters and shoreline residents, particularly during periods of high water level, when wakes may cause considerable property damage.

The Irondequoit Bay Plan attributed the low level of boat usage of the Bay to two major factors. First is the lack of high-quality facilities for mooring and launching boats (the private facilities tend to be expensive and in some cases are in a state of disrepair, and there are currently no public facilities available). Second is the poor water quality of the Bay, a condition which, as noted above, is gradually improving.

The same factors have also had a negative effect on the use of the Bay for recreational fishing. However, the Bay has always been popular with area fishermen and they can be found in every area of the Bay that has access. With the opening of the Bay to Lake Ontario, gradual improvement of water quality, an ongoing sport fishery restocking program, and the provision of public launch and berthing facilities (which will be discussed below) use of the Bay for recreational fishing can be expected to increase substantially.

5. WATER-DEPENDENT USES

Water-dependent uses are considered 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.

As already noted in the Study Area Inventory, with the exception of cottages, year-round homes, and a few multi-family residential developments (including the Harbor Square and Point Pleasant condominiums on the Bay and the Westage condominium complex on the Lake in Summerville), relatively few water-dependent or water-enhanced uses are to be found within Irondequoit's waterfront. Those that are, with some minor exceptions, are located on Irondequoit Bay and consist of such uses as marinas, boat sales and repair operations, and private boat and fishing clubs. These uses are generally

found in isolated locations along the bayshore. (A more complete description of these uses is to be found in the Inventory of Study Area section.)

Existing marina facilities on the Bay are often underutilized, as demonstrated by a survey conducted in 1976 by the Army Corps of Engineers that counted 425 boats using the Bay compared to 625 available berths. The completion of the Bay opening project in the summer of 1986, has increased the demand for using the Bay for boating and can be expected to bring about the redevelopment of existing marinas and the construction of new ones. In addition, public facilities for both mooring and launching are now in the planning stage for Monroe County's Bay Park West and the State-owned land at the northwest corner of the Bay. (The towns adjoining the Bay have not indicated that they plan to develop any public facilities of this type.)

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 using the Bay in 1985 numbered approximately 450 to 500.) Based on information gathered by the Corps as part of the Environmental Impact Statement prepared for the Bay Opening Project, a little over 2,000 boats (2,035) could be accommodated at existing, enlarged, and new marina facilities around the Bay (the State, County, and towns bordering the Bay indicated general preferences for marina development locations and a rough number of boats at each location).

Based upon the preferences indicated, approximately three quarters of the boats using the Bay might be accommodated by both public and private facilities on the Irondequoit side of the Bay. The locations preferred for these facilities include: Pt. Pleasant, Missaug Cove, New Port, Densmore Creek, Glen Haven, Empire Blvd., the State-owned property at the Bay's northwest corner, the County-owned Bay Park West, and scattered residential sites (see boating facilities map). However, development on most of these sites will have an impact upon one or more of the Bay's sensitive environmental features, including significant fish and wildlife resource areas, and must, therefore, meet the review criteria and development standards found in Section V, part B, which has been adopted by Irondequoit as part of its LWRP.

6. PUBLIC ACCESS AND RECREATION

As noted above, the use of Irondequoit Bay for water oriented recreation is expected to increase dramatically because the Bay has been opened to Lake Ontario. Recreational boating will increase with improved access to the Lake, and the Bay will serve an important "harbor of refuge" function for boats using Lake Ontario. The Bay, in its unopened state, served as a recreation area for boaters willing to use undeveloped launch sites, or able to dock and launch their boat at one of the remaining active marinas around the Bay. A number of private boating clubs offering docking and launching facilities have also been active on the Bay. In addition to increasing boating activity, the opening is also changing the mix of boats now using the Bay. Larger sailing craft are expected, since access to the Lake from the Bay is virtually unrestricted except for the eight foot channel depth.

Although opportunities for private access to the Bay are increasing, locations for access by the public to Irondequoit Bay and the lakeshore within Irondequoit's waterfront area are much more limited. Public, water-related recreational facilities and resources in the Town are, at present, either very limited or undeveloped. This state of affairs, however, will begin to change as waterfront land and resources currently owned by the State and Monroe County are developed over the next several years for recreational purposes.

The public land and resources in question include the Irondequoit Creek Wetlands, the County's Bay Park West, and State-owned property at the Bay's northwest corner, all on Irondequoit Bay. Also included are the various facilities and improvements which will be provided by the State in conjunction with the Bay opening project, which is now being completed by the Army Corps of Engineers. Once the Irondequoit Landfill on Newport Road reaches the end of its useful life (in two to three years), the possibility exists that its site will be used for a passive recreation facility.

IRONDEQUOIT CREEK WETLANDS: The Ellison Park Master Plan recommends several short and long range improvements to the Irondequoit Creek Wetlands that will make this natural resource much more accessible to the public. These improvements include: development of a new entrance road, construction of a parking lot at the entrance to the area, building a trail system (including a board walk) into the wetlands, creating an informal picnic area, and extending the existing trail system. The Plan also calls for the purchase by the County of the remaining private parcels in the wetlands and their incorporation into Ellison Park.

BAY PARK WEST: Bay Park West and the recently purchased Isaac Property located immediately to the north constitute the Town's most significant opportunity for providing the public with a water-related recreational facility on Irondequoit Bay. The Park is currently undeveloped and, therefore, underutilized, but plans are now being prepared by Monroe County that, when implemented, will insure the realization of the Park's potential for increasing the public's access to and use of the Bay.

Short range improvements to the Park recommended in the Park Master Plan include paving of the existing boat launch parking area and demolition of County-owned residences. Longer range plans include the creation of a new entrance road on the Park's west side that will provide more direct public access and eliminate the need to drive through residential neighborhoods to reach the Park, as is currently the case. Also recommended are the stabilization of the existing boat marina; construction of a new boat launch ramp with parking, picnic areas, toilets and other support facilities; and construction of fishing piers and overlooks of the Bay, taking advantage of the views along the shoreline. The interior of the Park will remain predominantly wooded and undisturbed except for a trail system.

The recent purchase of the large, vacant Isaac Property by the State and its lease to the County for park usage will permit the eventual construction of such active water uses as marinas, which otherwise would be impractical to provide. This is due to the fact that the Isaac Property

contains a considerable amount of open and flat land and has a shoreline bordering on deeper water. The shoreline of the original park area, by contrast, borders shallow water, limiting the size of boats that can be accommodated. (This situation is expected to worsen as the Bay's water quality improves, producing a thicker and healthier weed growth in shallow areas.)

TOWN LANDFILL: The Town owns 27 acres along Newport Road overlooking Irondequoit Bay, a major portion of which is presently operated as a landfill (scheduled for termination in the next few years.) The remainder of the site contains abrupt slopes and rolling hills, woods, marsh, water frontage along the Bay, and numerous overlook views. Future use of the municipal landfill site, after termination of the landfill operation, includes a proposed passive recreation facility.

Relatively difficult access, steep topography, potential settling of the landfill, and the otherwise attractive natural character of much of this site restrict the feasibility of major permanent structures or intensive use activities. A plan prepared in 1972 showing possible development of the site as a park proposed including such facilities as: picnic areas, parking, play equipment, ski and coasting slopes, fishing pier, trails, and overlooks. Prior to any development of the site, however, extensive tests will have to be conducted to insure that no toxic wastes are present.

STATE-OWNED BAY PROPERTY: Both the Irondequoit Bay Plan and the Town's new Master Plan mention the State's ongoing interest in developing land which it owns at the northwestern corner of the Bay for a large marina (containing up to 500 berths). The site in question is well suited for marina use given its proximity to the recently widened Bay opening and two major highways, as well as the availability of utilities in the area.

The site's steep slopes, lack of flat land, and shallow water depth, however, all present obstacles to marina development that may be very costly to overcome, as well as environmentally damaging. Further, development of a marina on this site only becomes truly practical if, as has been proposed in the Town's Master Plan, the adjacent Sea Breeze Expressway is relocated to the west of its present location. By doing so, the site will become less isolated from the adjoining Sea Breeze area and land will become available on which to provide parking and other necessary support facilities.

BAY OUTLET PARK: The opening of a channel (8 feet deep and 100 feet long) from Irondequoit Bay to Lake Ontario by the Army Corps of Engineers is now completed, and, for the first time in recent history, has made the Bay accessible to boats of all types and sizes which currently use the Lake only. As a later phase of this project, the State has agreed to construct a boat launch facility (two double launch ramps and parking for up to 150 cars and boat trailers) on the Irondequoit side of the new channel. These plans will formalize what has been historically an informal launch and access arrangement at the north end of the Bay.

A breakwater will also be constructed to the west of the channel and a jetty to the east (both on the Lake side of the channel), with fishing access provided on both these piers. In addition, comfort stations and

walkways will be constructed. These facilities will greatly increase public access to both the Bay and Lake Ontario and enhance opportunities for public enjoyment of valuable, but currently underutilized, bayfront and lakefront resources. (A decision at some future date to replace the bridge carrying Route 18 over the new channel would inhibit public access at this location, and would necessitate a major revision of the State's improvement plans including the size and location of facilities.)

LAKE ONTARIO: FACILITIES AND ACCESS

With the exception of the Bateau Terrace Tot Lot, there are no public recreation facilities on Lake Ontario within the Town of Irondequoit. Access to the Lake, however, and enjoyment of its resources by the residents of Irondequoit and the greater Rochester area is provided by Durand Eastman Park (a major 965 acre County-operated facility located within the City of Rochester on Lake Ontario).

Because the Park is surrounded on three sides by the Town of Irondequoit and because it is easily accessible from all parts of the Town, Irondequoit residents are able to take full advantage of this major public recreational resource, including its 7,500 feet of lake shoreline.

Various maintenance and safety improvements proposed in the Durand Eastman Park Master Plan, which was completed as of February 1987 and also contained in the County's Capital Improvement Program, will have the effect of upgrading access to the waterfront area of the Park and increasing the public's enjoyment of this unique resource. These improvements include a major beach clean-up, a new parking area, and safe pedestrian crossings. Another major improvement to the Park that will result not only in better access to the lakefront, but also the provision of better views of the Lake from Lake Shore Boulevard, is the leveling of the abandoned Hojack Line railroad bed which currently acts as both a physical and visual barrier to the lakefront.

Within the Town itself are to be found Windsor and Summerville Beaches, which although not in public ownership constitute a major water-related recreational resource. These beaches, which consist of a wide expanse of sand stretching from the Westage Condominiums on the west to the White City neighborhood on the east, have for many years been the center of controversy revolving around the legal rights of neighborhood residents and the public. Questions which still exist with regard to ownership of the beaches and the public's right to use them have resulted in an informal arrangement, overseen by the Town, that permits their use by the public. This agreement allows the Town to supervise the beaches and, thereby, insure that public usage does not negatively impact on the surrounding residential neighborhoods or the owners' property rights.

Because of the complex nature of the legal questions concerning ownership of the beaches, it would appear that the present arrangement for their use by the public is both realistic and fair to all parties concerned. Further, given the residential nature of the surrounding neighborhoods, the lack of parking facilities, and the poor access to the beaches from major

streets, purchase and development of the beaches by local governments to facilitate more active use by the public seems neither practical or advisable.

BATEAU TERRACE TOT LOT: The Town-owned and operated Bateau Terrace Tot Lot located in the White City area includes a small portion of Windsor Beach. However, because of poor access, the lack of parking, and the residential nature of the surrounding area, the Town has no plans for facilitating greater public use of the waterfront section of this facility.

APPENDIX

SECTION I: INVENTORY AND ANALYSIS

COASTAL FISH AND WILDLIFE HABITAT RATING FORM

Name of Area: Irondequoit Bay and Creek

SEP 18 1987

County(ies): Monroe

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

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

	(IS) Individual Score		(R) Replace- ability		(ISxR) Final Score
ECOSYSTEM RARITY (ER): One of the major coastal bay and tributary systems in the Great Lakes coastal region.	25 ---	x	1.2 ---	=	30.0 ---
SPECIES VULNERABILITY (SV): Least bittern (SC) and sedge wren (SC) nesting. Additive division: 16 + 16/2 = 24.	24 ---	x	1.2 ---	=	28.8 ---
HUMAN USE (HU): A major recreational fishing area on Lake Ontario, attracting anglers from throughout western and central New York.	9 ---	x	1.2 ---	=	10.8 ---
POPULATION LEVEL (PL): Concentrations of many warmwater fish species and salmonids are unusual in the Great Lakes Plain ecological region.	9 ---	x	1.2 ---	=	10.8 ---

REPLACEABILITY (R):
Irreplaceable. 1.2

SIGNIFICANCE = [(ERxR)+(SVxR)+(HUxR)+(PLxR)] = 80.4

SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT

PROJECT NARRATIVE

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 approximately 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 approximately 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 blackbird, and swamp sparrow.

IMPACT ASSESSMENT:

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 would 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, perch sites, soil stabilization, and buffer zones.

KNOWLEDGEABLE CONTACTS:

Tom Hart or Andrew Milliken
Division of Coastal Resources & Waterfront Revitalization
NYS Department of State
162 Washington Avenue
Albany, NY 12231
Phone (518) 474-3642

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

NYSDEC - Significant Habitat Unit
Wildlife Resources Center
Delmar, N.Y. 12054
Phone: (518) 439-7486

793

32°30'

794

780 000 FEET

295 000 m. E.

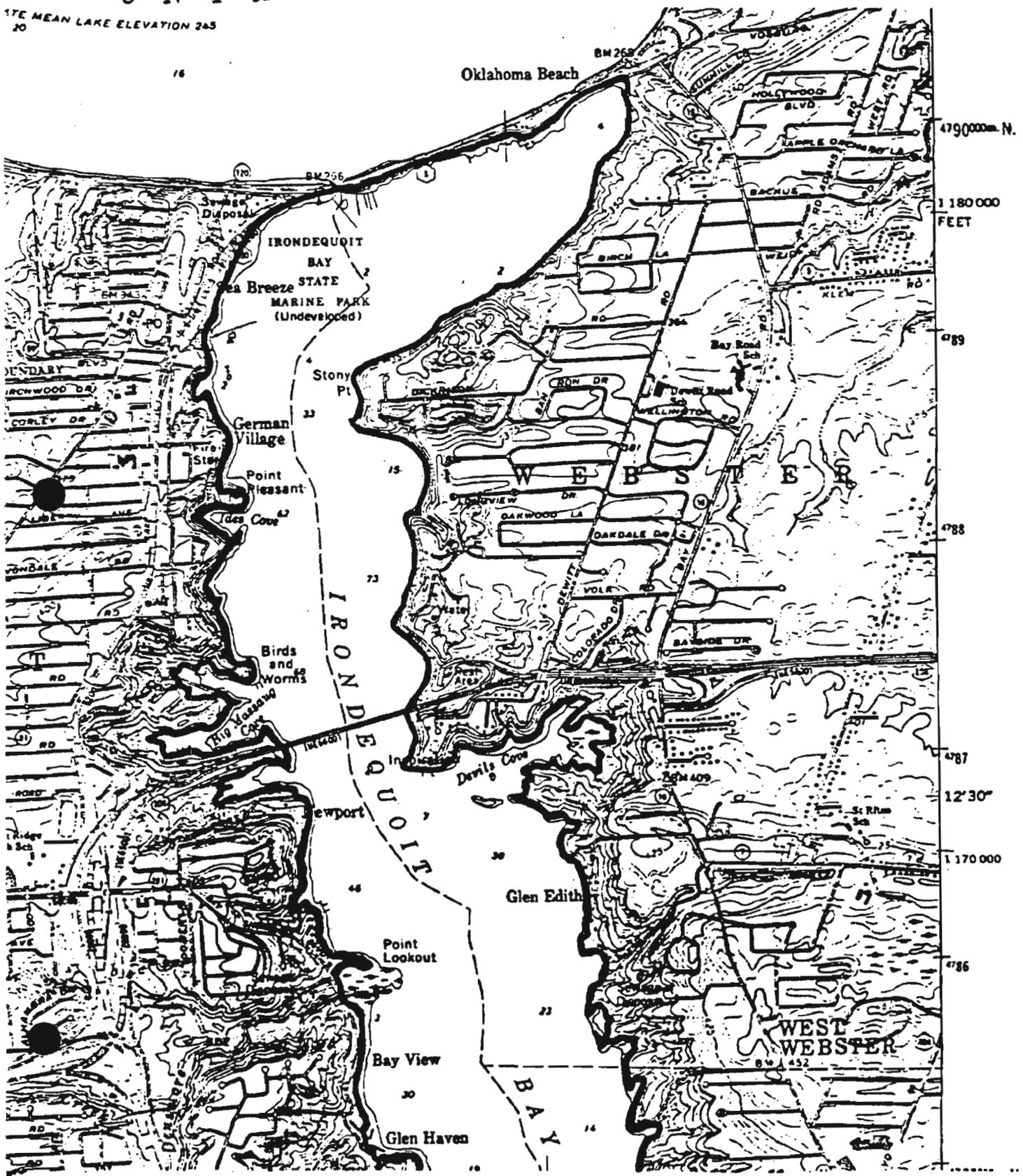
796

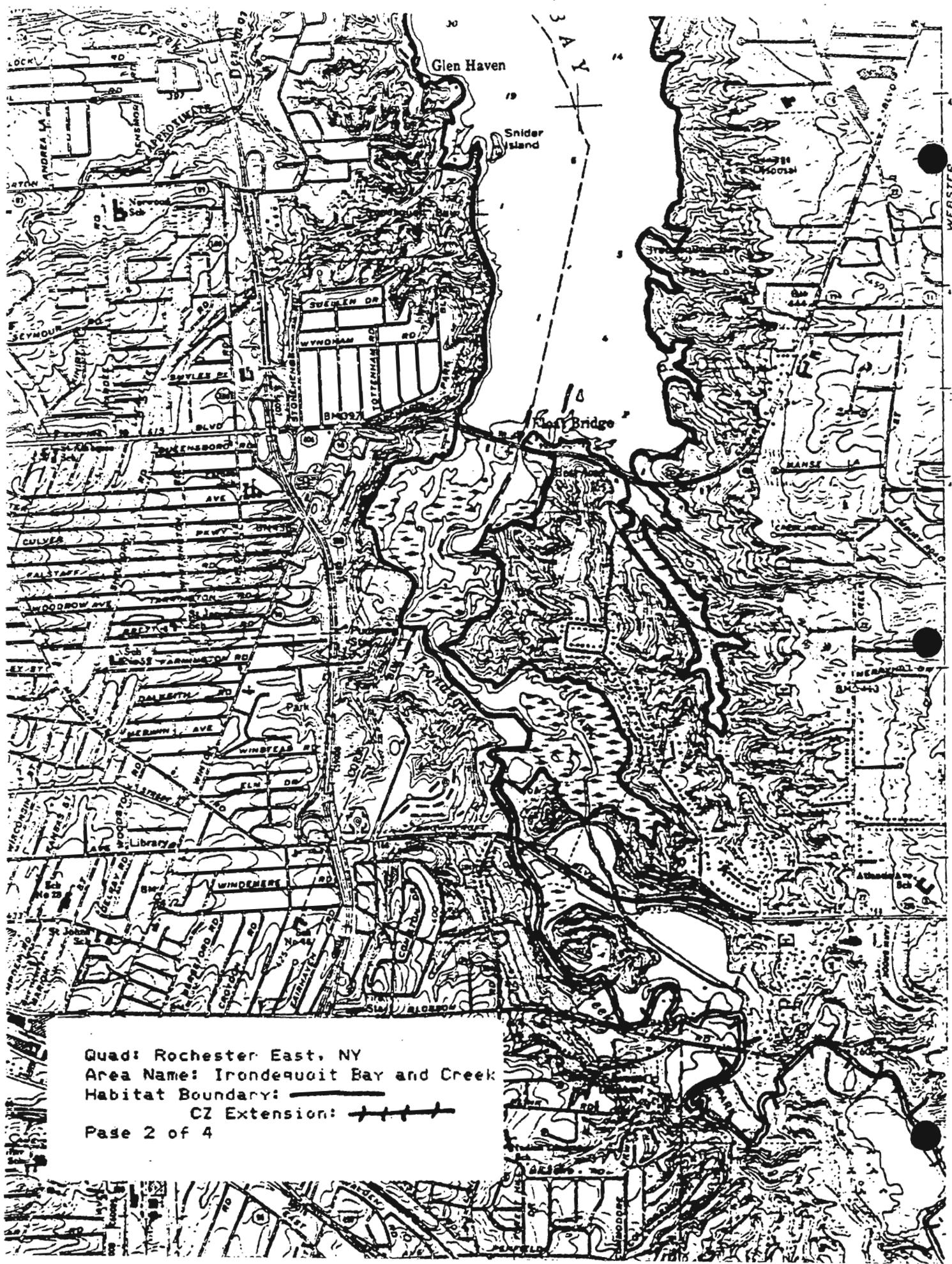
43°15'

Quad: Rochester East, NY
 Area Name: Irondequoit Bay and Creek
 Habitat Boundary: 
 CZ Extension: 
 Page 1 of 4

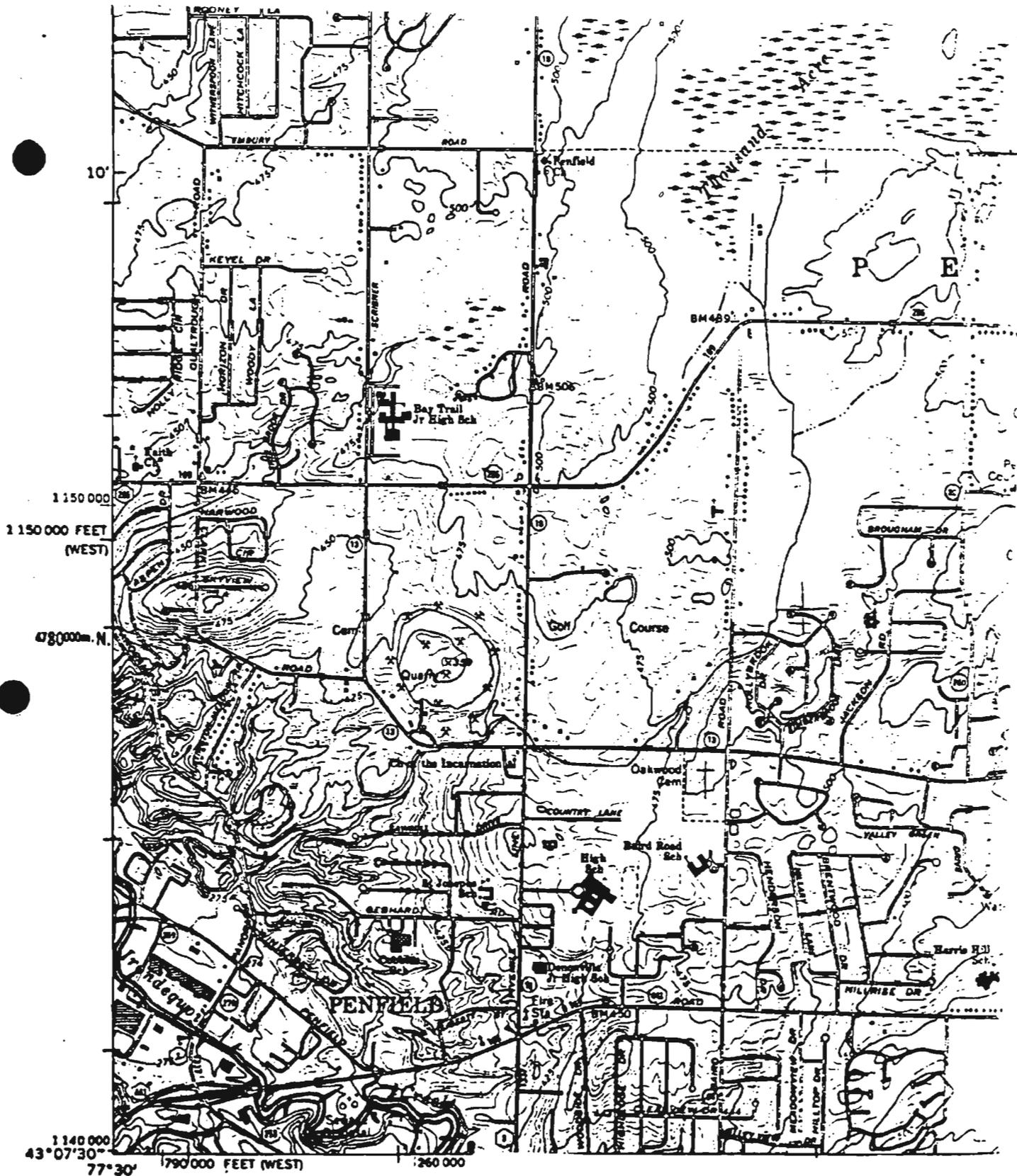
ONTARIO

MEAN LAKE ELEVATION 245





Quad: Rochester East, NY
 Area Name: Irondequoit Bay and Creek
 Habitat Boundary: 
 CZ Extension: 
 Page 2 of 4



PITTSFORD

Prepared and published in 1980 by the New York State of Transportation, in cooperation with the U.S. Department of Transportation, Federal Highway Administration.

Map base from 1971 U.S. Geological Survey 7.5-minute

Map revisions made using 1980 aerial photography, aerial photographs, plans, official records and other sources. Features revised include: highways and other transportation facilities; civil boundaries; recreation sites; hydrography; and buildings.

Quad: Webster, NY

Area Name: Irondequoit Bay and Creek

Habitat Boundary:

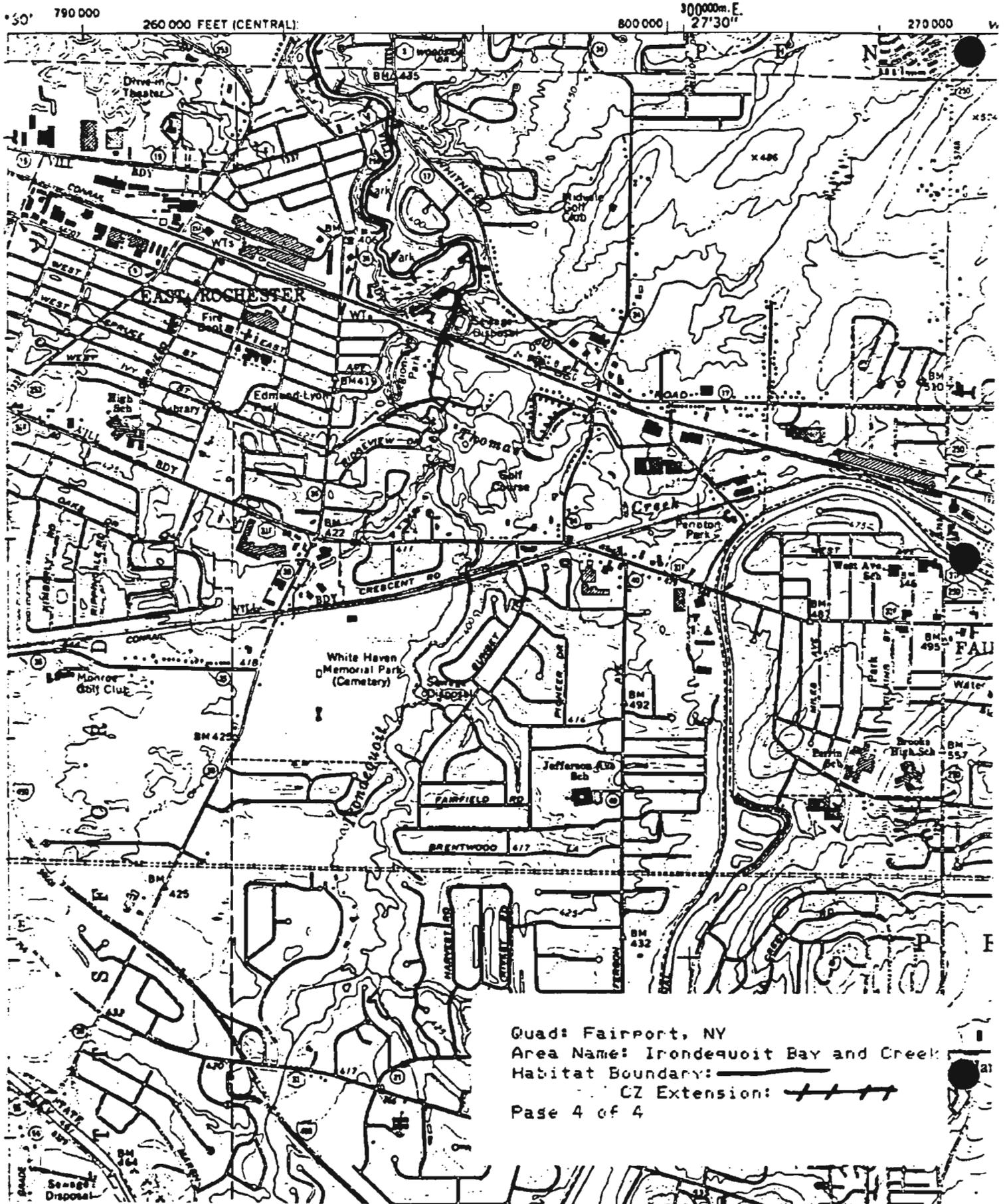
CZ Extension:

Page 3 of 4



1000
Between 72° and
Meridian grid A

NEW YORK STATE
DEPARTMENT OF TRANSPORTATION



Quad: Fairport, NY
Area Name: Irondequoit Bay and Creek
Habitat Boundary: ————
CZ Extension: - - - -
Page 4 of 4

STREAM CLASSIFICATIONS IN
IRONDEQUOIT BAY

WATER QUALITY

The following classifications are assigned to fresh surface waters within the Irondequoit Bay Drainage Basin.

Item No.	Waters Index Number	Name	Description	Map Ref. No.	Class	Standards
1	Ont. 108	Irondequoit Bay outlet	Enters Lake Ontario from south along southerly shore of lake 3.8 miles southeast of mouth of Genesee River and 0.9 mile east of easterly boundary of Durand Eastman Park in City of Rochester.	H-9ne	B	B
2	Ont. 108-P 113	Irondequoit Bay	Located on Irondequoit Bay outlet beginning immediately upstream from Lake Ontario and extending approximately 4 miles in southerly direction.	H-9ne	B	B
7	Ont. 108-P 113-3 portion as described	Irondequoit Bay	Enters southerly end of Irondequoit Bay from southwest immediately north of Webster Road (Route U.S. 104) and at Float Bridge.	H-9ne	B	B

Item No.	Waters Index Number	Name	Description	Map Ref. No.	Class	Standards
			Float Bridge. Mouth to Atlantic Avenue which crosses creek 1.9 miles upstream from mouth and 1.3 miles south of Float Bridge.			
137	Ont.-108-P 113-3a and tribs., including P 145a	Trib. of Irondequoit Bay	Enters southerly end of Irondequoit Bay from southwest 0.2 mile westerly of Float Bridge. P. 145b is located on trib. 3a of Irondequoit Bay in swampy area 0.1 mile upstream from Empire Blvd. (U.S. Route 104). P 145a is on trib. 3 of trib. 3a of Irondequoit Bay in swampy area 0.4 mile southerly of Float Bridge.	H-9ne	D	C
138	Ont.-108-P 113-3b, 4 and trib., 4a	Trib. of Irondequoit Bay	Enter Irondequoit Bay along its westerly side in section between Float Bridge and Bay view.	H-9ne	D	C
139	Ont.-108-P 113-5	Densmore Creek	Enter Irondequoit Bay from southwest at its westerly shoreline 0.6 mile west of Glen Edith.	H-9ne	D	C

Item No.	Waters Index Number	Name	Description	Map Ref.	Class	Standards
140	Ont.-108-P 113-	Trib. of Densmore Creek	Enter Densmore Creek from west 0.3 mile upstream from mouth and 0.3 mile northwest of Bay View.	H-9ne	D	C
141	Ont.-108-P 113-5-2 and trib., includ- ing P 147	Hobbie Creek	Enters Densmore Creek from west 0.5 mile upstream from trib. 1 and 0.6 mile west of Bay View. P 147 (Buell Pond) is on Hobbie Creek imme- diately west of Culver Road (U.S. Route 104) in City of Rochester.	H-9ne	D	C
142	Ont.-108-P 113- 5-2a	Trib. of Densmore Creek	Enters Densmore Creek from south- east 0.2 mile up- stream from Hobbie Creek and 0.7 mile west of Glen Haven.	H-9ne	D	C