Section II. Inventory and Analysis

Community Profile

A. Location

Rochester is the third largest city in New York State and is located on the southern shore of Lake Ontario, between Buffalo and Syracuse (see Map II-1). The Genesee River flows northward through the center of the city to the lake. The New York State Barge Canal runs along the southern edge of the city, in a generally east-west direction. To the east of the city is Irondequoit Bay which was the pre-glacial outlet of the Genesee River to Lake Ontario. The city is connected to the New York State Thruway via Interstate Routes 390 and 490.

B. Population

Rochester is at the center of a larger metropolitan region which includes Monroe County and the counties of Wayne, Ontario, Livingston, Orleans and Genesee. According to the 1980 Census, Monroe County had a population of 702,238 people and contained 252,217 households, while the city had a population of 241,741 people and contained 94,597 households. As with many cities located in the northeastern United States, Rochester's population declined between 1960 and 1980. However, in recent years Rochester's population has begun to stabilize. The city's 1985 population was estimated by the Center for Governmental Research to be approximately 242,000 persons and is projected to reach 245,000 by 1990.

According to the 1980 Census, approximately 14% of Rochester's population was 65 years old or older. Almost 17% of the population lived below the poverty level. The median income for the city was \$13,641, as compared to a median income of \$18,940 within the Rochester Metropolitan Statistical Area (MSA).

Based on 1980 figures, the city's housing stock consists primarily of one and two-family units. Forty-six percent of the city's occupied housing units are owner-occupied while 54% are renter-occupied. The average selling price of a single-family home in the city increased from \$20,330 in 1976 to \$42,247 in 1983. Since 1977, approximately 15% of the city's housing stock has been upgraded through the use of one of several city sponsored housing rehabilitation programs.

C. Employment

Rochester has traditionally been an area of relatively stable employment. The major employers in the city are Eastman Kodak Company, Xerox Corporation, the University of Rochester and General Motors Corporation (Rochester Products and Delco Divisions). Total employment in Monroe County in 1986 was approximately 342,000. The Rochester area's unemployment rate at the end of 1986 was 4.8% as compared to the national rate of 6.3% (seasonally unadjusted).

LWRP Boundary and Subareas

A. Overview

Rochester's LWRP boundary includes a coastal zone with two distinct components. These are the Genesee River gorge, and the Lake Ontario shoreline. The Genesee River runs in a northerly direction through the center of the city to Lake Ontario, and provides a unique urban waterfront environment. A large portion of the riverfront north of downtown Rochester is characterized by a 200 foot deep gorge. There are over 71,000 feet of river shoreline within the entire city.

The approximately 14,000 feet of Lake Ontario shoreline within the City of Rochester are located at the extreme northern end of the city, in the neighborhood of Charlotte, and within Durand-Eastman Park. A large part of the 6,100 feet of lakefront shoreline located at the northern end of the city is utilized as a public beach and is contained within Ontario Beach Park. Durand-Eastman Park, located several miles to the east and surrounded by the Town of Irondequoit, contains approximately 7,600 feet of lakeside frontage and includes wooded slopes, several ponds, a golf course and a variety of passive recreational facilities.

B. LWRP boundary and subareas

The City of Rochester's LWRP boundary is shown on Maps I-1a and I-1b. The boundary has been divided up into 6 subareas that are delineated and described in *Section IV. Uses and Projects*. The subarea boundaries are shown on Map IV-1.

C. Rochester's waterfront planning areas

The city's waterfront can be divided into three distinct sections with respect to city planning activities. These sections are shown on Map II-2. The northern-most portion of the river, from the Middle Falls area north to Lake Ontario, and the lake frontage within the city limits, are included within the boundaries of the LWRP.

The area from the Veteran's Memorial Bridge south through downtown to the Troup-Howell Bridge is included within the city's Urban Cultural Park (CUCP) Management Plan. The portion of the river between the Middle Falls and the Veteran's Memorial Bridge is, therefore, included in both the LWRP and the UCP. Development within Rochester's UCP will focus on the significance of the Genesee River in the city's history and growth, both past and present. The river's primary role was as a source of power to the city's early milling industries. The river was also important in providing transportation to and through the city, in facilitating Rochester's evolution from a mill town to a high technology manufacturing center, and the growth of Rochester's immigrant labor force which contributed to the city's industrial development. All of these ideas will be developed in some form within the UCP.

The adaptive reuse of the Brown's Race area within the park is key to the success of the city's UCP. Several other areas within the UCP have also been identified for development or preservation including Old Rochesterville, the Upper Falls industrial area, the Lake Avenue plateau, the Brewer Street flats area, and the area around the Maplewood YMCA near the Driving Park Bridge.

The area of the river from Ford Street south to the New York State Barge Canal (Erie Canal) is included in the Genesee River South Corridor Land Use and Development Plan. This plan, which focuses on the southern-most portion of the river within the city, was jointly funded and undertaken by the University of Rochester, the County of Monroe and the City of Rochester in the fall of 1984. The plan ties the redevelopment of the east side of the Genesee River, which is primarily occupied by the University of Rochester campus, with the phased development of the west bank.

The university plans to redevelop the east bank as an open space and recreational area, to permit university-related recreational activities, public hiking, etc. This redevelopment will include the closing of a portion of Wilson Boulevard, which now separates the main portion of the university campus from the river. The plan also includes residential development on the east bank. The west bank, much of which is vacant land recently acquired by the city from Conrail, is proposed for housing development and open space/recreational uses. The adjacent neighborhood is a mix of marginal industrial or warehousing uses and low to moderate-income housing. This area is currently the focus of plan implementation projects being undertaken by the city, Monroe County and the University of Rochester.

These projects include the construction of a pedestrian bridge across the Genesee River, and east and west river bank pedestrian/biking trails-that will connect with downtown.

Historical Development

A. Overview

Water has always been important to the economic development of Rochester. The Genesee River falls and rapids have been a source of relatively cheap, accessible power throughout the history of the city. The river and the access it provided to Lake Ontario have also been key to establishing shipping as an industry in this area. Early settlements which were the forerunners of the City of Rochester all began in this area because of the proximity to the Genesee River and Lake Ontario. These settlements are shown on Map II-3.

B. Early Rochester's waterfront

The abundance of fish and game drew the Seneca Indians to the shore of the Genesee River in the years prior to the arrival of the white man. In 1789, Indian Allen, attracted by the potential energy source of the rapids and falls, built the first mill in the area. This was the first white settlement in what's now Rochester's central business district (CBD). It was not a permanent settlement, however, and lasted only a year. Three years later, in 1792, another settlement sprang up on the river. William Hincher, his wife, and their eight children settled at the mouth of the Genesee River on the site of Rochester's present day port. This settlement eventually became known as the Village of Charlotte. In 1797, Gideon King and Zadock Granger settled King's Landing, later known as Hanford's Landing, on the west shore of the river, at the current site of Eastman Kodak Company's treatment plant. This area became an important shipping settlement.

The Village of Carthage was established on the east bank of the river in 1817. While Hanford's Landing and Carthage competed for shipping commerce from Lake Ontario, Colonel Nathaniel Rochester and

several partners bought a 100 acre tract of land south of the Upper Falls. Their tract was the nucleus of the Village of Rochesterville which was chartered in 1817.

As a result of the completion of the Erie Canal in 1823 and Rochester's new link with the Hudson River, the city's population boomed, growing from 5,400 in 1826 to 50,000 by 1860. The river was crucial to this development, as a source of power to run the many saw mills and flour mills. Schooners bringing wheat from Canada could navigate up the river to the Lower Falls. The milled flour would then be shipped to New York City via the canal system. The shipping industry on the lake soon flourished, making the Port of Rochester one of several important ports on the Great Lakes for both trade and shipbuilding.

The river and the lake have also provided significant recreational opportunities during the city's history. In the 19th Century, sidewhee1ers and other excursion boats evolved into a popular past time, with scheduled day trips departing regularly from Glen House near the Lower Falls. As time went on, other large boats provided excursions along the lake and to Canada.

The Village of Charlotte was a major tourist destination from the late 1880's to approximately 1915. An amusement park, several hotels and resort facilities were developed in Charlotte and attracted many visitors and summer residents to the area. The beach area in Charlotte became known as the "Coney Island of the West" during this time.

As other forms of transportation and power began to be developed, the importance of the Genesee River and Lake Ontario to the city began to decline. Over the years, dumping of industrial waste and municipal sewage into the river and lake resulted in a decline in the use of the lake and river as a recreational resource.

C. Waterfront rediscovery

During the last 25 years, the Genesee River and Lake Ontario have been rediscovered by city residents. As a result of stricter environ-mental controls, the efforts of private industry and completion of several major public works projects, the water quality of the river and lake have improved significantly. Because of this, the city's water resources can once again be enjoyed and appreciated. These areas provide opportunities for hiking, sightseeing, fishing, swimming and boating, all within the city limits. The river has been stocked with trout and salmon, and sport fishing has been revitalized. Ontario Beach Park was reopened for public bathing in the late 1970's. The reopening of the beach has encouraged a new appreciation of, and interest in Rochester's water resources among city residents. The City of Rochester's sesquicentennial celebration in 1984 centered on the waterfront and included a tall ships visit to the port area, as well as tens of thousands of visitors to the port and beach area during the event.

Geologic History

The City of Rochester rests on the Erie-Ontario Lowland, a relatively flat-lying plain, at an altitude of about 500 feet above mean sea level (msl). The principal geologic features within the LWRP boundary are the old and more recent courses of the Genesee River, and the lake's ridge or former shore of glacial Lake Iroquois. The high point of land in the area, now known as Ridge Road, is the southern edge of the

giant Lake Iroquois, which was the last of a series of glacial lakes which once covered the entire Great Lakes Basin.

Before the last glacier retreated roughly 10,000 years ago, the Genesee River flowed in a more easterly course, through what is now Irondequoit Bay, before emptying into the Ontario River, a westward flowing river which predates Lake Ontario. As the glacier retreated the course was shifted near the Town of Mendon to its present course. The modern course carved out the three waterfalls within Rochester and the steeply sloped river gorge which begins just north of the CBO and continues on to Lake Ontario. Elevations in this area range from about 490 feet above sea level at the Upper Falls to 250 feet above sea level at Lake Ontario.

The Genesee River gorge in Rochester exposes the pre-glacial rock record and provides a unique resource for geologic study. Between the Upper Falls and the Lower Falls (a distance of about 1.5 river miles) the rock strata or layers date back approximately 400 million years and include a classic section of Silurian aged rock. At least 200 species of marine fossils have been identified along this stretch of river indicating that this area was once part of an inland sea.

The oldest rock in this area is the Queenston Formation, which forms the base layer or stratum. The next stratum is about 50 feet thick and is known as the Grimsby Formation or Red Medina Sandstone. This rock is used extensively as building material throughout the Rochester area. Other distinctively colored strata include the nearly white Thorold Sandstone or Kodak formation, which separates underlying red shale from a 20 foot exposure of green Maplewood Shale. These two strata can be viewed about halfway up the west side of the gorge from the Rochester gas and Electric Company (RG&E) service road just north of the Lower Falls. The Kodak Formation forms the cap rock, or hard layer at the top of the Lower Fall. Reynales Limestone, the next stratum, is about 17 feet thick and caps the Middle Falls, providing a base for the floodgates located there. At the Upper Falls, the Gorge walls expose an 85 foot layer of dark blue-grey Rochester Shale capped by 20 feet of grey Lockport Dolomite Limestone. The gorge is listed in several New York State geological field guides, and is used for geology trips by schools, colleges and museums in the region.

Existing Land Uses

A. Overview

The City of Rochester's waterfront revitalization area includes a variety of land uses within approximately 2,800 acres or 4.4 square miles. LWRP land uses are listed in Table II-1. Approximately 62% of the city's waterfront revitalization area is used for recreation, parkland or as open space. Approximately 20% is in residential use, 2% in commercial use, 3% in industrial use and 8% is vacant land. The remaining land is used for transportation or utility purposes. Existing land uses within the LWRP boundary are shown on Maps II-4a, II-4b, and II-4c.

Because the city's coastal area is primarily urban in nature, there are no agricultural uses existing within the boundary.

Table II-1 Local Waterfront Revitalization Program Existing Land Uses

TYPE OF USE	SUB-TOTAL	TOTAL ACRES
(1) Residential		
Medium density	526.2	
High density	37.2	
		563.4
(2) Commercial	48.0	48.0
(3) Industrial		
Light manufacturing	42.6	
Industrial park	28.8	
Sewage treatment	15.2	
		85.6
(4) Public/semi-public		
Cemeteries	323.7	
Educational facilities	21.5	
Other	75.8	
		421.0
(5) Outdoor recreation		
Public parks	1246.2	
Marinas and boat launching sites	57.3	
		1303.5
(6) Utilities		
Electric generation and transmission	2.7	
Sewage treatment	80.8	
		83.5
(7) Transportation		
Streets/highways/expressways	21.4	
Railroads	38.7	
		60.1
(8) Vacant land		
Open space	29.6	
Woodlands	204.3	
		233.9
TOTAL COASTAL ZONE ACRE	AGE	<u>2800.0</u>

B. General description

The portion of the river included within the LWRP boundary is divided into two distinct segments. The area from Lake Ontario to the beginning of the wetlands just south of Riverview Marina is characterized by intensive marina and boating activity and related development. Within this area the river appears to be nothing more than a channel between several large marinas. North of the railroad bridge, however,

the river widens to 500 feet or more. On the west bank of the river in this area are the remains of the original Village of Charlotte that include several buildings and a rail switching yard. The banks of the river in this area are lined with boat slips. The visual quality is degraded by outdoor storage of boats, and several dilapidated or inappropriate land uses.

The remaining portion of the river from the Riverview Marina south to the Middle Falls is characterized by densely wooded steep slopes and the absence of significant shoreline development. Seneca Park, which includes the Seneca Park Zoo, ball fields, and passive recreational facilities, occupies most of the eastern river bank and upland area. The western bank includes Maplewood Park, the proposed Lower Falls Park as well as cemeteries and undeveloped open space.

The majority of land within the LWRP boundary is currently used for recreational or other open space uses. Almost all of the four miles of riverfront, from the Middle Falls north to the Turning Basin, are utilized as parkland or cemeteries. Existing parkland along the river includes Ontario Beach Park, Turning Point Park, and Maplewood Park along the west bank, and Seneca Park along the east bank Lower Falls Park is proposed for development along the west bank of the river, adjacent to the Lower Falls and just south of the Driving Park Bridge. Riverside Cemetery is located along the west bank of the river, just south of Turning Point Park, in the vicinity of the former St. Bernard's Seminary which is now owned by Eastman Kodak Company.

The steep banks of the Genesee River culminate in a gorge that exceeds 200 feet in depth in some areas. Located within this gorge, near the Lower Falls, is the Station 5 RG&E hydroelectric power plant. The Veteran's Memorial Bridge carries Route 104 over the Genesee River. Just north of this bridge is a pedestrian bridge which offers spectacu1ar views of the river gorge, and which was constructed as part of the Combined Sewer Overflow Abatement Program (CSOAP).

Further north, at Hanford's Landing, Eastman Kodak Company has built an industrial waste treatment plant. A vacant wooded area on the west side of the river stretches north from Kodak's treatment plant to Turning Point Park. In this 3/4 mile long area, the uplands beyond the river gorge contain Kodak's Research Laboratories and the former Seminary site. This site was rezoned to an IPO District (Industrial Planned Development) and is being utilized by Kodak as an office and research complex.

The east and west river banks are primarily vacant from the Turning Basin north for approximately ¾ mH e. Near Denise Road, the primary land uses again become recreation and open space and continue north to the river mouth for approximately 1.3 miles. Boat slips and private marinas are the major types of waterfront development. Physical access to the shore zone becomes easier in this area, with the exception of a 1/2 mile long section along the west bank which contains railroad tracks. The portion of this area north and south of the Stutson Street Bridge has been purchased by the city.

The only existing commercial shipping activity on the river is conducted by the Rochester Portland Cement Company. Ships carrying approximately 8,500 tons of cement made weekly trips up the river from the lake, stopping at the company's docking facilities on the west bank of the river, adjacent to Turning Point Park. These ships arrive from Ontario, Canada. There are no commercial fishing facilities or activities on the river at the present time.

As one moves away from the gorge rim or riverbank and into the upland areas, land uses become more urban in character. These uses have no physical connection with the river. Actually, the river all but disappears from view in these areas. Residential uses predominate in the upland areas, with some commercial and industrial development located along major streets or at major street intersections. In addition, there are two large cemeteries in the upland areas on the west side of the river, approximately halfway between downtown and the lake.

The major portion of lakeside frontage within the city's LWRP boundary is designated as public parkland. Ontario Beach Park is located at the mouth of the Genesee River and contains approximately 2,100 feet of lakeside frontage. Park facilities include a bathhouse, a large public beach area, a bandstand and several picnic pavilions. Durand-Eastman Park, located several miles to the east, contains over 7,600 feet of lakeside frontage. This area also included a public beach, at one time. The remaining lake frontage within the LWRP boundary is in residential use and includes the 4,000 feet of shoreline to the west of Ontario Beach Park.

Water-Dependent and Water-Enhanced Uses

A. Overview and definitions

Water-dependent land uses are structures or economic activities that cannot exist without a waterfront location such as marinas, boat ramps, sewage treatments plants, etc. Water-enhanced land uses are structures or economic activities that increase their value or importance because of their proximity to a shoreline. Frequently, they function as support services for water-dependent uses and could include parks and other recreational facilities, as well as some types of commercial development.

B. Water-dependent and water-enhanced uses

Water-dependent uses along the river primarily involve recreational activities such as boating and fishing. The river is navigable by power boats and sail boats for the five miles from Lake Ontario to the Lower Falls area. The river has a mature warm water fish population and has significant trout and salmon runs in the spring and fall. Thus, it is used for fishing as well as for pleasure boating.

The steep slopes along the river gorge make development and access extremely difficult in most locations. Because of this, these areas are largely undeveloped and remain in their wooded state. Water-enhanced, passive recreational activities such as hiking and bird watching are the primary uses within these areas. North of Turning Point Park, the upland areas drop closer to river level and significant wetlands begin to line the shoreline on both banks. Further north, near the Stutson Street Bridge, private marinas line the river shoreline. In this area, the river is primarily used for water-dependent activities such as boating, fishing and other types of recreation. The Genesee Lighthouse which was built in 1821, the U.S. Coast Guard Station, two vacant warehouses, a public boat launch, and a railroad swing bridge are also located in this area.

There are several industrial uses located along the river that are also water-dependent. The RG&E Station 5 hydroelectric plant and Eastman Kodak Company's industrial waste treatment plant are dependent on the river for power as well as for processing water. The Rochester Portland Cement Plant,

located on the west bank across from Rattlesnake Point, is dependent on the river for its shipping operations.

The lakeshore area supports water-dependent and water-enhanced recreational uses such as boating and fishing. Public bathing is permitted at Ontario Beach Park. Public bathing also takes place at Durand-Eastman Park. Picnicking and other water-enhanced passive recreational activities are also supported at each park.

In summary, existing water-dependent uses are located in several areas within the city's LWRP boundary. These uses include:

- the Portland Cement Company, located on the west river bank, within Turning Point Park;
- Eastman Kodak's waste treatment facility, located on the west river bank, near Hanford Landing and just north of the Veteran's Memorial Bridge;
- various marinas, boat slips and docks located along the east and west banks of the river, including the Rochester Yacht Club, the Genesee Yacht Club, Shumway Marina, Pelican Bay Marina, Voyager Marina, and the Riverview Marina (including the Spirit of Rochester tour boat);
- the Monroe County Boat Launch located on the Port Authority Site, along the west bank of the river, just north of the railroad swing bridge;
- bathing beaches located at Ontario Beach Park and Durand-Eastman Park; and
- RG&E's Station 5 hydroelectric power plant.

Existing water-enhanced uses are also located in several areas within the city's LWRP boundary. These uses include:

- public parks (Ontario Beach Park, Turning Point Park, Seneca Park, Maplewood Park, and Lower Falls Park); and
- various commercial uses along River Street, just north of the Stutson Street Bridge.

C. Market demand for new uses

Water-dependent uses which are appropriate for and compatible in the city's waterfront areas include marinas, a boatel, boat slips, docks and launching ramps, public beaches and swimming areas. Water-enhanced uses which are appropriate for and compatible in these areas include recreational facilities, some types of housing and commercial/retail development and hotel, boatel or bed-and-breakfast facilities.

Future demand within the LWRP boundary for water-dependent uses such as marinas and boat slips was investigated as part of an engineering and marketing study for the Port Site completed for the city in 2009 by a consultant team. The *Marina Engineering Report and Feasibility Study* concluded that a marina project was economically feasible on the Port Site, given the existing and projected future demand for boat slips in the Rochester harbor area. The specific marina product recommendations presented in the market study included the following:

- Construction of a marina containing 100 200 slips with slip sizes ranging from 35 feet to 100 feet in length (potential demand currently exists for 200 500 additional slips in the harbor area)
- Development of marina and boat services offsite
- Development of a "flexible" mix of seasonal and transient slips within the marina
- Development of a "waterfront events" area adjacent to the marina to promote public access and usage and stimulate commercial development in the area
- Charging \$80 to \$85 per lineal foot as a summer rate for dockage (this slip rate results in a marina debt supportable cost of approximately \$32,000 per slip based on 2009 dollars)

The market study also identified the following housing product recommendations:

- Development of taller, high-density buildings on the site that respect views (six to ten stories) and minimize the use of existing parking and parkland
- Development of two to four-story town homes and/or residential lofts over commercial / retail uses directly fronting the marina and along Lake Avenue
- Development of a hotel or condominium hotel on site with adjoining conference facilities
- Continued development of cruise ship dockage along the river front

(It should be noted that these are recommendations of the market study and that they do not necessarily comply with current zoning regulations on the site.)

An earlier *Port of Rochester Master Plan* prepared by Sasaki Associates in 2006 included a market demand analysis for housing, retail, office, hospitality and marina/recreational boating development on the site. As a part of that analysis, existing reports and documents were reviewed and interviews and site visits were conducted. In addition, published data was analyzed to assess the viability of each market segment. The market study used both quantitative and qualitative data to gauge what could be reasonably supported in the area. Using the research, a likely trade area for each use was determined, the supportable square footage in the given trade area was calculated, and then a likely capture rate for the uses that would locate at the Port was projected. This assessment of area economic conditions found that the Port Site could reasonably support the following maximum development:

- Residential: 1,100 new units
- Retail: General 17,000 sf.
- Retail: Convenience 28,000 sf.
- Eating and Drinking: 33,000 sf.
- Office: 51,000-76,000 sf.
- Hotel: Limited opportunity for boutique/condo hotel
- Marina: 100+ boat marina and potential future small-scale ferry service
- Destination Use: Limited seasonal opportunities

These amounts were projected to be supportable within the next 5-7 years, based on data collected and analyzed at the time of the report and without the introduction of additional extraordinary economic conditions or circumstances that would change the given market.

Recreational Opportunities and Public Access

A. Recreational opportunities (public parkland)

Lake Ontario and the Genesee River offer many outdoor recreational opportunities such as swimming, boating and fishing as well as passive recreational activities. According to the Coast Guard, the river maintains a depth of approximately 10 feet as far south as the Veteran's Memorial Bridge. This permits a variety of small pleasure boats to use the river. Canoeists and kayak enthusiasts are able to continue up the river as far south as Seth Green Island. Beyond Seth Green Island, swift river currents make upstream travel difficult. The natural river depth is maintained in the port area by annual dredging operations conducted by the U.S. Army Corps of Engineers (USACE). The dredging operations ensure a river depth of approximately 21 feet which permits access up the river for large recreational craft.

Berthing or mooring in the river is not possible for all the boat owners. Although the port area has a number of marinas and yacht clubs that contain approximately 1,000 boat slips, this does not meet present demand. Previous market studies (such as the Monroe County Waterfront Recreational Opportunities Study completed in 1989) have identified Rochester and Monroe County as having a market with tremendous growth potential in boat sales, particularly in the 16'-25' range. While many marina owners would like to expand their facilities along the river, development costs and the lack of land for expansion and parking have become major limitations.

Owners of smaller trailered boats are also experiencing launching and docking problems in the area. Only one public boat launch exists within the LWRP boundary. The four-lane boat launching ramp constructed at the port site by Monroe County has the capacity to accommodate 107 cars with trailers. Renewed interest in sport fishing has increased the use of this facility. However, the location of the launch on the west bank north of the railroad swing bridge has made maintenance of the ramp a continuous and costly concern because of a continued river surge problem that is eroding and undermining the launch area and persists even after the construction of the Army Corps of Engineers wave surge control structure in the mid-1990's. Additionally, the location of the boat launch and associated parking in this area are not considered to be the highest and best use of land at the Port Site.

The west breakwall and pier at the mouth of the river are often used for fishing and provide direct public access to the river. The east breakwall and pier adjacent to the Coast Guard Station are periodically closed for security reasons. The east and west piers have been improved by the USACE and are generally in good condition. The portion of the west pier south of the beach area has, however, experienced undermining and erosion due to major winter storms. The east pier has varying surface conditions and is not as suitable for public access.

The northern portion of the Port Site is dedicated parkland which is shown on Map II-11. Should future development be proposed in this area, the city will be required to utilize New York State parkland

alienation procedures to alienate parkland acreage and to replace it with appropriate and equivalent parkland acreage in another area (either on-site or off-site). See Maps II-5a, II-5b, and II-5c for park locations.

(1) DURAND-EASTMAN PARK (965 Acres):

Location: On Lake Ontario, west of Irondequoit Bay and east of the

Genesee River; the park can be entered from Lakeshore

Boulevard and Kings Highway.

Facilities: Hiking, bridle, and cross-country ski trails; 7 picnic shelters;

playground area; winter warming shelter and riding stable; l8-hole golf course, golf clubhouse with food concession and pro

shop; parking permitted on park roads.

Special features: Steep wooded slopes; valleys; scenic vistas; small lakes and

ponds; on Lake Ontario; botanical collections. Portions of the park make up part of the Monroe County Arboretum. Spring flowering trees and spectacular fall foliage colors make this park an area of exceptional beauty. Unique topography and soils

permit the growing of plants not native to the area.

Estimated Usage: Not available.

Development Opportunities: Development of beach area for swimming (park is currently

undergoing a phased capital improvement project totaling \$5.1

million).

(2) MAPLEWOOD PARK AND ROSE GARDEN (14 acres)

Location: West side of the Genesee River, from Driving Park Avenue north

to Hanford Landing Road; rose garden located at the

intersection of Lake Avenue and Driving Park Avenue; park can be entered from Driving Park Avenue, Maplewood Avenue, Maplewood Drive, and Bridge View Drive as well as from various

pedestrian trails.

Facilities: Informal picnicking and strolling areas; tennis courts; fishing

areas; parking area provided off Bridge View Drive; parking area for rose garden provided along park entrance drive from Driving

Park Avenue.

Special features: Pond located in lower Maplewood Park area; scenic views and

vistas of Genesee River gorge and Veteran's Memorial Bridge; the rose garden, one of the largest in the country (selected by the American Rose Society as an "All American Rose Test

Garden"; peak blooms in late June and September); several overlooks that provide spectacular views of the Genesee River

gorge.

Estimated Usage: Not available.

Development Opportunities: Improved access to gorge for hiking and fishing.

(3) LOWER FALLS PARK (3 acres):

Location: Proposed park to be located on the west bank of the Genesee

River south of the Driving Park Bridge, overlooking the Lower Falls area; access to the park will be provided via Driving Park

Avenue.

Facilities: Currently an undeveloped area. Potential uses could include

picnic areas and shelters, river overlooks, pedestrian and hiking

trails, and other passive recreational facilities.

Special features: Spectacular views of Lower Falls and river gorge; remains of

various historic structures evident in some areas.

Estimated Usage: Park is currently undeveloped.

Development Opportunities: Historic/archaeological resources; scenic views and vistas of

lower and middle falls; pedestrian and biking trails.

(4) ONTARIO BEACH PARK (39 acres):

Location: Northern-most portion of the city; on Lake Ontario, at the

mouth of the Genesee River; park can be entered from Lake and

Beach Avenues.

Facilities: Public beach; bathhouse; 6 picnic shelters; food concession

stand; outdoor performance pavilion; ice-skating rink; historic carousel; parking areas for approximately 1,500 cars on the port site to the south and within an area south of Beach Avenue and west of Lake Avenue; soccer field and 2 softball fields located in

an area to the south, along Estes Street.

Special features: One of the best natural sand beaches on Lake Ontario;

supervised swimming areas; boat launch on the Genesee River; antique Dentzel Carousel designated as a City of Rochester

Historic Landmark.

Estimated Usage: 800,000 visits / year

Development Opportunities: Enhancement of beach area; rehabilitation of bathhouse and

pier; redesign of existing bandstand; improvements to

circulation; coordination with events and facilities on Port of Rochester site (park is currently undergoing a phased capital

improvement project totaling \$6.7 million).

(5) SENECA PARK (297 acres):

Location: Eastern bank of the Genesee River, north and south of the

Veteran's Memorial Bridge; park can be entered from St. Paul

Street, just north of Route 104 (Ridge Road East).

Facilities: Outdoor swimming pool with bathhouse; playgrounds; softball

fields; 2 picnic shelters; hiking trails; marked nature and jogging trails; zoo; parking area adjacent to zoo and along lower park

road.

Special features: Seneca Park Zoo; pond; steep wooded slopes along the river

bank; wetlands; scenic views of the Genesee River gorge; park

was originally designed by Frederick Law Olmstead.

Estimated Usage: Not available.

Development Opportunities: Enhancement of Olmstead Plan; improved access to river gorge

for hiking and fishing; rehabilitation of zoo and public pool (park is currently undergoing a phased capital improvement project

totaling \$3.9 million).

(6) SETH GREEN DRIVE AREA (2.3 acres/part of Seneca Park):

Location: Eastern bank of the Genesee River; enter from St. Paul Street;

area runs from Norton Street north to Seneca Towers.

Facilities: Undeveloped open space area used for passive recreation;

"switchback trail" provides access to river gorge for fishing.

Special features: "Switchback trail" on steep wooded slopes along river provide

spectacular views of Veteran's Memorial Bridge and river gorge.

Estimated Usage: Not applicable.

Development Opportunities: Scenic views and vistas; pedestrian or hiking trails; improved

fishing access.

(7) TURNING POINT PARK (100 acres):

Location: West bank of the Genesee River, just south of the Turning Basin;

park can be entered from Lake Avenue via Boxart Street; park

borders Riverside Cemetery to south.

Facilities: Relatively undeveloped; hiking trails (connection to Lake

Avenue); picnic areas; fishing piers and dock; bird watching; parking area at end of Boxart Street, at entrance to park.

Special features: Park provides access to the water's edge for fishing and

canoeing; park provides spectacular views of river gorge and

Turning Basin; small waterfalls.

Estimated Usage: Not available.

Development Opportunities: Scenic views and vistas; pedestrian or hiking trails; improved

fishing access.

(8) TRYON PARK (82 acres):

Location: Adjacent to Irondequoit Creek and southwestern edge of the

Irondequoit Creek wetlands, just south of Irondequoit Bay; park

can be entered via Tryon Park Road.

Facilities: Relatively undeveloped; hiking trails; passive recreational

opportunities.

Special features: Steep wooded slopes; wetlands, scenic views and vistas of the

Irondequoit Creek wetlands and Irondequoit Bay.

Estimated Usage: Not available.

Development Opportunities: Enhancement of scenic views; new hiking and biking trails.

While not officially designated as parkland, Riverside Cemetery and Holy Sepulcher Cemetery, located just south of Turning Point Park on the west bank of the river, also offer passive recreation opportunities such as hiking, biking and bird watching.

B. Public access

With the exception of Durand-Eastman, all of the parks listed above are adequately serviced by public transportation (bus) via either Lake Avenue or St. Paul Street. Adequate parking is available at all of the sites with the exception of Ontario Beach Park where overflow parking is a problem during peak periods of summertime weekend use.

The CSOAP project, which involved construction of underground holding tunnels to reduce the water quality impacts of the city's combined storm and sanitary sewer system in certain areas, included the construction of a pedestrian walkway across the river, just north of the Veteran's Memorial bridge. This walkway links Seneca Park with Maplewood Park and provides unique physical and visual access to the river gorge for pedestrians and handicapped persons.

Within the LWRP, direct public access to the water is limited, despite the many public parks and open space areas. The problem with providing direct public access to much of the city's waterfront is

complicated by the topography of the areas involved. These areas include heavily wooded steep slopes which become more difficult to traverse as one moves south from the mouth of the river to the Lower Falls area. Even if better access to the river could be provided in certain areas, the safety of potential users would remain a significant issue.

On the east side of the river, Seneca Park has a variety of hiking trails that provide access along the rim of the river gorge and to the river itself via "switchback trails". Direct pedestrian access to the river on the east side is only possible from Seth Green Drive, located just south of the Veteran's Memorial Bridge, and from an RG&E service road located just north of the Driving Park Bridge.

Along the west bank, direct access to the river is possible from Turning Point Park, although visual access is provided from a variety of sites including Riverside Cemetery and Maplewood Park. Some informal trails exist along the east and west banks of the river, particularly near the Driving Park Bridge. Fishermen use these trails for access to prime fishing areas along the river. Hastings Street located just south of the bridge, leads to Lower Falls Park and provides access to an open area with spectacular views which runs from the Lower Falls southward to the Middle Falls. A formal hiking trail has also been developed in Maplewood Park from the Veteran's Memorial Bridge to the Kodak Park area.

Ontario Beach Park, with its long sandy beach, provides direct public access to Lake Ontario. However, few public trails or walkways exist for passive recreation use along the lake shoreline. A small public lakefront sidewalk currently exists along Beach Avenue between Clematis and Cloverdale Streets.

Historic Resources

Because Rochester began and grew along the Genesee River, there are many historic resources within the city's LWRP. These include archaeological sites, a local Preservation District, local, state and national landmarks, and a number of properties eligible for landmark designation.

In 1986, the Rochester Museum and Science Center prepared the Cultural Resources Inventory for the City of Rochester LWRP. This report identified 21 known archaeological sites, seven historic Euro-American archaeological sites, two landmarks listed on the National and State Registers of Historic Places, and three locally-designated landmarks. In April, 1987, the Beach Avenue Preservation District was designated, pursuant to the city's zoning ordinance.

The Genesee Lighthouse, at 70 Lighthouse Street, is perhaps the most historically significant site within the LWRP and gives an indication of the wealth of resources in this area of the City of Rochester. The site is listed on the National and State Registers of Historic Places, is a local landmark, contains the remains of the first light keeper's house (c. 1822), was the site of the cabin of the first permanent Euro-American settler in what was to become Rochester, and contains evidence of American Indian occupation.

Table II-2 illustrates the various historic and archaeological resources that exist within the LWRP boundary.

Visual Quality

A. Overview

Rochester's coastal area has a variety of unique topographical features including waterfalls, a river gorge, ravines, and several small river islands. Several breathtaking views and vistas are found throughout the city's waterfront revitalization area and enhance the city's urban environment. Significant scenic views and vistas within the city's LWRP are shown on Maps II-6a, II-6b and II-6c.

B. Description

The beach and port area dominate the land use pattern in the extreme northern portion of the city's waterfront revitalization area and contribute to the overall visual quality of that area. An exceptional view of the lake and mouth of the river can be seen as one drives north on Lake Avenue, past the Conrail railroad bridge. However, some of the cluttered, underutilized or dilapidated land uses along the Lake Avenue commercial strip detract from the aesthetics of the area.

Moving south from the port along the river, several spectacular views and vistas exist but are not easily accessible. A river overlook along the southern map approach to the Veteran's Memorial Bridge offers tremendous views of the river gorge and the eastern riverbank. Several vacant properties along St. Paul Street, on the eastern side of the river, also offer panoramic views and vistas of the river gorge and the western riverbank.

RG&E's Station 5 hydroelectric plant at the Lower Falls provides good views of the river in the spring and early summer. During the summer months, however, dense foliage obscures this view. Further north, near Kodak's research laboratories, is an area that could provide a spectacular river overlook, if developed properly.

Seneca Park, located along the river's eastern bluff, provides an excellent view of the river's wetlands and wooded slopes. Seneca and Maplewood Parks are connected via a pedestrian bridge which crosses the river and provides spectacular views of the river gorge. Kodak's waste water treatment plant on the opposite side of the river detracts from this view, however. The overlook at the end of Boxart Street provides a view of the wooded slopes near Seneca Park and views of the river gorge to the north. Areas within Turning Point Park provide spectacular views of the river and the Turning Basin, as well as the wetland areas along the eastern bank.

A footpath that leads down the steep slope at Turning Point Park provides direct pedestrian access to the river. A path which continues north from the park passes Riverview Marina and the remains of Old Charlotte and terminates at the Genesee Lighthouse, providing unique views of the land and the river.

Additional scenic views and vistas of Lake Ontario and various ponds and valleys exist in Durand-Eastman Park. Scenic views and vistas of Irondequoit Creek, Irondequoit Bay and the adjacent wetlands exist in Tryon Park. Views from the river and the lake of existing development and upland areas are also significant in many areas.

Table II-2 Local Waterfront Revitalization Program Culturally Significant Sites within the LWRP

Properties listed on the National and State	Genesee Lighthouse - 70 Lighthouse Street
Registers of Historic Places:	"Shingleside" (house) - 476 Beach Avenue
Properties designated as local landmarks:	Ontario Beach Carousel - Ontario Beach Park
	Genesee Lighthouse - 70 Lighthouse Street
	St. Bernard's Seminary - 2260 lake Avenue
Properties within the Beach Avenue	Properties between 480 and 670 Beach Avenue on the north
Preservation District:	side of street
	551 Beach Avenue on the south side.
Historic Euro-American Archaeological	Genesee Lighthouse Historic Site
Sites:	Lower Falls Mill and Industrial Site
	Carthage-Brewer's Dock Historic Site
	Carthage Flats Mill and Industrial Site
	Glen House Historic Site
	King's-Hanford's Landing Historic Site
	Kelsey's-Buell's Dock Historic Site
Archaeological Sites:	Twenty-one sites as identified by the Rochester Museum and
	Science Center.
	Science Center.
Properties Potentially Eligible to be Listed	According to the City of Rochester Historic Resources Survey
Properties Potentially Eligible to be Listed on the National and State Registers of	
	According to the City of Rochester Historic Resources Survey
on the National and State Registers of	According to the City of Rochester Historic Resources Survey prepared by Mack Consulting Associates in 1986, two districts
on the National and State Registers of	According to the City of Rochester Historic Resources Survey prepared by Mack Consulting Associates in 1986, two districts and 26 individual properties may meet the criteria for listing on
on the National and State Registers of	According to the City of Rochester Historic Resources Survey prepared by Mack Consulting Associates in 1986, two districts and 26 individual properties may meet the criteria for listing on the National and State Registers of Historic Places. The
on the National and State Registers of	According to the City of Rochester Historic Resources Survey prepared by Mack Consulting Associates in 1986, two districts and 26 individual properties may meet the criteria for listing on the National and State Registers of Historic Places. The individual properties are, for the most part clustered on Beach
on the National and State Registers of	According to the City of Rochester Historic Resources Survey prepared by Mack Consulting Associates in 1986, two districts and 26 individual properties may meet the criteria for listing on the National and State Registers of Historic Places. The individual properties are, for the most part clustered on Beach Avenue, Stutson Street. Latta and River Roads, and on Lake
on the National and State Registers of	According to the City of Rochester Historic Resources Survey prepared by Mack Consulting Associates in 1986, two districts and 26 individual properties may meet the criteria for listing on the National and State Registers of Historic Places. The individual properties are, for the most part clustered on Beach Avenue, Stutson Street. Latta and River Roads, and on Lake Avenue between Driving Park Avenue and Flower City Park. The
on the National and State Registers of	According to the City of Rochester Historic Resources Survey prepared by Mack Consulting Associates in 1986, two districts and 26 individual properties may meet the criteria for listing on the National and State Registers of Historic Places. The individual properties are, for the most part clustered on Beach Avenue, Stutson Street. Latta and River Roads, and on Lake Avenue between Driving Park Avenue and Flower City Park. The Ontario Beach Park District is wholly within the LWRP, while

Natural Resources

A. Overview

Rochester's waterfront revitalization area contains a variety of significant natural resources and environmental features. These include fish and wildlife habitat areas, wetlands and unique topographic features. These areas are shown on Maps II-7a, II-7b and II-7c.

B. Fishery resources and habitats

The Genesee River flows north through the City of Rochester and is one of four major New York State tributaries of Lake Ontario. The large size of the Genesee, and the fact that much of the river corridor is essentially undisturbed, make it one of the most important fish and wildlife habitats in the Great Lakes

Plain ecological region of New York State. However, water pollution and extensive alteration of the lower channel have reduced the environmental quality of the river.

The New York State Department of State (NYSDOS) has designated almost six and one-half miles of the river as a "coastal fish and wildlife habitat of state-wide significance". (See Appendix A) This habitat area extends from the mouth of the river at Lake Ontario to the Lower Falls, just south of the Driving Park Bridge. The Lower Falls is a natural impassable barrier to fish. The lower river area received a rating of 54, which is well above the 15.5 threshold for designation as a state coastal fish and wildlife habitat. The rating system was based on five criteria: ecosystem rarity; species vulnerability; human use; population level of species present; and replaceability.

The Genesee River is a highly productive warm water fisheries habitat which supports concentrations of many residents, and Lake Ontario based fish species. Among the more common resident species are smallmouth bass, brown bullhead, northern pike, channel catfish, walleye, carp and white sucker. Lakerun species found in the Genesee River include white bass, yellow perch, white perch, smelt, bowfin, sheepshead, rock bass and American eel. These fish populations are supplemented by seasonal influxes of large numbers of trout and salmon. In the spring (late February -April), steelhead (lake-run rainbow trout) and brown trout run up the river, and lake trout occur at the river's mouth. In fall (September - November), concentrations of coho and chinook salmon, brown trout and steelhead are found throughout the river during their spawning runs. The salmonid concentrations in the Genesee River are among the largest occurring in Lake Ontario tributaries, and are largely the result of an ongoing effort by NYSDEC to establish a major salmonid fishery in the Great Lakes through stocking. In 1985, approximately 20,000 steelhead and 300,000 chinook salmon were released in the river.

The Genesee River provides an important recreational fishery, attracting anglers from throughout New York State and beyond. Its location within the City of Rochester results in very heavy fishing pressure from residents of the metropolitan area. Major fishing areas along the river include the river mouth at Lake Ontario, and the riverfront between Seth Green Island and Lower Falls. Although the seasonal salmonid runs attract the greatest number of fishermen to the area, the river also supports an active warm water fishery. Easy access to the river for fishing is a problem in many areas, however, due to the topography of the river gorge. Ponds within Durand-Eastman Park also receive heavy fishing use during the spring and summer months. The fishing derbies held in the park are important to many local residents.

C. Wildlife resources and habitats

Wildlife use of the river and shore zone is extremely limited and not well documented. It appears to be limited to those species that can inhabit a relatively narrow riparian corridor, and are somewhat tolerant of human activities in adjacent areas. Possible or confirmed breeding bird species include mallard, wood duck, red-tailed hawk, spotted sandpiper, belted kingfisher, red-winged blackbird, swamp sparrow and various woodpeckers and woodland passerine birds. Other species occurring in the area probably include beaver, deer, squirrel, skunk, raccoon, muskrat, northern water snake and painted turtle.

Due to the inaccessibility of the gorge, there are no significant wildlife-related human uses of the river. The steep slopes of the gorge and the wooded areas of Durand-Eastman Park provide refuge for many types of wildlife. The park is an invaluable nature area that contains significant wetlands and a deer population of between 200 and 300 animals.

D. Tidal and freshwater wetlands

Wetlands are valuable fish and wildlife habitats and serve as nesting and breeding areas for many migratory species as well as spawning and nursery areas for many species of fish. Wetlands also provide flood and stormwater retention capacity by slowing runoff and temporarily storing water, thus protecting downstream areas from flooding. Aquifer recharge, erosion control and recreational opportunities are other benefits of wetland preservation.

In recognition of the benefits of wetlands, New York State enacted the Freshwater Wetlands Act (Article 24 of the Environmental Conservation Law). Wetlands encompassing 12.4 acres or more are protected, as are smaller areas having unusual local significance such as supporting a rare or endangered species. Any filling or alteration of a wetland or within a 100 foot buffer zone immediately surrounding the wetland requires a permit from the NYSDEC.

Wetlands are classified into four categories. Class I wetlands are the most valuable and least disturbed, while Class IV wetlands are the least valuable. Permits for alteration of a wetland are more likely to be granted for Class III and IV wetlands than those in the higher classes. Table II-3 lists state-designated wetlands within the city's LWRP, and the state classification category of each.

The U.S. Fish and Wildlife Service (USFWS), a branch of the U.S. Department of the Interior, has classified all significant wetlands in the Rochester area, regardless of size. Maps showing wetland boundaries and indicating the type of structural features and vegetation present were completed using 1978 and 1981 aerial photography.

The USFWS classification system categorizes wetlands first by the ecological system present. In Rochester, this is usually riverine (in or adjacent to a river) or palustrine (poorly drained or swampy area).

Some lacustrine (in or adjacent to a lake) wetlands are found in and adjacent to Durand and Eastman Lakes in Durand-Eastman Park. Further classifications include open water areas, emergent vegetation which is rooted under the water with parts of the plant extending up out of the water, shrub/scrub areas, and forested areas. Common examples of emergent vegetation in Rochester are cattails and purple loosestrife.

Vegetation found in shrub/scrub areas includes alder, buttonbush and dogwoods. In forested wetland areas within Rochester, willows, red and silver maples and red ash are likely to be found.

The USFWS areas identified generally occur in those areas shown on the NYSDEC maps, with the exception of certain smaller and isolated wetlands scattered throughout the city. Federally designated wetlands impose requirements upon federal agencies and federally-assisted projects, as well as requiring permits through the USACE.

Table II-3. Local Waterfront Revitalization Program State Designated Wetlands within the LWRP (12.4 Acres or Greater)

State Code	State Class	Location
RH-6	II	River, NE, north of Rattlesnake Point
RH-8	II	River, NW, below Riverside Cemetery
RH-9	II	River, NE, Turning Point Park and northward
RH-2O	I	River, NE, Seneca Park
RH-21	II	River, NE, Seneca Park and northward
RH-12	I	Durand-Eastman Park
RH-13	I	Durand Lake, D-E Park
RH-14	I	Eastman Lake, D-E Park
RH-15	I	Durand-Eastman Park
RH-16	ı	Durand-Eastman Park
PN-1	I	Tryon Park (small portion of Ellison Park wetlands area)

E. Water quality

The Genesee River accumulates and transports a variety of pollutants to Lake Ontario. Water quality in the lower river has degraded over the years because of the dumping of industrial wastes and untreated sewage into the river. According to the Monroe County Health Department (MCHD), the combination of combined sewer overflows, Eastman Kodak Company waste discharges and connections with the Barge Canal have significantly contributed to the pollution of the Genesee River. Because of improvements to the city's sewer systems and the upgrading of Eastman Kodak's King's Landing waste treatment plant which now removes silver and other chemicals from plant waste water discharges, river water quality has begun to improve. Small amounts of cadmium used in the photographic process still collect in river sediment, however, and can constitute a health problem when the river is dredged causing these toxic metal particles to become suspended in water. The NYSDEC is currently investigating elevated levels of toxic sediments in the lower Genesee and the toxicity of Kodak discharges.

The Monroe County Pure Waters Agency (MCPWA) was formed in 1967 to consolidate and improve municipal sanitary waste discharges. The Rochester Pure Waters District, one of five county sewer districts, operates and maintains treatment facilities, interceptor sewers and a collection system which serve the entire city. A network of sewer interceptors and new overflow tunnels collects sewage, stores it during periods of high storm water runoff, and then directs it to the Frank E. VanLare Treatment Plant in Durand-Eastman Park for secondary treatment. Five chlorination stations also serve the city.

Even though the upgraded city sewer system and improvements to industrial wastewater treatment have greatly improved Genesee River water quality, there are occasional periods of high storm water runoffs that cause serious but temporary pollution problems in the river. Pollution resulting from combined sanitary and stormwater sewers have been a long-term problem for the Genesee River. When stormwater runoff and sanitary sewage is carried in the same system, a heavy rainfall will generally

produce flows which exceed treatment plant capacity. When this happens, the excess flow of combined stormwater and sewage bypasses the treatment plant and flows directly into the river. Rochester and Monroe County are involved in the CSOAP project which has been designed to correct this problem through the construction of large, underground holding tunnels.

F. Air quality

At the current time, Rochester's air quality is not known to be a significant problem and meets all national air quality standards.

Flood Hazard Areas

A. Water flow

The greatest impact on water flow in the river is created by a series of dams. These include the Mount Morris Dam, the Court Street Dam and the Middle Falls floodgates. These dams regulate overall river levels and flows in order to provide flood control for the region and to generate electricity. Stream flow in the lower Genesee fluctuates extensively according to NYSDEC records. Mean annual flow is generally in the 3,000 to 3,500 cubic feet per second (cfs) range. Mean annual maximum flows generally fall in the 14,000 to 16,000 cfs range with mean minimum flows in the 450 to 500 cfs range.

B. Flooding

As noted earlier, the Genesee River follows a well-defined channel through much of its course through the City of Rochester. Flooding along the river has been virtually eliminated with the construction of the Mt. Morris Dam in 1952. The dam is located about 35 miles south of the city. The only large area of the city which is below the 100 year flood elevation is Genesee Valley Park, which is largely open space. Flood plain development has been kept to a minimum in the city due to the steep topography of the river gorge. Areas of lower elevation near Lake Ontario have been protected from flooding by filling, breakwalls and construction of bulkheads.

The City of Rochester participates in the National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA). FEMA recently completed a new Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRM) for the city. The FIS and FIRM became effective on August 28, 2008. These maps establish flood hazard areas in the city based on the 100-year and 500-year flood plain. Flood hazard areas in the City of Rochester are generally located along the Genesee River, south of the Court Street Dam and near the mouth of the Genesee River at Lake Ontario. Portions of the Port Site located just south of Ontario Beach Park and west of the river are located with flood zone AE and may require flood insurance and/or the construction of new development above the base flood elevation established by FEMA. Ontario Beach Park and Durand-Eastman Park (to the east along Lake Ontario) may also lose some beach area in the event of significant flooding which occurs during times of peak lake levels.

Erosion Hazard Areas, Siltation and Dredging

A. Coastal erosion hazard areas

A coastal erosion hazard area has been designated by the NYSDEC along the shoreline of Lake Ontario, from the City of Rochester/Town of Greece municipal boundary on the west, along the shoreline, to the City of Rochester/Town of Irondequoit municipal boundary on the east, at the eastern end of Durand-Eastman Park. This area is shown on maps prepared by the NYSDEC entitled: Coastal Erosion Hazard Area Map, City of Rochester and dated August 29, 1988. These maps are on file in the City Clerk's Office at City Hall, and show the boundaries of natural protective features and structural hazard areas within the LWRP.

These maps indicate that the shoreline area north of Beach Avenue from the city / Town of Greece municipal boundary east to Welland Street is eroding at a rate of approximately 1.5 feet per year. The shoreline area from Welland Street east to Clematis Street is eroding at approximately 1.0 feet per year. The shoreline area contained within Ontario Beach Park has been designated as a natural protective feature.

The shoreline area within Durand-Eastman Park from the western park boundary to Sunset Point Road has also been designated as a natural protective feature. The shoreline area that runs from Sunset Point Road east for approximately 1100 feet is eroding at approximately 1.0 feet per year. The remaining portion of the Lake Ontario shoreline within the boundaries of the LWRP is eroding at approximately 1.5 feet per year.

A natural protective feature is defined as a nearshore area, beach, bluff, primary dune, secondary dune, or wetland, and the vegetation thereon. A structural hazard area is defined as those shorelands, other than natural protective features, subject to erosion and located landward of shorelines having an average annual recession rate of 1 foot or more per year. The inland boundary of a structural hazard area is calculated by starting at the landward limit of a bluff and measuring along a line which is perpendicular to the shoreline a horizontal distance which is 40 times the long-term average annual recession rate.

B. Other erosion problems

An additional erosion problem continues to occur in the lower Genesee River, north of the O'Rourke Bridge, near the river's outlet with Lake Ontario. This problem involves wave surge action in the river caused by severe northeastern storms. This wave action causes damage to boats and boat docks in the river, as well as the undermining of other structures and facilities along the river bank. Many marinas along the river north of Stutson Street have suffered damage to structures, boats and shoreline due to the wave surge action of major storms during the last several years.

In the mid-1990s, the Army Corps of Engineers constructed a wave-dampening stone revetment along the inner seawall areas of the eastern and western breakwaters of the pier structures extending into Lake Ontario. Although these structures have reduced wave energies in the harbor, it has not effectively eliminated them. During strong northerly winds, there is a 3- to 6-foot surge at the northern end of the

Port Site, which is further reduced to 1 to 2 feet at the southern end of the site. Appropriate marine and coastal engineering will need to be developed into any marina development plan for the Port Site to reduce these wave energies to an acceptable condition for recreational marina / boating purposes. Accordingly, a southern entrance is much preferred to a northern entrance for any marina basin constructed on the site.

C. Siltation and dredging

Siltation primarily caused by bank and sheet erosion, construction activities, and some farming practices, can have a significant effect on water quality. Turbid water is visually unattractive. Silt also destroys stream habitats by changing the natural water environment. Silt covers and retains sewage wastes and other organic materials, which, through the process of decomposition, depletes the supply of dissolved oxygen in the water resulting in the killing of fish as well as water insect populations. Silt in water can also negatively impact fish spawning.

Bank erosion, a major factor in siltation, occurs partly because of natural wave action and surface runoff as well as from the wash created by powerboats on the river. A speed limit of 6 mph has been set by the Coast Guard as a safety measure and as a means to protect riverbanks from serious erosion. Enforcement of the speed limit is difficult, however.

Dredging activities in the port area designed to deepen the channel and to clear marina slips of silt have also had a negative impact on water quality. When dredging occurs, sediment is released and suspended in the water. The larger, heavier particles soon resettle on the bottom while the finer silts and clays remain suspended for longer periods of time and are transported from the dredge site by local currents. This causes significant pollution problems within the river and is detrimental to the natural fish and wildlife populations present there.

Both the NYSDEC and the Monroe County Health Department (MCHD) operate water quality monitoring stations in Lake Ontario and the Genesee River. NYSDEC's three surveillance stations are located near the Charlotte docks, approximately two miles south of the Stutson Street Bridge at Boxart Street, and on the east bank of the river between RG&E's Station 5 power plant and Driving Park Avenue. The MCHD maintains several stations in the lake and along the river and has increased the frequency of data collections since 1972.

Water and Sewer Service

Existing water and sewer lines and service within virtually all areas of the city's LWRP are adequate and in relatively good condition. There are no developable areas that are not currently serviced for water and sewers. No major problems have been identified with this element of the public infrastructure. Therefore, adequate water and sewer service within the LWRP is not currently a hinderance to development.

Transportation Network

The transportation network within the city's LWRP boundary involves an extensive system of existing streets, roads and highways that are operated and maintained by the city, county and New York State. Major and minor arterials and principal collector streets within the LWRP include Lake Avenue, St. Paul Street, Ridge Road West, the Lake Ontario State Parkway (LOSP), Beach Avenue, Lakeshore Boulevard and Driving Park Avenue. Virtually all developed areas within the LWRP boundary are also serviced by public transportation through the Rochester/Genesee Regional Transit Authority (R/GRTA). Transportation network issues that exist within the city's LWRP include general traffic congestion in the vicinity of Ontario Beach Park and the Port Site during major events and festivals and periods of peak summer use as well as the potential for improved linkages with the New York State Seaway Trail.

From Ridge Road West north to the LOSP, Lake Avenue is part of the State legislated arterial system. The section north of the parkway is on the Federal Aid Urban System (FAUS). Lake Avenue is a major north/south arterial which runs parallel to the west bank of the Genesee River. Lake Avenue provides access to downtown Rochester, Kodak Park, the West Ridge Road area, several residential areas (including the Maplewood and Charlotte neighborhoods), several strip commercial areas, the parkway, Ontario Beach Park, and the Port Site. The northern terminus of Lake Avenue is Beach Avenue, near Ontario Beach Park.

In the mid-1990's a combined reconstruction and rehabilitation project for Lake Avenue was completed which included geometric improvements at several intersections, a variety of surface and sub-surface structural improvements, provision of new pedestrian and bicycle facilities, streetscapes and wide pedestrian sidewalks in several areas and the redevelopment of the Beach Avenue / Lake Avenue intersection from a T-intersection into a 2-leg intersection with pedestrian crossings.

Traffic congestion in the vicinity of Ontario Beach Park continues to be a problem during periods of peak park use during the summer as well as during special events or festivals held at the park or on the Port Site. Traffic volumes on Lake Avenue fluctuate between 14,000 and 20,000 vehicles per day according to the Monroe County Department of Traffic Engineering. These volumes can increase significantly during major events and festivals or on warm summer weekends when the beach is open for public use. The city has instituted remote parking areas and shuttle service into and out of the area and has also redirected traffic flow on Lake Avenue to accommodate additional traffic volumes and improve efficiency of Lake Avenue and the transportation network during these types of events and occurrences.

The former Stutson Street Bridge was replaced in the mid-1990 with the new O'Rourke Bridge. The new bridge was relocated to the south of the old location on an alignment which connected with the existing Lake Ontario State Parkway (LOSP) and allowed a more efficient flow of traffic across the Genesee River and along Lake Avenue. This new alignment helped to alleviate much of the traffic congestion and convoluted traffic circulation patterns that formerly existed at the Lake Avenue / Stutson Street intersection.

An integral part of the New York State Seaway Trail is located within the city's LWRP boundary. This section of the trail includes the LOSP and Lakeshore Boulevard. The Seaway Trail is a mixed-use, shared right-of-way recreation corridor which runs for approximately 474 miles from the New York/

Pennsylvania border to Massena, New York. The Seaway Trail has been designated a National Recreation Trail and will be the initial element of a proposed Great Lakes trail system to run from Grand Portage, Minnesota to the New England seaboard. There is a potential to develop loops or linkages to existing and proposed recreation/tourism facilities in the city from the Seaway Trail via informational signage, brochures and marketing. Areas that could be included in this expanded trail system include the Genesee River gorge, Ontario Beach Park, Port Site, Turning Point Park, Seneca Park and Maplewood Park.

Other Issues

A. Hazardous waste sites and storage of toxic materials

The NYSDEC maintains a list of inactive hazardous waste disposal sites known as the NYS Registry of Inactive Hazardous Waste Disposal Sites. State funds for cleanup of these sites are currently provided by the Environmental Quality Bond Act (EQBA) of 1986, which provided \$1.2 billion for remediation of inactive hazardous waste sites. Three of the twelve sites on the NYS Registry for Rochester are located within the LWRP boundary. These sites are summarized in Table II-4 from data taken from the City of Rochester State of the Environment Report (1988).

Generators of hazardous wastes, or those companies, institutions, government agencies, and other facilities which produce hazardous wastes in their operations, are required to obtain permits and report regularly to the NYSDEC and USEPA on their activities under State and federal law. The City of Rochester has 65 permitted hazardous waste generators, producing approximately 26,331 tons of wastes annually. The top ten generators produce close to 97% of all hazardous wastes generated in Rochester. The largest generator is Eastman Kodak Company which produces about 21,737 tons annually from seven locations in Rochester, or about 83% of the regulated hazardous waste in the city.

Seven industries operate treatment, storage, and disposal facilities (TSDFs or TSDs) for their own hazardous wastes. There are no commercial TSDs located in Rochester. The Eastman Kodak Company operates a hazardous waste incinerator at Kodak Park. The remaining TSD's are used for temporary storage of material prior to disposal outside of the county, either in the Buffalo area or out of state.

Pursuant to the Inactive Hazardous Waste Disposal Sites Act of 1979 (Article 27, Title 13 of the New York State Environmental Conservation Law), Monroe County has responsibility for the identification of suspected inactive waste disposal sites. Sites which are suspected of containing hazardous waste are referred to the NYSDEC for further investigation.

The county has developed draft maps of all suspected and confirmed dumpsites in Rochester using aerial photography, public agency files, and information provided by the general public. Over 90 dumpsites were identified within the city. The county has also compiled site activity records which are keyed to these maps.

It should also be noted that at present, no program for proper disposal of household hazardous waste such as insecticides, used automobile oil and paint remover exists at the city, county, or state levels of government.

Table II-4 Local Waterfront Revitalization Program NYS Registry Inactive Hazardous Waste Sites within the LWRP

Site/(State Id.#)	Classification	Summary
Old Rochester City Landfill (Pattonwood Drive) (8-28-009)	2a	Active period: 1930's -1970. Approx. size: 20 acres. Former city landfill. Soil contaminated with hydrocarbons. Scheduled for Phase II investigation in 1990.
Genesee River Gorge (8-28-044)	2	Active period: 1800-1970's. Site generally located between Upper and Lower Falls, including former Deep Hollow Ravine. Coal gasification wastes suspected of being disposed of in gorge. Chemical seeps leaching out of face of Lower Falls, similar in nature to material encountered during Cliff Street siphon tunnel construction (Feb March 1985). Xylene, toluene, benzene, creosote products found. Expanded Phase I report completed in 1988. DEC is negotiating with the potentially responsible parties (PRP) to conduct the RI/FS. City and RG&E have proposed work program to DEC.
Eastman Kodak Co. Kodak Park East, (8-28-071)	2	Active period: 1953-present. Approx. size: 60 acres. Groundwater contaminated with methylene chloride and other solvents. As an interim remedial action, a few recovery wells are removing groundwater and discharging it to Kodak's King's Landing Waste Water Treatment Plant.

B. Summary of local laws and regulations

Local laws and regulations which were enacted as a result of the LWRP are contained in the Appendices to the LWRP. Local laws and regulations which are relevant to the City's LWRP are summarized in Table II-5 below. Zoning within the northern portion of the LWRP boundary is shown on Map V-1a

Table II-5 Local Waterfront Revitalization Program Relevant Laws and Regulations

ZONING DISTRICT OR OTHER REGULATIONS	PRIMARY LWRP AREAS	SUMMARY OF REGULATIONS
Harbortown-Village (H-V) District	Port Site East/west river banks Summerville area River Street Site Portions of upland area	Permits water-dependent and/or water- enhanced development; minimum waterfront setbacks are required; special permit required for uses within 30/100 feet of Genesee River

Open Space (OS) District	Public parkland Genesee River Gorge	Restricts development to parks, cemeteries, and outdoor recreation facilities. Special
	Riverside Cemetery	permit required for many uses.
Site plan review procedures	All LWRP areas	Requires review of site plan designs for virtually all development or rehabilitation within LWRP boundary. Includes criteria for review of plans.
Environmental Review Procedures	All LWRP areas	Requires detailed environ-mental review for all Type I and Unlisted Actions. Review requires identification of proposed mitigating measures. Type I actions include development in sensitive environmental areas within shorezone.

Development Opportunities and Constraints

A. Overview

Steep slopes, potential erosion problems and inaccessibility make any significant development in the river gorge itself unfeasible. Slope problems are most severe in the area from Turning Point Park south to the Upper Falls. At the park, the waterfront revitalization area broadens into a series of three plateaus stepping down to the river. At this point, however, the presence of wetlands along the river's edge prevents direct access to the water and serves as a major constraint to development.

Few existing areas or land uses within the city's waterfront area are derelict, underutilized or abandoned. There are, however, five significant development sites within the LWRP boundary. These areas are discussed below, and are show on Map II-8a, II-8b, and II-8c along with major land owners within the LWRP.

An area to the north of Seneca Park, along the east bank of the river, is characterized by steep, wooded slopes and contains significant wetlands. This area is virtually undevelopable and should be designated as permanent open space or public parkland. The remaining four development areas within the LWRP boundary have significant development potential.

B. General description of development parcels within the LWRP

The four development areas within the LWRP boundary include:

- (1) A parcel near St. Bernard's Seminary (22 acres). Currently, this parcel is part of Eastman Kodak's Park facilities and is zoned M-IPD. Kodak is developing this parcel as a research/office facility.
- (2) Boxart Street/Burley Road area (18 acres). Although this area is located within the waterfront revitalization area, it is an upland area and is not visible from the river. The

- parcel is zoned residential and has been developed for single-family housing on 12.6 acres. The remaining acreage has been retained as open space.
- (3) The River Street area (5 1/2 acres). This area includes the abandoned Conrail switching yards on the west bank of the river, near the historic Genesee Lighthouse. This area includes two parcels: one is owned by the City of Rochester and the other is owned by New York State.
- (4) The Port Site (22 acres) once housed a large blast furnace and later supported commercial shipping operations. In 2004, the City of Rochester completed the construction of a Ferry Terminal Building on the site, along with significant parking and other public infrastructure improvements, in anticipation of the arrival of a Fast Ferry service between Rochester and Toronto which began in 2004. The ferry service was abandoned in 2006 and the terminal building remains with its current use as restaurant and office space. A large portion of the remainder of the site is used for parking for Ontario Beach Park and commercial establishments on Lake Avenue. A 4-ramp boat launch which is owned and operated by Monroe County is also located at the southern end of the site.

None of the parcels listed above have significant infrastructure problems. Water and sewer lines and public streets existed or have been constructed as part of approved development. At the Boxart-Burley site, main sewer connections existed. Water and sewer lines were installed in the area as part of the subdivision development.

C. The Port Site

Site description

The 22-acre Port Site is bordered to the north by Ontario Beach Park, west by Lake Avenue, south by the former CSX railroad right of way, and to the east by the Genesee River. This property contains a number of physical features, including approximately 1,400 lineal feet of river shoreline on the Genesee River. The site contains a 53,200 square foot former ferry terminal building. Additional features on the site include a 104-car/trailer space boat launch (owned and operated by Monroe County) and approximately 830 public parking spaces mixed between a grid pattern roadway and site utility infrastructure system. The site topography varies approximately 30 feet sloping from Lake Avenue easterly to the river's edge. Soils are generally poor throughout the site with the best soils located on the westerly portion of the property.

Background/history

Over its history, the port site has been used for a variety of purposes. In the mid-19th century, it served as the home to a carnival and amusement park, including roller coasters, a midway and baseball fields. The river and lake provided the desirable commercial and recreational venues of a beach and a waterfront environment for strolling. At the same time, the area served as a stop on the Underground Railroad, bringing slaves from farther south for travel to Canada and freedom. Around 1870, a portion of the site was converted to an iron manufacturing plant, with a blast furnace that made pig iron for other

fabricators in the Rochester area. Again, the river/beach setting provided easy access for shipping to bring iron ore and other raw materials to the plant, and to ship product out. An extensive network of railroad facilities, including multiple tracks and a turntable, were also constructed to support the movement of goods and materials for the factory. The blast furnace was initially very successful, but started to struggle in the late 1800's, operating on an intermittent basis until it was permanently shut down and dismantled in the 1920's. The site then became a shipping facility, loading and unloading materials destined for Toronto and other cities on both sides of Lake Ontario. The rail network first established to serve the blast furnace helped support this use, as one of the primary exports was coal.

A terminal building was constructed on the site in the 1920's to facilitate the lake shipping trade and passenger travel through the port. Trade through the port followed increases and declines with the wars of the early 20th century. Primary cargoes for the port were coal and touring cars with passengers bound for Toronto and other Canadian ports. With the development of the roadway and railroad networks around the western end of the lake, both of these trades slowly tapered off. Passenger and car ferry service ended in the late 1940's and freight continuing but at very low volumes into the 1950's. It was in this same post World War II time frame that the current use of the port as a marina for pleasure craft started to develop. The Coast Guard estimated the total number of private pleasure boats on the river at 900 in the early 1950's. The terminal continued to be used for imports of newsprint and cement and exports of coal, but trade continued to slow through the 1950's and 1960's.

The conversion of the port area to support a high-speed ferry service began in 2000 with the reconstruction of the terminal building as a passenger terminal, including extensive customs facilities for walk-on passengers and vehicle processing. Ferry service to Toronto was initiated in June of 2004. In 2005 the ferry was operated by the City of Rochester. Ferry operations ceased in January 2006.

Regional context

The Port Site is located roughly seven miles north of downtown Rochester. Approximately 400,000 people live within ten miles of the site, which includes the majority of the Rochester metropolitan area. The population within 100 miles of the site is approximately 2.6 million; this area includes the metropolitan areas of Buffalo (70 miles to the west) and Syracuse (70 miles to the east). Regional access is provided by the interstate highway system which connects to limited access highways that bring traffic within a half-mile of the site. The Rochester Regional Transit Authority provides bus service from the site to downtown; there is no rail or boat service providing public transportation to the site.

The Port Site lies at the end of a strip of annexed land on both banks of the Genesee River between downtown Rochester and the lake. The site and its immediate environs provide the only access to the lake within the corporate limits of Rochester. This location creates the opportunity for many services that are unique to the region: Ontario Beach Park and Durand Eastman Beach are the only public swimming beaches in the vicinity of Rochester. The Genesee River provides marina services with immediate lake access to the western Rochester area; other marinas are typically at the southern ends of bays and inlets along the lakeshore, moving them well inland from the lake itself. As the site is bordered on the north by Lake Ontario, most services needed by the residents of Charlotte are to the south of the development site. There is small-scale retail immediately adjacent to the site, but large regional shopping centers are clustered in the Town of Greece (to the south and west of the site) and

the Town of Irondequoit (across the river and to the south and east), as well as in downtown Rochester. Likewise, major employment centers are nearer to downtown and on the south side of the downtown core. While Canada is only 50 miles across the lake from the site, the influence of Canadian trade is limited with the cessation of the ferry service to Toronto. There is a small amount of private boat traffic back and forth across the lake, but it does not have a significant impact on retail and business opportunities.

Neighborhood context

The Port Site is shown on Map II-9 and Map II-10. The site lies within the community of Charlotte, formerly a separate village that was annexed by the City of Rochester in 1916. The site is bordered by different land uses on each side. To the north lies Ontario Beach Park, with an expansive sand beach that is heavily used in the summer months, as well as an historic carousel, band stand, and picnic shelters. The band stand is host to a Wednesday evening concert series in the summer. There is also a large community center within the park. The eastern border of the site is the Genesee River, the opposite bank of which is home to a series of marinas and yacht clubs that house as many as 900 boat slips. The site's immediate southern edge is the former CSX rail right-of-way, now abandoned except for a single track that carries coal to a nearby power plant. Beyond the rail line is a collection of light industrial properties, concentrated along the river and rail line. The original Genesee River lighthouse, built in 1822, overlooks the site from a bluff south of the rail corridor.

The western edge of the Port is defined by Lake Avenue, which connects the site and Charlotte to downtown Rochester along the Genesee River. The eastern side of Lake Avenue is undeveloped, with the exception of two single-story restaurants north of Corrigan Street. Lake Avenue is developed on its western side with older two and three story structures, mostly wood frame residential buildings, which have been converted to retail stores, restaurants and bars over the years. Behind the buildings fronting Lake Avenue are residential properties. These properties front the cross streets of Lakeland, Fleming, Hincher, Corrigan, and Estes Streets, which run parallel to Lake Avenue. This residential community is separated from a larger residential area by an active recreation park that borders the western side of Estes Street.

The community of Charlotte maintains a strong identity among its residents and throughout the Rochester metropolitan area. Charlotte has an active community association that promotes its image and identity very effectively. The community plays host to a number of events and festivals throughout the year, and is frequently visited for its various attractions by many from Rochester and beyond. The community also maintains a strong sense of its history, through a local historical society and many points of historical interest, such as the Genesee Lighthouse.

Site opportunities and constraints

Site opportunities and constraints for the port site are shown on Map II-11. The greatest asset of the site is its location near the mouth of the Genesee River and the Lake Ontario shore. This location provides extraordinary physical access to boating and other water-dependent activities. The context of existing and proposed marinas and mature vegetation of Ontario Beach Park create an ambiance that will be desirable to potential residents and visitors. The proximity to the park also creates a recreational and

entertainment amenity to the site: the park includes swimming supported by a large bathhouse; basketball and beach volleyball courts; a bandstand that supports a regular summer concert schedule; a historic carousel; and picnicking and passive recreation facilities. A strong connection between the park and the development, particularly as a visual amenity, has been one of the most important issues for participants in the public meetings.

Transportation into and out of the site is one of the problems that must be resolved in advancing future development plans. The site is currently fed primarily by Lake Avenue, which can become a restriction for access during peak times (festivals and summer concerts at the beach). There are several opportunities to address this, particularly the development of River Street that can be used to re-route traffic around the Lake Avenue railroad crossing, usually the choke point in traffic movements. Also, greater use of Beach Avenue and its connections to the Lake Ontario State Parkway and Route 390, possibly combined with improvements to Estes Street to take traffic off Lake Avenue, can be used to mitigate the overall traffic picture. In the long term, there are opportunities to use the railroad corridor heading south along the river and west towards Greece as a transportation link, either through the development of bike and walking trails within the right-of-way or for some form of public transportation.

One of the greatest issues facing development will be dealing with the geo-technical and geological conditions of the site. The industrial uses during the late 1800's and early 1900's deposited a layer of slag across much of the site, ranging in depths from two to ten feet. This material is not considered a restriction to redevelopment, but its placement will be controlled (it must be placed with sufficient cover to isolate it). Slag removed from the site will be considered a regulated solid waste. The city is in the process of making a 6NYCRR Part 360 Beneficial Use Determination request to the New York State Department of Environmental Conservation which will allow reuse of slag as aggregate or other similar purposes in construction and filling projects. Slag that is not beneficially reused will be managed by the city as a solid waste and transported for proper disposal at a permitted facility. The site's geology will also place limits on the structures to be developed: the soils will only support four to five stories of wooden-framed construction on spread footings; depth to bedrock is generally in excess of 100 feet, making pile-supported construction expensive.

In the mid-1990s, the U.S. Army Corps of Engineers constructed a wave-dampening stone revetment on the inner seawall area of the east and west breakwaters of the pier structures extending into Lake Ontario. Although this structure has reduced wave energies in the harbor, it has not effectively eliminated them. During strong northerly winds or major northeastern storm events, there is a 3-foot to 6-foot surge at the northerly end of the site, which is further reduced to 1 to 2 feet at the southerly end of the site. Appropriate marine and coastal engineering will need to be developed as part of any new marina plan to reduce these wave energies to an acceptable condition for recreational marina / boating purposes. Accordingly, a southern marina entrance is much preferred to a northern entrance.

Designated parklands are located on the site in both the northerly area adjacent to Ontario Beach Park and in the southern portion of the site within the boat launch area. These generalized areas are conceptually shown on Map II-11. If development is pursued on any of these lands, the exact boundaries of the designated parklands affected will be determined by the City of Rochester and any

required alienation will be completed in accordance with city and State of New York statutes and procedures. Ownership issues will also need to be addressed between the city and Monroe County regarding the boat launch area.

D. The River Street area

The River Street area, located to the south of the port site and immediately adjacent to the Genesee River, has a unique neighborhood character that results from its topography and relative seclusion, its architecture, and the small bars, restaurants and other commercial uses that are found there. The River Street site is shown on Map II-9.

Views of the river and port area from the bluff and the Genesee Lighthouse are exceptional. The lighthouse is a tremendous asset to the area due to its historic significance and unique architecture. Similarly, the abandoned railroad station, located between River Street and the Genesee River, is an interesting building with good reuse potential. Some of the older buildings in the area are also architecturally significant and offer unique opportunities for adaptive reuse. Many of the adjacent commercial uses on Lake Avenue near Latta Road provide services to neighborhood residents. These uses are a valuable asset for potential new residential development. Some of these area businesses offer products and services for fishermen, boaters and tourists.

Despite these positive features, the River Street area has several development constraints. The RG&E substation is unattractive and detracts from views from the lighthouse grounds. The sewage lift station on River Street is another unattractive feature that could constrain future development. Finally, the east-west rail line which crosses the river at the swing bridge physically separates this area from the port site, while the north-south rail line limits development, particularly in the area north of the Tapecon manufacturing facility. Although occasional trains using these tracks could be a positive site feature by contributing to the unique ambience of the area, the railroad right-of-way still restricts access and movement and hinders full development in this area.

Access to the River Street area is somewhat difficult due to street widths, grade and direction. River Street is currently one-way, going north from Stutson Street. Access to the lighthouse is particularly confusing and it is not easily seen from Lake Avenue. In addition, the River Street area has very little land available for parking. All of these factors serve to constrain development in the area. River Street is a dead-end street and contains few uses which generate people. The street is too narrow and confined to successfully accommodate many types of new uses and the pedestrian and vehicular traffic they would generate. At the same time, the area has virtually no residential uses. These factors contribute to a "no man's land" quality which constrains many types of future public and private development.

The area along the river to the south of River Street (the former Conrail land from Stutson Street to Petten Street) is narrow and has limited access. Near Petten Street, where the property widens, there is more development potential, particularly for water-dependent uses. These uses could include a boat-launching ramp with car-trailer parking, boat slips, a dry-stack storage facility for boats, or a pedestrian footpath that connects the area with the River Street area to the north.