

TOWN OF PENFIELD LOCAL WATERFRONT REVITALIZATION PROGRAM

Adopted:

Town of Penfield Town Board, July 3, 1991

Approved:

NYS Secretary of State Gail S. Shaffer, October 28, 1991

Concurred:

U.S. Office of Ocean and Coastal Resource Management, January 14, 1992

Amended LWRP

Adopted:

Town of Penfield Town Board, March 4, 2015

Approved:

NYS Secretary of State Cesar A. Perales, May 26, 2015

Concurred:

U.S. Office for Coastal Management, August 21, 2015



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Office for Coastal Management
 Silver Spring Metro Center, Building 4
 1305 East-West Highway
 Silver Spring, Maryland 20910

Mr. Steve Ridler
 State of New York
 Department of State
 One Commerce Plaza
 99 Washington Ave.
 Albany, NY 12231

Dear Mr. Ridler:

Thank you for the New York Department of State’s June 17, 2015, request that changes to the Town of Penfield Local Waterfront Revitalization Program (LWRP) be incorporated into the New York Coastal Management Program (CMP). You requested that the changes described below be incorporated as routine program changes (RPCs), pursuant to Coastal Zone Management Act (CZMA) regulations at 15 C.F.R. part 923, subpart H, and the National Oceanic and Atmospheric Administration’s (NOAA’s) Office for Coastal Management’s¹ *Program Change Guidance (July 1996)*. The Office for Coastal Management’s decision deadline for the request received on June 24, 2015, was extended to August 21, 2015.

Based on our review of your submission, we concur that the changes are RPCs and we approve the incorporation of the changes as enforceable policies of the New York Coastal Management Program. Federal Consistency will apply to the approved changes to enforceable policies only after you publish notice of this approval pursuant to 15 C.F.R. § 923.84(b)(4) and the Office for Coastal Management’s *Addendum to the July 1996 Program Change Guidance (November 2013)*. Please include in the public notice the list of changes provided in this letter, and please send a copy of the notice to the Office for Coastal Management.

CHANGES APPROVED

Name/Description of State or Local Law/Regulation/Policy/Program Authority	State/Local Legal Citation	Date Adopted by State	Date Effective in State
ADDED:			
*Town of Penfield LWRP	*Sections I, II, IV, V, VI, VII, and Appendices A-D	5/26/2015	5/26/2015
Town of Penfield LWRP	Section III, Policies 1-13 (note: explanatory text included in	5/26/2015	5/26/2015

¹ NOAA’s Office for Coastal Management was formerly the Office of Ocean and Coastal Resource Management and the Coastal Services Center; these two offices were integrated in September 2014 into the Office for Coastal Management.

Name/Description of State or Local Law/Regulation/Policy/Program Authority	State/Local Legal Citation	Date Adopted by State	Date Effective in State
	Section III is not applicable as enforceable policies for CZMA federal consistency review purposes)		
DELETED:			
Town of Penfield LWRP (1991)	Town of Penfield LWRP (1991)	10/28/1991	10/28/1991
Changes marked with an asterisk (*) are incorporated into the New York Coastal Management Program, but do not contain enforceable policies that can be used for Federal Consistency.			

QUALIFICATIONS

States may not incorporate enforceable policies by reference. If an approved enforceable policy refers to another statute, regulation, policy, standard, guidance, or other such requirement or document (hereinafter "referenced policy"), the referenced policy itself must be submitted to and approved by the Office for Coastal Management as an enforceable policy in order to be applied under the federal consistency review provisions of the CZMA. Therefore, no referenced policy in these approved enforceable policies may be applied for federal consistency unless that referenced policy has been separately approved by the Office for Coastal Management.

Section VI of the LWRP:

Section 6.2 of the LWRP contains a list of federal actions subject to federal consistency review, which is identical to the most recent version of the state's list that the Office for Coastal Management approved on March 28, 2006. The only listing of activities subject to CZMA review is the state list approved by the Office for Coastal Management. Neither the list in Section 6.2 nor any other listing of activities in this, or any other LWRP, should be relied on in the state's exercise of CZMA review authority.

Section 6.3 of the LWRP provides a listing of "State and Federal Programs Necessary to Further the LWRP." This listing has no applicability for CZMA federal consistency review purposes.

PUBLIC AND FEDERAL AGENCY COMMENTS

The Office for Coastal Management received no comments on this RPC submission.

Thank you for your cooperation in this review. Please contact Glynnis Roberts at (301) 563-7102, if you have any questions.

Sincerely,

Joelle Gore, Chief
Stewardship Division

STATE OF NEW YORK
DEPARTMENT OF STATE

ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001
WWW.DOS.NY.GOV

ANDREW M. CUOMO
GOVERNOR

CESAR A. PERALES
SECRETARY OF STATE

May 26, 2015

Honorable Tony LaFountain
Supervisor
Town of Penfield
3100 Atlantic Avenue
Penfield, NY 14526

Dear Supervisor LaFountain:

I am pleased to inform you that I have approved the amendment to the Town of Penfield Local Waterfront Revitalization Program (LWRP), pursuant to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. Everyone who participated in the preparation of this program update is to be commended for developing a comprehensive management program that promotes the balanced preservation, enhancement, and utilization of the valuable local waterfront resources along Irondequoit Bay and Creek.

I am notifying State agencies that I have approved your Local Waterfront Revitalization Program Amendment and advising them that their activities must be undertaken in a manner consistent, to the maximum extent practicable, with the program.

The approved Town of Penfield LWRP Amendment will be available on the website of the Department of State, at http://www.dos.ny.gov/opd/programs/WFRevitalization/LWRP_status.html.

If you have any questions, please contact Renee Parsons of the Office of Planning and Development at 518-473-2461.

Sincerely,



Cesar A. Perales
Secretary of State



Department
of State

BY Councilman Moore

Law and Finance COMMITTEE

NAME Adoption of the Local Waterfront Revitalization Program (LWRP) Update

WHEREAS, the Town of Penfield applied for, and was awarded a grant from the New York State Department of State to update its Local Waterfront Revitalization Program which was originally adopted on July 3, 1991; and

WHEREAS, a draft update of the Local Waterfront Revitalization Program was prepared by the Town and forwarded to the Department of State for review by federal, state and local agencies pursuant to the requirements of Article 42 of the Executive Law and the State Environmental Quality Review Act (SEQRA); and

WHEREAS, the Town Board conducted a public hearing on January 21, 2015 to hear all those interested in the adoption of the update to the Local Waterfront Revitalization Program and has received adequate public input to consider adoption of said document;

NOW, THEREFORE, BE IT

RESOLVED, that the Town of Penfield's update to the Local Waterfront Revitalization Program is hereby adopted and authorized for submission to the New York State Secretary of State for approval pursuant to Article 42 of the Executive Law; and

Moved:	<u>Moore</u>	
Seconded:	<u>Quinn</u>	
Vote:	Kohl	<u>Aye</u>
	LaFountain	<u>Aye</u>
	Metzler	<u>Aye</u>
	Moore	<u>Aye</u>
	Quinn	<u>Aye</u>

FILED
 PENFIELD, N.Y.
 2015 FEB 27 AM 9:34
 ANNY M. STEKLOF
 TOWN CLERK



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT
Washington, D.C. 20235

JAN. 14 1992

George Stafford
Director
Division of Coastal Resources
and Waterfront Revitalization
Department of State
162 Washington Street
Albany, N.Y. 12231

Dear Mr. Stafford:

The Office of Ocean and Coastal Resource Management concurs with your request to incorporate the Town of Penfield Local Waterfront Revitalization Program (LWRP) into the New York State Coastal Management Program as a Routine Program Implementation (RPI) change. We received comments from three Federal agencies, none objecting to incorporating the LWRP as a RPI. This approval assumes you will make no further changes to the document in addition to the ones submitted.

In accordance with the Coastal Management Regulations, 15 CFR 923.84, Federal Consistency will apply to the Town of Penfield after you publish notice of our approval.

Sincerely,

Trudy Coxé
Director





STATE OF NEW YORK
DEPARTMENT OF STATE
ALBANY, N.Y. 12231-0001

GAIL S. SHAFFER
SECRETARY OF STATE

OCT. 28 1991

Honorable Donald G. Mack
Supervisor
Town of Penfield
3100 Atlantic Ave.
Penfield, NY 14526

Dear Supervisor Mack:

It is with great pleasure that I inform you that, pursuant to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act, I have approved the Local Waterfront Revitalization Program (LWRP) prepared by the Town of Penfield. The Town is to be commended for its thoughtful and energetic response to opportunities presented along its waterfront.

I will notify State agencies shortly that I have approved the LWRP and will provide them with a list of their activities which must be undertaken in a manner consistent to the maximum extent practicable with the LWRP.

Again, I would like to commend the Town for its efforts in developing the LWRP and look forward to working with you in the years to come as you endeavor to revitalize your waterfront.

Sincerely,

A handwritten signature in black ink, appearing to read "Gail S. Shaffer". The signature is fluid and cursive, with the first name being the most prominent.

Gail S. Shaffer

GSS:gn

PENFIELD TOWN BOARD RESOLUTION NO. 188

DATE July 3, 1991

BY Councilman Nolan

Law & Finance COMMITTEE

NAME Adopting the Penfield Local Waterfront Revitalization
Program (LWRP)

WHEREAS, the Town of Penfield applied for, and was awarded, a grant by the New York State Department of State for preparation of a Local Waterfront Revitalization Program, and entered into a contract with the Department of State on April 15, 1985; and

WHEREAS, a Draft Local Waterfront Revitalization Program and Draft Environmental Impact Statement was prepared by the Town and forwarded to the Department of State for review by federal, state and local agencies pursuant to the requirements of Article 42 of the Executive Law, the State Environmental Quality Review Act (SEQRA) and the Penfield Environmental Quality Review Law (PEQR); and

WHEREAS, a Final Environmental Impact Statement by the Town Board as complete

NOW, THEREFORE, BE IT

RESOLVED, that the Town of Penfield's Local Waterfront Revitalization Program is hereby adopted and authorized for submission to the New York State Secretary of State for approval, pursuant to Article 42 of the Executive Law.

Moved: Nolan

Seconded: Hession

Vote:	Hession	<u>Aye</u>
	LaFountain	<u>"</u>
	Mack	<u>"</u>
	Nolan	<u>"</u>
	Santirocco	<u>"</u>

xc: Planning/Zoning

Acknowledgements



Prepared By: **INGALLS PLANNING & DESIGN**

With Guidance from: **TOWN OF PENFIELD STEERING COMMITTEE**

Prepared for: **TOWN OF PENFIELD, NEW YORK**



This Local Waterfront Revitalization Program was prepared for the Town of Penfield and the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

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SECTION 1: WATERFRONT REVITALIZATION AREA BOUNDARY

1.1. Penfield Waterfront Revitalization Area Boundary

The Town of Penfield considered that future development of the primarily built-out residential neighborhoods east of Empire Boulevard and east of Irondequoit Creek is controlled by existing Town legislation or regulations to have a minimal impact on the adjacent coastal area. Consequently, the Penfield WRA boundary approved in 1991 was revised to exclude those residential neighborhoods. The modification of the Penfield WRA also changes the inland boundary of the State's coastal area, as described below in A. Upland Boundary of the WRA. The waterside of the State's coastal boundary was not modified.

A. Upland Boundary of the WRA

The Waterfront Revitalization Area (WRA) boundary is illustrated in [Figure 1](#) and can be described as follows:

1. Beginning at the point of intersection of corporate limits of the Towns of Webster and Penfield at the shoreline of Irondequoit Bay;
2. thence south and west, along the shoreline of Irondequoit Bay to the intersection with the corporate limits of the Towns of Irondequoit and Penfield;
3. thence southerly along the centerline of Irondequoit Creek to its intersection with the northern right-of-way of Browncroft Blvd.;
4. thence easterly along the northern right-of-way of Browncroft Blvd. to the intersection with the Town of Brighton corporate limits;
5. thence easterly along the Towns of Brighton and Penfield corporate limits to the intersection with the northern right-of-way of Browncroft Blvd.;
6. thence southeasterly along the northern right-of-way of Browncroft Blvd. a distance of approximately 750 feet;
7. thence northerly along the eastern property line of 2268 Browncroft Blvd. to its intersection with the northern right-of-way of Old Browncroft Blvd.;
8. thence south along the northern right-of-way of Old Browncroft Blvd. a distance of approximately 300 feet;
9. thence east and north along the property line of 45 Parkview Drive to its intersection with easterly property line of the County of Monroe owned lands known as Lucien Morin Park;
10. thence north along the easterly property line of the County of Monroe owned lands known as Lucien Morin Park to the intersection with the rear property line at the terminus of Old Westfall Drive;

11. thence southerly along the rear property lines of Old Westfall Drive, Woodhaven Drive, Parkview Drive, Falcon Crest Drive, Parkview Drive, Parkington Meadows, and then Parkview Drive;
12. thence northerly along the rear property lines of Maple Parks Height, Creek Street, Tufa Glen Drive, Royal View Drive, Crest View Drive, Morning Woods Drive, then Manse Lane to the intersection with the eastern right-of-way of Empire Blvd.;
13. thence northeasterly along the eastern right-of-way of Empire Blvd. to its intersection with the eastern right-of-way of Bay Road;
14. thence northwesterly along the eastern right-of-way of Bay Road to its intersection with Towns of Penfield and Webster corporate limits;
15. thence west along the Towns of Penfield and Webster corporate limits to the shoreline of the Irondequoit Creek.


B. Waterside Boundary of the WRA

As stated in the Town of Penfield Local Law No. 2 of 2008 or Irondequoit Bay Harbor Management Law, the waterside boundary illustrated in [Figure 1](#) can be described as all areas on the water surface of the Irondequoit Bay within the corporate limits of the Town of Penfield, to the corporate limits of the Towns of Irondequoit and Webster.

LWRP Boundary

 LWRP Boundary

 Town Line

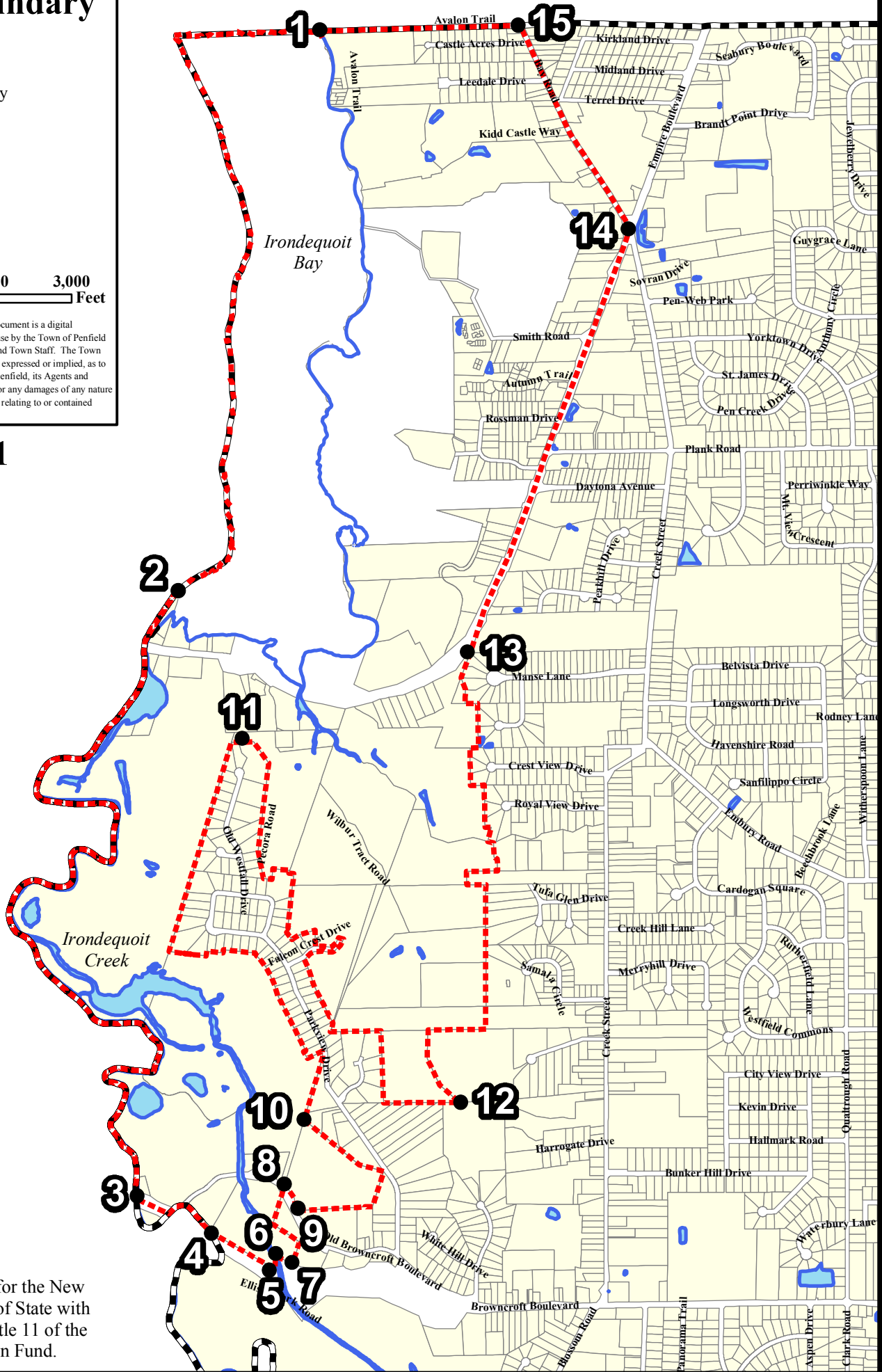
 Parcels



0 500 1,000 2,000 3,000 Feet

The Town of Penfield certifies that this GIS document is a digital reproduction of a map or data collected in-house by the Town of Penfield for the convenience of and use by the Public and Town Staff. The Town of Penfield does not make any representations, expressed or implied, as to the accuracy of such record(s). The Town of Penfield, its Agents and Employees, shall not be responsible or liable for any damages of any nature whatsoever for errors and/or omissions, if any, relating to or contained within such map.

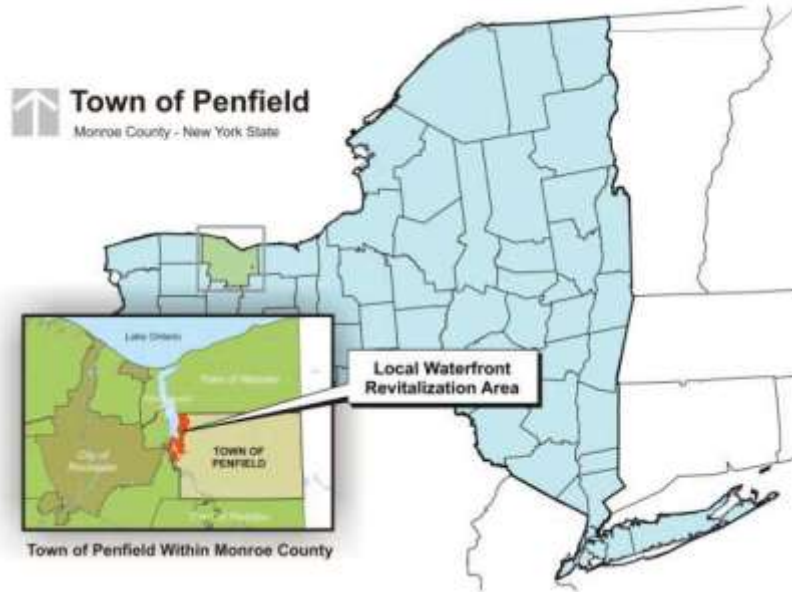
Figure 1



This map was prepared for the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

SECTION 2: INVENTORY AND ANALYSIS

2.1. Regional Geographic Setting and Community Characteristics



The Town of Penfield is located in the northeast portion of Monroe County along the south and east shores of Irondequoit Bay approximately 8 miles west from the City of Rochester's Center City. It is bounded to the north by the Town of Webster, to the east by Wayne County, to the south by the Town of Perinton, and to the west by the Towns of Brighton and Irondequoit. The Local Waterfront Revitalization Area, as described in Section 1, includes approximately 4 miles of shoreline along Irondequoit Bay and Irondequoit Creek and encompasses approximately 2 square miles.

A. Overview of the Coastal Resources Planning Efforts and Achievements

The Town of Penfield adopted its Local Waterfront Revitalization Program (LWRP) in 1991. Since adoption, the Town has accomplished several things that can either be attributed to or have evolved from the LWRP. Most of these accomplishments are outlined in subsequent plans and studies, which are consistent with Penfield's tagline "Town of Planned Progress." In addition to the development of environmental protection overlay districts (EPOD), which were established in 1981 in an effort to help protect environmentally sensitive areas in the Town, there are several plans and studies relevant to the waterfront area. These include:

1997 LaSalle's Landing Development Plan¹

Developed in collaboration with the Town of Irondequoit, this plan guides development and redevelopment of the southern shoreline area of Irondequoit Bay including land fronting on Empire Boulevard. The plan made recommendations including encouraging mixed-use development and public

infrastructure improvements. As a result of this Plan the Town developed a new zoning district, entitled LaSalle's Landing Development, and extended public water and sewer infrastructure to the area.

2003 Irondequoit Bay Harbor Management Plan²

The Harbor Management Plan was prepared to help assure greater consistency in reviewing plans among the local municipalities and various state and federal agencies that have jurisdiction for Irondequoit Bay. The Plan helps the New York State Department of Environmental Conservation (NYS DEC), Monroe County, and the sponsoring Towns of Irondequoit, Webster and Penfield cooperate to make better use of the Bay. The Harbor Management Plan is intended as an addendum to the Local Waterfront Revitalization Programs adopted by the Towns of Irondequoit, Penfield, and Webster.

2008 Economic Development Action Plan³

The main purpose of the plan was to study the characteristics of Penfield's six business districts and develop a plan and vision for their future. LaSalle's Landing is one of the business districts identified, and several recommendations were made. Recommendations include better marketing and signage, updating zoning to include incentives, cluster development, increased density, and design guidelines.

2010 Comprehensive Plan⁴

The purpose of the Comprehensive Plan is to provide an overall framework for future public and private investment in the community. The Plan updates the recommendations from the 2000 Comprehensive Plan to reflect current conditions and Penfield's vision for its future. The most notable recommendation in the Plan that will impact the waterfront area is the identification of the LaSalle's Landing area as mixed-use.

B. Why an LWRP update?

The LWRP has had a positive effect on the Town of Penfield. It has helped to improve the waterfront area by providing a consistent framework for revitalization aimed at balancing the environmental sensitivity of Irondequoit Bay and Creek with recreational and economic development opportunities. Several things have taken place since the adoption of the 1991 LWRP that warrant this update. Many of the nonconforming uses that were present at the time the LWRP was adopted are no longer there. LaSalle's Landing Park has been developed and an expansion is underway. Several key properties in LaSalle's Landing have been redeveloped and plans are underway to do more. A Harbor Management Plan and the associated Harbor Management Plan Law are now in place. This amendment to the 1991 LWRP document is aimed at continuing the revitalization efforts already underway and expanding upon some of the programs and controls that were initially established to more effectively improve and protect waterfront resources and facilities.

The objectives of this LWRP amendment are:

- To continue to protect and restore the natural resources of Irondequoit Bay and Creek by managing the impacts of development;
- To incorporate and develop consistencies with the Irondequoit Bay Harbor Management Plan;
- To remove the residential neighborhoods that do not have a relationship with the waterfront from the Waterfront Revitalization Area;

¹ http://www.penfield.org/media/dpt_planning_LaSalle_Dev_Plan_1997.pdf

² <http://www2.monroecounty.gov/files/planning/IBHMP%20Final%20Report.pdf>

³ http://www.penfield.org/media/Development_Action_Plan_-_ExecutiveSummary.pdf

⁴ http://www.penfield.org/index.php?pr=Planning_Comp_Plan_Update

- To continue to provide recreational opportunities for residents and visitors;
- To develop opportunities for residents and visitors to enjoy and learn about the history and the sensitive environment characteristics of the area; and
- To identify projects that will implement these objectives.

C. Population History

The Town of Penfield is predominately a residential community which covers approximately 37 square miles. It is considered a suburb of Rochester and until the 1950’s remained rural in character, primarily because of the difficulty in access to the City of Rochester. The Irondequoit Creek Valley posed a major obstacle to travelers until the development of better roads and bridges.

The Town of Penfield’s population doubled during the 1960’s but has shown a more steady population growth since 1970. This is consistent with the continuing trend of Monroe County residents moving from the City to inner ring towns and then from the inner ring towns to outer areas. As shown in Table 1, Penfield grew from a total population of 12,601 in 1960 to 36,242 residents in the year 2010. This represents an additional 23,641 people or a 187.6% increase in persons living in Penfield over a fifty year period. A review of the population history of the larger towns in Monroe County (towns with a population more than 20,000 residents) indicates that Penfield has been one of the fastest growing behind Henrietta and Perinton since 1960.

Table 1: Town Population Change 1960 to 2010

Towns	1960	1970	1980	1990	2000	2010	% Change
Hamlin	2,755	4,167	7,675	9,203	9,355	9,045	228.3%
Henrietta	11,598	33,017	36,134	36,376	39,028	42,581	267.1%
Perinton	16,314	31,568	41,802	43,015	46,090	46,462	184.8%
Penfield	12,601	23,782	27,201	30,219	34,645	36,242	187.6%
Clarkson	2,339	3,642	4,016	4,517	6,072	6,736	187.9%
Ogden	7,262	11,736	14,693	16,912	18,492	19,856	154.6%
Chili	11,237	19,609	23,676	25,178	27,638	28,625	154.7%
Parma	6,277	10,748	12,585	13,878	14,822	15,633	149 %
Webster	16,434	24,739	28,925	31,639	37,926	42,651	130.8%
Mendon	3,902	4,541	5,434	6,845	8,370	9,152	134.5%
Gates	13,775	26,442	29,756	28,583	29,275	28,400	106.1%
Riga	2,800	3,746	4,309	5,114	5,437	5,590	99.6%
Greece	48,670	75,136	81,367	90,106	94,141	96,095	97.4%
Towns	1960	1970	1980	1990	2000	2010	% Change
Sweden	7,224	11,461	14,859	14,181	13,716	14,175	96.2%
Pittsford	15,156	25,058	26,743	24,497	27,219	29,405	94.2%
Rush	2,555	3,287	3,001	3,217	3,606	3,478	36.1%
Wheatland	3,711	4,265	4,897	5,093	5,149	4,775	28.6%
Brighton	27,849	35,065	35,776	34,455	35,588	36,609	31.4%
Irondequoit	55,337	63,675	57,648	53,657	52,354	51,692	-6.6%
Total	267,796	415,684	460,497	476,685	508,923	527,192	96.8%
Monroe County	586,387	711,917	702,238	713,968	735,343	744,344	26.9%

Source: US Census, Penfield Comprehensive Plan

2.2. Waterfront Overview

The Town of Penfield's Local Waterfront Revitalization Area is located in the northwest portion of the Town and includes Irondequoit Bay and Irondequoit Creek. The area that borders Irondequoit Creek consists almost exclusively of undeveloped, heavily wooded steep slopes. There is some low density residential development on the plateau of the slopes. At the foot of the slopes, the Creek meanders through extensive wetlands of approximately 110 acres.

Irondequoit Creek runs approximately 11,500 feet from Browncroft Boulevard to the Bay, which is located at the southern limit of the waterfront area. As already noted, most of the land adjacent to the Creek is undeveloped. What uses do exist include a pre-existing non-conforming rendering plant located on the Creek, just north of Browncroft Boulevard; one residence located on a flat area adjacent to the Creek; and several businesses, where the Creek flows into Irondequoit Bay and along Empire Boulevard. Most of the steep slopes occurring along the Creek are incorporated into Ellison Park, owned by Monroe County and part of the County's park system.

LaSalle's Landing is a short stretch of flat shoreline running approximately 4,270 feet along the southern edge of Irondequoit Bay. This section of Penfield's planning area is commonly considered as the Town's "waterfront area." Empire Boulevard, State Route 404, is located in this segment of the planning area and runs in the east-to-west direction. The area consists of approximately 40 acres of land, and includes several confirmed or suspected brownfield sites. Sections of the area were used for dumping by the City of Rochester in the mid 1900's. The few uses that do exist in this area are commercial or business oriented including a restaurant.

Continuing northeasterly along Irondequoit Bay from LaSalle's Landing are more undeveloped steep slopes. Approximately 6,772 feet of shoreline are in Monroe County's Abraham Lincoln Park, and approximately 1,665 feet belong now or formerly to the Bayview Y. This section of heavily wooded slopes provides one of the most scenic areas along Irondequoit Bay.

Just north of the Bayview Y property, there are a few cottages close to the Bay on Avalon Trail, a private drive of approximately 2,750 feet. This area is not easily reached by fire trucks and other service vehicles; is not served by public water, nor does there appear to be sufficient flat terrain for adequate onsite septic systems to serve the closely clustered cottages, several of which have been converted to year round residences.

2.3. Historic Sites and Structures

The Wisconsin Glacier, the last of four successive glaciers of the Ice Age, was responsible for the formation of the Rochester and specifically the Irondequoit Bay areas. As the glacier melted, it left large amounts of water trapped at the southern edge and formed a silt laden lake in the Irondequoit Valley, now known as Irondequoit Bay.

In her 1960 book entitled "Penfield's Past", former Penfield Town Historian Katherine Wilcox Thompson writes about the earliest known residents of the area:

"Archeologists have investigated, identified collected and classified sites and artifacts of the earliest inhabitants of the Genesee country. They tell us that our present Monroe County has been occupied for over 5,000 years. Wandering bands followed the waterways and those campsites near to the creeks, rivers and lakes. At the rear of the Knebel Farm, 1699 Empire Boulevard, surface indications of such a campsite were found in Penfield about ten years ago (c.1950) on the shore bordering Irondequoit Bay. It has

been established that the period when this campsite was used was between 3,000 and 2,000 B.C."

The Statewide Archeological Inventory Map maintained by the Office of Parks, Recreation and Historic Preservation (OPRHP) indicates that a number of archeological sites are located within and adjacent to the boundaries of the LWRP area.

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

The first recorded visit by Europeans in Irondequoit Bay took place on August 20, 1669, by the French explorer LaSalle. By 1687, the area was the site of major conflicts between the French and the Seneca Indians. The attacks were led by the Marquis de Denonville, as the Governor of New France. Denonville's campaign against the Senecas is noted by seven markers extending from Brighton, through Penfield and northward to the Town of Webster.

Grunner's Tavern, now McGregor's Restaurant on Empire Boulevard, is recognized as a significant local historic site because of its importance to travelers crossing the Irondequoit Bay.

Because of the protection afforded these sites through their recognition by state and local governments, their status as sites of considerable importance is not threatened. The sites are not currently threatened by any adjacent land uses or any other adverse conditions.

2.4. Existing Land and Water Uses


Figure 2 shows the existing land uses as recoded by the Town Assessor using the Property Type Classification Codes. As illustrated on the map and in Table 2, the two primary uses within the LWRP boundary include Parks and Recreation and Public, and Vacant. These uses comprise Lucien Morin Park, Abraham Lincoln Park, the Bay View Y, and several large parcels near the south end of the Bay. Commercial uses exist along Empire Boulevard and are concentrated north of Plank Road and at the Bay's south end. The south end area, also known as LaSalle's Landing, was identified in the Town's comprehensive plan as a future mixed-use area. Areas that include residential uses are located near Rossman Drive and south of Avalon Trail.

Table 2: Land Use Acreage


Land Use	Acres
Single-Family Residential	183.5
Multi-Family Residential	28.3
Business and Commercial	95.7
Industrial	41.6
Parks and Recreation	266.4
Public, Cultural, Educational and Related	143.9
Transportation Services	35.3
Utilities	6.6
Vacant	214.1


Existing Land Use

 LWRP Boundary


 Town Line


 Single-Family Residential


 Multi-Family Residential

 Business and Commercial

 Agriculture


 Industrial

 Parks and Recreation

 Public, Cultural, Educational and Related

 Transportation Services

 Utilities

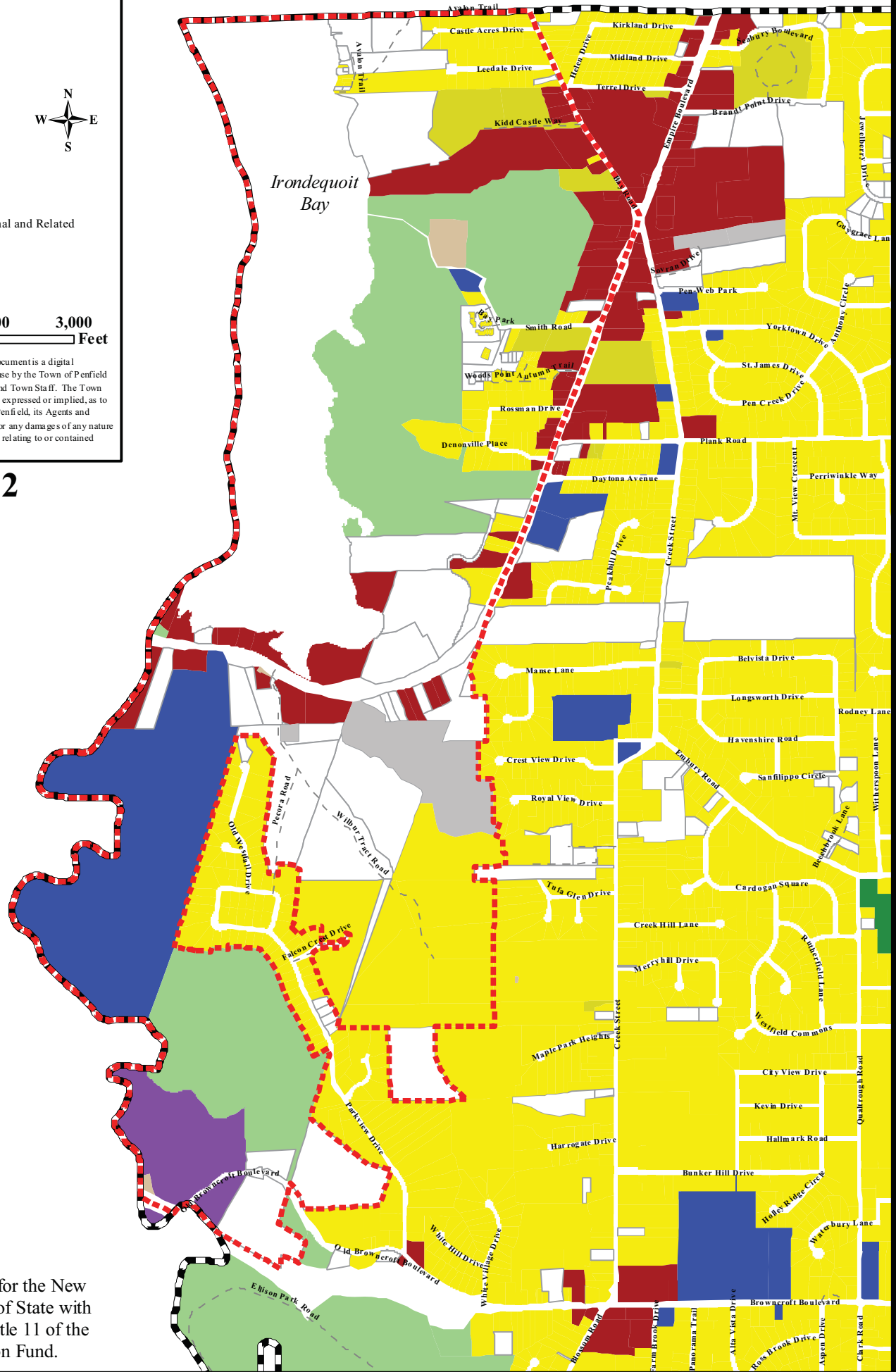
 Vacant / No Data



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Figure 2



This map was prepared for the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

A. Existing Water-Dependent & Enhanced Uses

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

The County Parks Department proposes to demolish the Quonset hut formerly used by the Rochester Rowing Club and construct a lodge with a reconstructed access road and accessory parking and docking facilities when funding permits.

The Bayview Y, located at 1209 Bay Road, conducts limited water sports programs in conjunction with its youth program in the summer. While owning approximately 1,665 ft. of shoreline, the Bayview Y utilizes the dock facilities at nearby Smith Road. The Bayview Y shoreline has no developed access; however, docking facilities and access are proposed in the Y's long range plans. No timetable has been set for this development.

The Southpoint Marina is located at 1384 Empire Boulevard, and is defined as a water dependent and enhanced use. The property has in excess of 2,300 ft. of shoreline and has 186 boat slips. The Southpoint Marina is expanding its docking to accommodate an additional 176 boat slips and a 3,750 square foot marina clubhouse and restaurant, with an in-ground swimming pool and additional parking facilities to support the improvements. Basil's Restaurant is also located at 1384 Empire Boulevard and includes outdoor seating overlooking the bay and marina and allows boaters to dock at the marina to patronize the restaurant. Development of a nine building 339 unit apartment complex, east of the marina is currently underway. The marina is a pre-existing non-conforming use that has been in operation prior to the adoption of the LWRP in 1991. Bay Creek Paddling Center is an activities-based retailer of canoes and kayaks located at 1099 Empire Boulevard. Oak Orchard Canoe and Kayak is located at 1350 Empire Boulevard and also provides lessons and retail sales.

These uses located on the shoreline are the primary water-dependent and enhanced uses within the Waterfront Revitalization Area. A discussion of other commercial uses in upland sections of the area has not been included since the orientation of these existing developments is inland, and they are not considered to be dependent on or enhanced by their proximity to the waterfront.

B. Demand for Future Water Related Uses

As in other Irondequoit Bay communities, the pressures for development as a result of the opening of the Bay to Lake Ontario are increasing. Also, demand for boat docking facilities will likely increase as residential development occurs along Empire Boulevard. This need/demand for increased utilization of the Town's waterfront area for water-enhanced uses is evidenced by the heightened interest of the private sector in developing such uses along the Bay, particularly on Empire Boulevard, and land values have escalated dramatically. Several developers and current owners have held discussions with the Town regarding a variety of new and/or expanded water-oriented or enhanced facilities such as: restaurants, marinas, hotels, and multiple family residential developments with waterfront amenities. Since adoption of the first LWRP in 1991, several non-conforming uses are no longer on the waterfront including a waste disposal facility, an auto sale and repair business, and a construction company. The Empire Boulevard area is near compliance with the intent of the LWRP. However, several parcels in the waterfront area are either confirmed or suspected waste sites.

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

2.5. Existing Zoning

Chapter 29, Articles I-XI establish the Town's zoning ordinance to encourage appropriate and orderly physical development; promote in all possible ways public health, safety, convenience and general welfare; classify, designate and regulate the location and use of buildings, structures and land for agricultural, residential, commercial, industrial or other uses in appropriate places and for said purpose to divide the Town of Penfield into districts of such number, shape and area as may be deemed best suited to carry out these regulations and provide for their enforcement. The Town's zoning includes 19 districts, with several located within the LWRP boundary, as illustrated in [Figure 3-Existing Zoning Map](#).

The districts were established to meet the following purposes:

Environmental Protection Overlay District (EPOD)

The purpose of the Environmental Protection Overlay District, illustrated in [Figure 19](#), is to provide special controls over land development located in sensitive environmental areas within the Town of Penfield. These districts and their associated regulations are designed to preserve and protect unique environmental features within the Town as much as possible, including but not limited to wetlands, steep slopes, floodplains, watercourses and woodlands.

The regulations contained in each EPOD are not intended to be substituted for other general zoning district provisions, but can be superimposed over such district provisions, and should be considered as additional requirements to be met by the applicant or developer, prior to project approval. The purpose of the overlay districts is to provide the Town with an additional level of review and regulation that controls how land development permitted by the primary zoning district should occur in sensitive or unique environmental areas.

Conservation Residential District (CR-2)

The purpose of the Conservation Residential District is to limit development so as to preserve and protect the unique and sensitive features that characterize the areas of the Town adjacent to Irondequoit Bay. In order to achieve this purpose, residential uses will only be permitted at very low densities.

Residential Districts (R-1-12, R-1-20)

The purpose of these Residential Districts is to maintain the residential character of the district. The districts are to provide for residential uses at suburban standards.

Multiple Residence (MR)

The purpose of the Multiple Residence District is to permit, where appropriate, the construction and development of multiple-family residences in the Town. This district shall be serviced by sanitary sewers, storm sewers and public water.

LaSalle's Landing Development (LLD)

The purpose of the LaSalle's Landing Development District is to provide a suitable character and stable environment for the establishment and maintenance of water-oriented and/or water-enhanced uses

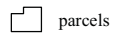
Existing Zoning



LWRP Boundary



Town Line



parcels

Single-Family Residential

- R-1-15
- R-1-20
- RR-1
- CR-2
- RA-2; R-1-12

Multiple-Family Residential

- MR; TH; PD; MHP

Commercial

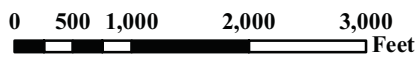
- GB
- LB
- BN-R

Industrial

- LI

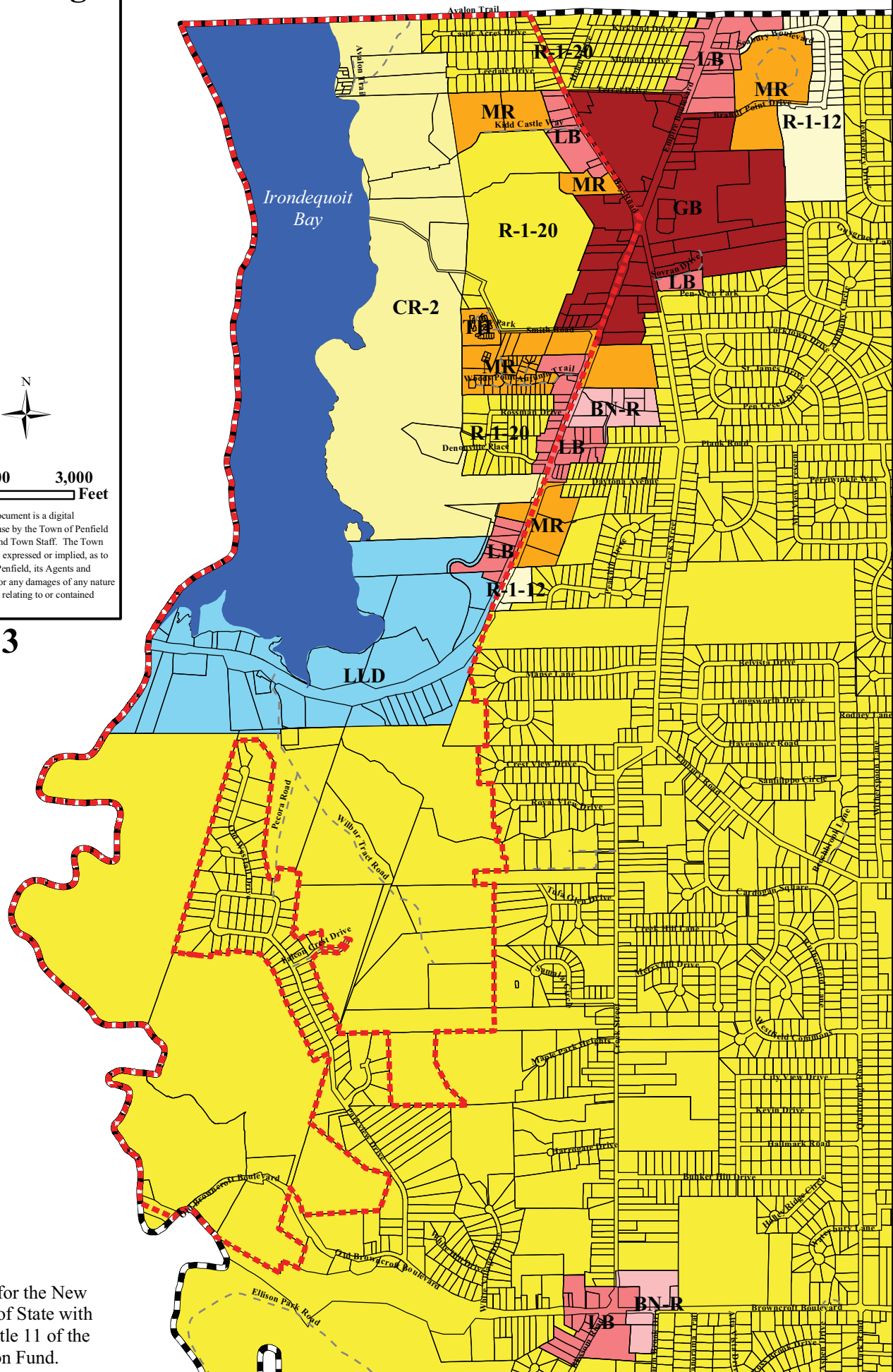
Special District

- LLD; FC



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Figure 3



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and activities along the shore line of Irondequoit Bay and its adjacent wetlands. The District is also designed to protect the unique and sensitive environmental features that exist along the Bay shoreline, and to promote the public health, safety and general welfare. The district is designed to promote and encourage public access to the shore zone and appropriate water-oriented recreational and other appropriate development adjacent to the shore zone.

The LLD permits moderate density residential development, as well as certain commercial, recreational and open space uses that serve the residents and the visitors to this district, as well as the Town, and that generally benefits from and enhances the unique aesthetic and environmental qualities of the Town's waterfront area.

Townhouse Dwelling District (TH)

It is the purpose of the Townhouse Dwelling District to permit where appropriate, the construction and development of townhouse units, which are single-family dwellings, separated by a party wall. Area proposed to be rezoned TH shall be served by sanitary sewers, storm sewers and public water.

Limited Business (LB)

The purpose of this district is to provide convenience, small-scale retail service, and business uses in strategic locations to support the Town's residential population base. The Limited Business District is intended to act as a buffer between the larger and more intense general business centers and residential areas.

General Business (GB)

The purpose of this district is to provide the broader range of general and comparison commercial goods and services necessary to serve a number of neighborhoods and do so in an orderly fashion that maintains viability of residential areas and neighborhood commercial centers.



2.6. Parks and Recreation Facilities




There are several parks within the waterfront area that provide opportunity for recreation. LaSalle's Landing Park is located along the north side of Empire Boulevard. It provides parking, a cartop boat launch and fishing access to the Creek and Bay. The Town has purchased additional land and has expanded it to increase parking, improve access to the water, and provide a facility that will likely appeal to a wider range of users. There are two Monroe County parks within the waterfront area. Abraham Lincoln Park is located on the east side of the Bay and is primarily a passive park that is currently underutilized. Access and parking should be provided from Empire Boulevard. The other County owned facility is the Ellison Park Wetland complex in the southern part of the waterfront area. As with Abraham Lincoln Park, the wetland complex, which includes Irondequoit Creek, is accessible from Empire Boulevard. A small hand carry boat launch considered for the area and the multi-use trail as outlined in the 2008 Irondequoit Creek Valley Multi-use Trail Study⁵ has been completed. The Town owns the former Smith Road Treatment Plant, which is located near Abraham Lincoln Park. The Town would like to sell the property to the County and have it become part of the Park.


Figure 4 depicts several parks and recreational opportunities within the LWRP area. Most of these facilities are owned and operated by Monroe County and are further described below.


⁵ http://www.penfield.org/media/Irondequoit_Creek_Valley_Multi-use_Trail_Study_2008-06-16.pdf

Parks & Recreation Facilities

-  LWRP Boundary
-  Recreational Areas

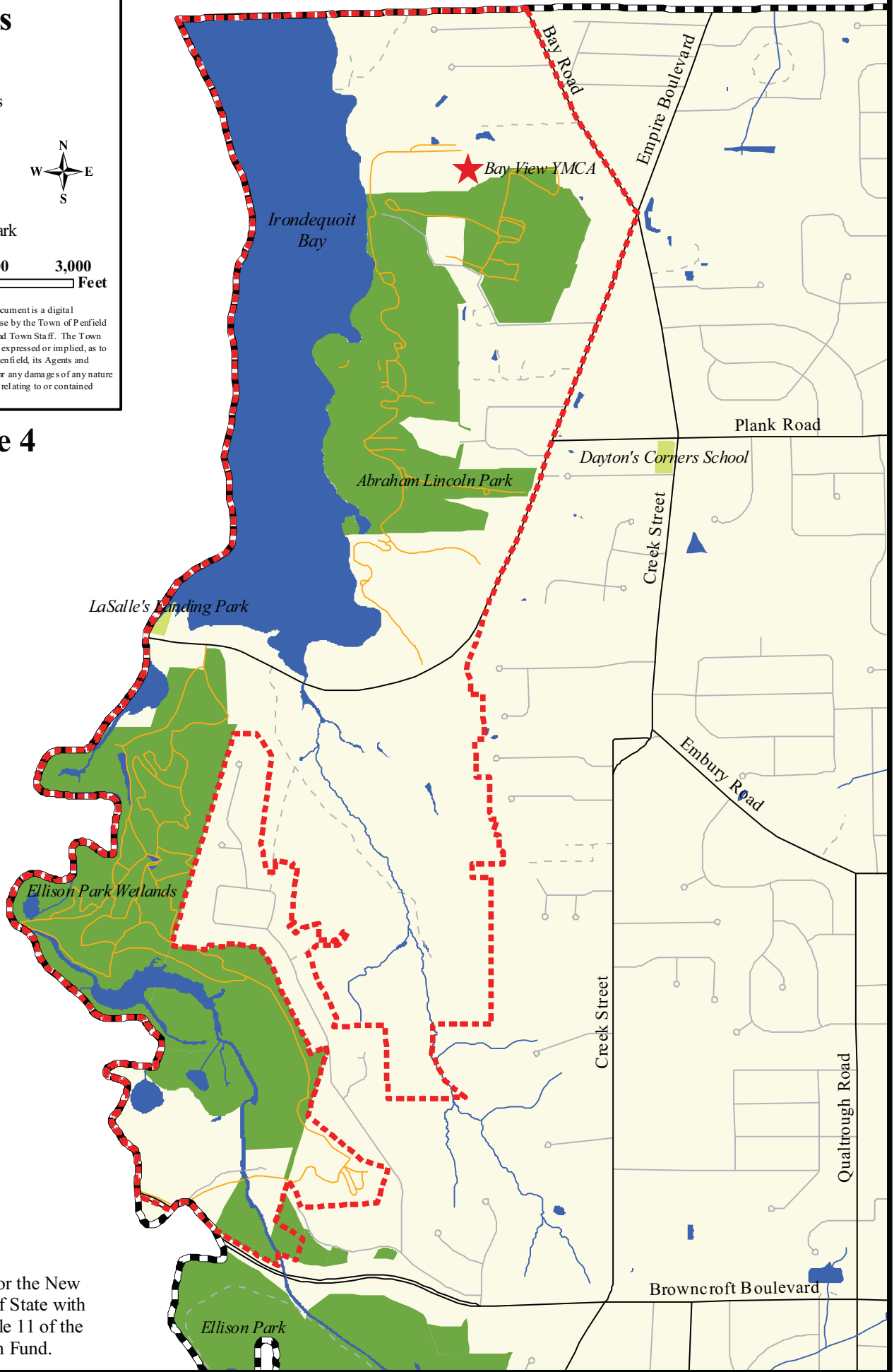
 Trails
 Town Park
 Monroe County Park




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Figure 4



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A. Town of Penfield Facilities

The Town of Penfield owns or operates several recreational sites, most of which presently serve dual neighborhood and Town-wide needs. These are operated and maintained by the Recreation Department and the Parks and Facilities Department.

LaSalle's Landing Park, located at 1080 Empire Boulevard along the Irondequoit Bay shoreline, is the only park owned by the Town located within the LWRP boundary. Park facilities include a small boat launch, fishing access, bird and waterfowl watching, informational signage, and parking. In efforts to expand the park, the Town recently acquired 2.5 acres at 1140 Empire Boulevard, formerly known as the Ruoff property, which is located to the east of the existing park. The expansion and improvements to the park include the development of boardwalks, re-grading and plantings, possibly a pavilion structure, new stormwater infrastructure, and the relocation of the entrance.

Table 3: Public Recreational Facilities

Recreational Facility	Acres
Greenwood Park	20
Veterans Memorial Park	115
Sherwood Park	81
Rothfuss Park	69
Harris Whalen Park	45
Channing H. Philbrick Park	41
Penfield Community Center	8
LaSalle's Landing Park	4
Dayton's Corners School	2
Schaufelberger Park	1

Source: Penfield Comprehensive Plan

B. Monroe County Facilities

The Monroe County Parks Department⁶ operates two facilities in the Town of Penfield. Ellison Park consists of 714.5 acres, approximately two-thirds of which is in Penfield, and offers picnic areas, shelters, lodges, baseball and softball fields, tennis courts, playground areas, ice skating, and horse, bike and hiking trails. Abraham Lincoln Park (formerly Irondequoit Bay Park East) is a primarily undeveloped County Park, which contains 181.6 acres along the eastern shore and slopes of Irondequoit Bay. Monroe County recently updated the Ellison Park Master Plan which addresses these facilities.

C. Public Access / Recreational Facilities

The Penfield waterfront revitalization area contains two of Monroe County's major parks: Ellison Park and Abraham Lincoln Park. Portions of Ellison Park extend into the neighboring Towns of Irondequoit and Brighton. The Park contains a total of 444 acres, 284 of which are wetlands. Nearly all of the parklands which are in Penfield are classified as wetlands. The wetlands, by nature, are generally flat. Irondequoit Creek, which meanders through the wetlands, has a slope of approximately one foot per mile. There is currently a trail system that circumvents the wetlands, the only form of access currently available in the Penfield section of the Park.

⁶ <http://www.monroecounty.gov/parks-index.php>

Abraham Lincoln Park contains 182 acres of County owned land and is located on the east side of Irondequoit Bay toward the south end of the Bay. Recent improvements to the Park by Monroe County have resulted in a new parking lot, active recreational facilities and pedestrian access from Empire Blvd. to the Bay. The Town of Penfield has an abandoned sewage treatment plant on Smith Road. The site is heavily wooded. Slopes are steep, forming numerous gullies and small valleys. The shoreline which extends for a distance of 6,772 feet, is very steep, and falls directly into the Bay, leaving no access to the water. There are no beaches of any useable size along the shore. A large Quonset building and a single family house are located at the end of the road. The Quonset hut is used by the Bayview Y, previously cited in the section on water dependent and enhanced uses. A trail has been informally established which parallels the shore of the Bay. The County Parks Department is proposing to demolish the Quonset hut and construct a lodge, a reconstructed road and accessory parking and docking facilities when funding permits.

Although the Town contains these two major park sites, public waterfront access is limited to scenic vistas, hiking, bird watching, canoeing along Irondequoit Creek, and similar passive activities. Because of the extensiveness of the wetlands and the fragile nature of much of the steep slopes, even passive recreation within much of the area is not possible. The area's primary function has been conservation. The Town does see the potential for expanding access at the Smith Road site, as part of the overall park plan now being developed by the County.

Each of these public facilities presents an opportunity for increased public access to the waterfront. The long range plans for the County parks recognize the need for expanded opportunities and include a program to accommodate those needs. The proposed improvements respect the environmentally sensitive nature of the parks' woodlots, steep slopes, wetlands and habitat areas.

The Town has also recognized several sites in the inventory process where access to privately owned properties for limited passive recreation purposes would heighten waterfront opportunities without infringing upon existing land uses. These areas are sited primarily for their potential to provide hiking trails and scenic vistas and include the Glendoveer's property, a banquet facility off Browncroft Boulevard.

2.7. Water and Sewer Service




The current limits of the public water and sewer systems available in Penfield are shown in [Figure 5](#). The public water system (shown with brown lines) is owned and operated by the Monroe County Water Authority (MCWA). As shown on the map, nearly the entire Town has access to public drinking water. The sanitary sewer service area (shown in gray) is operated by the Monroe County Pure Waters and the Town of Webster. As a result, the location and intensity of future growth in Penfield is partially dependent on the sewer capacities of adjacent municipalities to accommodate new development. The one developed area within the waterfront area not currently served by public water and sewer is along Avalon Trail, which is served by on-site disposal systems.

There are no formal studies that quantify the remaining capacity of sanitary sewers within Penfield. However, according to Town staff there is limited capacity available in the vicinity of Webster and Perinton. In order to access this capacity, system upgrades (e.g. pump stations, etc.) may be necessary.

2.8. Drainage and Storm Sewer

The purpose of the Town's drainage and storm sewer system is to prevent uncontrolled run-off which can cause negative impacts on the well-being of the community and welfare of its residents. The Town's

Water & Sewer Service

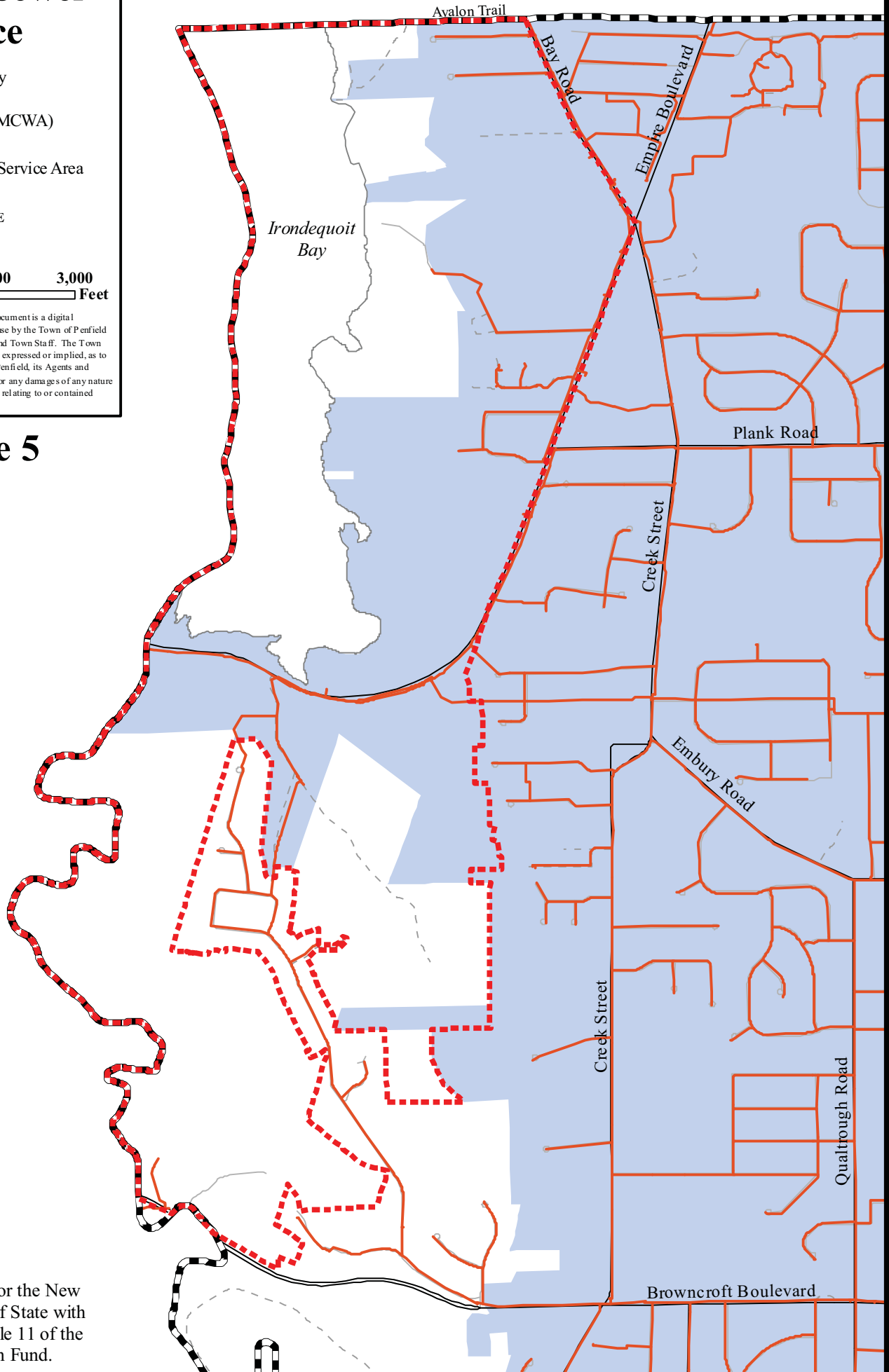
-  LWRP Boundary
-  Water Service (MCWA)
-  Sanitary Sewer Service Area



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Figure 5



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drainage system consists of natural and man-made infrastructure. Natural infrastructure includes the creeks, streams, and wetlands that collect and direct water to the appropriate destination (Irondequoit Bay, Lake Ontario, etc). Man-made infrastructure includes catch basins, storm sewers, retention ponds, and detention ponds. There are 160 detention/retention ponds within Penfield, of which, 101 are owned or maintained by the Town. In order to ensure that proper drainage facilities were constructed as development occurred, Penfield passed a Town Drainage Law in 1988 which was updated in 2000 and renamed the Stormwater and Erosion Control Law⁷. In 2007, the Town passed three additional laws to be consistent with the NYS Department of Environmental Conservation's new Phase II regulations for stormwater quality control. These laws ensure greater compliance with the water quality needs within the area.

2.9. Transportation

Penfield is well served by a combination of regional highways and a well-developed network of local roads. It emphasizes pedestrians and bicyclists as much as it does motorists. The Town not only looks to manage traffic and congestion, it requires sidewalks as a component of most new development and has a sidewalk program to install new sidewalks and repair existing ones. It also recently completed a Bicycle Facilities Master Plan to help achieve its goal of becoming a more bicycle friendly community.

A. Existing Road Network

NYS Routes 441 and 286 accommodate east/west travel across the Town, while NYS Route 250 accommodates north/south. NYS Route 404 traverses the northwest corner of the Town. Together these highways along with the Interstate system located just to the west of the Town line, form the backbone of Penfield's transportation system.







The primary roadway in the waterfront revitalization area is Empire Boulevard (SR 404). It traverses east and west, south of the Bay and north and south along the east side of the Bay. According to 2008 New York State Department of Transportation traffic counts, the roadway has an annual average daily traffic (AADT) of more than 25,000. Browncroft Boulevard is another State Route located at the southern end of the waterfront area and has an AADT of more than 20,000. Plank Road is a significant east-west local road that connects with Empire Boulevard and Creek Street and Bay Road, which are significant north-south connecting roads. The three roads are maintained by the Monroe County Department of Transportation. [Figure 6](#) depicts the existing road network and jurisdiction.

B. Pedestrian Facilities

Pedestrian facilities in the waterfront area are limited. Much of the Empire Boulevard corridor lacks sidewalks on one or both sides and where sidewalks do exist they are short in length with broken pavement varying from good to fair condition. Within the waterfront area, segments of sidewalks do exist east and west of Bay Road and Creek Street. Other roads such as Creek Street and Plank Road include sidewalk segments on at least one side of the road but are not typically contiguous. As part of the annual sidewalk program, the Town of Penfield has been completing sidewalk connections within the Empire Boulevard corridor east of the waterfront revitalization area. The Town does plan to improve sidewalk connections along Empire Boulevard and elsewhere in the waterfront area in future years.

⁷ http://www.penfield.org/docmanager/2000-06-21%20Stormwater_Mgmt_Policy.pdf

Existing Road Network

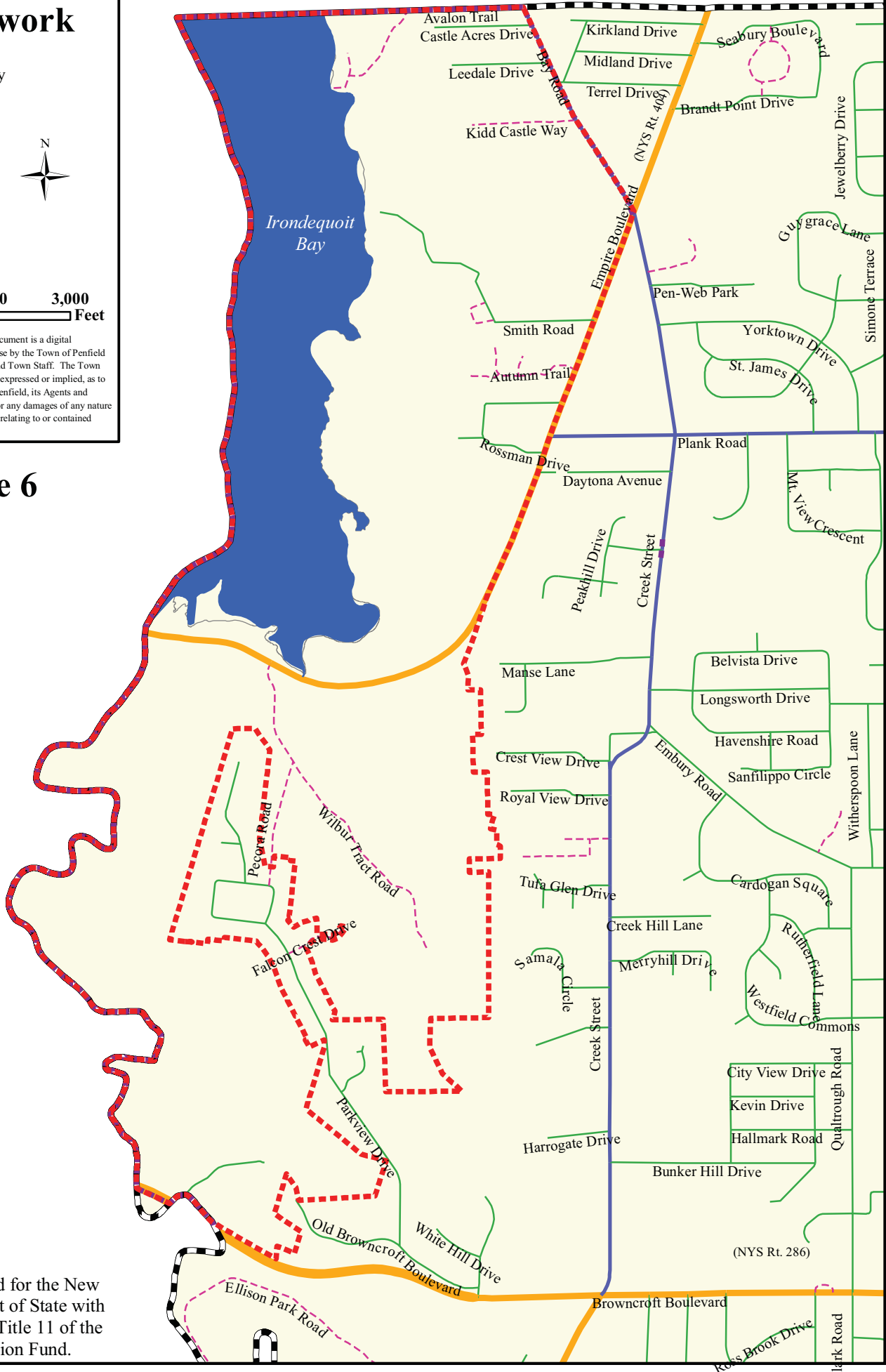
-  LWRP Boundary
-  Town Line
-  State Road
-  County Road
-  Town Road
-  Private Drive



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Figure 6



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Moving within the waterfront area is difficult for pedestrians. Crossing Empire Boulevard is a significant challenge. The Town plans to continue to work with the New York State Department of Transportation to find ways to calm traffic on Empire Boulevard and improve pedestrian facilities. In addition, the Town should continue to require, when practical, pedestrian facilities as part of new development and look to establish a comprehensive pedestrian network, especially within the LaSalle's Landing area. A pedestrian friendly network of streets and trails are important ingredients in developing mixed-use and walkable communities.

C. Bicycle Facilities

Bicyclists currently share the travel lanes and shoulders of Empire Boulevard. Route 404 is part of the Great Lakes Seaway Trail, which is a National Scenic Byway. The Genesee Transportation Council, the local Metropolitan Planning Organization, has identified the LaSalle's Landing Route 404 segment of the Great Lakes Seaway Trail as a problem area. The crossing at Irondequoit Creek is a concern for bicyclists due to roadway conditions and geometries. The cut section on the hill west of Irondequoit Creek is a width restriction. The absence of shoulder on the hill force bicyclists into the travel lane. The New York State Department of Transportation will consider including bicycle lanes or shared use lanes as part of



upcoming resurfacing and restriping projects for Empire Boulevard. In 2008 the Town completed a Bicycle Facilities Master Plan⁸. The Master Plan is a strategy for providing safe, convenient and well-designed bicycle routes and facilities within the Town. The Plan identifies several high priority bicycle routes within or connecting to the waterfront area including Empire Boulevard, Creek Street, and Plank Road. These "Priority Routes" maximize accessibility to community destinations and linkages to regional transportation routes; and target roads identified as "hot spots" by the Plan's steering committee. Improvements for bicycle facilities will start with these Priority Routes.

2.10. Water Resources

The Irondequoit Bay Harbor Management Plan and supporting Biological Study⁹, 2003 and a Draft Environmental Impact Statement and Final Environmental Impact Statement addressing the Southpoint Marina expansion at the south end of Irondequoit Bay provides a thorough inventory and analysis. For a more detailed description of the characteristics of the Bay please see those documents.

A. Water Surface Analysis and Use

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

⁸ http://www.penfield.org/media/Bike_2008_Penfield_Bicycle_Facility_Plan.pdf

⁹ [http://www.monroecounty.gov/Image/Biological%20Study%20of%20Irondequoit%20Bay\(1\).pdf](http://www.monroecounty.gov/Image/Biological%20Study%20of%20Irondequoit%20Bay(1).pdf)

Irondequoit Bay is about four miles long and varies in width from 1/4 to 3/4 miles, except near the Lake where it broadens to about 1 1/4 miles. The Bay has about 2.6 square miles of water surface and about 10 miles of shoreline (approximately 2 miles of which are in the Town of Penfield). The north and south ends of the Bay have significant shallow areas and water levels fluctuate annually and seasonally (see Lake Ontario Water Levels chart from U.S. Army Corps of Engineers¹⁰ and the nautical chart¹¹ from the National Oceanic and Atmospheric Administration (NOAA)). The Bay is primarily a warm water fishery for northern pike, largemouth bass, bullhead, and other species.

Water Surface Use

Irondequoit Bay is the largest coastal bay in Monroe County. It is connected to Lake Ontario at its north end by a protected outlet channel and Irondequoit Creek flows into the Bay at its south end. The Bay is popular for numerous water recreational activities including: boating, hunting, fishing, water skiing, personal watercraft (PWC) use, ice skating, ice fishing, hiking, and nature study.

Figure 7 is the existing water surface use map. It was developed as part of the Water Use Plan for the Irondequoit Bay Harbor Management Plan¹². The purpose of the water use plan is to minimize congestion, increase public safety and fulfill other stated goals of the Harbor Management Plan. The five water surface use classifications are:

Resource Protection Areas - Resource Protection Areas are established to provide protection to environmentally sensitive areas. Boat storage and dredging are incompatible with and are discouraged in resource protection areas.

Harbor Areas - Harbor areas are to provide public access, safe refuge, transient berthing and economic development opportunity.

Navigation Ways - Navigation ways are recommended for Irondequoit Bay to ensure that travel is not limited or impacted by water surface use or improvements and to ensure safe use of the Bay.

Near Shore Areas - Near Shore Areas are defined in this Plan as being within 300 feet of shore and other areas described within the NYS Navigation Law. Near Shore Areas are generally appropriate for passive uses.

Open Water Areas - The remainder of the Bay not encumbered by any of the above stated designations is designated as Open Water Areas.

For more information regarding the water surface use of Irondequoit Bay, see the Water Surface Use Plan¹³ in the Irondequoit Bay Harbor Management Plan, which is attached as Appendix B.

B. Water Quality

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








¹⁰ <http://www.lre.usace.army.mil/Missions/GreatLakesInformation>

¹¹ <http://www.charts.noaa.gov/OnLineViewer/14804.shtml>

¹² <http://www2.monroecounty.gov/files/planning/IBHMP%20Final%20Report.pdf>

¹³ Page 67 of <http://www2.monroecounty.gov/files/planning/IBHMP%20Final%20Report.pdf>

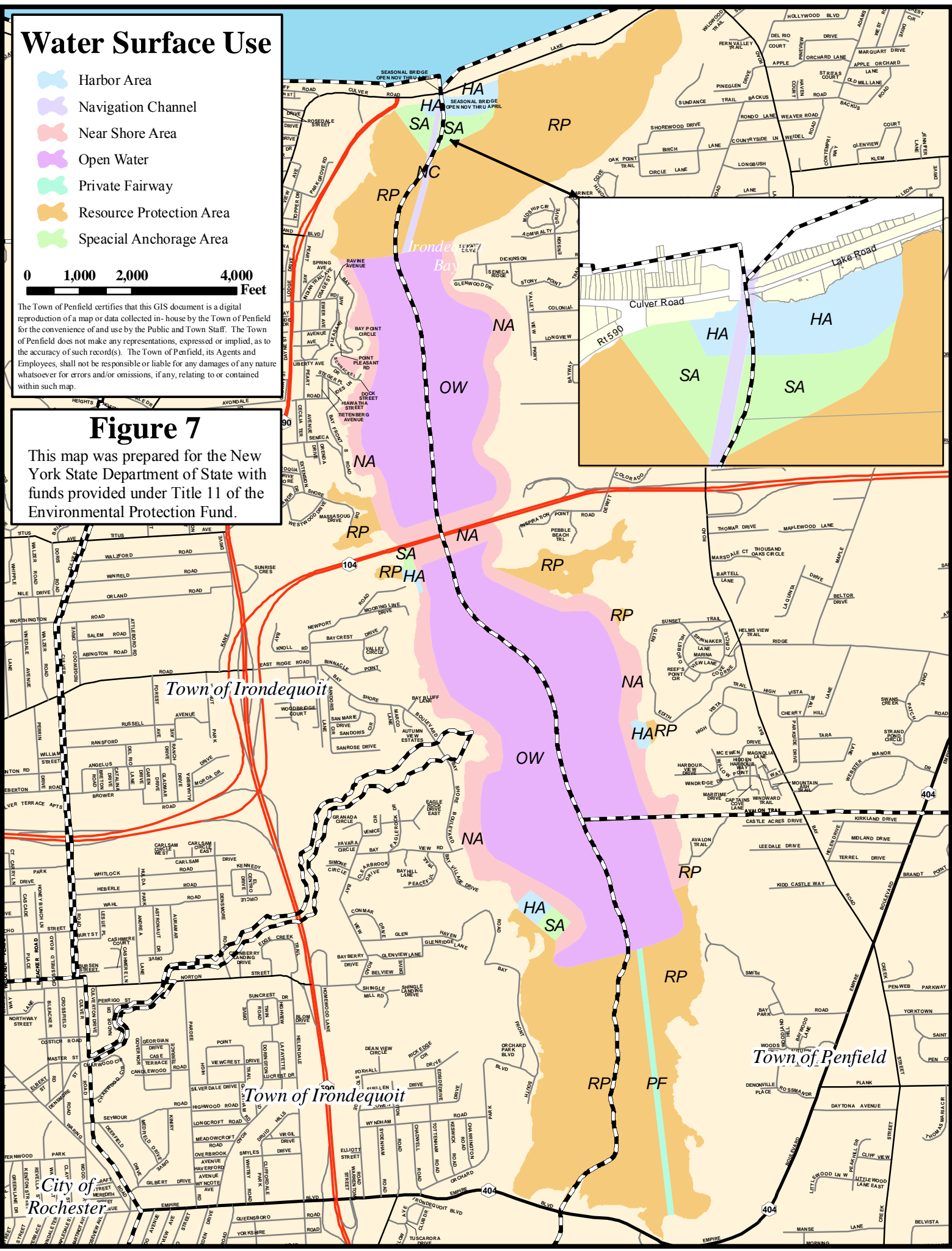
Water Surface Use

-  Harbor Area
 -  Navigation Channel
 -  Near Shore Area
 -  Open Water
 -  Private Fairway
 -  Resource Protection Area
 -  Special Anchorage Area
- 0 1,000 2,000 4,000 Feet

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Figure 7

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

The extensive amount of road salt carried into the Bay from its watershed inhibits the mixing of the Bay's lower waters, extending the annual period of low oxygen, stagnant, and biologically undesirable conditions in the deeper portion of the Bay. This lack of seasonal mixing is due to the stratification in the Bay caused by the salinity of the water. Surface algae and sediment reduce the amount of sunlight which can penetrate to lower depths, thus causing a sterile vegetative condition.

High water levels, surface water runoff, deforestation, wind erosion, and nesting wildlife have all contributed to the erosion of the steep slopes around the Bay, primarily on the east side, causing additional landslides to occur and aggravating existing ones. This has created scars along the Bay slopes. Increased erosion of the shoreline, in addition to causing property damage, has also added to the sediment load in the Bay.

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

Purification of Irondequoit Bay, however, will be a slow, yet continual process once all present abuses are terminated. Because of the large quantities of nutrients and salt already in the Bay, improvements in its water quality will be gradual. One potential impact resulting from the reduction of nutrients will be a decrease in surface algae blooms, allowing more sunlight to penetrate the Bay, thus promoting the growth of weeds in the shallow areas of the northern and southern ends of the Bay. In addition to the improvements to sewage treatment facilities, Monroe County is actively taking measures to improve Bay water quality through other techniques. The County has, with federal and State financial assistance, taken action to reduce the phosphorous level of the Bay. In 1986 an experimental program for using aluminum sulfate or alum to act as a seal on the bottom of the Bay was extremely successful. The center of the Bay was spread with alum to keep the phosphorous from recycling in the Bay.

The Town is a member of the Monroe County Stormwater Coalition¹⁴. The 28 member organization was established in 2000 to work together to comply with the federal stormwater regulations and improve water quality in the region.

A federal regulation, commonly known as Stormwater Phase II, requires permits for stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas and for construction activities disturbing one or more acres. To implement the regulation, the New York State Department of Environmental Conservation requires two permits, one for MS4s in urbanized areas and one for construction activities. The permits are part of the State Pollutant Discharge Elimination System (SPDES).

¹⁴ <http://www.monroecounty.gov/des-stormwater-coalition>

2.11. Scenic Resources and Visual Quality



Irondequoit Bay constitutes a major scenic resource for the Town of Penfield, and the entire greater Rochester area. The Bay, because of its setting of steep, heavily wooded slopes and wetlands, provides views of exceptional beauty. The Great Lakes Seaway Trail, formerly named and commonly known as the Seaway Trail, is located along Empire Boulevard and Bay Road. The most scenic Bay views are from Empire Boulevard at the south end of the Bay, especially traveling east from Irondequoit.

An interpretive sign in LaSalle's Landing Park is on the Great Lakes Seaway Trail.

The most accessible areas for viewing Irondequoit Bay in Penfield are located at the Bay's south end. Spectacular views of the entire Bay are available from multiple vantage points along Empire Boulevard, particularly from the recently constructed LaSalle's Landing Park (see Area D in [Figure 8](#)) which was acquired and constructed in partnership with the NYS Department of State (DOS) with funds provided under Title 11 of the Environmental Protection Fund. The Bay extends northward from Empire Boulevard and an observer can clearly see the Route 104 Bridge in the distance. Increasing development along the west shore in Irondequoit can be noticed. Irondequoit Bay's eastern shoreline remains in a mostly undeveloped, natural state.

From Empire Boulevard, looking south, one has an excellent view of the expansive wetlands, an area that attracts numerous birds and animals. These wetlands remain mostly natural and surround Irondequoit Creek which meanders through them. While much of the wetlands south of Empire Boulevard are County owned, public access to these wetlands is limited. Outstanding views are primarily available from private properties (see Area A in [Figure 8](#)).

There are two additional areas which can provide exceptional viewing of Irondequoit Bay, but which have limited access. These include sections of Abraham Lincoln Park (see Areas B in [Figure 8](#)), where access is discouraged because of the sensitive slopes, and the property now or formerly owned by the Bayview Y (see Areas C in [Figure 8](#)), where no trails or viewing areas currently exist. Ways to include viewing areas without endangering steep slopes should be explored.

Views of the Bay are limited not only by such natural features as steep slopes and wooded lots, but also by the pattern of land ownership that exists in Penfield's waterfront. The most scenic areas of Penfield's waterfront are primarily in private ownership (as noted above in the Empire Boulevard area), with access restricted because of the nature of the uses. In some cases the development itself has blocked the public's view of the Bay and detracted from the visual quality of the waterfront, particularly along portions of the bayshore, where houses and commercial uses have been built directly on the water and on the surrounding steep slopes.

The Towns of Penfield, Irondequoit, and Webster are members of the Irondequoit Bay Coordinating Committee¹⁵ (IBCC), whose mission is to coordinate among various levels of government with an interest in the Irondequoit Bay, all levels of public and private use of the area, and to develop,

¹⁵ The Irondequoit Bay Coordinating Committee (IBCC) was established in 1985 as an advisory committee through an inter-municipal agreement between the towns of Irondequoit, Penfield and Webster and the County of Monroe. <http://www2.monroecounty.gov/planning-planning.php>

Scenic Resources and Visual Quality

 LWRP Boundary

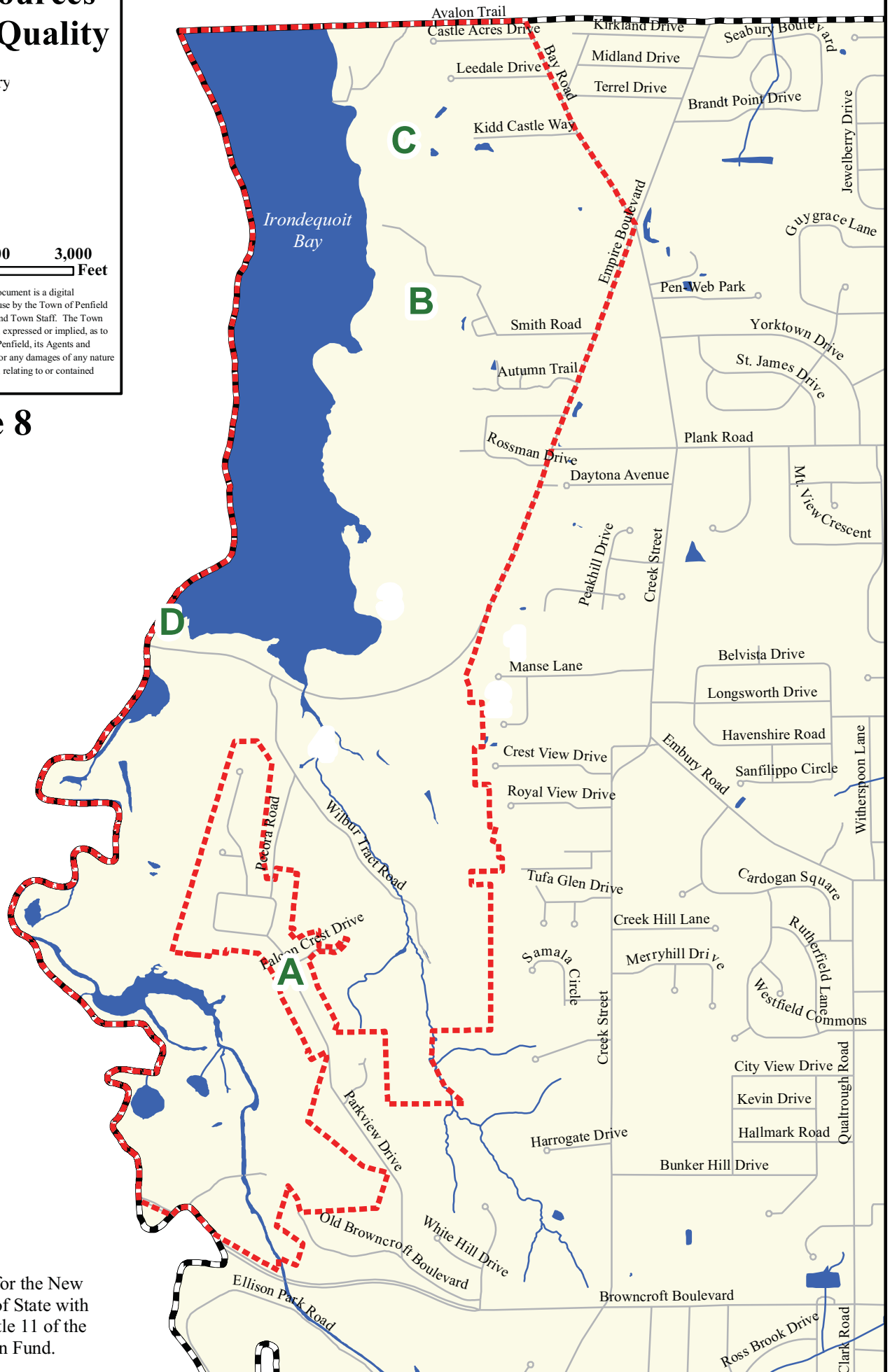
 Town Line



0 500 1,000 2,000 3,000 Feet

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Figure 8



This map was prepared for the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

recommend and monitor, related policies with the goal to promote recreational and economic opportunities on Irondequoit Bay while protecting and maintaining environmental quality. The IBCC and the towns strive to limit the impacts from development and protect the aesthetic quality of the Bay area.

2.12. Underutilized and Deteriorated Sites

The waterfront revitalization area contains several sites that can be classified as either underutilized, deteriorated or inappropriately developed (see [Figure 9](#)). These sites are seen as problem areas and in some cases as opportunities for promoting waterfront revitalization. The area that is considered as having the greatest potential for development and is, therefore, viewed as an opportunity site, will be discussed first.

A. Former Sewage Treatment Plant

The former treatment plant at the end of Smith Road (see Site A in [Figure 9](#)) is owned by the Town of Penfield. The site is currently vacant, however, the Town believes there is an opportunity for the site to become part of Abraham Lincoln Park and would like to sell it to Monroe County. It has and will continue to have discussions with the County. Although it is unknown at this time what exactly the County would use the building for, it would likely support the Park as a recreational use.

B. Empire Boulevard Strip





The area (see Site B in [Figure 9](#)) contains several inappropriate, non-water-dependent or enhanced uses, including automotive and industrial installations which are not making a contribution to the waterfront, and which, in some cases, may be detrimental to the waterfront area. Parcel sizes in the Empire Boulevard Strip vary from less than an acre to 30 plus acres of land. Portions of both vacant and inappropriately developed parcels contain steep slopes, wetlands, floodplains and woodlots subject to the Town's existing environmental protection ordinances.

There are also several uses in the area that are appropriate but which are either not developed to their full potential or are deteriorated. Such uses include restaurants and bars. The area is also the site of the privately owned pull-off at 1384 Empire Boulevard, which could provide additional public parking for people wishing to gain access to the water. The Town is interested in obtaining an access easement from the property owner to give the public legal access to Irondequoit Bay. The Empire Boulevard strip is seen as the area with the greatest potential for achieving access to the waterfront and promoting a waterfront environment that will have an impact on the local economy. Although the Town does not have any specific ideas on what should happen on each parcel, it does believe both horizontal and vertical mixed-use is the most suitable direction for the future. Uses could include, but are not limited to, townhouses, restaurants and cafes, and small boutique style commercial businesses. The area is envisioned to be compact and walkable with public access to the water provided by all developed and redeveloped properties.

C. Baker Commodities Rendering Plant

The last site (see Site C in [Figure 9](#)) which is considered to be both a pre-existing non-conforming use and under-utilized is the 43.6 acre parcel containing the Baker Commodities Rendering Plant, located on Browncroft Boulevard. Current use of the property is a rendering plant for converting waste fats, oils, grease, and animal by-products to tallow. The site contains significant wetlands and borders Irondequoit

Underutilized Sites

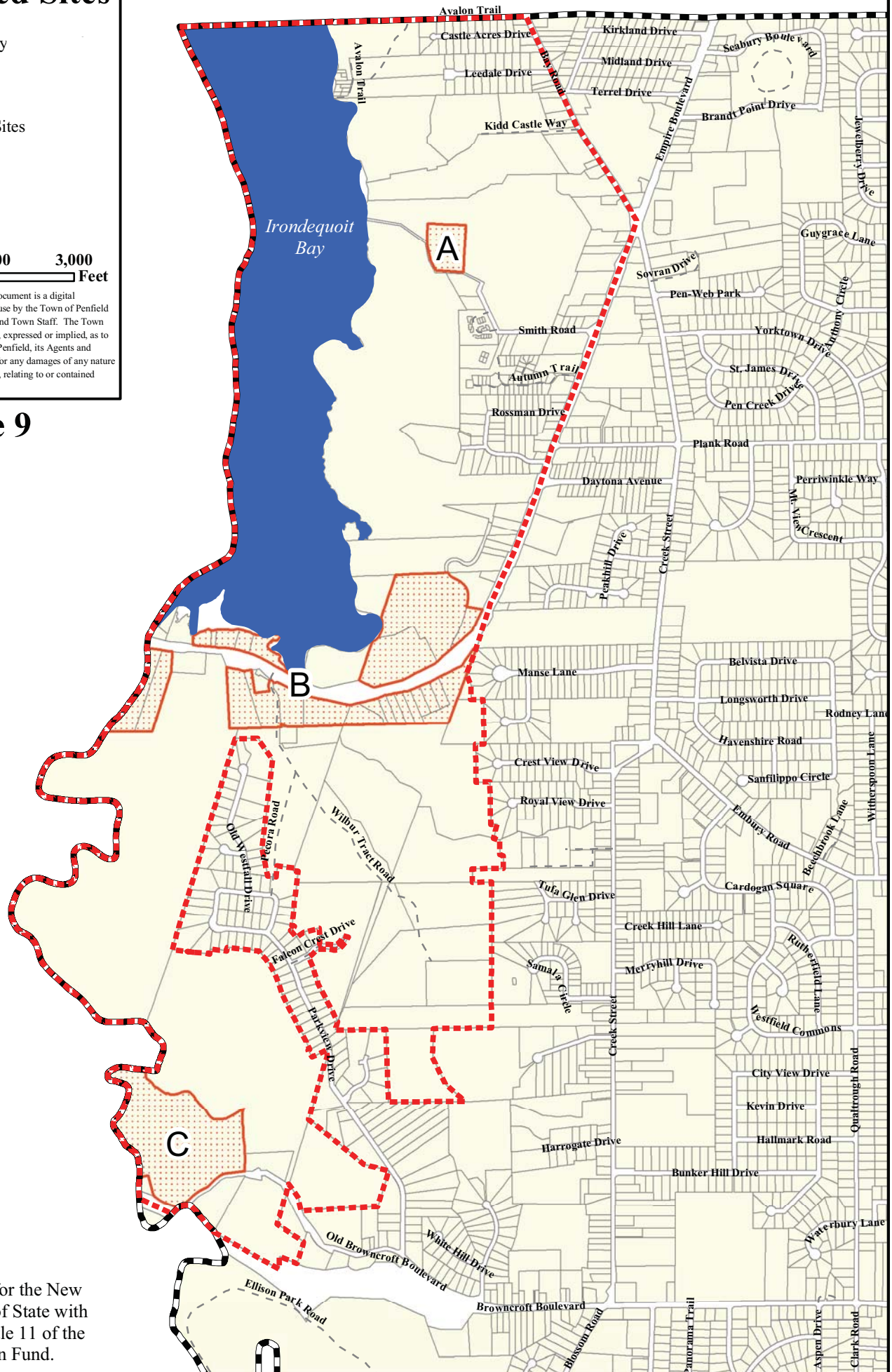
-  LWRP Boundary
-  Town Line
-  Underutilized Sites
-  Parcels



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Figure 9



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Creek for a distance of 2,058 feet. The use of the property as a rendering plant is expected to continue for the foreseeable future. If plant operation does cease mixed-use use with a residential component would seem most appropriate.

2.13. Environmental Qualities

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

The Irondequoit Bay Harbor Management Plan¹⁶, 2003 provides a thorough inventory and analysis. For a more detailed description of the environmental characteristics in and around the Bay please see that document, which is online at www.penfield.org or at the Town Clerk's office.

A. Wetlands and Wildlife Habitats

Irondequoit Bay and Creek, located within the City of Rochester and the Towns of Irondequoit, Webster, Perinton and Penfield in Monroe County, has been designated by the New York State Secretary of State as a Significant Coastal Fish and Wildlife Habitat (see [Figure 10](#)). See Appendix D for the detailed description of the Irondequoit Bay and Creek Habitat. The habitat includes the entire bay area, and emergent wetlands immediately south of the bay and approximately seven miles upstream on Irondequoit Creek. The Bay and Creek support a significant warm water fishery and provide angling opportunities for fishermen throughout western and central New York. The entire complex is utilized by migrating waterfowl during the spring and fall as a staging and feasting area.

Irondequoit Bay has been classified by the New York State Department of Environmental Conservation as a Class 1 Wetland (see [Figure 11](#)), which is the highest classification that can be given. They are considered the most valuable type of wetland, providing the greatest level of benefits, and are therefore subject to a higher level of protection. New York State retains permit granting authority for activities in Class I wetlands, and therefore regulates activities around Irondequoit Bay. (DEC considers the entire shoreline area of the Bay as a Class 1 Wetland because of the presence of both submergent and emergent aquatic vegetation.)

DEC has identified three types of wetlands in the Irondequoit Bay area: (1) Submergent Wetlands, (2) Fringe Emergent Wetlands, and (3) Shrub Wetlands. Each of these serves important functions such as: shoreline erosion protection, wildlife and fish habitat spawning and nursery areas, improving water quality, and open space. The Penfield section of the Bay contains all three types of wetlands.

Wetlands Submergent

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

¹⁶ <http://www2.monroecounty.gov/files/planning/IBHMP%20Final%20Report.pdf>

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

Wetlands Emergent

Emergent wetlands are found at various locations around the Bay. Large cattail marshes are found south of Empire Boulevard, and total over 110 acres. Fringes of emergent wetland are found at the south end and at various locations elsewhere.

Emergent wetlands provide excellent fish and wildlife habitats. Birds such as red wing blackbirds, rail and marsh wrens use cattails for nesting, feeding or roosting. Water-fowl use these areas during migration and brood-rearing; pheasants winter over in cattail marshes. Other birds such as hawks, great blue herons and bitterns forage for food in emergent wetlands. Muskrats use cattails for food and nest building, and small mammals, such as mice, winter in marshes. Deer may use cattail areas as escape cover. These areas may also be used as spawning habitat for northern pike. When emergent vegetation is associated with other wetland cover types, such as submergent vegetation, or with upland cover types, the habitat value is increased. These "edges" between different cover types are the areas where the greatest diversity of habitat and wildlife exist.

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

Shrub Wetlands

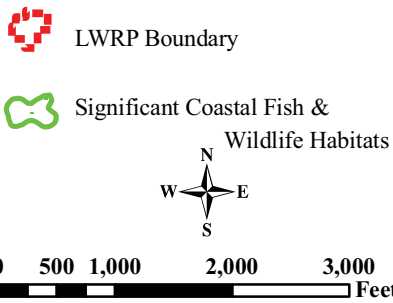
Shrub wetlands are found in various coves on the east and west sides of the Bay. This type of wetland cover is usually adjacent to the upland area and provides a transition zone between the wetland and the upland. Red osier dogwood, willow, arrow-wood, buckthorn, red maple and green ash saplings are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

Upland Wildlife Habitat

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

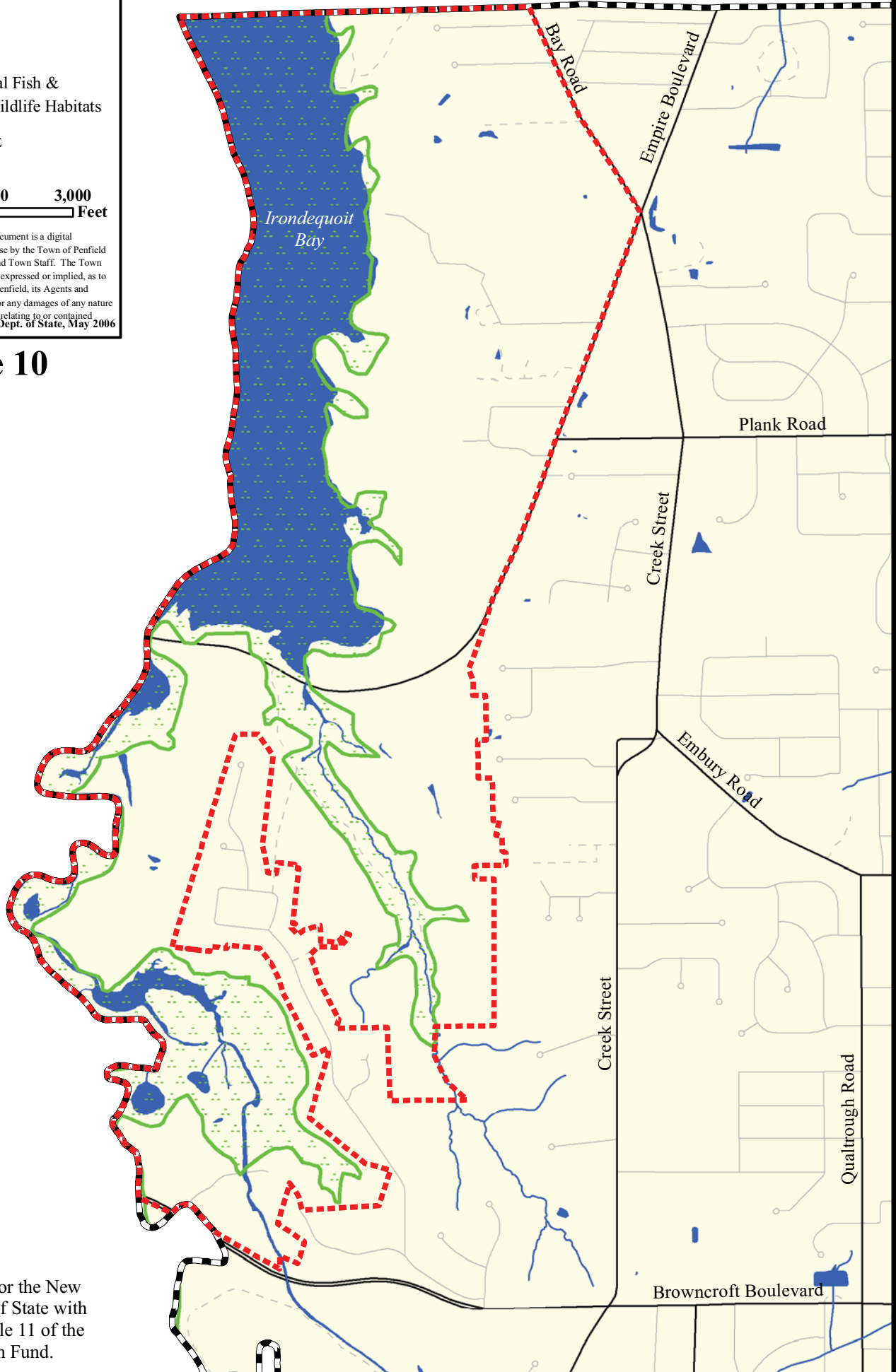
In addition to avian wildlife, many species of mammals use the Bay area. The largest land mammal around the Bay, the whitetail deer, is common to the forested area around the Bay and is dependent upon the woods for escape cover, fawn rearing, and winter cover. Small mammals utilizing the forest and wetland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

Wildlife Habitats



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Figure 10



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Aquatic Habitat

The Bay supports a large number of freshwater fishes. This population is dominated by some warm water species not normally considered game fish, such as white perch, alewife, or bowfin. These species do, however, contribute to the forage base of the Bay. With an improved water quality, a shift in abundance to species commonly sought after as sport fishes, such as largemouth bass, smallmouth bass, northern pike, and salmonids, is expected. Invasive species, such as the zebra mussel and the round goby, have also been found in the Bay. Figure 15 shows those areas of the Bay where good shoreline structure, vital for a productive and diverse fishery, exists. This structure is composed of natural wave washed beaches, submergent vegetation, overhanging shoreline vegetation, gravel/rubble bottoms, and/or submerged trees and woody debris.

In addition to the resident population of fishes in the Bay, other species are found in great numbers seasonally. Salmonids use the Bay during spawning runs up Irondequoit Creek. It is possible that, as water quality continues to improve, some of the salmonids may become year round residents within the Bay. The present condition of the salmonid fishery in Lake Ontario and adjoining bays and tributaries is a direct result of the State's intensive stocking program. The 2008 stocking figures show that Irondequoit Creek received 9,760 Brown Trout and 27,500 Steelhead. Irondequoit Bay received 24,516 Walleye and the nearby Genesee River received 61,230 Salmon.

Table 4 identifies fish species and aquatic plants associated with Irondequoit Bay, while Table 5 identifies breeding birds associated with the Bay.

Table 4- Fish Species and Aquatic Plants

FISH SPECIES COMMON TO THE IRONDEQUOIT BAY

Golden shiner	Johnny darter
Carp	Yellow perch
Spottail shiner	Alewife
Emerald shiner	Northern pike
Largemouth bass	Gizzard shad
Smallmouth bass	White sucker
Pumpkinseed	Longnose gar
Black crappie	Sea lamprey
Rockbass	*Atlantic salmon
White perch	*Rainbow trout
Channel catfish	*Brown trout
Black bullhead	*Coho salmon
Brown bullhead	*Chinook salmon
Walleye	<i>*Seasonal inhabitants</i>

COMMON AQUATIC PLANTS ASSOCIATED WITH THE IRONDEQUOIT BAY

SUBMERGENT	EMERGENT
Coontail	Longleaf pondweed
Watermilfoil	Broadleaf cattail
Sago pondweed	Narrow leaf cattail
FLOATING	SHRUB
Water lily	Willow
Duckweed	Red osier dogwood

	Silky dogwood
	Buckthorn
	Green ash – sapling stage
	Red maple sapling stage
	Arrowwood
	<i>Shrubs are not normally considered truly aquatic plants but these species are used as wetland indicators by biologists with the DEC (Region 8).</i>

Table 5- Breeding Birds of the Irondequoit Bay Area

POSSIBLE	PROBABLE
Chimney Swift	Green Heron
Red-headed Woodpecker	Least Bittern
Alder Flycatcher	Sora
Rough-winged Swallow	Killdeer
Brown Creeper	Common Snipe
Chestnut-sided Warbler	Willow Flycatcher
	Least Flycatcher
	Tree Swallow
	White-eyed Vireo
	Yellow-throated Vireo
	Mourning Warbler
	Hooded Warbler
	Rufous-sided Towhee

CONFIRMED	
American Bald Eagle	Wood Thrush
Mallard	Veery
Blue-winged Teal	Cedar Waxwing
Wood Duck	Starling
Red-tailed Hawk	Red-eyed Vireo
American Kestrel	Warbling Vireo
Ring-necked Pheasant	Yellow Warbler
Virginia Rail	Cerulean Warbler
Common Gallinule	Common Yellowthroat
American Woodcock	American Redstart
Rock Dove	House Sparrow
Mourning Dove	Red-winged Blackbird
Yellow-billed Cuckoo	Northern Oriole
Black-billed Cuckoo	Common Grackle
Screech Owl	Brown-headed Cowbird
Great Horned Owl	Scarlet Tanager
Ruby-throated Hummingbird	Cardinal
Belted Kingfisher	Rose-breasted Grosbeak
Common Flicker	Indigo Bunting
Pileated Woodpecker	House Finch

CONFIRMED	
Red-bellied Woodpecker	Bank Swallow
Hairy Woodpecker	Barn Swallow
Downy Woodpecker	Blue Jay
Eastern Kingbird	American Crow
Great-crested Flycatcher	Black-capped Chickadee
Eastern Phoebe	Tufted Titmouse
Eastern Wood Pewee	American Goldfinch
White-breasted Nuthatch	Chipping Sparrow
House Wren	Field Sparrow
Marsh Wren	Swamp Sparrow
Gray Catbird	Song Sparrow
Brown Thrasher	American Robin

Local Habitats

Around Irondequoit Bay the following areas were identified as locally significant habitats within Penfield's LWRP boundary:

South End Emergent Fringe - This is the largest area of cattail fringe around the Bay. It is associated with lightly developed shoreline, submergent and floating vegetation, and open water shallows. This area provides excellent habitat for waterfowl, shore and wading birds, seagulls, terns, reptiles, and amphibians. The road frontage is heavily developed and development pressures are great. The Bay is quite shallow for about one quarter mile north. South of Empire Boulevard, a large cattail marsh associated with Irondequoit Creek extends southward to Browncroft Boulevard.

East Side Coves - There are several coves along the east side of Irondequoit Bay. Most are small with a fringe of cattail, submergent and floating vegetation. There is usually a shrub transition zone followed by upland forest. There is usually an open water connection offering good water circulation. These areas provide excellent habitat for a variety of wetland wildlife species such as waterfowl, wading birds, and furbearers. Fish use these areas for spawning, nursery and feeding cover.







B. Floodplains

The shoreline area and wetlands of Irondequoit Bay have been identified as flood-prone in studies done by the Federal Emergency Management Administration. (These areas have been mapped and flood elevations cited as part of the local flood insurance program.) Building activity in these flood-prone areas is regulated by the National Flood Insurance Program and the Town's floodplain management ordinance. Building within flood-prone areas (see [Figure 11](#)) can affect the flood handling capabilities of a body of water such as Irondequoit Bay and can be exposed to significant damage from high water levels.

C. Woodlots and Steep Slopes

Natural woodlots can be defined as areas where there are twenty (20) or more trees per acre and their un-branched girth measured at a minimum of three (3) feet off the ground is a minimum of ten (10) inches in diameter (saw timber size trees). Trees grown commercially for landscaping, Christmas tree

Wetlands and Floodplains

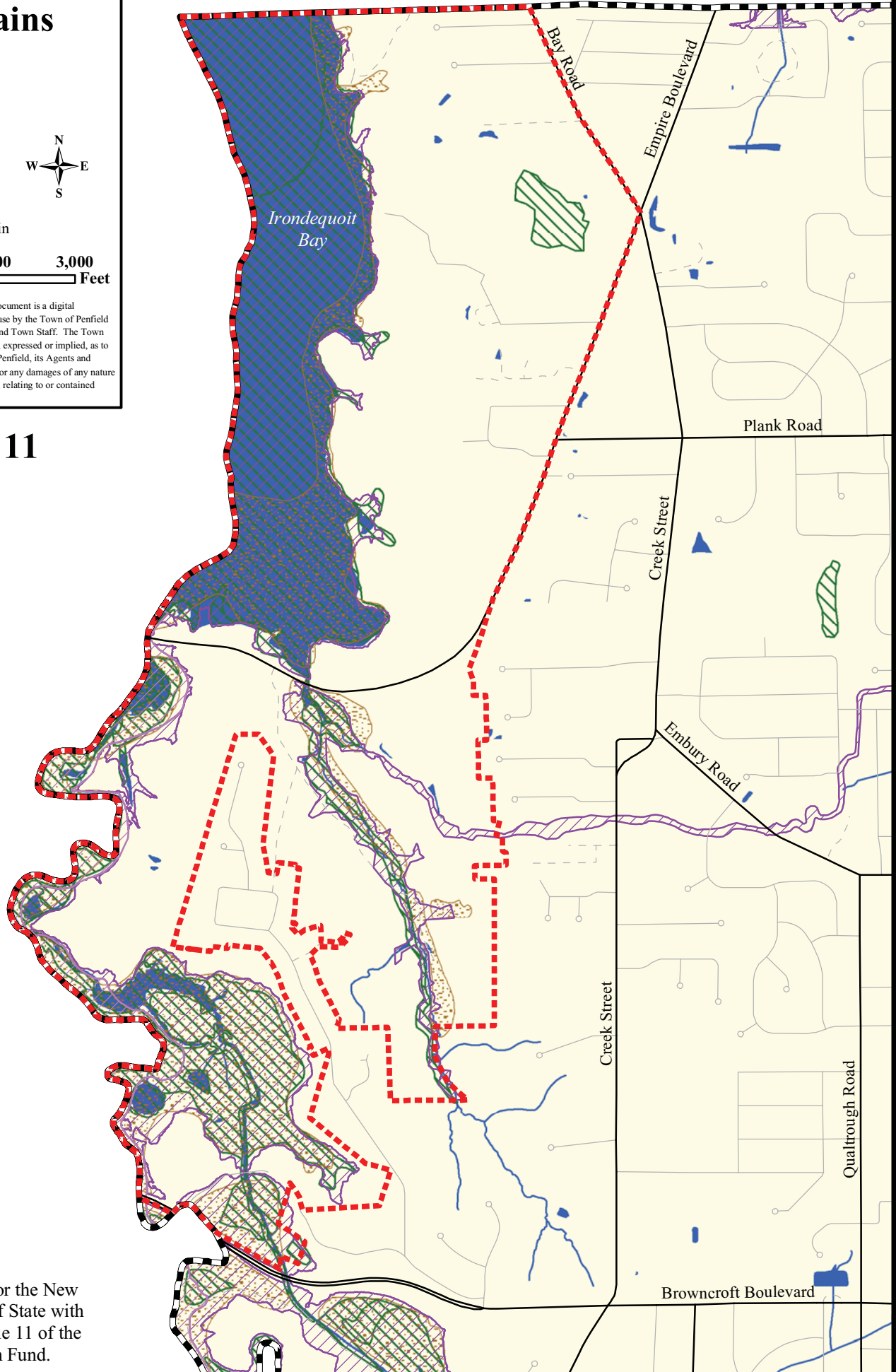
-  LWRP Boundary
-  Town Line
-  State Wetland
-  Federal Wetland
-  Floodway
-  100-Year Floodplain



0 500 1,000 2,000 3,000 Feet

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Figure 11



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plantations, and orchard trees whether abandoned or active, are not considered in this classification. Woodlots are important habitats and help to control the erosion of steep slopes. [Figure 12](#) shows the location of woodlots and steep slopes within Penfield's LWRP area.

Development activities on or adjacent to the steep slopes around Irondequoit Bay can result in increased erosion and sedimentation, degradation of the water quality of the Bay and its tributary streams, slope slippage, and destruction of the natural character of the Bay areas. The manner in which stormwater drainage is handled and the disturbance of soils and removal of vegetation can affect slope stability.

Slopes of 15 percent or greater (see [Figure 12](#)) may be subject to failure if disturbed either through removal of vegetation, which acts to stabilize the slope, or grading of slope areas, which exposes them to erosion by wind and water. Natural percolation of storm-water is reduced when vegetation is removed from slope areas, or impervious surfaces (such as buildings and paved surfaces) are constructed.

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

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

D. Soil Characteristics

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

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

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

Soils associated with approximately 10 acres of orchard and 40 of cropland within the LWRP area are classified as prime farmland, within LCS Soils Groups 2 through 4 of the NYS Agricultural Land Classification 1990.

E. Coastal Erosion Hazard Areas

New York State Department of Conservation has identified coastal erosion areas in Monroe County. Coastal erosion hazard areas are those coastal shorelines described as follows:

Woodlots and Steep Slopes

 LWRP Boundary

 Town Line

 Woodlot

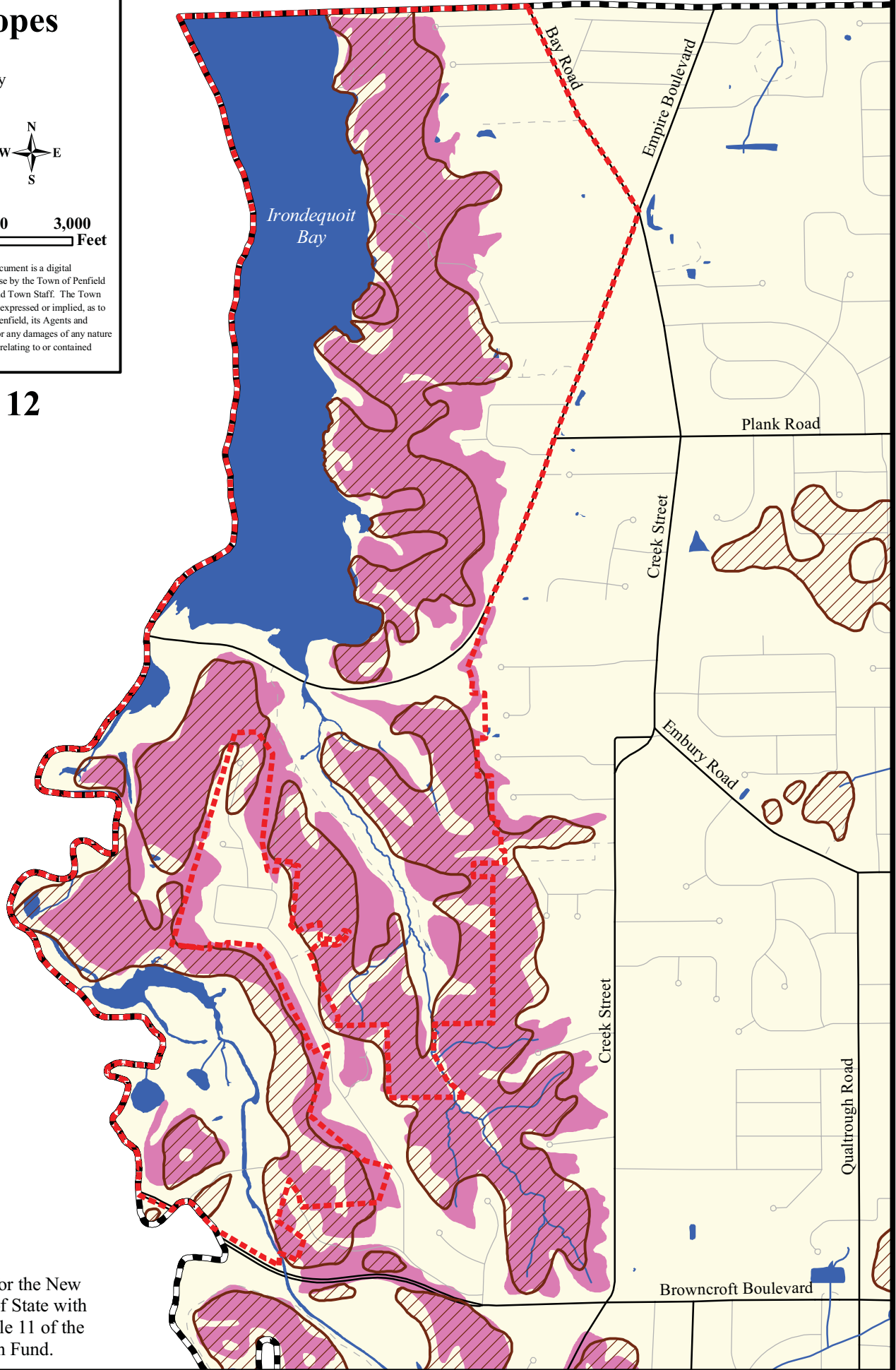
 Steep Slope



0 500 1,000 2,000 3,000 Feet

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Figure 12



This map was prepared for the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

- Structural Hazard Areas which are receding at an average rate of one foot or more per year; and
- Natural Protective Features Areas including beaches, dunes, sandbars, spits, shoals, barrier bays, barrier islands, bluffs and wetlands.

All of the shoreline of Abraham Lincoln Park, a 300 foot strip immediately south of the Penfield/Webster town line, a 600 foot strip immediately west of Shangri la Lane, and an area identified on property located at 1384 Empire Blvd, have been designated as erosion hazard areas. These will be subject to the regulations of Article 34 of the Environmental Conservation Law.

F. Air Quality

The Town of Penfield has no air quality maintenance areas within its boundaries, although several LWRP area residents expressed concern about the Baker Commodities Rendering Plant located at 2268 Browncroft Boulevard. The rendering plant provides a necessary service that uses waste fats, oils and grease collected from area restaurants and food preparation sites, as well as animal by-products, to make tallow for use in such products as soap and cosmetics. Its use as a rendering plant is expected to continue for the foreseeable future.

This is the only plant of its kind in Western New York State, and its service area extends to the outskirts of the area. The plant handles animal carcasses from farm livestock and road kills, and the odor, historically, has been quite apparent in the general vicinity of the plant.

Area residents have been complaining for a number of years about odors emitted from the plant. The upgrading of methods and equipment have helped in controlling but not completely eliminating odors

The plant has been in operation since the early 1900's, and until the late 1970's, used a lagoon adjacent to Irondequoit Creek as a settling pond for waste. In 1978, the plant was connected to sanitary sewers for waste disposal.


G. Waste Disposal Sites


Figure 13 identifies the location of suspected and confirmed waste disposal sites in the waterfront revitalization area. The survey of these sites was conducted by Monroe County in 1988. Several sites have been remediated since then, the map now identifies the remaining sites that require remediation.

Confirmed and Suspected Waste Sites

 LWRP Boundary

 Town Line

 Suspected Waste Site

 Confirmed Waste Site

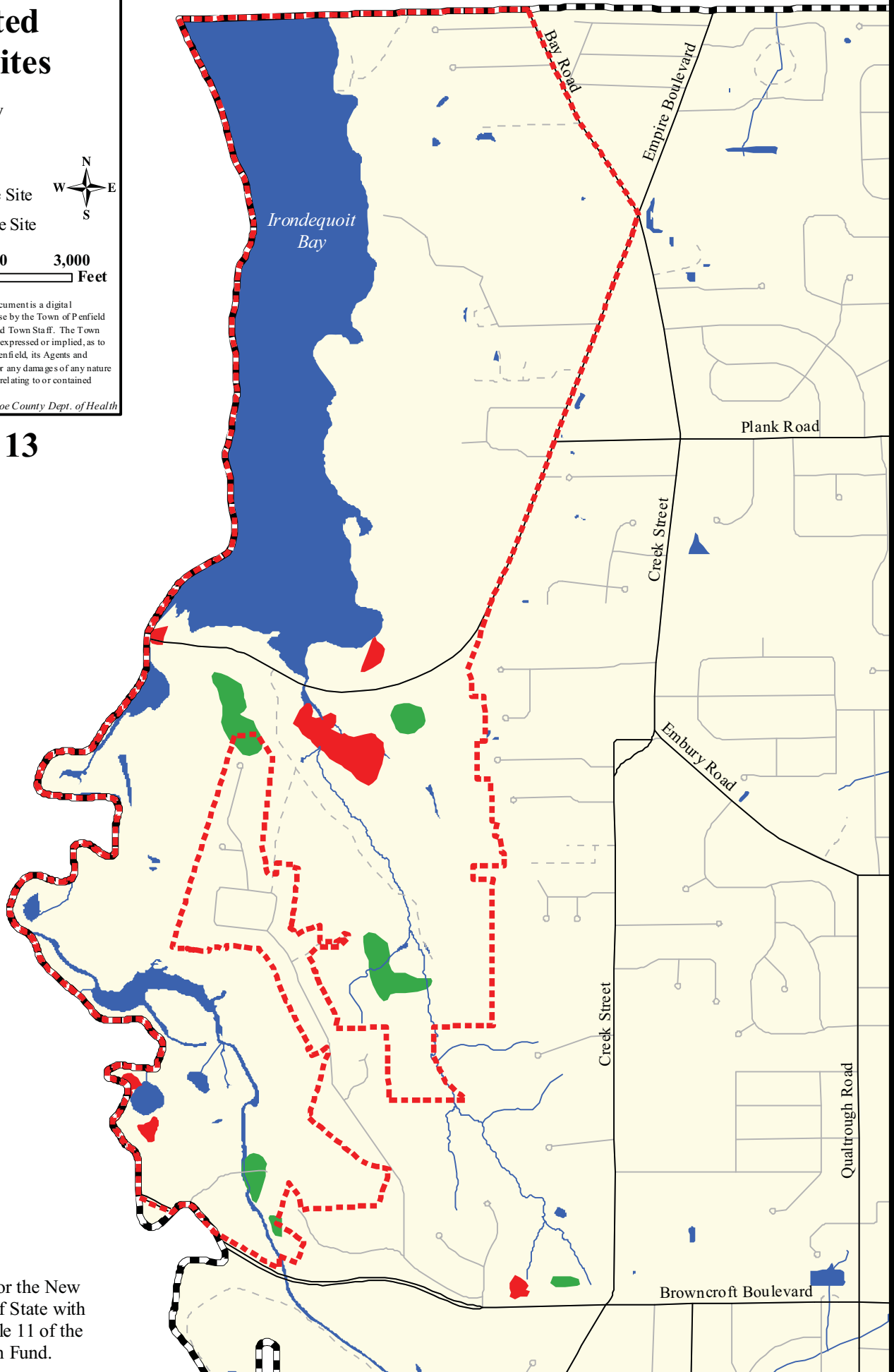


0 500 1,000 2,000 3,000 Feet

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Waste Site Data Source: Monroe County Dept. of Health

Figure 13



This map was prepared for the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

SECTION 3: WATERFRONT REVITALIZATION PROGRAM POLICIES

The Local Waterfront Revitalization Program (LWRP) policies and sub-policies (collectively referred to as “policies”) presented in this chapter consider the economic, environmental, and cultural characteristics of a community's waterfront. The policies represent a balance between economic development and preservation that will permit beneficial use of and prevent adverse effects on coastal resources. They also represent the enforceable policies of the New York State Coastal Management Program for the waterfront area subject to this LWRP. The policies are comprehensive and reflect the community’s concerns; and they will be enforced through use of State laws and authorities, and local laws and regulations. The policies are the basis for Federal and State consistency determinations for activities affecting the waterfront area. While the policies are enforceable as a matter of state and local law however, for reviews conducted under the federal Coastal Zone Management Act, the explanatory text for each policy is for explanatory purposes only. Definitions of terms used in the policies appear at the end of the chapter.

The policies are organized under four headings: developed waterfront policies; natural waterfront policies; public waterfront policies; and working waterfront policies.

A. Summary of Policies

The following is a summary list of the LWRP policies.

Developed Waterfront Policies

- Policy 1 Foster a pattern of development in the waterfront area that enhances community character, preserves open space, makes efficient use of infrastructure, makes beneficial use of a waterfront location, and minimizes adverse effects of development.
- Policy 2 Preserve historic resources of the waterfront area.
- Policy 3 Enhance visual quality and protect scenic resources in the waterfront area.

Natural Waterfront Policies

- Policy 4 Minimize loss of life, structures, and natural resources from flooding and erosion.
- Policy 5 Protect and improve water quality and supply in the waterfront area.
- Policy 6 Protect and restore the quality and function of the waterfront area ecosystem.
- Policy 7 Protect and improve air quality in the waterfront area.
- Policy 8 Minimize environmental degradation in the waterfront area from solid waste and hazardous substances and wastes.

Public Waterfront Policies

- Policy 9 Provide for public access to, and recreational use of, waterfront waters, public lands, and public resources of the waterfront area.

Working Waterfront Policies

- Policy 10 Protect water-dependent and water-enhanced uses and promote siting of these uses in suitable locations.
- Policy 11 Promote sustainable use of living marine resources in the waterfront area.
- Policy 12 Protect agricultural lands in the waterfront area.
- Policy 13 Promote appropriate use and development of energy and mineral resources.

B. Waterfront Revitalization Policies

Developed Waterfront Policies

- Policy 1 Foster a pattern of development in the waterfront area that enhances community character, preserves open space, makes efficient use of infrastructure, makes beneficial use of a waterfront location, and minimizes adverse effects of development.**

The regional character of a community's waterfront is defined by the pattern of developed and open land.

Penfield's waterfront area primarily consists of parks, recreation, and open space. These uses include Lucien Morin Park and Abraham Lincoln Park (formerly known as Irondequoit Bay East Park). Concentrated at the Bay's south end is a mix of commercial uses along Empire Boulevard. This section of Penfield's waterfront area is commonly referred to as the Town's "waterfront." Empire Boulevard (Route 404), a State road, runs in the east-to-west direction. The area consists of approximately 40 acres of land, and includes several confirmed or suspected brownfield sites. This area, also known as LaSalle's Landing, was identified in the Town's comprehensive plan as a future mixed-use area. There are several residential neighborhoods located adjacent to the middle and northern portions of waterfront area near Rossman Drive and south of Avalon Trail.

The collection of natural, recreational, commercial, ecological, cultural, and aesthetic resources in the community, or landscape, defines its character; and the distribution of developed and open lands establishes a pattern of human use that reflects an historic choice between economic development and preservation of waterfront resources.

Development that does not reinforce the traditional pattern of human use would result in an undesirable loss of the community and landscape character of the region. Development, public investment, and regulatory decisions should preserve open space and natural resources and sustain the Penfield waterfront or LaSalle's Landing District as a center of activity. Water-dependent and water-enhanced uses generally should locate in the LaSalle's Landing District in order to support the economic base and to avoid disturbance of shorelines and waters in open space areas.

The policy is intended to foster a development pattern that provides for beneficial use of waterfront resources. The primary components of the desired development pattern are: strengthening traditional waterfront communities as centers of activity, encouraging water-dependent uses to expand in maritime centers, enhancing stable residential areas, and preserving open space.

Because of the dependency of development upon the provision of basic municipal services, water and sewer, and site access, and because of the importance of improving and protecting water quality, no development shall occur which is not serviced by existing water and sewer systems or the expansion of

those systems or an approved alternative system. The expansion of any system should occur in such a fashion as to promote orderly growth around existing centers of development, and should take into consideration soil conditions, topography, density and impact on treatment facilities and appurtenances.

Proposed major actions may only be undertaken in the waterfront area if they will not significantly impair valuable coastal waters and resources, thus frustrating the achievement of the purposes of the safeguards which the State and Town have established to protect those waters and resources. Proposed actions must take into account the social, cultural, economic and environmental interests of the State and Town and their citizens in such matters that would affect natural resources, water levels and flows, shoreline damage, and recreation.

1.1 Concentrate development and redevelopment in or adjacent to Empire Boulevard.

Encourage development within the waterfront area that further defines and enhances the character of the community.

Focus public investment, actions, and assistance in waterfront redevelopment areas to reclaim unused waterfront land and enhance public recreational opportunities.

Locate new development where infrastructure is adequate or can be upgraded to accommodate new development. Future development along the shoreline of Irondequoit Bay shall comply with State, County and Town regulations relative to public sewers, or approved alternative systems, and water systems. Future development shall not be permitted along the shoreline unless adequately served by public sewer and water, or an approved alternative system. Highway design criteria for a new construction of public roads shall respond to the specific aesthetic of the shoreline area and incorporate pedestrian friendly access where feasible.

Develop vacant sites along Empire Boulevard shore zone for water-enhanced uses in conformance with restrictions cited under policy 10.

Redevelop sites along Empire Boulevard shore zone containing automotive and industrial uses for water-enhanced uses in conformance with restrictions cited under policy 10.

Further industrial use of the waterfront area should not be permitted and existing uses that are inconsistent with the development goals for the waterfront revitalization area should not be allowed to expand.

The following guidelines will be used to review actions against this policy:

1. Development will first be promoted in areas which have access to public services and facilities that are adequate to meet the requirements of the proposed action and where such proposed action provides for the orderly growth of the Town.
2. Future development shall be encouraged in the specific areas identified for potential development on the proposed land use map.
3. The Irondequoit Bay Harbor Management Plan and the Harbor Management Plan Law are applicable to all development within the waterfront area.
4. Proposed development in areas not serviced by sanitary sewer systems should be connected to public sewer systems if such extension can be accommodated in a cost effective manner.

5. All development shall be compatible with the LWRP and have adequate vehicular and pedestrian access ways.
6. No development action shall take place unless streets and highways serving the proposed site can safely accommodate traffic generated by the proposed development.
7. No development shall take place unless stormwater runoff from a proposed site complies with the required Municipal Separate Storm Sewer Systems (MS4s) and the State Pollutant Discharge Elimination System (SPDES).
8. No development action along Avalon Trail shall take place unless the water needs (consumptive and firefighting) of the proposed development can be met by the existing water supply system.

1.2 Ensure that development or uses take appropriate advantage of their waterfront location.

Reserve the immediate waterfront for water-dependent and water-enhanced uses and activities.

Accommodate water-enhanced uses where they are compatible with surrounding development, do not displace or interfere with water-dependent uses, do not negatively impact sensitive environmental areas, and reflect the unique qualities of a waterfront location through appropriate design and orientation.

Allow other uses that derive benefit from a waterfront location, such as residential uses, in appropriate locations to the extent that they do not conflict with a water-dependent use.

Avoid uses on the waterfront which cannot by their nature derive economic or social benefit from a waterfront location.

The following guidelines will be used to review actions for consistency with this policy.

When an action is proposed to take place in the Empire Boulevard area, the following guidelines will be used:

1. Permitted principal uses are:
 - a. Multi-family dwellings, apartment buildings and townhomes;
 - b. hotels, motels;
 - c. restaurants and small retail shops;
 - d. parks, playgrounds, beaches – public and private;
 - e. fishing piers;
 - f. car-top boat/canoe launch areas;
 - g. any combinations of permitted uses;
 - h. parking lots accessory to permitted uses; and,
 - i. accessory structures; and
 - j. historic sites.
2. Proposed uses/development actions will expand waterfront opportunities to Town residents, as well as visitors to the community, and will be geared toward strengthening the community's economic base.
3. All projects shall be in conformance with Policy 10 and incorporate design elements which provide for additional public access to the waterways, either on a pedestrian or visual scale.

4. Priority shall be given to uses which are enhanced by a location adjacent to the water in the LaSalle's Landing District.
5. The action should enhance existing and anticipated uses.
6. The action should serve as a catalyst to private investment in the LaSalle's Landing District.
7. The action should improve the deteriorated condition of the area and, at a minimum, must not cause further deterioration.
8. The action must lead to development which is compatible with the character of the area, with consideration given to scale, architectural style, density, siting, and intensity of use.
9. The action should have the potential to improve the existing economic base of the community, and, at a minimum, must not jeopardize this base.
10. The action should improve views from the water, and adjacent and upland views of the water, and at a minimum, must not affect those views in an insensitive manner.
11. The action should improve the potential for multiple uses of the sites in accordance with specific guidelines and review procedures.

1.3 Protect stable residential areas.

Maintain stable residential areas and allow for continued compatible residential and supporting development in or adjacent to such areas.

Continue to utilize and, if necessary, expand the Conservation Residential District with the purpose of limiting development as to preserve and protect the unique and sensitive features that characterize the areas adjacent to the Irondequoit Bay.

Areas that include residential uses are located off Empire Boulevard in the central portion of the waterfront revitalization area near Smith Road, Denonville Place, and Rossman Drive and in the northern area between Kidd Castle Way and Avalon Trail. These mature neighborhoods consist of modest one and two story homes on lots between one-quarter and one-half acres. There is a residential area south of Empire Boulevard and east of Lucien Morin Park near Wilbur Tract Road, but this area is primarily the rear portion of lots fronting Creek Street, which is no longer within the waterfront revitalization area.

1.4 Maintain and enhance natural areas, recreation, and open space.

Natural areas, recreation, and open space uses within the waterfront area include Lucien Morin Park, LaSalle's Landing Park, Abraham Lincoln Park, the Bayview Y, as well as environmentally sensitive areas described in LWRP Section II. Avoid loss of economic, environmental, and aesthetic values associated with these areas.

Avoid expansion of infrastructure and services which would promote conversion of these areas to other uses. Maintain natural, recreational, and open space values, including those associated with parks.

1.5 Minimize potential adverse land use, environmental, and economic impacts that would result from development.

All existing local regulations including zoning, stormwater, and erosion controls are applicable to help minimize adverse impacts of new development and redevelopment.

1.6 Minimize the potential for adverse impacts from types of development, which individually may not result in a significant adverse environmental impact, but when taken together could lead to or induce subsequent significant adverse impacts.

All existing local regulations including zoning, stormwater, and erosion controls are applicable to help minimize adverse impacts of new development and redevelopment.

1.7 To safeguard the vital economic, social and environmental interests of the State and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the State has established to protect valuable coastal resource areas.

Policy 2 Preserve historic resources of the waterfront area.

The intent of this policy is to preserve the historic and archaeological resources of the waterfront area. Concern extends not only to the specific site or resource but to the area adjacent to and around specific sites or resources. The quality of adjacent areas is often critical to maintaining the quality and value of the resource. Effective preservation of historic resources must also include active efforts, when appropriate, to restore or revitalize. While the LWRP addresses all such resources within the waterfront area, it actively promotes preservation of historic, archaeological, and cultural resources that have a waterfront relationship.

This policy is applicable to the historic resources identified in Section II. It also applies to Zones of Archaeological Sensitivity in the Waterfront Revitalization Area, as identified by the State Historic Preservation Office. Prior to undertaking major construction activities in the waterfront revitalization area, anyone proposing such activity shall consult with the State Historic Preservation Office to determine whether significant archaeological resources are present and what measures are necessary to preserve these resources.

Grunner's Tavern, now known as McGregor's, is located on the south side of Empire Boulevard at the east shore of Irondequoit Creek, and although not a designated structure, is recognized as a significant local historic site because of its importance to travelers crossing the Irondequoit Creek.

Public agencies must use any techniques, measures, or controls to prevent significant adverse changes to historic resources. A significant adverse change includes but is not limited to:

1. Alteration of or addition to one or more of the architectural, structural, ornamental or functional features of a building, structure, or site that is a recognized historic, cultural, or archaeological resource, or component thereof. Such features are defined as encompassing the style and general arrangement of the exterior of a structure and any original or historically significant interior features including type, color and texture of building materials; entry ways and doors; fenestration; lighting fixtures; roofing, sculpture and carving; steps; rails; fencing; windows; vents and other openings; grillwork; signs; canopies; and other appurtenant fixtures and, in addition, all buildings, structures, outbuildings, walks, fences, steps, topographical features, earthworks, paving and signs located on the designated resource property. (To the extent they are relevant, the Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" shall be adhered to.)

2. Demolition or removal in full or part of a building, structure, or earthworks that is a recognized historic, cultural, or archaeological resource or component thereof, to include all those features described in (a) above plus any other appurtenant fixtures associated with a building structure of earthwork unless determined to be structurally deficient or a danger to public safety.
3. All proposed actions within 500 feet of the perimeter of the property boundary of the historic, architectural, cultural, or archaeological resource and all actions within an historic district that would be incompatible with the objective of preserving the quality and integrity of the resource. Primary considerations to be used in making judgment about compatibility should focus on the visual and locational relationship between the proposed action and the special character of the historic, cultural, or archaeological resource. Compatibility between the proposed action and the resource means that the general appearance of the resource should be reflected in the architectural style, design material, scale, proportion, composition, mass, line, color, texture, detail, setback, landscaping and related items of the proposed actions. With historic areas, this would include infrastructure improvements or changes, such as street and sidewalk paving, street furniture and lighting.

This policy shall not be construed to prevent the construction, reconstruction, alteration, or demolition of any building, structure, earthworks, or component thereof of a recognized historic, cultural or archaeological resource which has been officially certified as being imminently dangerous to life or public health. Nor shall the policy be construed to prevent the ordinary maintenance, repair, or proper restoration according to the U.S. Department of Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" of any building, structure, site or earthwork, or component thereof of a recognized historic, cultural or archaeological resource which does not involve a significant adverse change to the resource, as defined above.

2.1 Maximize preservation and retention of historic resources.

Preserve the historic character of the resource by protecting historic materials and features or by making repairs using appropriate measures.

Provide for compatible use of the historic resource, while limiting and minimizing alterations to the resource.

Minimize loss of historic resources or historic character when it is not possible to completely preserve the resource.

Relocate historic structures only when the resource cannot be preserved in place.

Allow demolition only where alternatives for retention are not feasible.

Avoid potential adverse impacts of development on nearby historic resources.

2.2 Protect and preserve archaeological resources.

Minimize potential adverse impacts by redesigning projects, reducing direct impacts on the resource, recovering artifacts prior to construction, and documenting the site.

The appropriation of any object of archaeological or paleontological interest situated on or under lands owned by New York State, Monroe County, or Town of Penfield are subject to the provisions of Education Law § 233.

Anyone proposing to undertake major construction activities around Irondequoit Bay shall consult with the New York State Office of Parks, Recreation and Historic Preservation to determine whether significant archeological resources are present at the site and what measures are necessary to preserve these resources. The Town of Penfield requires a Cultural Resource Survey for all actions that will disturb any previously undisturbed area.

Policy 3 Enhance visual quality and protect scenic resources throughout the waterfront area.

Visual quality is a major contributor to the character of the waterfront area, and the primary basis for the public's appreciation. The Irondequoit Bay and its wetlands constitute a major scenic resource for the Town of Penfield and the greater Rochester area. The most accessible areas for viewing Irondequoit Bay in Penfield are located from the south end of the Bay, such as from LaSalle's Landing Park. Opportunities exist to increase access to scenic views at Abraham Lincoln Park and the Bayview Y.

The intent of this policy is to protect and enhance visual quality and protect recognized scenic resources of the waterfront area. The policy is applicable to the scenic resources identified in Section II.

Actions occurring within the waterfront revitalization area shall protect, restore, or enhance the overall scenic quality of the area. Actions will be reviewed to determine whether they would be likely to impair scenic views and vistas from streets and other public ways including the surface of Irondequoit Bay and Creek. Impairment would include: (i) the irreversible modification of geological forms or vegetation; the destruction or removal of structures wherever the geologic forms, vegetation or structures are significant to the scenic quality of an identified resource; and (ii) the addition of structures which, because of siting or scale, will reduce identified views or which because of scale, form, or materials will diminish the scenic quality of the coast; and (3) glare from excessive light.

3.1 Protect and improve visual quality throughout the waterfront area.

Enhance existing scenic characteristics by minimizing introduction of discordant features.

The following guidelines will be applied in reviewing actions which may affect scenic quality:

1. siting and imposition of height limitations and/or massing on structures to maintain the scenic quality of the shoreline and to retain views to and from the shore;
2. clustering or orienting structures to retain views and save open space;
3. removing deteriorated elements from the coastal landscape, such as those identified in Section II, "Underutilized and Deteriorated Sites";
4. maintaining or adding vegetation to provide interest, encourage the presence of wildlife, blend structures into the site, and obscure unattractive elements, except when selective clearing removes unsightly, diseased or hazardous vegetation and when selective clearing creates views of coastal waters;
5. using appropriate materials, in addition to vegetation, to screen unattractive elements;
6. using appropriate scales, forms and materials to ensure that buildings and other structures are compatible with and add interest to the landscape; and
7. restricting signage, as follows:
 - a. signs may be illuminated with a constant source that does not include flashing neon, revolving, animated or similar type signs.

- b. signs oriented towards the water shall be permitted for identification purposes only and shall not exceed twenty (20) square feet.
- c. all building-mounted and free-standing illuminated signage shall be externally lit and no "back-lit" illumination shall be permitted unless as a directional safety feature.

Restore deteriorated and remove degraded visual elements, and screen activities and views which detract from visual quality.

Preserve existing vegetation and establish new vegetation to enhance scenic quality.

Group or orient structures to preserve open space and provide visual organization.

Improve the visual quality associated with urban areas and historic maritime areas.

Anticipate and prevent impairment of dynamic landscape elements that contribute to ephemeral scenic qualities.

Recognize water-dependent uses as important additions to the visual interest of the waterfront.

Protect scenic values associated with public lands, including public trust lands and waters, and natural resources.

The Irondequoit Bay Harbor Management Plan and the LaSalle's Landing Plan are applicable when considering how to protect and enhance views and vistas identified in Section II.

3.2 Protect aesthetic values associated with the Irondequoit Bay and the surrounding wetlands.

Protect aesthetic and scenic values associated with Irondequoit Bay and the surrounding wetlands, including Penfield's eastern shoreline which remains in a natural vegetated state.

Protect views along the Great Lakes Seaway Trail National Scenic Byway, which passes through the waterfront area along Empire Blvd.

Natural Waterfront Policies

Policy 4 Minimize loss of life, structures, and natural resources from flooding and erosion.

In response to existing or perceived erosion and flood hazards, several landowners have constructed erosion protection structures. While some erosion control structures are necessary to protect development, some erosion control structures located along the shore may not be necessary for erosion protection or may cause erosion.

Erosion protection structures often contribute to erosion both on and off the site due to poor design and siting. Increased erosion, aesthetic impairments, loss of public recreational resources, loss of habitats, and water quality degradation can result from erosion protection structures. The cumulative impact of these structures can be large. Before a permit is granted to allow construction of erosion protection structures, the purpose, function, impact, and alternatives to a structure need to be carefully evaluated to determine that the structures are necessary and to avoid adverse impacts.

The natural shoreline has an inherent natural, social, and economic value that should be respected to ensure continuing benefits to the Town, State and the region. Consequently, those portions of the shoreline that are not fortified should generally remain in a natural condition to respond to coastal processes.

Development and redevelopment in hazard areas needs to be managed to reduce exposure to coastal hazards. Hardening of the shoreline is to be avoided except when alternative means, such as soft engineering alternatives, are not effective. The relocation of the use or natural methods of erosion control, such as riparian vegetation plantings, are preferred approaches to control erosion because of fewer environmental impacts than hard structures. Hard structures may be more practical to protect principal structures or areas of extensive public investment.

Barrier landforms that protect significant public investment or natural resources should be maintained. Soft structural protection methods are to be used to conform to the natural coastal processes.

As climate change is predicted to have impacts on storm frequency and severity, water levels, precipitation patterns, and ice cover, it is recognized as another significant factor in the incidence of erosion and flooding over time. As a result, climate change should be considered when projects involving substantial investments of private or public expenditures are designated.

This policy seeks to protect life, structures, and natural resources from flooding and erosion hazards throughout the waterfront area. The policy reflects State flooding and erosion regulations and provides measures for reduction of hazards and protection of resources.

The Town's flood damage prevention regulations is Local Law #1 of 2008, Flood Damage Prevention Law, which governs the location and type of construction in designated floodplains, and it is applicable to new construction and development.

The shoreline and certain areas of steep slopes along Irondequoit Bay have been designated as Coastal Erosion Hazard Areas by the New York State Department of Environmental Conservation. These areas will be protected by the Coastal Erosion Hazard Areas Act, Article 34 of the Environmental Conservation Law.

Specific standards and criteria for construction in or near steep slope areas and outside the coastal erosion hazard areas, which are regulated by D.E.C., are dependent upon the specific site conditions, including slope, soil classes and proposed activities, and are subject to regulation by the Town of Penfield. Within coastal hazard areas, new structures or substantial enlargement of existing non-conforming structures are subject to the Environmental Conservation Law, Section 505, and Article 34.

Coastal processes, including the movement of beach materials by water, and any excavation or dredging in nearshore or offshore waters which changes the supply and net flow of such materials can deprive shorelands of their natural regenerative powers. Such mining, excavation and dredging should be accomplished in a manner so as not to cause a reduction of supply, and thus an increase of erosion, to such shorelands.

4.1 Minimize losses of human life and structures from flooding and erosion hazards.

Use the following management measures, which are presented in order of priority: (1) avoid development other than water-dependent uses in coastal hazard areas; (2) locate or move development and structures as far away from hazards as practical; (3) use vegetative non-structural measures which have a reasonable probability of managing flooding and erosion, based on shoreline characteristics including exposure, geometry, and sediment composition; (4) enhance existing natural protective features and processes, and use non-structural measures which have a reasonable probability of managing erosion; (5) use hard structural erosion protection measures for control of erosion only where the above measures are not sufficient to protect the principal use, or the use is water-dependent or reinforces the role of a maritime center or a waterfront redevelopment area.

Development shall be located in areas where there is no threat to slope stability likely to cause slope failure.

Development and other actions, such as clearing of vegetation, discharging of stormwater, filling, cutting, grading, dredging, mining or excavating for any activity, including temporary or permanent access to the shoreline, and constructing erosion protection structures, such as breakwaters or seawalls, proposed for areas defined as steep slopes, and similar actions occurring on the plateaus of the slopes, shall not threaten the stability of the slope.

Mitigate the impacts of erosion control structures.

Manage development in floodplains outside of coastal hazard areas so as to avoid adverse environmental effects, to minimize the need for structural flood protection measures, and to meet Federal flood insurance program standards.

4.2 Preserve and restore natural protective features.

Development in natural protective features are subject to 6 NYCRR Part 505.8.

Development and other activities within the Coastal Erosion Hazard Areas are subject to all applicable non-conforming use laws and regulations.

The status for structures classified as non-conforming pre-existing uses will be lost, if any such structure is located within a coastal hazard area and the structure falls into non-use, are vacant, or have ceased continued use for a period of one (1) year.

Guidelines for reviewing shoreline actions with this policy are as follows:

1. Nearshore Area: These lands under water beginning at the mean low water line and extending waterward in a direction perpendicular to the shoreline to a point where mean low water depth is 15 feet or to a horizontal distance of 1,000 feet from the mean low water line, whichever is greater.

Guidelines

- a. Consider whether activity would diminish erosion protection offered by a natural protective feature in a nearshore area; and only permit where necessary construction or maintenance of navigation channels, bypassing sand around natural and manmade obstructions and artificial beach nourishment.
 - b. Clean sand or gravel of a compatible type and size is the only material which may be deposited within nearshore areas.
2. Steep Slopes: Steep slopes include all areas as indicated in the Town of Penfield's Environmental Protection Overlay Districts (EPODs), including transitional zones at the top and base of slopes containing soils with moderate to severe limitations for development and recreational use and natural protective features as defined in NYCPR Part 505 regulations, Coastal Erosion Hazard Act and local regulations.

Guidelines

- a. The construction of new buildings or structures or additions to or modifications of existing buildings or structures within steep slope areas are strictly regulated.
- b. The following activities are regulated in accordance to the Town's Zoning Code Article III-3-6, including but not limited to:
 1. Clearing of or construction of a land area.

2. Construction or placement of any sewage disposal system including individual disposal systems.
 3. Filling, cutting, or excavating operations.
 4. Discharge of stormwater and/or construction and placement of stormwater runoff systems.
- c. No regulated activity shall be undertaken unless it can be adequately demonstrated that:
1. The stable angle of repose of the soil classes found on the site has been used to determine the proper placement of structures and other development related facilities within the plateau area. Site-specific calculations of the stable angle of repose for the site were determined by a professional soil scientist or engineer using the soil classes and nomenclature contained in the Monroe County soil surveys and obtained for the site by borings as well as high intensity soil survey data provided by the applicant.
 2. The stability of soils will be maintained or increased to adequately support any construction thereon, or to support any landscaping, agricultural, or similar activities. This shall be documented by soil bearing data provided by a qualified testing laboratory or engineer and paid for by the developer.
 3. No proposed activity will cause erosion or slipping of soil, or cause sediment to be discharged into Irondequoit Bay, its wetlands or tributaries, or any stream or tributary.
 4. Plant life located on the slopes outside of the minimum area that need to be disturbed for carrying on approved activities shall not be destroyed. Plants or other acceptable ground cover shall be re-established in disturbed areas immediately upon completion of development activity so as to prevent any of the harmful effects set forth above to maintain the natural scenic characteristics of any steep slope.
 5. Access down steep slopes shall be provided with ramp slopes no greater than 1:16 and side slopes no greater than 1:3 if not terraced or otherwise structurally stabilized. Disturbed non-roadway areas shall be stabilized and adequately drained.
 6. Construction of erosion protection structures, particularly along the water side of eroding bluffs, shall be permitted to provide protection of bluff features according to the following standards:
 - i. Best Management Practices shall be employed in all unfortified areas where discharge may occur.
 - ii. All erosion protection structures should be designed and constructed according to generally accepted engineering principles found in publications of the U.S. Natural Resource Conservation Service.
 - iii. The construction, modification or restoration of erosion protection structures shall not be likely to cause any measurable increase in erosion at the development site or other locations and prevent adverse effects to natural protective features, existing erosion protection structures, and natural resources such as significant fish and wildlife habitats.
 - iv. Stormwater and drainage practices shall comply with the Stormwater Phase II regulations. Drainage of stormwater shall not cause erosion or siltation, contribute

to slope failures, pollute groundwater, or cause damage to, or flooding of property. Drainage systems shall be designed and located to ensure slope stability.

- v. Any grading, excavating or other soil disturbance conducted on a steep slope shall not direct surface water runoff over the receding edge during construction.
7. Activities in steep slope areas should result in minimal disturbance of natural vegetation to prevent increased erosion.
8. Development must adequately provide for slope stability and reduce the likelihood of slope failure.

Maximize the protective capabilities of natural protective features by: avoiding alteration or interference with shorelines in a natural condition; enhancing existing natural protective features; restoring impaired natural protective features; and managing activities to minimize interference with, limit damage to, or reverse damage which has diminished the protective capacities of the natural shoreline.

Minimize interference with natural coastal processes by: providing for natural supply and movement of unconsolidated materials; minimizing intrusion of structures into coastal waters and interference with coastal processes; and mitigating any unavoidable intrusion or interference.

4.3 Protect public lands and public trust lands and use of these lands when undertaking all erosion or flood control projects.

Avoid losses or likely losses of public trust lands or use of these lands, including public access to and along the shore, which can be reasonably attributed to or anticipated to result from erosion protection structures.

4.4 Manage navigation infrastructure to limit adverse impacts on coastal processes.

Manage navigation channels to limit adverse impacts on coastal processes by designing channel construction and maintenance to protect and enhance natural protective features and prevent destabilization of adjacent areas; and make beneficial use of suitable dredged material.

Marinas that dredge as necessary to maintain infrastructure shall be consistent with this policy and with the Harbor Management Plan and Harbor Management Law, which are appended.

Manage stabilized inlets to limit adverse impacts on coastal processes.

4.5 Ensure that expenditure of public funds for flooding and erosion control projects results in a public benefit.

Give priority in expenditure of public funds to actions which: protect public health and safety; mitigate flooding and erosion problems caused by previous human intervention; protect areas of previously existing intensive development; and protect substantial public investment in land, infrastructure, and facilities.

Expenditure of public funds must be made in accordance with existing regulations and should not be made for the exclusive purpose of protecting private development.

The following factors shall be weighed in determining whether the expenditure of public funds is merited:

1. The importance of the development or services provided to the community;
2. The danger which a proposed activity may present to both life and property;

3. The availability of alternative locations, not subject to flooding or erosion damage, for a given use; and
4. The necessity of a waterfront location for new development.

The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

This policy applies to any structures specifically designed to reduce or prevent erosion such as a groin, jetty, seawall, revetment, or breakwater. The following guidelines will be used in applying the policy to the Penfield waterfront and in evaluating an action's consistency with this policy.

1. Long term maintenance programs presented for erosion protection structures should include specifications for normal maintenance of degradable materials and the periodic replacement of removable materials.
2. All material must be durable and capable of withstanding inundation, wave impacts, weathering, ice damage and other storm effects.

The construction, modification, or restoration of erosion protection structures shall not have adverse effects on natural protective features and natural resources, such as significant fish and wildlife habitats and at the same time, shall respect the aesthetic environment.

Erosion and flooding are processes which occur naturally. There are actions, however, that increase the severity and adverse effects of those processes, causing damage to, or loss of property, and endangering human lives. These actions include: (1) the use of erosion protection structures such as groins, jetties and bulkheads, or (2) the use of impermeable docks which block the littoral transport of sediment to adjacent shorelands, thus increasing their rate of recession; (3) the failure to observe proper drainage or land restoration practices, thereby causing run-off and the erosion and weakening of shorelands.

The following additional guidelines will be used to interpret and apply this policy in the Town of Penfield:

1. The construction, modification, or restoration of erosion protection structures must not cause any measurable increase in erosion or adverse deposition at the development site or other locations.
2. Activities should result in the minimal disturbance of vegetation and promote regeneration of appropriate vegetation to prevent increased erosion problems.
3. Any grading, excavating, or other soil disturbance conducted on a steep slope must not direct surface water runoff over the receding edge during or after construction.

4.6 Consider climate change when siting and designing projects involving substantial public expenditures.

4.7 Ice management practices shall not damage significant fish and wildlife and their habitats, increase shoreline erosion or flooding.

Prior to undertaking actions required for ice management including bubbler systems, an assessment must be made of the potential effects of such actions upon the stabilization of ice in adjacent areas, production of hydro-electric power; fish and wildlife and their habitats, as identified in the LWRP Section

II and [Figure 10](#); flood levels and damage; rates of shoreline erosion damage; and natural protective features.

Following such an examination, adequate methods of avoidance or mitigation of such potential effects must be utilized if the proposed action is to be implemented.

Policy 5 Protect and improve water quality and supply.

The purpose of this policy is to protect the quality and quantity of water in the waterfront area. Quality considerations include both point source and nonpoint source pollution management. The primary quantity consideration is the maintenance of an adequate supply of potable water in the region.

Water quality protection and improvement in the region must be accomplished by the combination of managing new and remediating existing sources of pollution. In some areas with existing water quality impairments, more aggressive remediation measures will be needed.

Pursuant to the Federal Clean Water Act of 1977 (PL 95-217), the State has classified its coastal and other waters in accordance with consideration of best usage in the interest of the public, and has adopted water quality standards for each class of waters. These classifications and standards are reviewable at least every three years for possible revision or amendment, and are reviewed by the State in light of adopted Local Waterfront Revitalization Programs.

Irondequoit Bay has been classified "B" water quality. The Coordinating Committee for Irondequoit Bay is developing water quality management measures for the Bay to achieve a water quality level that is reflective of its current B classification. The intent is to achieve a quality level that will enable the widest possible recreational use while protecting important wildlife habitat. The water quality classification for Irondequoit Bay should be maintained.

Dredging often proves to be essential for waterfront revitalization and development, maintaining navigation channels at sufficient depths, pollutant removal and meeting other coastal management needs. Such dredging projects, however, may adversely affect water quality, fish and wildlife habitats, wetlands and other important coastal resources. Often these adverse effects can be minimized through careful design and timing of the dredging operation and proper siting of the dredge spoil disposal site. Dredging permits will be granted if it has been satisfactorily demonstrated that these anticipated adverse effects have been reduced to levels which satisfy State dredging permit standards set forth in regulations developed pursuant to Environmental Conservation Law (Articles 15, 24, 25, and 34), and are consistent with policies pertaining to the protection of coastal resources.

Based on the shallow conditions and environmental sensitivity found at the south end of Irondequoit Bay, existing non-conforming uses and facilities are permitted to dredge for maintenance purposes as long as all applicable policies and regulations are satisfied. Expansion of these facilities may be permitted if it can be demonstrated that minimal or no maintenance dredging is necessary to achieve expansion.

A number of factors must be considered when reviewing a proposed site for an electric generating plant or industrial facility construction. One of these factors is that the facility must not discharge any effluent that will be unduly injurious to the propagation and protection of fish and wildlife, the industrial development of the State, the public health, and public enjoyment of the receiving waters. The effects of thermal discharges on water quality and aquatic organisms must be considered by State agencies or, if applicable, a sitting board when evaluating an applicant's request to construct a new electric generating facility.

5.1 Prohibit direct or indirect discharges which would cause or contribute to contravention of water quality standards.

Prevent point source discharges into waterfront areas and avoid land and water uses which would: (1) exceed applicable effluent limitations; or (2) cause or contribute to contravention of water quality classification and use standards; or (3) materially adversely affect receiving water quality; or (4) violate a vessel waste no-discharge zone prohibition.

Ensure effective treatment of sanitary sewage and industrial discharges by maintaining efficient operation of treatment facilities, providing secondary treatment of sanitary sewage, improving nitrogen removal capacity, incorporating treatment beyond secondary for new wastewater treatment facilities, reducing demand on facilities, reducing loading of toxic materials, reducing or eliminating combined sewer overflows, and managing on-site disposal systems.

All new or expanded development expected to occur along Empire Blvd. shall be placed on public sanitary waste systems. Other sectors of the Waterfront Revitalization Area will be individually reviewed to determine the feasibility of such an approach. Alternative systems, if feasible, must be designed by licensed professional engineers, and will be reviewed by the Town and the Monroe County Health Department.

5.2 Manage land use activities and use best management practices to minimize nonpoint pollution of waterfront areas.

Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

Any development within the Town's Waterfront Revitalization Area must comply with the required Municipal Separate Storm Sewer Systems (MS4s) and the State Pollutant Discharge Elimination System (SPDES).

If buried waste is encountered during any excavation, appropriate protective measures must be taken during removal and remediation as to prevent the contamination of coastal waters.

5.3 Protect and enhance the quality of waterfront area waters.

Protect water quality based on physical factors (pH, dissolved oxygen, dissolved solids, nutrients, odor, color, and turbidity), health factors (pathogens, chemical contaminants, and toxicity), and aesthetic factors (oils, floatables, refuse, and suspended solids).

Sanitary equipment aboard a vessel must meet the applicable standards established by the appropriate federal, state and local agencies.

Minimize disturbance of streams, including their beds and banks, in order to prevent erosion of soil, increased turbidity, and irregular variation in velocity, temperature, and level of water.

Protect water quality from adverse impacts associated with excavation, fill, dredging, and disposal of dredged material consistent with State and regional dredging standards and provisions of the Irondequoit Bay Harbor Management Plan and Harbor Management Plan Law.

5.4 Limit the potential for adverse impacts of watershed development on water quality and quantity.

Protect water quality by ensuring that watershed development protects areas that provide important water quality benefits, maintains natural characteristics of drainage systems, and protects areas that are particularly susceptible to erosion and sediment loss.

Limit the impacts of individual development projects to prevent cumulative water quality impacts upon the watershed which would result in a failure to meet water quality standards.

5.5 Protect and conserve the quality and quantity of potable water.

Prevent contamination of potable waters by limiting discharges of pollutants and limiting land uses which are likely to contribute to contravention of surface and groundwater quality classifications for potable water supplies.

Limit cumulative impacts of development on groundwater recharge areas to ensure replenishment of potable groundwater supplies.

Policy 6 Protect and restore the quality and function of the ecosystem.

The ecosystem consists of physical (non-living) components, biological (living) components, and their interactions. Its physical components include environmental factors such as water, soils, geology, energy, and contaminants. The biological components include the plants, animals, and other living things in and around the shore.

Certain natural resources that are important for their contribution to the quality and biological diversity of the ecosystem have been specifically identified by the State for protection. These natural resources include regulated tidal and freshwater wetlands; designated Significant Coastal Fish and Wildlife Habitats; and rare, threatened, and endangered species. In addition to specifically identified discrete natural resources, the quality of the ecosystem also depends on more common, broadly distributed natural resources, such as the extent of forest cover, the population of overwintering songbirds, or benthic communities. These more common natural resources collectively affect the quality and biological diversity of the ecosystem.

The Irondequoit Bay and Creek Significant Coastal Fish and Wildlife Habitat, which encompasses approximately 2000 acres within the City of Rochester and the towns of Irondequoit, Webster, Brighton, Perinton and Penfield, includes the entire bay area, the emergent wetlands immediately south of the Bay and approximately seven miles upstream on Irondequoit Creek.

Any activity that degrades water quality, increases temperature or turbidity, alters water depths, or reduces flows in Irondequoit Bay or Creek would adversely affect the fish and wildlife resources of this area. Discharges of sewage or stormwater runoff containing sediments, nutrients, or chemical pollutants could adversely impact on fish and wildlife resources. Warm water species would be most sensitive during March through July, when spawning and incubation take place. Salmonids would be most sensitive during their respective spawning periods, and in the spring after hatchery-raised fish are released in the creek. Barriers to fish migration, whether physical or chemical, would have a significant effect on salmonid populations in Irondequoit Bay and Creek. Activities affecting Irondequoit Creek as far inland as Trout Creek should be evaluated for potential impacts. The fisheries resources in Irondequoit Bay could support increased recreational fishing pressure, resulting in a fishery of statewide

or greater significance. The expansion of the channel connecting Irondequoit Bay with Lake Ontario has increased access for human uses of fish and wildlife in this area. Existing areas of natural vegetation bordering Irondequoit Bay and Creek should be maintained to provide bank cover, perching sites, soil stabilization, and buffer zones.

A detailed description of the Irondequoit Bay and Creek Significant Coastal Fish and Wildlife Habitat is provided in Appendix D. Also, see the Irondequoit Bay Harbor Management Plan, in Appendix B or online at www.penfield.org.

This policy recognizes and provides for enhancement of natural resources within regionally important natural areas for which management plans have been prepared.

6.1 Protect and restore ecological quality.

Avoid significant adverse changes to the quality of the ecosystem as indicated by physical loss, degradation, or functional loss of ecological components.

Maintain values associated with natural ecological communities.

Retain and add indigenous plants.

Avoid fragmentation of natural ecological communities and maintain corridors between ecological communities. Maintain structural and functional relationships between natural ecological communities to provide for self-sustaining systems.

Avoid permanent adverse change to ecological processes.

Reduce adverse impacts of existing development when practical.

6.2 Protect and restore Significant Coastal Fish and Wildlife Habitats.

Protect Irondequoit Bay and Creek Significant Coastal Fish and Wildlife Habitats (see Section II, [Figure 10](#)) from uses or activities which would destroy habitat values or significantly impair the viability of the designated habitat beyond its tolerance range which is the ecological range of conditions that supports the species population or has the potential to support a restored population where practical.

The Irondequoit Bay and Creek habitat shall be protected, preserved, and, where practicable, restored so as to maintain its viability as a habitat.

Wherever practical, enhance or restore designated habitats so as to foster their continued existence as natural systems.

6.3 Protect and restore freshwater wetlands.

Comply with statutory and regulatory requirements of the State's wetland laws.

Comply with regulatory requirements of the Town's Environmental Protection Overlay District, Wetland Protection District Article III-3-6.

Use the following management measures, which are presented in order of priority: (1) prevent the net loss of vegetated wetlands by avoiding fill or excavation; (2) minimize adverse impacts resulting from unavoidable fill, excavation, or other activities; and (3) provide for compensatory mitigation for unavoidable adverse impacts.

Provide and maintain adequate buffers between wetlands and adjacent or nearby uses and activities to protect wetland values.

Restore freshwater wetlands wherever practical to foster their continued existence as natural systems.

6.4 Protect vulnerable fish, wildlife, and plant species, and rare ecological communities.

The Irondequoit Bay Harbor Management Plan and Penfield Harbor Management Law and supporting biological study are applicable to development within the waterfront area. These documents are appended to this LWRP and available online at www.penfield.org and in the Town Clerk's office.

6.5 Protect natural resources and associated values in identified regionally important natural areas.

In addition to Irondequoit Bay itself, there are several natural resource areas within the waterfront revitalization area that are of great importance to the region including Irondequoit Creek, Lucien Morin Park, and the woodlots in and adjacent to Abraham Lincoln Park. These areas not only help to stabilize steep slopes, treat stormwater, and form habitats but they also provide recreational opportunities for residents and visitors such as canoeing, kayaking, hiking, bird watching, and fishing.

Protect natural resources comprising a regionally important natural area. Focus actions on protection, restoration, and management of natural resources.

Protect and enhance activities associated with sustainable human use or appreciation of natural resources.

Provide for achievement of a net increase in wetlands when practical opportunities exist to create new or restore former freshwater wetlands.

Adhere to management plans prepared for regionally important natural areas.

Policy 7 Protect and improve air quality in the waterfront area.

This policy provides for protection of the waterfront area from air pollution generated within the waterfront area or from outside the waterfront area which adversely affects air quality.

In Penfield, land uses within the coastal area are restricted to residential, recreational and commercial, all of which are unlikely to impact air quality. The New York State Department of Environmental Conservation has jurisdiction over the monitoring of air quality to ensure that the provisions of the Clean Air Act are met.

7.1 Control or abate existing and prevent new air pollution.

Limit pollution resulting from new or existing stationary air contamination sources consistent with applicable standards, plans, and requirements.

Recycle or salvage air contaminants using best available air cleaning technologies.

Limit pollution resulting from vehicle or vessel movement or operation.

Limit actions which directly or indirectly change transportation uses or operation resulting in increased pollution.

Restrict emissions or air contaminants to the outdoor atmosphere which are potentially injurious or unreasonably interfere with enjoyment of life or property.

Limit new facility or stationary source emissions of acid deposition precursors consistent with achieving final control target levels for wet sulfur deposition in sensitive receptor areas, and meeting New Source Performance Standards for the emissions of oxides of nitrogen.

7.2 Limit discharges of atmospheric radioactive material to a level that is as low as practicable.

7.3 Limit sources of atmospheric deposition of pollutants to the waterway, particularly from nitrogen sources.

Policy 8 Minimize environmental degradation in the waterfront area from solid waste and hazardous substances and wastes.

The intent of this policy is to protect people from sources of contamination and to protect waterfront resources from degradation through proper control and management of wastes and hazardous materials. In addition, this policy is intended to promote the expeditious remediation and reclamation of hazardous waste sites to permit redevelopment. Attention is also required to identify and address sources of soil and water contamination resulting from landfill and hazardous waste sites and in-place sediment contamination.

The definitions of terms "solid wastes" and "solid wastes management facilities" are taken from New York's Solid Waste Management Act (Environmental Conservation Law, Article 27). Solid wastes include sludge from air or water pollution control facilities, demolition and construction debris and industrial and commercial wastes.

Hazardous wastes are unwanted by-products of manufacturing processes and are generally characterized as being flammable, corrosive, reactive, or toxic. More specifically, hazardous waste is defined in Environmental Conservation Law (Section 27-0901[3]) as "waste or combination of wastes which because of its quantity, concentration, or physical, chemical or infectious characteristics may: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed, transported or otherwise managed."

Examples of solid waste management facilities include resource recovery facilities, sanitary landfills and solid waste reduction facilities. Although a fundamental problem associated with the disposal and treatment of solid wastes is the contamination of water resources, other related problems may include: filling of wetlands and littoral areas; atmospheric loading; and degradation of scenic resources.

There are currently no active transport, storage, treatment and/or disposal of hazardous wastes within Penfield's coastal area. There are no sites in Penfield's coastal areas listed in Inactive Hazardous Waste Disposal Sites in New York State, August, 2009. No activity should be permitted within the coastal area if the environmental degradation associated with hazardous waste (as defined in Environmental Conservation Law, Article 27) produced by any such activity could not be minimized, to the greatest extent practicable.

There are several suspected and confirmed waste disposal sites identified in Section II and [Figure 13](#). Some of these sites contain construction debris and other hazardous materials. The New York State Brownfield Opportunity Area Program (BOA) should be utilized to assess existing conditions of sites, evaluate necessary remediation, and plan for reuse.

The Monroe County Development Review Committee requests site specific soil surveys when a proposal is reviewed on or near a suspected or confirmed waste disposal site.

8.1 Manage solid waste to protect public health and control pollution.

Plan for proper and effective solid waste disposal prior to undertaking major development or activities generating solid wastes.

Manage solid waste by reducing the amount of solid waste generated, reusing or recycling material, and using land burial or other approved methods to dispose of solid waste that is not otherwise being reused or recycled.

Prevent the discharge of solid wastes into the environment by using proper handling, management, and transportation practices.

Operate solid waste management facilities to prevent or reduce water, air, and noise pollution and other conditions harmful to the public health.

8.2 Manage hazardous wastes to protect public health and control pollution.

Manage hazardous waste in accordance with the following priorities: (1) eliminate or reduce generation of hazardous wastes to the maximum extent practical; (2) recover, reuse, or recycle remaining hazardous wastes to the maximum extent practical; (3) use detoxification, treatment, or destruction technologies to dispose of hazardous wastes that cannot be reduced, recovered, reused, or recycled; (4) use land disposal as a last resort.

Ensure maximum public safety through proper management of industrial hazardous waste treatment, storage, and disposal.

Remediate inactive hazardous waste disposal sites.

8.3 Protect the environment from degradation due to toxic pollutants and substances hazardous to the environment and public health.

Prevent release of toxic pollutants or substances hazardous to the environment that would have a deleterious effect on fish and wildlife resources.

Prevent environmental degradation due to persistent toxic pollutants by: limiting discharge of bio-accumulative substances, avoiding re-suspension of toxic pollutants and hazardous substances and wastes, and avoiding re-entry of bio-accumulative substances into the food chain from existing sources.

Prevent and control environmental pollution due to radioactive materials.

Protect public health, public and private property, and fish and wildlife from inappropriate use of pesticides.

Take appropriate action to correct all unregulated releases of substances hazardous to the environment.

8.4 Prevent and remediate discharge of petroleum products.

Have adequate plans for prevention and control of petroleum discharges in place at any major petroleum-related facility.

Prevent discharges of petroleum products by following approved handling and storage, and facility design and maintenance principles.

Clean up and remove any petroleum discharge, giving first priority to minimizing environmental damage.

- 8.5 Transport and store solid waste and hazardous substances and waste in a manner which protects the safety, well-being, and general welfare of the public; the environmental resources of the State; and the continued use of transportation facilities.**
- 8.6 Site solid and hazardous substances and waste facilities to avoid potential degradation of waterfront resources.**

Public Waterfront Policies

Policy 9 Provide for public access to, and recreational use of, the waterway, public lands, and public resources of the waterfront area.

While physical public access to Penfield's shoreline is limited due to environmentally sensitive areas, such as steep slopes and wetlands, a major goal of the LWRP is to provide increased public access and recreational use of the Irondequoit Bay and Creek, where appropriate. To help meet this goal, the Town has established the following objectives:

- All development and redevelopment shall provide public access to the water in a manner consistent with the LaSalle's Landing District (LLD), as well as this policy and sub-policies below.
- All improvements to Empire Boulevard shall include traffic calming and shall improve pedestrian and bicyclist access / circulation across and along the roadway.

The Town has made great strides in improving public access to the water through the development of the LaSalle's Landing Park at the south end of the Bay. In addition, Monroe County Parks Department has improved trails in Abraham Lincoln Park and Ellison Park and plans to make additional improvements to the parks that will improve access. The Town should continue to seek opportunities to improve public access by working with private land owners to develop trails, promenades, and other facilities along the waterfront and allow the public to utilize those facilities.

This policy addresses the issue of balancing the level of access to a resource against its capacity and the necessity for its protection. Because much of Penfield's bay shoreline has long been considered environmentally sensitive, there has been limited public recreational development in the area. The 2009 Ellison Master Plan does, however, call for public access to the wetlands in an environmentally sound manner so that the balance mandated by this policy would be achieved. The 1997 LaSalle's Landing Plan and the 2003 Irondequoit Bay Harbor Management Plan both recognize balancing public access with the environmental sensitivity of the area and this policy supports these Plans. See those plans online at www.penfield.org for further details.

9.1 Promote appropriate and adequate physical public access and recreation throughout the waterfront area.

Provide convenient, well-defined, physical public access to and along the shoreline for water-related recreation (See Section 4 - Proposed Land Use and Projects).

Provide a level and type of public access and recreational use that takes into account proximity to population centers, public demand, natural resource sensitivity, accessibility, compatibility with on-site and adjacent land uses, and needs of special groups.

Protect and maintain existing public access and water-related recreation.

Provide additional physical public access and recreation facilities at public sites, such as LaSalle's Landing Park, Abraham Lincoln Park, and Ellison Park.

Provide physical access linkages throughout the waterfront, such as the Irondequoit Creek Valley multi-use trail.

Include physical public access and/or water-related recreation facilities as part of development whenever development or activities are likely to limit the public's use and enjoyment of public waterfront lands and waters.

Provide incentives to private development which provide public access and/or water-related recreation facilities.

Restrict public access and water-related recreation on public lands only where incompatible with public safety and protection of natural resources.

Ensure access for the general public at locations where State or Federal funds are used to acquire, develop, or improve parkland.

The level of access to be provided should not cause a degree of use which would exceed the physical capability of the resource or facility.

9.2 Provide public visual access from public lands to waterfront lands and waters or open space at all sites where physically practical.

Protect existing scenic views along the Irondequoit Bay waterfront.

Avoid loss of existing visual access by limiting physical blockage by development or activities. Minimize adverse impact on visual access.

Mitigate loss of visual access by providing for on-site visual access or additional and comparable visual access off-site.

Increase visual access wherever practical.

9.3 Preserve the public interest in and use of lands and waters held in public trust by the State, and other public entities.

Limit grants, easements, permits, or lesser interests in lands underwater to those instances where they are consistent with the public interest in the use of public trust lands.

Determine ownership, riparian interest, or other legal right prior to approving private use of public trust lands under water.

Limit grants, including conversion grants, in fee of underwater lands to exceptional circumstances.

Reserve such interests or attach such conditions to preserve the public interest in use of underwater lands and waterways which will be adequate to preserve public access, recreation opportunities, and other public trust purposes.

Evaluate opportunities to re-establish public trust interests in existing grants which are not used in accordance with the terms of the grant, or are in violation of the terms of the lease, or where there are significant limitations on public benefits resulting from the public trust doctrine.

9.4 Assure public access to public trust lands and navigable waters.

Ensure that the public interest in access below ordinary high water and to navigable waters is maintained.

Consider obstructions to public access when necessary for the operation of water-dependent uses and their facilities.

Permit interference with public access for riparian non-water-dependent uses in order to gain the minimum necessary reasonable access to navigable waters.

Use the following factors in determining the minimum access necessary: the size, use, and nature of the water body, the uses of the adjacent waters by the public, the traditional means of access used by surrounding similar uses, and whether alternative means to gain access are available.

9.5 Improve and expand the recreational use of fish resources in Irondequoit Bay.

Fish and wildlife resources on Irondequoit Bay are highly important to the Town and the general public, however, opportunities for access by the public are limited and public water related recreational facilities and resources are either limited or undeveloped. Opportunities for expanded access to fish and wildlife resources will be enhanced through proposed actions such as public access improvements to LaSalle's Landing Park, Lucien Morin Park, and Abraham Lincoln park (formerly Irondequoit Bay East Park), and redevelopment of the Empire Blvd. area. Section IV includes a discussion of all potential sites where access to fish and wildlife resources may be expanded.

Recreational uses of coastal fish and wildlife resources include consumptive uses, such as fishing, and non-consumptive uses, such as wildlife photography, bird watching, and nature study.

Any efforts to increase recreational use of these resources will be made in a manner which ensures the protection of fish and wildlife resources in marine and freshwater coastal areas and which takes into consideration other activities dependent on these resources. Also, such efforts must be done in accordance with existing State law and in keeping with sound resource management considerations. Such considerations include biology of the species, carrying capacity of the resource, public demand, costs and available technology.

The following additional guidelines should be considered by agencies as they determine the consistency of their proposed action with the above policy:

1. Consideration should be made by agencies as to whether an action will impede existing or future utilization of the State's recreational fish and wildlife resources.
2. Efforts to increase access to the recreational fish and wildlife resource should not lead to overutilization of that resource or cause impairment of the habitat. Sometimes such impairment can be more subtle than actual physical damage to the habitat. For example, increased human presence can deter animals from using the habitat area.
3. The impacts of increasing access to recreational fish and wildlife resources should be determined on a case by case basis, consulting the significant habitat narrative and/or conferring with a trained fish and wildlife biologist.
4. Any public or private sector initiatives to supplement existing stocks (e.g., stocking a stream with fish reared in a hatchery) or to develop new resources (e.g., creating private fee hunting or fee fishing facilities) must be done in accord with existing State law.

Working Waterfront Policies

Policy 10 Protect water-dependent and water-enhanced uses and promote siting of these uses in suitable locations.

The intent of this policy is to protect existing water-dependent commercial and recreational uses and to promote future siting of water-dependent uses at suitable locations. It is also the intent of this policy to enhance the economic viability of water-dependent uses by ensuring adequate infrastructure for water-dependent uses and their efficient operation.

There is a finite amount of waterfront space in the Town suitable for development purposes. Pressures for development around Irondequoit Bay are increasing dramatically because of its accessibility to Rochester, its natural beauty, and the opening of Irondequoit Bay to Lake Ontario. Much of the area, however, is a delicate natural resource. Development pressures as well as pressures for public access must, therefore, be successfully balanced against environmental controls.

In addition to water dependent uses, uses which are enhanced by a waterfront location should be encouraged to locate along the shore. A water enhanced use is defined as a use that has no critical dependence on obtaining a waterfront location, but the profitability of the use and/or the enjoyment level of the users would be increased significantly if the use were adjacent to, or had visual access to, the waterfront. Due to the environmental conditions at the south end of the Bay, water enhanced uses should be accommodated along the shoreline where they are compatible with surrounding development and do not displace or interfere with existing water-dependent uses. These uses should also be designed to welcome the public. Depending on their relationship to the water, restaurants, motels, hotels, and stores, shops or boutiques may be considered water enhanced.

If there is no immediate demand for a water dependent use in a given area but a future demand is reasonably foreseeable, temporary non-water dependent uses should be considered preferable to a non-water dependent use which involves an irreversible or nearly irreversible commitment of land. Parking lots, passive recreational facilities, outdoor storage areas, and nonpermanent structures are uses or facilities which would likely be considered as "temporary" non-water dependent uses.

Water-dependent uses are vital to the economic health of the region and are identified in Section 2.

10.1 Protect existing water-dependent uses.

Avoid actions which would displace, adversely impact, or interfere with existing water-dependent uses unless the water-dependent use is causing or will cause adverse impacts on coastal uses and resources.

Pre-existing non-conforming water dependent uses, such as marinas, will be allowed to continue to operate. However, they will not be allowed to expand unless it is demonstrated that there is adequate water depth that mitigates the need for maintenance dredging, there is adequate land side support, does not cause any adverse impacts to coastal uses and resources, the expansion is in the public interest and significantly improves public access to the water.

Public funds shall not be expended to promote uses that are not water-dependent or water-enhanced except for public waterfront recreational facilities.

10.2 Promote the LaSalle's Landing District as the most suitable location for water-dependent uses.

Ensure that public actions enable LaSalle's Landing District to continue to function as a center for water-dependent uses.

Protect and enhance the economic, physical, cultural, and environmental attributes which support the LaSalle's Landing District.

New water-dependent uses are encouraged to locate within the LaSalle's Landing District.

In the actual siting of water dependent or enhanced uses consideration should be given to the following factors:

1. The adequacy of infrastructure (e.g. public sewers, public water lines, power supply) to support water-dependent or water-enhanced uses;
2. The compatibility of water-dependent or water-enhanced uses with adjacent uses: Water-dependent or water-enhanced uses should be located so that they augment, or at least do not detract from, the surrounding community. Nearby residential areas should be protected from odors, noise and traffic.
3. The protection of water, soils, vegetation, and habitats from adverse impacts.

10.3 Allow for development of new water-dependent uses outside of the maritime center.

The only maritime center within the Penfield waterfront revitalization area is the LaSalle's Landing area located at the south end of Irondequoit Bay.

New water-dependent uses may be appropriate outside the maritime center if the use: (1) should not be located in a maritime center due to the lack of suitable sites; or (2) has unique locational requirements that necessitate its location outside maritime centers; or (3) would adversely impact the functioning and character of the maritime center if located within the maritime center; or (4) is of a small scale and has a principal purpose of providing access to the waterway.

Private development actions will be reviewed for their accommodation of waterfront features: e.g., restaurants with visual and shoreline access, residential development with recreation easements, waterfront walkways and trails.

10.4 Improve the economic viability of water-dependent uses by allowing for non-water-dependent accessory and multiple uses, particularly water-enhanced and maritime support services.

Due to the environmental sensitivity of most of the waterfront area in Penfield, opportunities for water-dependent uses will be limited. However, emphasis shall be placed on mixed-use, water-enhanced uses and maritime support services located in the uplands.

10.5 Minimize adverse impacts of new and expanding water-dependent uses, provide for their safe operation, and maintain regionally important uses.

Consider new and/or the expansion of existing marinas, yacht clubs, boat yards, and other boating facilities where there is: adequate upland for support facilities and services; sufficient waterside and landside access; appropriate nearshore depth to minimize dredging; suitable water quality classification; minimization of effects on wetlands and other habitats; and adequate water circulation.

Penfield's waterfront area along the north side of Empire Boulevard is shallow and environmentally sensitive. In order to be considered, all proposed marinas or expansion of the existing marina or boat launching facilities within the LaSalle's Landing District must significantly improve public access to the water independent from the marina, docking and/or boat launch facilities, and any significant adverse environmental impacts created should be mitigated.

10.6 Provide sufficient infrastructure for water-dependent uses.

Allow for the maintenance of existing fairways and at channel depth consistent with the needs of water-dependent uses.

Use suitable dredged material for beach nourishment, dune reconstruction, or other beneficial uses.

Avoid open water disposal of dredged material when opportunities for beneficial reuse of material exist.

Avoid shore and water surface uses which would impede navigation.

Provide for services and facilities to facilitate existing commercial and recreational navigation.

Foster water transport for people.

10.7 Promote efficient use of the Irondequoit Bay surface waters.

Limit congestion of harbor waters, conflict among uses, foster navigational safety, and minimize obstructions in the waterway to reduce potential hazards to navigation.

Any increase or additional use of waterway, if such an increase or addition poses a public safety hazard, must be mitigated.

Avoid intrusions or encroachments upon navigation channels and other identified vessel use areas.

10.8 Water-dependent and water-enhanced recreation will be encouraged and facilitated.

In Penfield, the preferable water-dependent and enhanced recreational uses are: small scale boating and fishing facilities, trails, picnic areas, scenic overlooks and passive recreational areas that take advantage of coastal scenery. These improvements should only be made if they would be consistent with the preservation and enhancement of the Town's wetlands, steep slope areas, scenic areas and historic resources.

Prior to taking action relative to development, agencies should consult with the State Office of Parks, Recreation, and Historic Preservation, and with the Town to determine appropriate recreation uses.

Appropriate recreation uses (such as trails, walkways, sitting areas, etc.) shall be provided at the expense of the project sponsor.

Improvements to Empire Boulevard shall be designed in a manner to accommodate bicyclists and pedestrians throughout the LaSalle's Landing District.

In determining whether compelling reasons exist which would make recreation inadvisable as a multiple use, public safety should reflect recognition that some risk is acceptable in the use of recreation facilities.

Promote access for water-related recreation within private developments along the Irondequoit Bay shore zone.

Many public and private developments present practical opportunities for providing recreation facilities as an additional use of the site or facility. Therefore, whenever developments are located along the shore, they should, to the fullest extent permitted by existing law, provide for some form of water-related recreation use unless there are compelling reasons why any form of such recreation would not be compatible with the development or would not be compatible with the sensitive nature of the environment; and a reasonable demand for public use cannot be foreseen.

Whenever a proposed development would be consistent with LWRP policies and the development could, through the provision of recreation and other multiple uses, significantly increase public use of the shore, then such development should be encouraged to locate adjacent to the shore.

Policy 11 Promote sustainable use of living aquatic resources.

Living marine resources play an important role in the social and economic well-being of the people of waterfront communities. Recreational uses of living aquatic resources constitute an important contribution to the economy of the region and the State. Recreational fishing on Irondequoit Bay and Creek, by local residents and visitors, not only provides a food source for the people that fish but also provides an economic benefit to many local businesses.

Continued use of living resources depends on maintaining long-term health and abundance of aquatic fisheries resources and their habitats, and on ensuring that the resources are sustained in usable abundance and diversity for future generations. This requires the State's active management of aquatic fisheries, protection and conservation of habitat, restoration of habitats in areas where they have been degraded, and maintenance of water quality at a level that will foster occurrence and abundance of living aquatic resources. Allocation and use of the available resources must: (1) be consistent with the restoration and maintenance of healthy stocks and habitats, and (2) maximize the benefits of resource use so as to provide valuable recreational experiences and viable business opportunities for commercial and recreational fisheries.

11.1 Ensure the long-term maintenance and health of living aquatic resources.

Ensure that commercial and recreational uses of living aquatic resources are managed in a manner that: results in sustained useable abundance and diversity of the aquatic resource; does not interfere with population and habitat maintenance and restoration efforts; uses best available scientific information in managing the resources; and minimizes waste and reduces discard mortality of fishery resources.

Ensure that the management of the State's trans-boundary and migratory species is consistent with interstate, State-Federal, and inter-jurisdictional management plans.

Protect, manage, and restore sustainable populations of indigenous fish, wildlife species, and other living aquatic resources.

Foster occurrence and abundance of aquatic resources by protecting spawning grounds and other important habitat areas.

11.2 Provide for commercial and recreational use of aquatic resources.

Maximize the benefits of aquatic resource use so as to provide a valuable recreational resource experience and viable business opportunities for commercial and recreational fisheries.

Protect the public health and the marketability of aquatic and fishery resources by maintaining and improving water quality.

11.3 Promote recreational use of aquatic resources.

Provide opportunities for recreational use of aquatic resources.

Provide adequate infrastructure to meet recreational needs, including appropriate fishing access, dockage, parking, and livery services.

Promote commercial charter, party boat, and non-motorized boating businesses in the LaSalle's Landing District.

Policy 12 Protect agricultural lands.

There are no agricultural lands within the waterfront area.

Policy 13 Promote appropriate use, siting, and development of energy and mineral resources and associated infrastructure.

In dealing with energy problems, the first order of preference is the conservation of energy. Energy efficiency in transportation and site design, and efficiency in energy generation are the best means for reducing energy demands. Reduced demand for energy reduces the need for construction of new facilities that may have adverse impacts on waterfront resources.

In addition to the impacts of construction of new energy generating facilities, the potential impacts of oil and gas extraction and storage and mineral extraction must be considered. In particular are the potential adverse impacts of mining activities on aquifers.

In consultation with the Town of Penfield, the Department of State will comment on the State's energy policies and planning reports as may exist; present testimony for the record during relevant proceedings under State law; and use the State SEQR and DOS regulations to ensure that decisions on other proposed energy facilities (other than those certified under the Public Service Law) which would impact the waterfront area are made consistent with the policies and purposes of this Local Waterfront Revitalization Program.

13.1 Conserve energy resources.

Promote and maintain energy efficient modes of transportation, including mass transit and alternative forms of transportation.

Plan and construct sites using energy efficient design.

Improve energy generating efficiency through design upgrades of existing facilities.

13.2 Promote alternative energy sources that are self-sustaining, including solar and wind powered energy generation.

13.3 Ensure maximum efficiency and minimum adverse environmental impact when siting major energy generating facilities.

Only site major energy generating facilities in a waterfront location where a clear and significant public benefit is established.

Site major energy generating facilities close to load centers to achieve maximum transmission efficiency.

In siting such facilities, avoid adverse impacts on waterfront resources, including but not limited to, avian and bat populations, scenic views, public recreational resources, natural resources, adjacent land uses, and coastal processes.

Site and construct new energy generating and transmission facilities so they do not adversely affect natural, scenic, and economic waterfront resources.

13.4 Minimize adverse impacts from fuel storage facilities.

13.5 Minimize adverse impacts associated with mineral extraction.

Commercial sand and aggregate mining is generally presumed to be an inappropriate use in the waterfront area.

Preserve topsoil and overburden using appropriate site preparation techniques and subsequent site reclamation plans.

C. Definitions

Selected terms used in the policies are defined as follows:

Accretion means the gradual and imperceptible accumulation of sand, gravel, or similar material deposited by natural action of water on the shore. This may result from a deposit of such material upon the shore, or by a recession of the water from the shore.

Agricultural land means land used for agricultural production, or used as part of a farm, or having the potential to be used for agricultural production. Agricultural lands include lands in Agricultural Districts, as created under Article 25-AA of the Agricultural and Markets Law; lands comprised of soils classified in soil groups 1, 2, 3, or 4 according to the New York State Department of Agriculture and Markets Land **Classification System**; or lands used in agricultural production, as defined in Article 25-AA of the Agriculture and Markets Law.

Aquaculture means the farming of aquatic organisms, including fish, mollusks, crustaceans, and aquatic plants. Farming implies some form of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc. Farming also implies ownership of the stock being cultured.

Best management practices means methods, measures, or practices determined to be the most practical and effective in preventing or reducing the amount of pollutants generated by nonpoint sources to a level compatible with water quality standards established pursuant to section 17-0301 of the Environmental Conservation Law. Best management practices include, but are not limited to, structural and non-structural controls, and operation and maintenance procedures. Best management practices can be applied before, during, or after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters.

Boating facility means a business or accessory use that provides docking for boats and encompasses 4,000 square feet or greater of surface waters, as measured by the outermost perimeter of the dock, and is designed to accommodate six (6) or more boats.

Coastal Barrier Resource Area means any one of the designated and mapped areas under the Coastal Barrier Resources Act of 1982, (P.L. 97-348), and any areas designated and mapped under the Coastal Barrier Improvement Act of 1990 (P.L. 101-591), as administered by the U.S. Fish and Wildlife Service, and any future designations that may occur through amendments to these laws.

Coastal Hazard Area means any coastal area included within an Erosion Hazard Area designated by the New York State Department of Environmental Conservation pursuant to the Coastal Erosion Hazard Areas Act of 1981 (Article 34 of the Environmental Conservation Law), and any coastal area included within a V-zone as designated on Flood Insurance Rate Maps prepared by the Federal Emergency

Management Agency pursuant to the National Flood Insurance Act of 1968 (P.L. 90-448) and the Flood Disaster Protection Act of 1973 (P.L. 93-234).

Development, other than existing development, means any construction or other activity which materially changes the use, intensity of use, or appearance of land or a structure including any activity which may have a direct and significant impact on coastal waters. Development shall not include ordinary repairs or maintenance or interior alterations to existing structures or traditional agricultural practices. The term shall include division of land into lots, parcels, or sites.

Historic resources means those structures, landscapes, districts, areas or sites, or underwater structures or artifacts which are listed or designated as follows: any historic resource in a Federal or State park established, solely or in part, in order to protect and preserve the resource; any resource on, nominated to be on, or determined eligible to be on the National or State Register of Historic Places; any cultural resource managed by the State Nature and Historic Preserve Trust or the State Natural Heritage Trust; any archaeological resource which is on the inventories of archaeological sites maintained by the Department of Education or the Office of Parks, Recreation, and Historic Preservation; any resource which is a significant component of a Heritage Area; any locally designated historic or archaeological resources protected by a local law or ordinance.

Maritime center means a discrete portion or area of a harbor or bay that is developed with, and contains concentrations of water-dependent commercial and industrial uses or essential support facilities. The harbor or bay area is a center for waterborne commerce, recreation, or other water-dependent business activity and, as such, is an important component of the regional transportation system. A maritime center is characterized by: sheltered and suitable hydrologic conditions; land- and water-based infrastructure, essential for the operation of water-dependent commercial and industrial uses, extant or easily provided; physical conditions necessary to meet the siting and operational requirements of water-dependent uses; close proximity to central business districts; and limited high value natural resources.

Maritime support services mean industrial, commercial, or retail uses which provide necessary goods and services to water-dependent businesses, thus enabling these businesses to operate in an efficient and economically viable manner.

Native or indigenous stock means fish, shellfish, and crustaceans originating in and being produced, growing, living, or occurring naturally in the coastal waters.

Natural protective features means a nearshore area, beach, bluff, primary dune, secondary dune, or wetland, and the vegetation thereon.

Public trust lands are those lands below navigable waters, with the upper boundary normally being the mean high water line, or otherwise determined by local custom and practice. Public trust lands, waters, and living resources are held in trust by the State or by the trustees of individual towns for the people to use for walking, fishing, commerce, navigation, and other recognized uses of public trust lands.

Traditional waterfront communities means communities which historically have contained concentrations of water-dependent businesses; possess a distinctive character; and serve as a focal points for commercial, recreational, and cultural activities within the region.

Vulnerable fish and wildlife species means those listed in 6 NYCRR Part 182.5 as Endangered Species, Threatened Species, and Special Concern Species.

Vulnerable plant species means those listed in 6 NYCRR Part 193.3 as Endangered Species, Threatened Species, Exploitably Vulnerable Species, and Rare Species.

Water-dependent use means a business or other activity which can only be conducted in, on, over, or adjacent to a water body because such activity requires direct access to that water body, and which involves, as an integral part of such activity, the use of the water.

Water-enhanced use means a use or activity which does not require a location adjacent to coastal waters, but whose location on the waterfront adds to the public use and enjoyment of the water's edge. Water-enhanced uses are primarily recreational, cultural, retail, or entertainment uses.

Waterfront Redevelopment Area is a waterfront area which is part of or near a business district and contains blighted or underutilized properties which are adequate in size to accommodate significant redevelopment of regional or statewide benefit. The following factors shall be considered in identification of waterfront redevelopment areas: (1) evidence of community commitment and initiative; (2) participation in the Local Waterfront Revitalization Program; (3) adequacy of local land and water use regulations; (4) adequacy of infrastructure; (4) opportunities for local and regional economic growth; and (5) opportunities for improved public access, environmental quality, and creation of local activity centers.

SECTION 4: PROPOSED LAND AND WATER USES AND PROJECTS

In order to determine which projects and uses were most appropriate for Penfield's waterfront area, the Town identified general land use areas within its LWRP boundaries; assessed its various needs; and considered both the development potential and constraints of several waterfront sites. Concurrently, the Town evaluated the policies which it set forth in Section III to ensure their consistency with the proposed waterfront projects and uses.

4.1. LWRP Subareas

In determining the types of projects and uses which represent the most appropriate reuse of Penfield's waterfront resources, the Town divided the area within its LWRP boundaries into three subareas, as illustrated in [Figure 14](#).

Subarea 1 – Lucien Morin Park

Subarea 2 – LaSalle's Landing

Subarea 3 - Empire Boulevard/Bay Road Corridor

Each subarea was categorized according to its development potential and land use characteristics, according to the following classifications:

- Areas of existing stable uses where significant changes in the patterns of development are unlikely to occur, or vacant land where infill development projects have been announced and are proceeding through the Town review and approval process.
- Large areas of open space or undeveloped or inappropriately developed land suitable for a variety of land uses, or suitable for land banking and/or protection.
- Areas of particular concern, which typically include specific areas where important natural or manmade resources are found, as well as those that contain incompatible uses and blighting conditions that should be removed.

Each subarea within Penfield's LWRP boundaries is briefly described and evaluated below based on these three use classifications.

A. Subarea Descriptions

Subarea 1 – Lucien Morin Park

The Wetlands subarea, which includes the area bordering Irondequoit Creek south of Empire Boulevard and north of Browncroft Boulevard, consists almost exclusively of extensive wetlands and undeveloped, heavily wooded steep slopes. Approximately 237 acres are owned by Monroe County and 227 of those are part of the Ellison Wetlands Park. Other uses which exist within this subarea include a rendering plant located adjacent to Irondequoit Creek and some low density residential development found in the vicinity of Wilbur Tract Road.

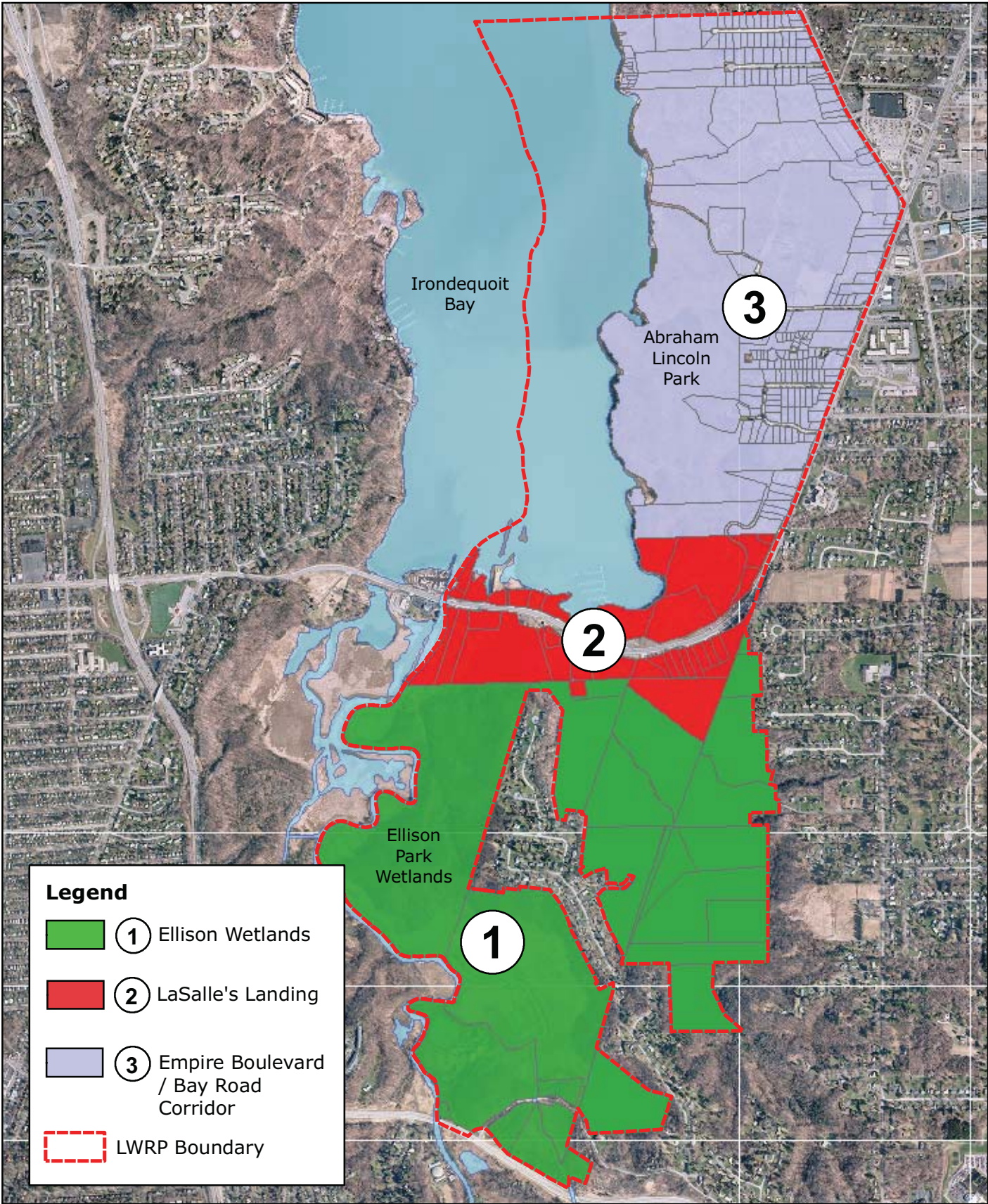


Figure 14

Sub-Areas

Town of Penfield Local Waterfront Revitalization Program



Ellison Wetlands

The Town considers Subarea 1 an area which requires special protection because of the unique and important natural resources found there. The presence of such sensitive natural features as wetlands, steep wooded slopes, and natural habitats requires that Subarea 1 remain in its present undeveloped state.

Subarea 2 - LaSalle's Landing

The shoreline consists of the area on both sides of Empire Boulevard, at the southern end of Irondequoit Bay, with Irondequoit Creek forming its western boundary. It is the only section of Penfield's LWRP area which provides direct and easy access to the Bay.

There are several current land uses, both north and south of Empire Boulevard, that are preexisting, non-conforming, established prior to the Town's current zoning map and ordinance. Some of these, which include automotive installations, tend to have a negative impact on Penfield's waterfront. Such uses are not dependent upon or enhanced by a waterfront location, and their presence is considered to be an impediment to the redevelopment of the shoreline.

There are also some uses within Subarea 2 that are regarded by the Town as appropriate for this location, but which are either not developed to their full potential or are deteriorated. The area also includes a Town-owned park which provides direct public access to the water. There is currently a boat docking facility, South Point Marina, located at the south end of the Bay, which provides seasonal docking.

In addition to the land uses discussed above, other factors have limited development and/or redevelopment within LaSalle's Landing. Steep slopes in the northeastern portion of the area and both suspected and confirmed brownfield sites have limited development and redevelopment opportunities. In addition, the lack of safe access to and from Empire Boulevard is also an issue that needs to be addressed.



LaSalle's Landing is seen by the Town as the only area within the Waterfront Revitalization Area that possesses the potential for providing greater access to and use of Irondequoit Bay, as well as for stimulating the local economy through the development of uses dependent upon or enhanced by a waterfront location. For these reasons, Subarea 2 is considered by Penfield to be its prime waterfront opportunity site and the one which requires the most Town involvement to ensure that appropriate redevelopment occurs in a manner which will realize the area's full potential.

Banners have helped to establish identity at LaSalle's Landing.



Sage Harbor, a senior lifestyle community on Kidd Castle Way, is just north of the Bayview Y. It is representative of just one of the many uses within Subarea 3

Subarea 3 - Empire Boulevard/Bay Road Corridor

The Empire Boulevard/Bay Road Corridor is located northwest of LaSalle's Landing and is bordered by Irondequoit Bay on the west, the Webster town line on the north, and Bay Road, Empire Boulevard, and the northern portion of Subarea 2 on the south.

Subarea 3 is the most diverse of those found within the Waterfront Revitalization Area containing several types of residential and business land uses, most of which are located on or near Empire Boulevard and Bay Road the subarea's major arterial highways. Such uses include a community shopping center, multifamily residential projects, and a large nursing home. In addition, located west of Empire Boulevard and east of Irondequoit Bay, is a substantial amount of open space, much of which comprises Abraham Lincoln Park (formerly Bay Park East), an undeveloped County recreation facility.

Abraham Lincoln Park contains 182 acres of County owned land and is located in the southeast end of Irondequoit Bay. The site, access to which is via a poorly maintained, one lane road, is heavily wooded,

with fragile, steep slopes forming numerous gullies and small valleys and extensive sand bluff erosion. Although the park has a shoreline which extends for a distance of 6,772 feet along Irondequoit Bay, access to the water is almost nonexistent because of the steep slopes that are found at the water's edge. There are no beaches of any useable size along the shore. Also included in the park is a relatively flat area located on the plateau east of the shoreline, which was previously used by the County as a nursery. This area, unlike the remainder of the park land, lends itself to increased use by the public for recreational purposes.

The Town of Penfield's abandoned sewage treatment plant, which is accessed from Smith Road, is surrounded by Abraham Lincoln Park. The property is owned by the Town and is currently vacant. It is the intent of the Town that this property become part of the Park, and discussions were undertaken with Monroe County about transferring ownership and is looking to remediate the treatment tank. The Town will continue discussions with the County. The property would provide a great opportunity to gain public access to the northern portion of the Park. Uses could include but are not limited to a maintenance facility, trailhead, parking, and/or interpretative center.

4.2. Conditions Requiring Special Attention

Conditions and features exist within Penfield's LWRP area that will require the Town's special attention in order to achieve the policies which it has set for its waterfront. These conditions include:

- Sensitive Natural Resources
- Non-conforming Uses
- Development Pressures

A. Sensitive Natural Resources

Irondequoit Bay and the wetlands area south of Empire Boulevard and north of Browncroft Boulevard contain many unique and important natural features which are environmentally very sensitive. These natural features serve as a resource for recreation and visual beauty and constitute an integral part of complex and critical natural processes. Increasing development pressures threaten these natural features and reinforce the need for the special protection measures adopted by the Town. Some of these measures were adopted as a result of the recommendations of Penfield's 1991 Local Waterfront Revitalization Program, the Irondequoit Bay Harbor Management Plan, and supporting Biological Survey.

The natural features identified in several studies and plans for the area adjoining Irondequoit Bay, including those conducted by the technical staff of Irondequoit Bay Coordinating Committee, requiring protection from development pressures include: wetlands, steep slopes/bluffs, floodplains, erosion hazard areas, woodlots, and significant wildlife habitats. Descriptions and maps showing the location of the natural features described above have been included in Section II, Inventory and Analysis.

B. Non-conforming Uses

The existence of pre-existing, non-conforming uses within the Waterfront Revitalization Area also requires the Town's special attention if its policies for the area are to be realized. This is especially true for Subarea 2 which, as has already been noted, contains several non-conforming automotive uses. Such uses are inappropriate in a shoreline area, and their continued presence would prevent the full realization of this subarea's potential as a prime location for water-oriented uses. Incentives have therefore been incorporated into the Town's regulations to discourage the expansion of such uses in this

subarea. This area also includes a commercial marina which is also classified as a non-conforming use even though it is a water-dependent use. The non-conforming classification is due to shallow water and fish habitat areas near the south end of Irondequoit Bay.

To a lesser extent, nonconforming uses are also found in Subarea 1. Subarea 1 includes a 43.6 acre parcel containing the Baker Commodities rendering plant. This facility is currently used to convert waste fats, oils, grease, and animal byproducts to tallow. The site of the rendering plant contains significant wetlands and borders Irondequoit Creek for a distance of 2,058 feet. Although the plant site is considered by the Town to be both a pre-existing non-conforming use and underutilized, the use of the property as a rendering plant is expected to continue for the foreseeable future.

C. Development Pressure

As already noted in the Inventory and Analysis, the demand for increased use of Penfield's waterfront for water-dependent and water-enhanced uses is evidenced by the heightened interest of the private sector in developing such uses along the Bay shoreline, particularly Empire Boulevard, and the dramatic increase in waterfront land values. Several developers and current owners have held discussions with the Town regarding a variety of new and/or expanded water oriented or enhanced uses, such as restaurants, marinas, hotels, condominiums, and multiple family residential developments with waterfront amenities.

Site development constraints within Penfield's waterfront, such as shallow water depth, poor vehicular access, limited space for parking, the presence of incompatible uses, and particularly the proximity of sensitive environmental features (see above), requires the Town to apply rigorous development standards to any development proposal for this area. Also, given the very limited amount of Penfield's waterfront that is accessible, the Town has adopted legal tools needed to ensure that only water oriented uses are permitted in its waterfront.

4.3. Land Use Needs

In general, the land use plan for the Waterfront Revitalization Area is based on the policies of the Town's LWRP, which takes into account an assessment of land use needs and natural features peculiar to Penfield's waterfront. Penfield's land use needs for its waterfront area include the following:

- The preservation and enhancement of various environmentally-sensitive and/or unique areas of special concern that include such natural features as woodlots, watercourses, floodplains and erosion hazard areas, steep slopes/bluffs, beaches, scenic vistas, and fish and wildlife habitats.
- The development of appropriate uses in the vicinity of the shoreline that take advantage of their proximity to the water, enhance the visual and aesthetic qualities of the waterfront, and contribute to the Town's general economic growth.
- The enhancement of recreational opportunities provided by Irondequoit Bay and its wetlands, including: fishing, boating, swimming, and hiking, as well as more passive recreational activities.
- The protection and enhancement of existing stable residential areas.
- The development of a mixed-use area within the LaSalle's Landing area that takes maximum advantage of its waterfront location, enhances the unique ambiance of the shoreline, provides for public access to the waterfront, increases public, water-oriented recreational opportunities, and does not disturb or destroy sensitive environmental features or conditions which exists.

4.4. Land Use Definitions

Before describing the land uses and projects to be accommodated within the three subareas constituting Penfield's waterfront, land use categories and the purpose and intent of each category are described below.

A. Mixed-use

This land use classification provides for the development of a cohesive and integrated mix of appropriate water-oriented or enhanced uses within shoreline areas. Residential, commercial, and/or public open space/recreational uses could be included within such areas. The mix of uses permitted under this classification is intended to take maximum advantage of the unique assets and characteristics of a waterfront location, as well as to allow for creativity and flexibility in project design.

B. Residential

The existing single family residential areas of Penfield are developed at the density of two to three housing units per acre. Although this type of development will continue to be the predominant use in such areas, the Penfield Comprehensive Plan recommends the mixing of densities and types of dwelling units (e.g., single family, condominiums, townhouses, duplexes, etc.). When evaluating density and types of dwelling units, consideration should be given to the total area of the parcel to be developed, the retention of natural features, and the types and densities of surrounding development. Particular attention would be given to the presence of natural features which can be preserved through the clustering of housing units.

C. Conservation/Open Space/Recreation

Conservation areas, which include wetlands, floodplains, steep slopes, and stream channels, may have limited use as passive recreation areas, as long as the natural environment is not severely disturbed. Conservation areas serve important functions in the natural environment and can cause severe problems if not protected.

Open space areas include important natural features, such as woodlots, that do not require the level of protection of conservation areas. Limited development could occur in these areas, but only under very strict development controls.

Recreation areas include developed and undeveloped recreation areas, both public and private.

D. Industrial

The Baker Commodities, a rendering plant started in 1905, located along Old Browncroft Road, is the only industrial use identified within the LWRP area. It is pre-existing, non-conforming use legally operating on residentially zoned property and it is anticipated that the plant will continue to operate well into the future. As a result, this area is designated as Industrial on the Proposed Land Use Map.

4.5. Proposed Water Use

As outlined in Section 2: Inventory and Analysis, water surface use on the Bay centers around recreational boating, however other recreational activities such as fishing, water skiing, personal watercraft use, and ice skating are also popular. The 2003 Irondequoit Bay Harbor Management Plan (IBHMP) addresses the regulation and use of the water surface with the following six goals:

1. Better protect and enhance the sensitive natural areas and resources of the Bay;
2. Improve and protect water quality of Irondequoit Bay for desired uses which emphasize a healthy aquatic ecosystem;
3. Ensure that development around the Bay occurs without impacting significant resources;
4. Minimize and resolve water surface use conflicts and conflicts among all of the stakeholders of Irondequoit Bay;
5. Improve public access to diverse recreational opportunities on Irondequoit Bay; and
6. Make Irondequoit Bay an integral part of local and regional tourism development efforts.

The water surface use map, as illustrated in [Figure 7](#), was developed as part of the Water Use Plan for the IBHMP. The purpose of the water use plan is to minimize congestion, increase public safety, and fulfill other stated goals of the Harbor Management Plan. The five water surface use classifications are:

Resource Protection Areas - are established to provide protection to environmentally sensitive areas. The majority of surface water within the Town of Penfield is designated as a Resource Protection Area. Boat storage and dredging are incompatible with and are discouraged in this area. While the existing marina shall be allowed to continue to operate, it should not be allowed to expand unless the expansion significantly improves public access to the water and does not cause any adverse impacts on coastal uses and resources.

Harbor Areas - Harbor areas are to provide public access, safe refuge, transient berthing and economic development opportunity.

Navigation Ways - Navigation ways are recommended for Irondequoit Bay to ensure that travel is not limited or impacted by water surface use or improvements and to ensure safe use of the Bay. Navigation ways are proposed to delineate the Navigation Channel and private Fairways.

The **Outlet Channel** is the only navigation channel on the Bay. Fairways are unmarked navigation ways where previous dredging operations have created a channel to access marina facilities. These channels are considered pre-existing non-conforming uses. Maintenance dredging in these areas should only be considered in order to accommodate the existing use. **Near Shore Areas** - Near Shore Areas are defined in this Plan as being within 300 feet of shore and other areas described within the NYS Navigation Law. Near Shore Areas are generally appropriate for passive uses.

Open Water Areas - The remainder of the Bay not encumbered by any of the above stated designations is designated as Open Water Areas. These are areas that support active recreational use based on the following characteristics:

- Sufficient surface area;
- Adequate water depth;
- Access to Fairways and Harbor Areas; and
- Less sensitive shoreline conditions.

While the Harbor Management Plan recommends the creation of a harbormaster position to administer and enforce the Irondequoit Bay Harbor Management Plan and local laws pertaining to Irondequoit Bay, due to financial constraints this position has not been filled. Currently, the Monroe County Sheriff Department's Marine Unit conducts regular patrols of Irondequoit Bay enforcing boating regulations, performing boat safety inspections, and assisting in search, rescue and recovery operations. The U.S. Coast Guard also conducts patrols.

The full text of the Harbor Management Plan is included in an Appendix B.

4.6. Proposed Land Uses and Projects

The following description of proposed land uses and projects is intended to convey Penfield's objectives for the future use and character of its LWRP area. The land uses which are proposed are presented according to the three previously described subareas, and were arrived at through a consideration of several factors, including:

- Town LWRP policies (Section III)
- Irondequoit Bay Harbor Management Plan
- Penfield Comprehensive Plan
- Existing land use patterns
- Land use trends and demand projections
- Environmental development constraints
- Natural resources base data
- Infrastructure improvement information
- Private and public sector development plans

A. Subarea 1

Because Subarea 1 consists primarily of such environmentally sensitive features as wetlands and steep slopes, and because a significant portion of the area is in public ownership as parkland, the predominant land use of this section of Penfield's waterfront should remain open space. Also, with the possible exception of a very small amount of new, detached single family housing located on the plateaus of the steep slopes found in the area, no new development is proposed.

1. Support the Implementation of Public Access Improvements at Ellison Park and Wetlands as Outlined in the 2009 Monroe County Ellison Park Area Master Plan

The Town, however, recognizes the need for greater public access to and use of the extensive wetlands and other natural resources located in Subarea 1. The Monroe County Ellison Park Area Master Plan, a comprehensive recreation plan which includes Ellison Park and other publicly owned land in the vicinity

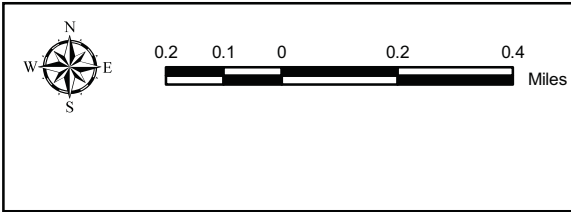
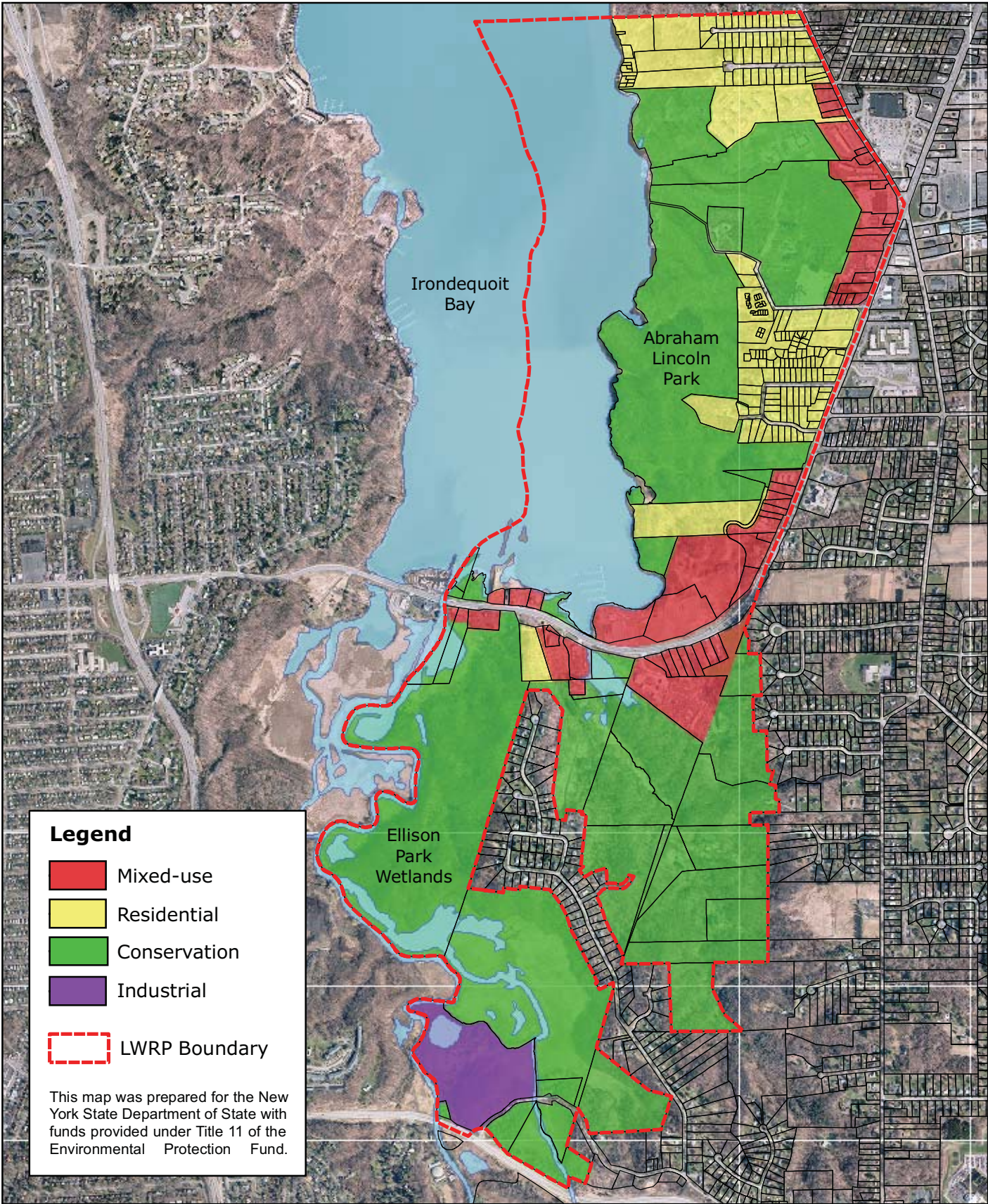


Figure 16

Proposed Land Use

Town of Penfield Local Waterfront Revitalization Program

of Irondequoit Bay, contains several recommendations which, if implemented, would achieve these objectives (See [Figure 17](#)).

Among the plan proposals is the construction of an access point from Empire Boulevard; development of an access point and parking on Browncroft Boulevard; improving parking and access on Old Browncroft Boulevard; developing a trail system, including a boardwalk into the wetland area; maintaining and extending the existing trail system; and considering a new park name to establish a unique identity and increase public awareness.

No timetable has yet been set by Monroe County for the implementation of the proposals made for the wetlands area.

2. Seek Funding for the Implementation of the Irondequoit Creek Valley Multi-Use Trail

In 2008 the Town completed the Irondequoit Creek Valley Multi-Use Trail Feasibility Assessment and Design Recommendations. The area investigated in the study includes the Irondequoit Creek Corridor from Panorama Trail, which is south of the LWRP area, to LaSalle's Landing at the south of the Bay. The northern segment of the 4.8 mile proposed trail would traverse along the Creek through the Ellison Wetlands in Subarea 1. The study recommended a trail alignment, outlined design considerations, and developed cost estimates. Based on the 2008 report, the overall cost for full construction was estimated to be \$3,510,945¹⁷.

B. Subarea 2

Subarea 2, also known as LaSalle's Landing, contains the only section of Penfield's Irondequoit Bay shoreline which is easily accessible. As a result of the 1991 LWRP and the 1997 LaSalle's Landing Development Plan, the area has been designated as the LaSalle's Landing Development District (LLD).

The LLD was designated to provide a suitable character and stable environment for the establishment and maintenance of water-oriented and/or water-enhanced uses and activities along the shore line of Irondequoit Bay and its adjacent wetlands. The LLD included a variety of permitted uses and encourages mixed-use development, which is critical in the creation of vibrant waterfront destinations. The LLD regulations are flexible and leave much discretion to the Town Board. While mixed-use is the predominant proposed land use in subarea 2, several parcels should remain as conservation areas. This includes LaSalle's Landing Park as well as the parcel located along the Bay's eastern shoreline in subarea 2, where topography and sensitive habitats prohibit development. The Town should consider arranging an agreement with the land owner to acquire the property in exchange for transferring the development potential to an adjacent parcel.

Following are several recommended projects the Town of Penfield will consider in Subarea 2.

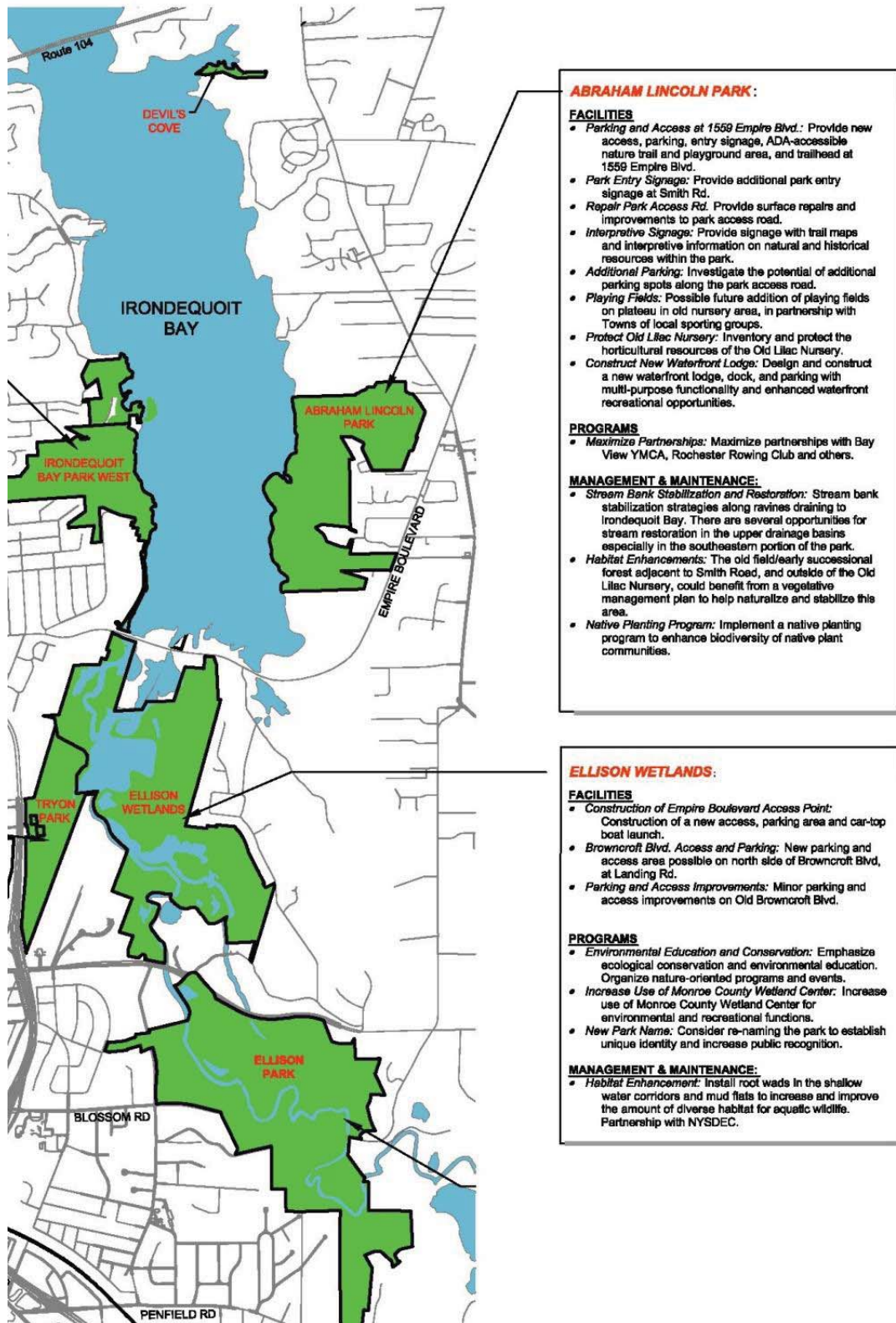
3. Utilize the Brownfield Opportunity Area Program

The Brownfield Opportunity Areas Program¹⁸ (BOA) provides municipalities with assistance to complete revitalization plans and implementation strategies for areas with brownfield sites. The Towns of Penfield and Irondequoit submitted a successful joint application for a BOA grant for the LaSalle's Landing area. The Town should utilize the program to prepare a master plan and an implementation strategy that involves the remediation of contaminated properties. The BOA should position LaSalle's Landing as a mixed-use waterfront destination and address topics such as:

¹⁷ Estimates from the 2008 Irondequoit Creek Valley Multi-use Trail Feasibility Assessment and Design Recommendations. See www.penfield.org for report.

¹⁸ For more information on the BOA program go to <http://www.dos.ny.gov/opd/>

Figure 17: Recommendations Summary from Ellison Park Area Master Plan



Source: Ellison Park Area Master Plan, prepared by EDR

- access management
- pedestrian and bicycle access/circulation
- shared parking
- design character (design guidelines)
- traffic calming on Empire Boulevard
- confirmed and suspected contaminated sites

4. Develop a Master Plan for LaSalle's Landing Park

The Town recently acquired 2.5 acres at 1140 Empire Boulevard, formerly known as the Ruoff property, which is located to the east of the existing park. A master plan should be developed for the park that includes the additional land and amenities installed as recommended in the master plan.

5. Implement Traffic Calming Measures on Empire Boulevard

The Town has been working with the New York State Department of Transportation (NYS DOT) on evaluating opportunities and developing strategies to calm traffic and improve access and safety on the Empire Boulevard corridor. The Town should continue to work closely with the NYS DOT. Improvements to the roadway should include traffic calming measures and facilitate pedestrian and bicycle access and circulation to the waterfront and along the corridor in the LaSalle's Landing area. Any future development intensity should be such that existing infrastructure can accommodate it or else the developer(s) would share in the costs of mitigation.

6. Evaluate and Update the LaSalle's Landing Development District (LLD)

Once LaSalle's Landing is part of the BOA program and a master plan is prepared, the Town should evaluate and update the LLD. Design guidelines that address site design, pedestrian and bicycle access and circulation, architectural character, parking, and public access to the water should be included in the update.

C. Subarea 3

A substantial portion of the Irondequoit Bay shoreline and plateau area in Subarea 3 is located within Abraham Lincoln Park, an extensive, undeveloped site, owned by Monroe County. Due to the fragile condition of the natural features which are found in this area (e.g., steeply wooded sand bluffs), only low impact improvements are considered appropriate.

Immediately to the north of Abraham Lincoln Park is the Bayview Y property, which contains approximately 24 acres, including about 225 feet of Bay frontage. The property consists of steep wooded slopes in its western portion, with a flat plateau area to the east. To the north of the Bayview Y and west of the two senior housing developments on Kidd Castle Way is an undeveloped parcel. This environmentally sensitive lot is all wooded and includes steep slopes. This area is identified on the Land Use map as Conservation.

The rest of Subarea 3 consists of a mix of low and high density residential and mixed use development along Empire Boulevard, which functions as one of Penfield's primary commercial areas. (Present commercial development serves Penfield and Webster.) The 2010 comprehensive plan future land use map (see [Figure 18](#)) shows commercial, medium, and low density residential development for the area.

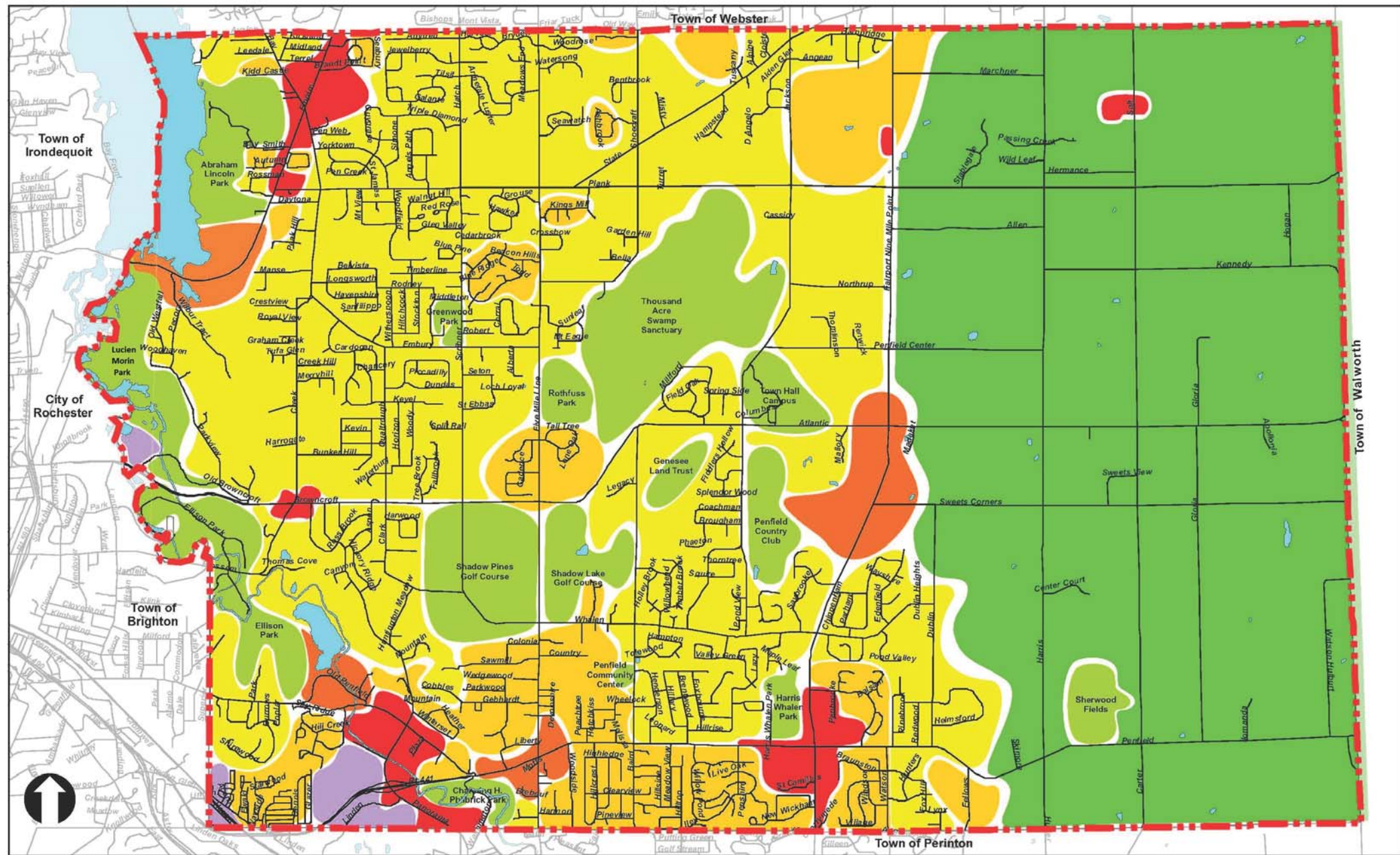


Figure 18

Legend - Future Land Use Classifications

Low Density Residential	Mixed-use
High Density Residential	Industrial
Rural Residential / Agriculture	Recreation / Sanctuary
Commercial	

April 15, 2010

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This map was prepared for the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

Future Land Use Map

Such development would largely represent infill development at a scale compatible with the area's existing development.

7. Bayview Y Development of Shoreline Access and Improvements

The western portion of the Bayview Y site, because of the presence of the fragile natural features discussed above, should remain undeveloped, with the possible exception of docking facilities and access to the shoreline, which has been proposed by the Bayview Y in its long range plans. If such access is eventually provided, it should be designed in such a way as to allow public access to the shoreline, while minimizing impacts to environmentally sensitive areas.

8. Consider Extending Water and Sewer Service along Avalon Trail

The expansion of sewer and water service to the residential properties adjacent to Irondequoit Bay along Avalon Trail should be considered. Given the area's high water table and shallow soils, there is concern regarding the proper functioning of the septic systems used by the homes and maintaining adequate water supplies for domestic and firefighting purposes.

9. Promote the Transfer of the Former Treatment Plant to Monroe County

Located just north of the Abraham Lincoln Park is the Town's former sewage treatment plant. It is the desire of the Town to transfer the property to Monroe County and have it incorporated into Abraham Lincoln Park. The site is would provide public access to the northern portion of the Park and could be used as a trail head, parking, maintenance facility, and/or interpretive center.

Table 6 summarizes proposed uses and projects in the three subareas of the Penfield waterfront revitalization area.

Table 6: Summary of Proposed Uses and Projects

AREA	PROPOSED LAND USE	PROPOSED PROJECTS / ACTIONS	TIME FRAME
Sub-area 1	Open Space, public land to be conserved, Industrial (one location)	• Support the Implementation of Public Access Improvements at Ellison Park & Wetlands as Outlined in the 2009 Monroe County Ellison Park Area Master Plan	On-going
		• Seek Funding for the Implementation of the Irondequoit Creek Valley Multi-Use Trail	3-5
Sub-area 2	Predominantly Mixed-use with some public open space / land to be conserved, and residential.	• Utilize the Brownfield Opportunity Area Program	On-going
		• Amenities to LaSalle's Landing Park	0-2
		• Implement Traffic Calming Measures on Empire Boulevard	0-2

		<ul style="list-style-type: none"> • Evaluate and Update the LaSalle's Landing Development District (LLD) 	3-5
Sub-area 3	Public open space/conservation, residential, mixed-use, public facility (former treatment plant)	<ul style="list-style-type: none"> • Bayview Y development of shoreline access and improvements. 	0-2
		<ul style="list-style-type: none"> • Consider Extending Water and Sewer Service Along Avalon Trail 	10+
		<ul style="list-style-type: none"> • Promote the T of the Former Treatment Plant to Monroe County 	0-2
		<ul style="list-style-type: none"> • Support the Implementation of Public Access Improvements at Abraham Lincoln Park as Outlined in the 2009 Monroe County Ellison Park Area Master Plan 	On-going

SECTION 5: TECHNIQUES FOR LOCAL IMPLEMENTATION

Section V of the Penfield LWRP has been organized to provide an understanding of how the policies and the proposed uses and projects will be implemented by the Town. The section includes a summary of local legislative techniques and tools and other public and private actions necessary to implement the LWRP. A management structure, including the procedures for coordinating LWRP consistency review of federal and State actions, and financial resources are also discussed.

5.1. Local Plans, Studies, Laws and Regulations Necessary to Implement the LWRP

Local laws and regulations are the basic means for implementing the LWRP policies and projects. They can ensure that, at a minimum, nothing will occur to prevent the longer advantageous use of the waterfront or to frustrate the achievement of any of the policies or purposes of the LWRP. The balance between development/redevelopment and resource protection that is apparent in the LWRP policies and the proposed land uses and projects has been achieved through the application of many of the Town's existing laws and regulations.

A. Existing Local Laws and Regulations

❖ The Town's Zoning Regulations (Chapter 29 of the Penfield Code)

Town's zoning regulations establish various zoning districts (residential, business, planned development, etc.) in the Waterfront Revitalization Area and identify the uses allowed in these districts (see [Figure 3 Zoning Map](#)). Of particular note are Environmental Protection Overlay Districts (see [Figure 19](#)), which provide additional protections for wetlands, steep slopes, floodplains, watercourses, and woodlands, and the LaSalle's Landing Development District, which is designed to protect sensitive environmental features and encourage water-oriented-recreational and other appropriate uses adjacent to parts of Irondequoit Bay. The LaSalle's Landing Development District was developed as a result of Penfield's 1991 LWRP and remains an important implementation tool for the program.

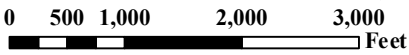
The zoning regulations specify uses allowed by right or with a special permit. They also establish requirements for area, coverage, and height in each zoning district and indicate what uses require a site plan review. Finally, the regulations contain standards governing such matters as excavations, earthmoving, parking, landscaping, signage, and incentives.

The zoning regulations establish procedures for making zoning decisions and describe the responsibilities of various officials and government bodies. The official responsible for enforcing the regulations is the Building and Zoning Administrator, who issues building permits and certificates of compliance. The Zoning Board of Appeals has the responsibility to make determinations on requests for variances. The Planning Board is responsible for reviewing and approving site plans, and the Town Board is responsible for the issuance of Special Permits and granting site plan review in the LaSalle's Landing District.

The zoning regulations contain provisions which allocate space for water-related and water-dependent uses, thereby supporting Policies 1-3 (Developed Waterfront Policies) and Policies

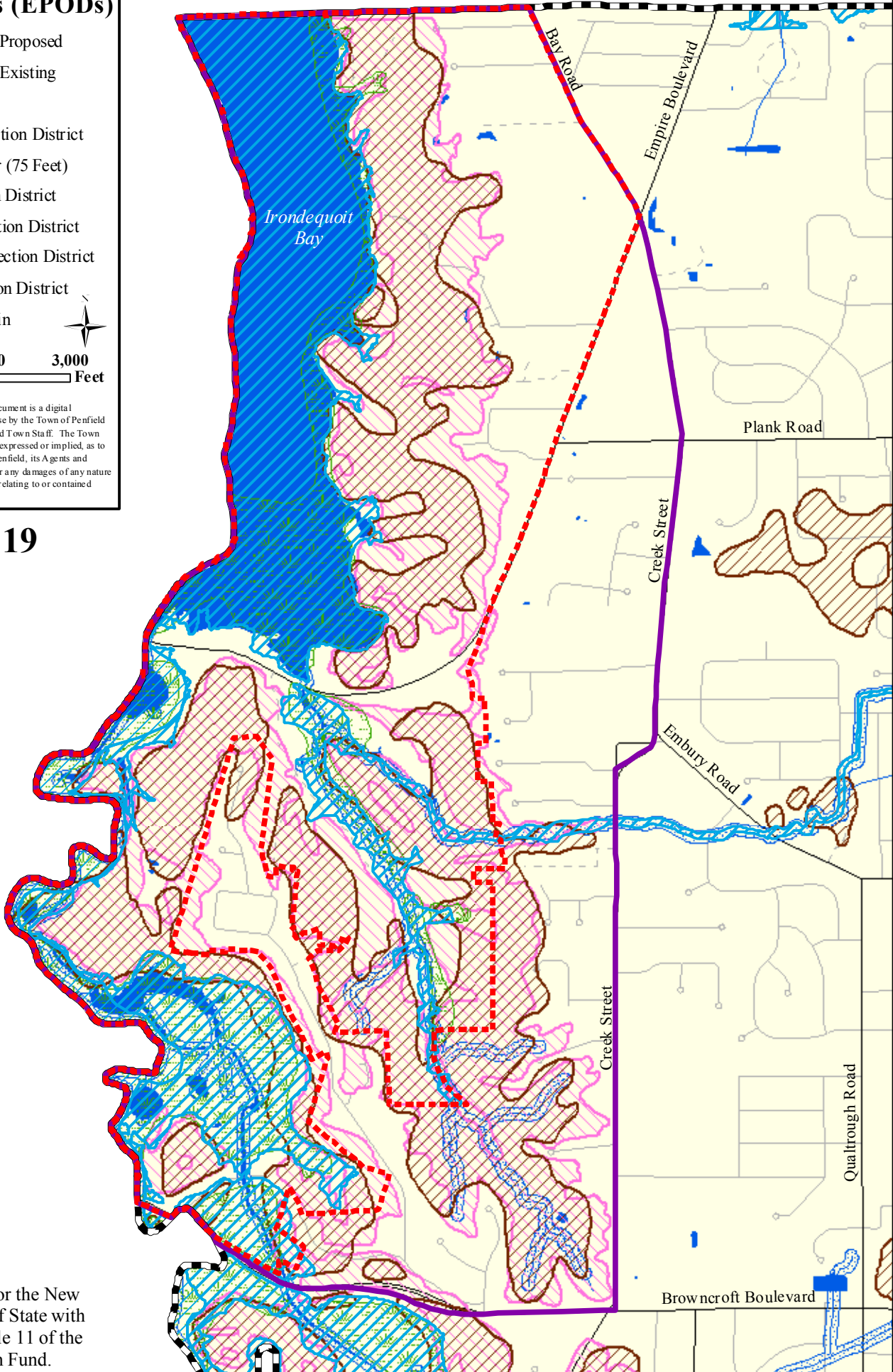
Environmental Protection Overlay Districts (EPODs)

-  LWRP Boundary - Proposed
-  LWRP Boundary - Existing
-  Town Line
-  Watercourse Protection District
-  Watercourse Buffer (75 Feet)
-  Woodlot Protection District
-  Steep Slope Protection District
-  State Wetland Protection District
-  Floodway Protection District
-  100-Year Floodplain



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Figure 19



This map was prepared for the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

10-13 (Working Waterfront Policies) of the LWRP. Policies 4-8 (Natural Waterfront Policies) and Policy 9 (Public Waterfront Policies) are furthered by basic lot coverage and open space provisions, parking requirements, and site plan review conditions. Policy 3 (Enhance Visual Quality and Protect Scenic Resources in the Waterfront Area) is advanced by basic height and bulk requirements, site plan review conditions, and signage regulations. The objectives regarding non-point pollution of Policy 5 (Water Quality) can be advanced by regulations pertaining to excavation, earthmoving, and erosion control.

❖ **Construction Stormwater Pollution Prevention and Erosion and Sediment Control Law (Local Law No. 3 - 2007)**

The purpose of this local regulation is to safeguard public health, protect property, prevent damage to the environment and promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any development or other activity which disturbs or breaks the topsoil or results in the movement of earth on land in the Town of Penfield.

❖ **Design and Management of Post-Construction Stormwater Pollution Prevention Measures Law (Local Law No. 4 - 2007)**

The purpose of this law is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in the watersheds within the Town. Therefore, the Town establishes this set of water quality and quantity policies to provide reasonable guidance for the regulation of stormwater runoff and to, in addition to the above, safeguard persons, protect property, prevent damage to the environment, and comply with the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s), for the purpose of protecting local water resources from degradation.

❖ **Stormwater Illicit Discharge Connection Law (Local Law No. 5 – 2007)**

The purpose and intent of this law is to ensure the health, safety and general welfare of citizens, and protect and enhance the water quality of watercourses and water bodies in a manner pursuant to, and consistent with, the Federal Clean Water Act (33 U.S.C. §1251 et seq.) by (i) reducing Pollutants in storm water discharges to the maximum extent practicable; (ii) prohibiting non-storm water discharges to the storm drain system.; and (iii) prohibiting stormwater discharges to Sanitary Sewers.

❖ **Town of Penfield Stormwater Management Policy (adopted 1988; revised 2000)**

This official Town policy contains stormwater management regulations, including flood damage prevention. It applies town-wide, with particular relevance for areas of special flood hazard as identified by the Federal Emergency Management Agency. Permits are required for development in flood hazard areas. Such development must meet standards specified in the Policy for such things as construction materials and methods, utilities, and floor elevations. The Building and Zoning Administrator is responsible for enforcing the regulations, and the Town Board is responsible for making decisions on appeals to the requirements of the regulations.

The stormwater, erosion control and flood damage prevention regulations described above support the objectives of LWRP Policy 4 (Minimize Loss of Life, Structures, and Natural Resources from Flooding and Erosion) and LWRP Policy 5 (Protect and improve water quality and supply in the waterfront area).

❖ **Irondequoit Bay Harbor Management Plan (adopted 2003)**

In 2003, the Towns of Penfield, Irondequoit, and Webster adopted the Irondequoit Bay Harbor Management Plan (IBHMP). The IBHMP was prepared to help assure greater consistency in reviewing plans among the municipalities around the Bay and various state and federal agencies. The plan helps the New York State Department of Environmental Conservation (NYS DEC), Monroe County and the Towns of Penfield, Irondequoit, and Webster cooperate to make better use of the Bay. The Plan is appended. NOTE: a recommendation of the 2003 Irondequoit Bay Harbor Management Plan is to update the Plan every ten (10) years. The Irondequoit Bay Coordinating Committee is in the process of updating the Plan as recommended.

The IBHMP includes goals, policies, and recommendations pertaining to resource protection, water surface use, public access, and landside development. The Plan gave impetus to updating the Local Waterfront Revitalization Programs in all three Towns, which make specific reference to the IBHMP in several sections, including the Policies.

❖ **Irondequoit Bay Harbor Management Law (adopted 2008)**

Adopted by the Towns of Penfield, Irondequoit, and Webster, this legislation establishes standards, requirements, and procedures for the environmental protection of Irondequoit Bay and regulates the use of watercraft.

By regulating water surface uses, marina activities, docking, boat storage, mooring, dredging, and tree removal; by protecting vistas and public access; and by providing an enforcement mechanism, the Irondequoit Bay Harbor Management Law essentially furthers all policies of the LWRP.

B. New and Revised Local Laws and Regulations

❖ **Penfield Waterfront Consistency Review Law (adopted 2015)**

A new Town of Penfield Waterfront Consistency Review Law was adopted in 2015 to establish a clear procedure for the review of actions to be directly undertaken, funded, or permitted within the town's waterfront revitalization area for consistency with the LWRP policies and purposes. The Town of Penfield Waterfront Consistency Review Law is located in Appendix A.

5.2. Other Public and Private Actions Necessary to Implement the LWRP

The Town of Penfield will continue to support and participate in the activities of the Irondequoit Bay Coordinating Committee (IBCC).

Much of the legislation that was enacted as part of the 1991 LWRP reflects the work of the Irondequoit Bay Coordinating Committee and continues to be relevant today. The IBCC was created under a cooperative agreement between Monroe County and the towns of Irondequoit, Penfield and Webster. The New York State Department of Environmental Conservation, although not a formal party to the agreement, is a major participant in the work of the IBCC.

The purpose of the IBCC is to establish uniform regulations for public and private development in the Irondequoit Bay area. The environmental objectives and development management measures identified by the Committee were translated into legislation as part of the work completed in the 1991 LWRP and

the 2003 Irondequoit Bay Harbor Management Plan. The IBCC will continue to be the entity to manage development and redevelopment in the LWRP area.

5.3. Management Structure Necessary to Implement the LWRP

The LWRP is intended to ensure that the actions of government agencies at all levels further the Town's objectives for its Waterfront Revitalization Area.

LWRP implementation is both reactive and proactive. It is reactive (regulatory) in the sense that projects and other proposed actions by private entities and public agencies reviewed for consistency with the LWRP. It is proactive in that the Town undertakes projects and programs of its own to advance the LWRP.

A. Town Management Structure

Lead Officials

The Town Supervisor, or Supervisor's designee, is the lead official. The Supervisor is responsible for ensuring that provisions of local law related to the waterfront are implemented; ensuring that State and Federal agencies receive local input on actions they may plan to undertake in the Town's waterfront area; pursuing funding and other support for projects cited the LWRP; assessing the progress made in implementing the LWRP; and initiating LWRP revisions and updates as necessary. The Supervisor, with the support of Town staff, is primarily responsible for pursuing development opportunities in the waterfront revitalization area.

The Director of Developmental Services, along with Code Enforcement Officers and the Fire Marshal, are the officials responsible for overseeing the day-to-day implementation of the regulatory aspects of the LWRP, such as monitoring pre-existing and non-conforming uses, and ensuring compliance with special requirements of Environmental Protection Overlay Districts and the LaSalle's Landing Development District.

Lead Agency

The Town Board is the lead agency within the LaSalle's Landing District and the Planning Board has lead agency authority for all other areas within the LWRP boundary. As identified in the Penfield Waterfront Consistency Review Law, the agency reviews proposed actions in detail and makes recommendations on the consistency of proposed actions with the LWRP policies, standards, and conditions, as well as with Town zoning and other applicable regulations. The agency is authorized to make recommendations to other agencies concerning actions in the Town's waterfront revitalization area. The agency is also authorized to help Town departments implement projects proposed in the LWRP. Finally, the agency will make recommendations on revising and updating the LWRP.

Other Town Agencies

All agencies in the Town are responsible for determining whether proposed actions for which they are responsible are consistent with LWRP policies, standards, and conditions. For example, the Town Board, Planning Board, Zoning Board, and Conservation Board are responsible for reviewing proposed actions and making determinations in the Waterfront Revitalization Area. The Planning Department, acting as first contact in the project intake process, determines the course and distribution of any project application to the proper reviewing agencies. This department also assists the applicant in determining the relationship of the proposed projects to the Environmental Protection Districts and zoning districts, and the project's applicability under State, County and Town regulations. Planning, Public Works, Code

Enforcement, and Fire Marshal personnel will assist each other with enforcement of the Harbor Management Law, zoning regulations, building codes, and subdivision regulations. The Town Board, in consultation with the Town Attorney, will be responsible for adopting any legislative updates necessary to carry out the LWRP.

5.4. Guidelines for Notification and Review of State Agency Actions Where Local Waterfront Revitalization Programs Are in Effect

A. Purposes of Guidelines

1. The Waterfront Revitalization of Coastal Areas and Inland Waterways Act (the Act) (Article 42 of the Executive Law) and the Department of State's regulations (19 NYCRR Part 600) require certain State agency actions identified by the Secretary of State to be consistent to the maximum extent practicable with the policies and purposes of the approved Town of Penfield Local Waterfront Revitalization Program (LWRP). These guidelines are intended to assist state agencies in meeting that statutory consistency obligation.
2. The Act also requires that state agencies provide timely notice to the Town of Penfield whenever an identified action will occur within the area covered by the approved Town of Penfield LWRP. These guidelines describe a process for complying with this notification requirement. They also provide procedures to assist the Town of Penfield in carrying out their review responsibilities in a timely manner.
3. The Secretary of State is required by the Act to confer with state agencies and local governments when notified by the Town of Penfield that a proposed state agency action may conflict with the policies and purposes of its approved LWRP. These guidelines establish a procedure for resolving such conflicts.

B. Definitions

1. Action means:
 - a. A "Type I" or "Unlisted" action as defined by the State Environmental Quality Review Act (SEQRA);
 - b. Occurring within the boundaries of the Town of Penfield LWRP; and
 - c. Being taken pursuant to a state agency program or activity which has been identified by the Secretary of State as likely to affect the policies and purposes of the Penfield LWRP.
2. Consistent to the maximum extent practicable means that an action will not substantially hinder the achievement of any of the policies and purposes of the approved Penfield LWRP and, whenever practicable, will advance one or more of such policies. If an action will substantially hinder any of the policies or purposes of the approved Penfield LWRP, then the action must be one:
 - a. For which no reasonable alternatives exist that would avoid or overcome any substantial hindrance;

- b. That will minimize all adverse effects on the policies or purposes of the LWRP to the maximum extent practicable; and
 - c. That will result in an overriding regional or statewide public benefit.
3. Local Waterfront Revitalization Program, or Penfield LWRP, means the program prepared and adopted by the Town of Penfield Town Board and approved by the Secretary of State pursuant to Executive Law, Article 42; which program contains policies on the management of land, water, and man-made resources, proposed land uses and specific projects that are essential to program implementation.

C. Notification Procedure

- 1. When a state agency is considering an action within the defined boundary of the Penfield LWRP, the state agency shall notify the Supervisor of the Town of Penfield.
- 2. Notification of a proposed action by a state agency:
 - a. Shall fully describe the nature and location of the action;
 - b. Shall be accomplished by use of other existing state agency notification procedures, or through any alternative procedure agreed upon by the state agency and the Town of Penfield;
 - c. Should be provided to the Supervisor as early in the planning stages as possible, but in any event at least 30 days prior to the agency's decision on the action. The timely filing of a copy of a completed Waterfront Assessment Form (WAF) to the Supervisor of the Town of Penfield should be considered adequate notification of a proposed action.
 - d. If the proposed action will require the preparation of a draft environmental impact statement, the filing of this draft document with the Supervisor of the Town of Penfield can serve as the state agency's notification to the Town of Penfield.

D. Local Government Review Procedure

- 1. Upon receipt of notification from a state agency, the Town of Penfield will be responsible for evaluating a proposed action against the policies and purposes of its approved LWRP. Upon request of the Supervisor of the Town of Penfield, the state agency should promptly provide the Town with whatever additional information is available which will assist the Town to evaluate the proposed action.
- 2. If the Town of Penfield cannot identify any conflicts between the proposed action and the applicable policies and purposes of its approved LWRP, it should inform the state agency in writing of its finding. Upon receipt of the Town's finding, the state agency may proceed with its consideration of the proposed action in accordance with 19 NYCRR Part 600.
- 3. If the Town of Penfield does not notify the state agency in writing of its finding within the established review period, the state agency may then presume that the proposed action does not conflict with the policies and purposes of the Town's approved LWRP.

4. If the Town of Penfield notifies the state agency in writing that the proposed action does conflict with the policies and/or purposes of its approved LWRP, the state agency shall not proceed with its consideration of, or decision on, the proposed action as long as the Resolution of Conflicts procedure established in E. below shall apply. The Town of Penfield shall forward a copy of the identified conflicts to the Secretary of State at the time when the state agency is notified. In notifying the state agency, the Town shall identify the specific policies and purposes of the LWRP with which the proposed action conflicts.

E. Resolution of Conflicts

1. The following procedure applies whenever the Town of Penfield has notified the Secretary of State and state agency that a proposed action conflicts with the policies and purposes of its approved LWRP.
 - a. Upon receipt of notification from the Town of Penfield that a proposed action conflicts with its approved LWRP, the state agency should contact the Supervisor of the Town of Penfield to discuss the content of the identified conflicts and the means for resolving them. A meeting of state agency and Town of Penfield representatives may be necessary to discuss and resolve the identified conflicts. This discussion should take place within 30 days of the receipt of a conflict notification from the Town.
 - b. If the discussion between the Town of Penfield and the state agency results in the resolution of the identified conflicts, then, within seven days of the discussion, the Town shall notify the state agency in writing, with a copy forwarded to the Secretary of State, that all of the identified conflicts have been resolved. The State agency can then proceed with its consideration of the proposed action in accordance with 19 NYCRR Part 600.
 - c. If the consultation between the Town of Penfield and the state agency does not lead to the resolution of the identified conflicts, either party may request, in writing, the assistance of the Secretary of State to resolve any or all of the identified conflicts. This request must be received by the Secretary of State within 15 days following the discussion between the Town of Penfield and the state agency. The party requesting the assistance of the Secretary of State shall forward a copy of their request to the other party.
 - d. Within 30 days following the receipt of a request for assistance, the Secretary, or a Department of State official or employee designated by the Secretary, will discuss the identified conflicts and circumstances preventing their resolution with appropriate representatives from the state agency and Town of Penfield.
 - e. If agreement among all parties cannot be reached during this discussion, the Secretary shall, within 15 days, notify both parties of his/her findings and recommendations.
 - f. The state agency shall not proceed with its consideration of, or decision on, the proposed action as long as the foregoing Resolution of Conflicts procedures shall apply.

5.5. Procedural Guidelines for Coordinating New York State Department of State and Local Waterfront Revitalization Program Consistency Review of Federal Agency Actions

A. Direct Actions

1. After acknowledging the receipt of a consistency determination and supporting documentation from a federal agency, DOS will forward copies of the determination and other descriptive information on the proposed direct action to the Supervisor of the Town of Penfield and to other interested parties.
2. This notification will indicate the date by which all comments and recommendations must be submitted to DOS and will identify the Department's principal reviewer for the proposed action.
3. The review period will be about twenty-five (25) days. If comments and recommendations are not received by the date indicated in the notification, DOS will presume that the Town of Penfield has "no opinion" on the consistency of the proposed direct federal agency action with the LWRP policies.
4. If DOS does not fully concur with and/or has any questions on the comments and recommendations submitted by the Town, DOS will contact the Supervisor of the Town of Penfield to discuss any differences of opinion or questions prior to agreeing or disagreeing with the federal agency's consistency determination on the proposed direct action.
5. A copy of DOS' "agreement" or "disagreement" letter to the federal agency will be forwarded to the Supervisor of the Town of Penfield.

B. Permit and License Actions

1. DOS will acknowledge the receipt of an applicant's consistency certification and application materials. At that time, DOS will forward a copy of the submitted documentation to the Supervisor of the Town of Penfield and will identify the Department's principal reviewer for the proposed action.
2. Within thirty (30) days of receiving such information, the Supervisor, or the Supervisor's representative, will contact the principal reviewer for DOS to discuss:
 - a. The need to request additional information for review purposes; and
 - b. Any possible problems pertaining to the consistency of a proposed action with the local coastal policies.
3. When DOS and the Supervisor of the Town of Penfield agree that additional information is necessary, DOS will request the applicant to provide the information. A copy of this information will be provided to the Supervisor of the Town of Penfield upon receipt.
4. Within thirty (30) days of receiving the requested information or discussing possible problems of a proposed action with the principal reviewer for DOS, whichever is later, the Supervisor of the Town of Penfield will notify DOS of the reason why a proposed action may be inconsistent or consistent with the LWRP policies.

5. After that notification, the Supervisor of the Town of Penfield will submit the municipality's written comments and recommendations on a proposed permit action to DOS before or at the conclusion of the official public comment period. If such comments and recommendations are not forwarded to DOS by the end of the public comment period, DOS will assume that the Town has "no opinion" on the consistency of the proposed action with the LWRP policies.
6. If DOS does not fully concur with and/or has any questions on the comments and recommendations submitted by the Town on a proposed permit action, DOS will contact the Supervisor of the Town of Penfield to discuss any differences of opinion prior to issuing a letter of "concurrence" or "objection" to the applicant.
7. A copy of the DOS' "concurrence" or "objection" letter to the applicant will be forwarded to the Supervisor of the Town of Penfield.

C. Financial Assistance Actions

1. Upon receiving notification of a proposed federal financial assistance action, DOS will request information on the federal financial assistance action from the applicant for consistency review purposes. As appropriate, DOS will also request the applicant to provide a copy of the application documentation to the Supervisor of the Town of Penfield. A copy of this letter will be forwarded to the Supervisor of the Town of Penfield and will serve as notification that the proposed federal financial assistance action may be subject to review.
2. DOS will acknowledge the receipt of the requested information and provide a copy of this acknowledgment to the Supervisor of the Town of Penfield. DOS may, at this time, request the applicant to submit additional information for review purposes.
3. The review period will conclude thirty (30) days after the date on DOS' letter of acknowledgment or the receipt of requested additional information, whichever is later. The review period may be extended for major federal financial assistance actions.
4. The Supervisor of the Town of Penfield must submit the Town's comments and recommendations on the proposed action to DOS within twenty days (or other time agreed to by DOS and the Supervisor of the Town of Penfield) from the start of the review period. If comments and recommendations are not received within this period, DOS will presume that the Town has "no opinion" on the consistency of the proposed federal financial assistance action with the LWRP policies.
5. If DOS does not fully concur with and/or has any questions on the comments and recommendations submitted by the Town, DOS will contact the Supervisor of the Town of Penfield to discuss any differences of opinion or questions prior to notifying the applicant of DOS consistency decision.
6. A copy of DOS consistency decision letter to the applicant will be forwarded to the Supervisor of the Town of Penfield.

5.6. Local Financial Resources

Public and private resources are needed by the Town for proposed projects and other actions which are necessary to implement the LWRP.

Table 7: Projects and Actions Requiring Additional Financial Resources for Implementation

RECOMMENDATION	RESPONSIBLE AGENCY
Support the Implementation of Public Access Improvements as Outlined in the 2009 Monroe County Ellison Park Area Master Plan.	Monroe County, Town of Penfield
Seek Funding for the Implementation of the Irondequoit Creek Valley Multi-Use Trail.	Town of Penfield, Monroe County
Utilize the Brownfield Opportunity Area Program.	Town of Penfield, New York State
Provide Amenities to the LaSalle’s Landing Park.	Town of Penfield, NYSDEC
Implement Traffic Calming Measures on Empire Boulevard.	New York State, Town of Penfield
Evaluate and Update the LaSalle’s Landing Development District (LLD).	Town of Penfield, Town of Irondequoit
Bayview Y development of shoreline access and improvements.	Bayview Y, Town of Penfield, & NYSDEC
Promote the Sale of the Former Treatment Plant to Monroe County.	Monroe County, Town of Penfield

The Town will budget annually for management and maintenance of its waterfront and waterfront facilities, administration of the LWRP, and enforcement of the Harbor Management Law.

The Town will apply for state and federal funds (i.e., Environmental Protection Fund, New York State Quality Communities, Brownfield Opportunity Areas, etc.) to implement components of its LWRP.

The Town will consider bond issues, user-supported special districts and authorities, exactions on waterfront development, and other revenue enhancements to facilitate LWRP implementation.

In addition to the provision of funding, the successful implementation of several of the Local Waterfront Revitalization Program's proposed projects and actions will depend on the Town's ability to take a strong leadership role in working with property owners and potential investors, and to provide an effective framework for local public/private cooperation. By so doing, the Town will encourage the types of private sector participation, that is essential to the successful implementation of the residential and water oriented/mixed use developments discussed in Section IV.

SECTION 6: STATE AND FEDERAL ACTIONS AND PROGRAMS LIKELY TO AFFECT IMPLEMENTATION

State and federal actions will affect and be affected by implementation of the LWRP. Under State Law and the U.S. Coastal Zone Management Act, certain State and federal actions within or affecting the local waterfront area must be consistent, or consistent to the maximum extent practicable, with the enforceable policies and purposes of the LWRP. This consistency requirement makes the LWRP a unique, intergovernmental mechanism for setting policy and making decisions, and helps to prevent detrimental actions from occurring and future options from being needlessly foreclosed. At the same time, the active participation of State and federal agencies is also likely to be necessary to implement specific provisions of the LWRP.

6.1. State Actions and Programs Which Should Be Undertaken in a Manner Consistent With the LWRP

Pursuant to the State Waterfront Revitalization of Coastal Areas and Inland Waterways Act (Executive Law, Article 42), the Secretary of State notifies affected State agencies of those agency actions and programs that are to be undertaken in a manner consistent with approved LWRPs. The following list of State actions and programs is that list. The State Waterfront Revitalization of Coastal Areas and Inland Waterways Act requires that an LWRP identifies those elements of the program that can be implemented by the local government, unaided, and those that can only be implemented with the aid of other levels of government or other agencies. Such statement shall include those permit, license, certification or approval programs; grant, loan subsidy or other funding assistance programs; facilities construction, and planning programs that may affect the achievement of the LWRP.

OFFICE FOR THE AGING

- 1.0 Funding and/or approval programs for the establishment of new or expanded facilities providing various services for the elderly.

DEPARTMENT OF AGRICULTURE AND MARKETS

- 1.00 Agricultural Districts Program
- 2.00 Rural Development Program
- 3.00 Farm Worker Services Program
- 4.00 Permit and approval programs:
 - 4.01 Custom Slaughters/Processor Permit
 - 4.02 Processing Plant License
 - 4.03 Refrigerated Warehouse and/or Locker Plant License

DIVISION OF ALCOHOLIC BEVERAGE CONTROL/ STATE LIQUOR AUTHORITY

- 1.00 Permit and Approval Programs:
 - 1.01 Ball Park - Stadium License
 - 1.02 Bottle Club License
 - 1.03 Bottling Permits
 - 1.04 Brewer's Licenses and Permits
 - 1.05 Brewer's Retail Beer License
 - 1.06 Catering Establishment Liquor License
 - 1.07 Cider Producer's and Wholesaler's Licenses
 - 1.08 Club Beer, Liquor, and Wine Licenses
 - 1.09 Distiller's Licenses
 - 1.10 Drug Store, Eating Place, and Grocery Store Beer Licenses
 - 1.11 Farm Winery and Winery Licenses
 - 1.12 Hotel Beer, Wine, and Liquor Licenses
 - 1.13 Industrial Alcohol Manufacturer's Permits
 - 1.14 Liquor Store License
 - 1.15 On-Premises Liquor Licenses
 - 1.16 Plenary Permit (Miscellaneous-Annual)
 - 1.17 Summer Beer and Liquor Licenses
 - 1.18 Tavern/Restaurant and Restaurant Wine Licenses
 - 1.19 Vessel Beer and Liquor Licenses
 - 1.20 Warehouse Permit
 - 1.21 Wine Store License
 - 1.22 Winter Beer and Liquor Licenses
 - 1.23 Wholesale Beer, Wine, and Liquor Licenses

OFFICE OF ALCOHOLISM AND SUBSTANCE ABUSE SERVICES

- 1.00 Facilities, construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
 - 2.01 Certificate of approval (Substance Abuse Services Program)
- 3.00 Permit and approval:
 - 3.01 Letter Approval for Certificate of Need

- 3.02 Operating Certificate (Alcoholism Facility)
- 3.03 Operating Certificate (Community Residence)
- 3.04 Operating Certificate (Outpatient Facility)
- 3.05 Operating Certificate (Sobering-Up Station)

COUNCIL ON THE ARTS

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Architecture and environmental arts program.

OFFICE OF CHILDREN AND FAMILY SERVICES

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Homeless Housing and Assistance Program.
- 3.00 Permit and approval programs:
 - 3.01 Certificate of Incorporation (Adult Residential Care Facilities)
 - 3.02 Operating Certificate (Children's Services)
 - 3.03 Operating Certificate (Enriched Housing Program)
 - 3.04 Operating Certificate (Home for Adults)
 - 3.05 Operating Certificate (Proprietary Home)
 - 3.06 Operating Certificate (Public Home)
 - 3.07 Operating Certificate (Special Care Home)
 - 3.08 Permit to Operate a Day Care Center

DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION

- 1.0 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

DORMITORY AUTHORITY OF THE STATE OF NEW YORK

- 1.00 Financing of higher education and health care facilities.
- 2.00 Planning and design services assistance program.

EDUCATION DEPARTMENT

- 1.00 Facilities construction, rehabilitation, expansion, demolition or the funding of such activities.
- 2.00 Permit and approval programs:
 - 2.01 Certification of Incorporation (Regents Charter)

- 2.02 Private Business School Registration
 - 2.03 Private School License
 - 2.04 Registered Manufacturer of Drugs and/or Devices
 - 2.05 Registered Pharmacy Certificate
 - 2.06 Registered Wholesale of Drugs and/or Devices
 - 2.07 Registered Wholesaler-Repacker of Drugs and/or Devices
 - 2.08 Storekeeper's Certificate
- 3.00 Administration of Article 5, Section 233 of the Educational Law regarding the removal of archaeological and paleontological objects under the waters of the State.

OFFICE OF EMERGENCY MANAGEMENT

- hazard identification,
- loss prevention, planning, training, operational response to emergencies,
- technical support, and disaster recovery assistance.

EMPIRE STATE DEVELOPMENT/ EMPIRE STATE DEVELOPMENT CORPORATION

- 1.00 Preparation or revision of statewide or specific plans to address State economic development needs.
- 2.00 Allocation of the state tax-free bonding reserve.

ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

- 1.00 Issuance of revenue bonds to finance pollution abatement modifications in power-generation facilities and various energy projects.
- 2.00 New Construction Program – provide assistance to incorporate energy-efficiency measures into the design, construction and operation of new and substantially renovated buildings.
- 3.00 Existing Facilities Program – offers incentives for a variety of energy projects

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

- 1.00 Acquisition, disposition, lease, grant of easement, and other activities related to the management of lands under the jurisdiction of the Department.
- 2.00 Classification of Waters Program; classification of land areas under the Clean Air Act.
- 3.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 4.00 Financial assistance/grant programs:
 - 4.01 Capital projects for limiting air pollution

- 4.02 Cleanup of toxic waste dumps
- 4.03 Flood control, beach erosion, and other water resource projects
- 4.04 Operating aid to municipal wastewater treatment facilities
- 4.05 Resource recovery and solid waste management capital projects
- 4.06 Wastewater treatment facilities
- 6.00 Implementation of the Environmental Quality Bond Act of 1972, including:
 - (a) Water Quality Improvement Projects
 - (b) Land Preservation and Improvement Projects including Wetland Preservation and Restoration Projects, Unique Area Preservation Projects, Metropolitan Parks Projects, Open Space Preservation Projects, and Waterways Projects.
- 7.00 Marine Finfish and Shellfish Programs
- 9.00 Permit and approval programs
 - Air Resources
 - 9.01 Certificate of Approval for Air Pollution Episode Action Plan
 - 9.02 Certificate of Compliance for Tax Relief – Air Pollution Control Facility
 - 9.03 Certificate to Operate: Stationary Combustion Installation; Incinerator; process, exhaust or Ventilation System
 - 9.04 Permit for Burial of Radioactive Material
 - 9.05 Permit for Discharge of Radioactive Material to Sanitary Sewer
 - 9.06 Permit for Restricted Burning
 - 9.07 Permit to Construct; a Stationary Combustion Installation; Incinerator; Indirect Source of Air Contamination; Process, Exhaust or Ventilation System
 - Construction Management
 - 9.08 Approval of Plans and Specifications for Wastewater Treatment Facilities
 - Fish and Wildlife
 - 9.09 Certificate to Possess and Sell Hatchery Trout in New York State
 - 9.10 Commercial Inland Fisheries Licenses
 - 9.11 Fishing Preserve License
 - 9.12 Fur Breeder’s License
 - 9.13 Game Dealer’s License
 - 9.14 Licenses to breed Domestic Game Animals
 - 9.15 License to Possess and Sell Live Game
 - 9.16 Permit to Import, Transport and/or Export under Section 184.1 (11-0511)
 - 9.17 Permit to Raise and Sell trout

- 9.18 Private Bass Hatchery Permit
- 9.19 Shooting Preserve Licenses
- 9.20 Taxidermy License
- 9.21 Permit – Article 15, (Protection of Water) – Dredge and Deposit Material in a Waterway
- 9.22 Permit – Article 15, (Protection of Water) – Stream Bed or Bank Disturbances
- 9.23 Permit – Article 24, (Freshwater Wetlands)

Hazardous Substances

- 9.24 Permit to Use Chemicals for the Control or Elimination of Aquatic Insects
- 9.25 Permit to Use Chemicals for the Control or Elimination of Aquatic Vegetation
- 9.26 Permit to Use Chemicals for the Control or Elimination of Undesirable Fish

Lands and Forest

- 9.27 Certificate of Environmental Safety (Liquid Natural Gas/Liquid Petroleum Gas)
- 9.28 Floating Object Permit
- 9.29 Marine Regatta Permit
- 9.30 Navigation Aid Permit

Marine Resources

- 9.31 Digger's Permit (Shellfish)
- 9.32 License of Menhaden Fishing Vessel
- 9.33 License for Non Resident Food Fishing Vessel
- 9.34 Non Resident Lobster Permit
- 9.35 Marine Hatchery and/or Off Bottom Culture Shellfish Permits
- 9.36 Permits to Take Blue Claw Crabs
- 9.37 Permit to Use Pond or Trap Net
- 9.38 Resident Commercial Lobster Permit
- 9.39 Shellfish Bed Permit
- 9.40 Shellfish Shipper's Permits
- 9.41 Special Permit to Take Surf Clams from Waters other than the Atlantic Ocean
- 9.42 Permit – Article 25, (Tidal Wetlands)

Mineral Resources

- 9.43 Mining Permit
- 9.44 Permit to Plug and Abandon (a non-commercial, oil, gas or solution mining well)
- 9.45 Underground Storage Permit (Gas)
- 9.46 Well Drilling Permit (Oil, Gas and Solution Salt Mining)

Solid Wastes

9.47 Permit to Construct and/or operate a Solid Waste Management Facility

9.48 Septic Tank Cleaner and Industrial Waste Collector Permit

Water Resources

9.49 Approval of Plans for Wastewater Disposal Systems

9.50 Certificate of Approval of Realty Subdivision Plans

9.51 Certificate of Compliance (Industrial Wastewater Treatment Facility)

9.52 Letters of Certification for Major Onshore Petroleum Facility Oil Spill Prevention and Control Plan

9.53 Permit Article 36, (Construction in Flood Hazard Areas)

9.54 Permit for State Agency Activities for Development in Coastal Erosion Hazards Areas

9.55 Permit for State Agency Activities for Development in Coastal Erosion Hazards Areas

9.56 State Pollutant Discharge Elimination System (SPDES) Permit

9.57 Approval – Drainage Improvement District

9.58 Approval – Water (Diversions for Power)

9.59 Approval of Well System and Permit to Operate

9.60 Permit – Article 15, (Protection of Water) – Dam

9.61 Permit – Article 15, Title 15 (Water Supply)

9.62 River Improvement District Permits

9.63 River Regulatory District approvals

9.64 Well Drilling Certificate of Registration

9.65 401 Water Quality Certification

10.00 Preparation and revision of Air Pollution State Implementation Plan.

11.00 Preparation and revision of Continuous Executive Program Plan.

12.00 Preparation and revision of Statewide Environmental Plan.

13.00 Protection of Natural and Man-made Beauty Program.

14.00 Urban Fisheries Program.

15.00 Urban Forestry Program.

16.00 Urban Wildlife Program.

ENVIRONMENTAL FACILITIES CORPORATION

1.0 Financing program for pollution control facilities for industrial firms and small businesses.

DEPARTMENT OF FINANCIAL SERVICES (DEPARTMENT OF BANKING)

- 1.00 Permit and approval programs:
 - 1.01 Authorization Certificate (Bank Branch)
 - 1.02 Authorization Certificate (Bank Change of Location)
 - 1.03 Authorization Certificate (Bank Charter)
 - 1.04 Authorization Certificate (Credit Union Change of Location)
 - 1.05 Authorization Certificate (Credit Union Charter)
 - 1.06 Authorization Certificate (Credit Union Station)
 - 1.07 Authorization Certificate (Foreign Banking Corporation Change of Location)
 - 1.08 Authorization Certificate (Foreign Banking Corp. Public Accommodations Office)
 - 1.09 Authorization Certificate (Investment Company Branch)
 - 1.10 Authorization Certificate (Investment Company Change of Location)
 - 1.11 Authorization Certificate (Investment Company Charter)
 - 1.12 Authorization Certificate (Licensed Lender Change of Location)
 - 1.13 Authorization Certificate (Mutual Trust Company Charter)
 - 1.14 Authorization Certificate (Private Banker Charter)
 - 1.15 Authorization Certificate (Public Accommodation Office – Banks)
 - 1.16 Authorization Certificate (Safe Deposit Company Branch)
 - 1.17 Authorization Certificate (Safe Deposit Company Change of Location)
 - 1.18 Authorization Certificate (Safe Deposit Company Charter)
 - 1.19 Authorization Certificate (Savings Bank Charter)
 - 1.20 Authorization Certificate (Savings Bank DeNovo Branch Office)
 - 1.21 Authorization Certificate (Savings Bank Public Accommodations Office)
 - 1.22 Authorization Certificate (Savings and Loan Association Branch)
 - 1.23 Authorization Certificate (Savings and Loan Association Change of Location)
 - 1.24 Authorization Certificate (Savings and Loan Association Charter)
 - 1.25 Authorization Certificate (Subsidiary Trust Company Charter)
 - 1.26 Authorization Certificate (Trust Company Branch)
 - 1.27 Authorization Certificate (Trust Company – Change of Location)
 - 1.28 Authorization Certificate (Trust Company Charter)
 - 1.29 Authorization Certificate (Trust Company Public Accommodations Office)
 - 1.30 Authorization to Establish a Life Insurance Agency
 - 1.31 License as a Licensed Lender

- 1.32 License for a Foreign Banking Corporation Branch

OFFICE OF GENERAL SERVICES

- 1.00 Administration of the Public Lands Law for acquisition and disposition of lands, grants of land and grants of easement of land under water, issuance of licenses for removal of materials from lands under water, and oil and gas leases for exploration and development.
- 2.00 Administration of Article 4 B, Public Buildings Law, in regard to the protection and management of State historic and cultural properties and State uses of buildings of historic, architectural or cultural significance.
- 3.00 Facilities construction, rehabilitation, expansion, or demolition.
- 4.00 Administration of Article 5, Section 233, Subsection 5 of the Education Law on removal of archaeological and paleontological objects under the waters of the State.
- 5.00 Administration of Article 3, Section 32 of the Navigation Law regarding location of structures in or on navigable waters.
- 6.00 Section 334 of the State Real Estate Law regarding subdivision of waterfront properties on navigable waters to include the location of riparian lines.

DEPARTMENT OF HEALTH

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
 - 2.01 Approval of Completed Works for Public Water Supply Improvements
 - 2.02 Approval of Plans for Public Water Supply Improvements.
 - 2.03 Certificate of Need (Health Related Facility except Hospitals)
 - 2.04 Certificate of Need (Hospitals)
 - 2.05 Operating Certificate (Diagnostic and Treatment Center)
 - 2.06 Operating Certificate (Health Related Facility)
 - 2.07 Operating Certificate (Hospice)
 - 2.08 Operating Certificate (Hospital)
 - 2.09 Operating Certificate (Nursing Home)
 - 2.10 Shared Health Facility Registration Certificate

DIVISION OF HOMES AND COMMUNITY RENEWAL and its subsidiaries and affiliates

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Financial assistance/grant programs:
 - 2.01 Federal Housing Assistance Payments Programs (Section 8 Programs)

- 2.02 Housing Development Fund Programs
 - 2.03 Neighborhood Preservation Companies Program
 - 2.04 Public Housing Programs
 - 2.05 Rural Initiatives Grant Program
 - 2.06 Rural Preservation Companies Program
 - 2.07 Rural Rental Assistance Program
 - 2.08 Special Needs Demonstration Projects
 - 2.09 Urban Initiatives Grant Program
 - 2.10 Urban Renewal Programs
- 3.00 Preparation and implementation of plans to address housing and community renewal needs.

OFFICE OF MENTAL HEALTH

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
 - 2.01 Operating Certificate (Community Residence)
 - 2.02 Operating Certificate (Family Care Homes)
 - 2.03 Operating Certificate (Inpatient Facility)
 - 2.04 Operating Certificate (Outpatient Facility)

DIVISION OF MILITARY AND NAVAL AFFAIRS

- 1.0 Preparation and implementation of the State Disaster Preparedness Plan.

NATURAL HERITAGE TRUST

- 1.0 Funding program for natural heritage institutions.

OFFICE OF PARKS, RECREATION, AND HISTORIC PRESERVATION (including Regional State Park Commission)

- 1.00 Acquisition, disposition, lease, grant of easement, or other activities related to the management of land under the jurisdiction of the Office.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 3.00 Funding program for recreational boating, safety, and enforcement.
- 4.00 Funding program for State and local historic preservation projects.
- 5.00 Land and Water Conservation Fund programs.
- 6.00 Nomination of properties to the Federal and/or State Register of Historic Places.

- 7.00 Permit and approval programs:
 - 7.01 Floating Objects Permit
 - 7.02 Marine Regatta Permit
 - 7.03 Navigation Aide Permit
 - 7.04 Posting of Signs Outside State Parks
- 8.00 Preparation and revision of the Statewide Comprehensive Outdoor Recreation Plan and the Statewide Comprehensive Historic Preservation Plan and other plans for public access, recreation, historic preservation or related purposes.
- 9.00 Recreation services program.
- 10.00 Urban Cultural Parks Program.
- 11.00 Planning, construction, rehabilitation, expansion, demolition or the funding of such activities and/or projects funded through the Environmental Protection Fund (Environmental Protection Act of 1993) or Clean Water/Clean Air Bond Act of 1996.

OFFICE FOR PEOPLE WITH DEVELOPMENTAL DISABILITIES

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
 - 2.01 Establishment and Construction Prior Approval
 - 2.02 Operating Certificate Community Residence
 - 2.03 Outpatient Facility Operating Certificate

POWER AUTHORITY OF THE STATE OF NEW YORK

- 1.00 Acquisition, disposition, lease, grant of easement, and other activities related to the management of land under the jurisdiction of the Authority.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition.

ROCHESTER-GENESEE REGIONAL TRANSPORTATION AUTHORITY (regional agency)

- 1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the Authority.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 3.00 Increases in special fares for transportation services to public water-related recreation resources.

NEW YORK STATE SCIENCE AND TECHNOLOGY FOUNDATION

- 1.00 Corporation for Innovation Development Program.
- 2.00 Center for Advanced Technology Program.

DEPARTMENT OF STATE

- 1.00 Appalachian Regional Development Program.
- 2.00 Coastal Management Program.
 - 2.10 Planning, construction, rehabilitation, expansion, demolition or the funding of such activities and/or projects funded through the Environmental Protection Fund (Environmental Protection Act of 1993) or Clean Water/Clean Air Bond Act of 1996.
- 3.00 Community Services Block Grant Program.
- 4.00 Permit and approval programs:
 - 4.01 Billiard Room License
 - 4.02 Cemetery Operator
 - 4.03 Uniform Fire Prevention and Building Code

STATE UNIVERSITY CONSTRUCTION FUND

- 1.0 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

STATE UNIVERSITY OF NEW YORK

- 1.00 Acquisition, disposition, lease, grant of easement, and other activities related to the management of land under the jurisdiction of the University.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

DEPARTMENT OF TRANSPORTATION

- 1.00 Acquisition, disposition, lease, grant of easement, and other activities related to the management of land under the jurisdiction of the Department.
- 2.00 Construction, rehabilitation, expansion, or demolition of facilities, including but not limited to:
 - (a) Highways and parkways
 - (b) Bridges on the State highways system
 - (c) Highway and parkway maintenance facilities
 - (d) Rail facilities
- 3.00 Financial assistance/grant programs:

- 3.01 Funding programs for construction/reconstruction and reconditioning/preservation of municipal streets and highways (excluding routine maintenance and minor rehabilitation)
- 3.02 Funding programs for development of the ports of Albany, Buffalo, Oswego, Ogdensburg and New York
- 3.03 Funding programs for rehabilitation and replacement of municipal bridges
- 3.04 Subsidies program for marginal branch lines abandoned by Conrail
- 3.05 Subsidies program for passenger rail service
- 4.00 Permits and approval programs:
 - 4.01 Approval of applications for airport improvements (construction projects)
 - 4.02 Approval of municipal applications for Section 18 Rural and Small Urban Transit Assistance Grants (construction projects)
 - 4.03 Approval of municipal or regional transportation authority applications for funds for design, construction and rehabilitation of omnibus maintenance and storage facilities
 - 4.04 Approval of municipal or regional transportation authority applications for funds for design and construction of rapid transit facilities
 - 4.05 Certificate of Convenience and Necessity to Operate a Railroad
 - 4.06 Highway Work Permits
 - 4.07 License to Operate Major Petroleum Facilities
 - 4.08 Outdoor Advertising Permit (for off premises advertising signs adjacent to interstate and primary highway)
 - 4.09 Real Property Division Permit for Use of State Owned Property
- 5.00 Preparation or revision of the Statewide Master Plan for Transportation and sub-area or special plans and studies related to the transportation needs of the State.
- 6.00 Water Operation and Maintenance Program Activities related to the containment of petroleum spills and development of an emergency oil spill control network.

DIVISION OF YOUTH

- 1.0 Facilities construction, rehabilitation, expansion, or demolition or the funding for approval of such activities.

6.2 Federal Activities Affecting Land and Water Uses and Natural Resources in the Coastal Zone of New York State

Note: This LWRP's list of the federal agency activities is identical to the most recent version of the Table 2 list in the New York State Coastal Management Program as approved by the federal Office of Ocean and Coastal Resources Management on March 28, 2006. Please contact the New York State Department of State, Office of Planning and Development, at (518) 474-6000, for any updates to New York State Coastal Management Program Table 2 federal agency activities list that may have occurred post-approval of this LWRP.

This list has been prepared in accordance with the consistency provisions of the federal Coastal Zone Management Act and implementing regulations in 15 CFR Part 930. It is not exhaustive of all activities subject to the consistency provisions of the federal Coastal Zone Management Act, implementing regulations in 15 CFR Part 930, and the New York Coastal Management Program. It includes activities requiring:

1. the submission of consistency determinations by federal agencies;
2. the submission of consistency certifications by entities other than federal agencies; and
3. the submission of necessary data and information to the New York State Department of State, in accordance with 15 CFR Part 930, Subparts C, D, E, F and I, and the New York Coastal Management Program.

I. Activities Undertaken Directly by or on Behalf of Federal Agencies

The following activities, undertaken directly by or on behalf of the identified federal agencies, are subject to the consistency provisions of the Coastal Zone Management Act, its implementing regulations in 15 CFR Part 930, Subpart C, and the New York Coastal Management Program.

Department of Commerce, National Marine Fisheries Service:

- Fisheries Management Plans

Department of Defense, Army Corps of Engineers:

- Proposed authorizations for dredging, channel improvement, breakwaters, other navigational works, erosion control structures, beach replenishment, dams or flood control works, ice management practices and activities, and other projects with the potential to impact coastal lands and waters.
- Land acquisition for spoil disposal or other purposes.
- Selection of open water disposal sites.

Department of Defense, Air Force, Army and Navy:

- Location, design, and acquisition of new or expanded defense installations (active or reserve status, including associated housing, transportation or other facilities).
- Plans, procedures and facilities for handling or storage use zones.
- Establishment of impact, compatibility or restricted use zones.

Department of Energy:

- Prohibition orders.

General Services Administration:

- Acquisition, location and design of proposed Federal government property or buildings, whether leased or owned by the Federal government.

Department of Interior, Fish and Wildlife Service:

- Management of National Wildlife refuges and proposed acquisitions.

Department of Interior, National Park Service:

- National Park and Seashore management and proposed acquisitions.

Department of Interior, Minerals Management Service:

- OCS lease sale activities including tract selection, lease sale stipulations, etc.

Department of Transportation, Coast Guard:

- Location and design, construction or enlargement of Coast Guard stations, bases, and lighthouses.
- Location, placement or removal of navigation devices which are not part of the routine operations under-the Aids to Navigation Program (ATON).
- Expansion, abandonment, designation or anchorages, lightering areas or shipping lanes and ice management practices and activities.

Department of Transportation, Federal Aviation Administration:

- Location and design, construction, maintenance, and demolition of Federal aids to air navigation.

Department of Transportation, St. Lawrence Seaway Development Corporation:

- Acquisition, location, design, improvement and construction of new and existing facilities for the operation of the Seaway, including traffic safety, traffic control and length of navigation season.

Department of Transportation, Federal Highway Administration:

- Highway construction

II. Federal Licenses and Permits and Other Forms of Approval or Authorization

The following activities, requiring permits, licenses, or other forms of authorization or approval from Federal agencies, are subject to the consistency provisions of the Coastal Zone Management Act, its implementing regulations in 15 CFR Part 930, Subpart D, and the New York Coastal Management Program.

Department of Defense, Army Corps of Engineers:

- Construction of dams, dikes or ditches across navigable waters, or obstruction or alteration of navigable waters required under Sections 9 and 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401, 403).
- Establishment of harbor lines pursuant to Section 11 of the Rivers and Harbors Act of 1899 (33 U.S.C. 404, 405).
- Occupation of seawall, bulkhead, jetty, dike, levee, wharf, pier, or other work built by the U.S. pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408).
- Approval of plans for improvements made at private expense under USACE supervision pursuant to the Rivers and Harbors Act of 1902 (33 U.S.C. 565).
- Disposal of dredged spoils into the waters of the U.S., pursuant to the Clean Water Act, Section 404 (33 U.S.C. 1344).
- All actions for which permits are required pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972(33 U.S.C. 1413).
- Construction of artificial islands and fixed structures in Long Island Sound pursuant to Section 4 (f) of the River and Harbors Act of 1912 (33 U.S.C.).

Department of Energy, Federal Energy Regulatory Commission:

- Licenses for non-Federal hydroelectric projects and primary transmission lines under Sections 3 (11), 4 (e) and 15 of the Federal Power Act (16 U.S.C. 796 (11), 797 (11) and 808).
- Orders for interconnection of electric transmission facilities under Section 202 (b) of the Federal Power Act (15 U.S.C. 824 a (b)).
- Certificates for the construction and operation of interstate natural gas pipeline facilities, including both pipelines and terminal facilities under Section 7 (c) of the Natural Gas Act (15 U.S.C. 717 f (c)).
- Permission and approval for the abandonment of natural gas pipeline facilities under Section 7(b) of the Natural Gas Act (15 U.S.C. 717 f (b)).

Department of Energy, Economic Regulatory Commission:

- Regulation of gas pipelines, and licensing of import or export of natural gas pursuant to the Natural Gas Act (15 U.S.C. 717) and the Energy Reorganization Act of 1974.
- Exemptions from prohibition orders.

Environmental Protection Agency:

- NPDES permits and other permits for Federal installations, discharges in contiguous zones and ocean waters, sludge runoff and aquaculture permits pursuant to Sections 401, 402, 403, 405, and 318 of the Federal Water Pollution Control Act of 1972 (33 U.S.C. 1341, 1342, 1343, and 1328).
- Permits pursuant to the Resources Recovery and Conservation Act of 1976.
- Permits pursuant to the underground injection Control program under Section 1424 of the Safe Water Drinking Water Act (42 U.S.C. 300 h-c).
- Permits pursuant to the Clean Air Act of 1976 (42 U.S.C. 1857).

Department of Interior, Fish and Wildlife Services:

- Endangered species permits pursuant to the Endangered Species Act (16 U.S.C. 153 (a)).

Department of Interior, Mineral Management Service:

- Permits to drill, rights of use and easements for construction and maintenance of pipelines, gathering and flow lines and associated structures pursuant to 43 U.S.C. 1334, exploration and development plans, and any other permits or authorizations granted for activities described in detail in OCS exploration, development, and production plans.
- Permits required for pipelines crossing federal lands, including OCS lands, and associated activities pursuant to the OCS Lands Act (43 U.S.C. 1334) and 43 U.S.C. 931 (c) and 20 U.S.C. 185.

Interstate Commerce Commission:

- Authority to abandon railway lines (to the extent that the abandonment involves removal of trackage and disposition of right-of-way); authority to construct railroads; authority to construct slurry pipelines.

Nuclear Regulatory Commission:

- Licensing and certification of the siting, construction, and operation of nuclear power plants, pursuant to Atomic Energy Act of 1954, Title II of the Energy Reorganization Act of 1974 and the National Environmental Policy Act of 1969.

Department of Transportation:

- Construction or modification of bridges, causeways or pipelines over navigable waters pursuant to 49 U.S.C. 1455.
- Permits for Deepwater Ports pursuant to the Deepwater Ports Act of 1974 (33 U.S.C. 1501).

Department of Transportation, Federal Aviation Administration:

- Permits and licenses for construction, operation or alteration of airports.

III. Federal Financial Assistance to State and Local Governments

The following activities, involving financial assistance from federal agencies to state and local governments, are subject to the consistency provisions of the Coastal Zone Management Act, its implementing regulations in 15CFR Part 930, Subpart F, and the New York Coastal Management Program. When these activities involve financial assistance for entities other than State and local governments, the activities are subject to the consistency provisions of 15 CFR Part 930, Subpart C.

Department of Agriculture

- 10.068 Rural Clean Water Program
- 10.409 Irrigation, Drainage, and Other Soil and Water Conservation Loans
- 10.410 Low to Moderate Income Housing Loans
- 10.411 Rural Housing Site Loans
- 10.413 Recreation Facility Loans
- 10.414 Resource Conservation and Development Loans
- 10.415 Rural Rental Housing Loans
- 10.416 Soil and Water Loans
- 10.418 Water and Waste Disposal Systems for Rural Communities
- 10.419 Watershed Protection and Flood Prevention Loans
- 10.422 Business and Industrial Loans
- 10.423 Community Facilities Loans
- 10.424 Industrial Development Grants
- 10.426 Area Development Assistance Planning Grants
- 10.429 Above Moderate Income Housing Loans
- 10.430 Energy Impacted Area Development Assistance Program
- 10.901 Resource Conservation and Development
- 10.902 Soil and Water Conservation
- 10.904 Watershed Protection and Flood Prevention
- 10.906 River Basin Surveys and Investigations

Department of Commerce

- 11.300 Economic Development - Grants and Loans for Public Works and Development Facilities
- 11.301 Economic Development - Business Development Assistance
- 11.302 Economic Development - Support for Planning Organizations
- 11.304 Economic Development - State and Local Economic Development Planning
- 11.305 Economic Development - State and Local Economic Development Planning

- 11.307 Special Economic Development and Adjustment Assistance Program - Long Term Economic Deterioration
- 11.308 Grants to States for Supplemental and Basic Funding of Titles I, II, III, IV, and V Activities
- 11.405 Anadromous and Great Lakes Fisheries Conservation
- 11.407 Commercial Fisheries Research and Development
- 11.417 Sea Grant Support
- 11.427 Fisheries Development and Utilization Research and Demonstration Grants and Cooperative Agreements Program
- 11.501 Development and Promotion of Ports and Intermodal Transportation
- 11.509 Development and Promotion of Domestic Water-borne Transport Systems

Department of Housing and Urban Development

- 14. 112 Mortgage Insurance - Construction or Substantial Rehabilitation of Condominium Projects
- 14. 115 Mortgage Insurance - Development of Sales Type Cooperative Projects
- 14. 117 Mortgage Insurance - Homes
- 14. 124 Mortgage Insurance - Investor Sponsored Cooperative Housing
- 14. 125 Mortgage Insurance - Land Development and New Communities
- 14. 126 Mortgage Insurance - Manages ant Type Cooperative Projects
- 14. 127 Mortgage Insurance - Mobile Home Parks
- 14. 218 Community Development Block Grants/Entitlement Grants
- 14. 219 Community Development Block Grants/Small Cities Program
- 14. 221 Urban Development Action Grants
- 14. 223 Indian Community Development Block Grant Program

Department of the Interior

- 15.400 Outdoor Recreation - Acquisition, Development and Planning
- 15.402 Outdoor Recreation - Technical Assistance
- 15.403 Disposal of Federal Surplus Real Property for Parks, Recreation, and Historic Monuments
- 15.411 Historic Preservation Grants-In-Aid
- 15.417 Urban Park and Recreation Recovery Program
- 15.600 Anadromous Fish Conservation
- 15.605 Fish Restoration
- 15.611 Wildlife Restoration

- 15.613 Marine Mammal Grant Program
- 15.802 Minerals Discovery Loan Program
- 15.950 National Water Research and Development Program
- 15.951 Water Resources Research and Technology - Assistance to State Institutes
- 15.952 Water Research and Technology-Matching Funds to State Institutes

Department of Transportation

- 20.102 Airport Development Aid Program
- 20.103 Airport Planning Grant Program
- 20.205 Highway Research, Planning, and Construction Railroad Rehabilitation and Improvement
- Guarantee of Obligations
- 20.309 Railroad Rehabilitation and Improvement – Guarantee of Obligations
- 20.310 Railroad Rehabilitation and Improvement - Redeemable Preference Shares
- 20.506 Urban Mass Transportation Demonstration Grants
- 20.509 Public Transportation for Rural and Small Urban Areas

General Services Administration

- 39.002 Disposal of Federal Surplus Real Property

Community Services Administration

- 49.002 Community Action
- 49.011 Community Economic Development
- 49.013 State Economic Opportunity Offices
- 49.017 Rural Development Loan Fund
- 49.018 Housing and Community Development (Rural Housing)

Small Business Administration

- 59.012 Small Business Loans
- 59.013 State and Local Development Company Loans
- 59.024 Water Pollution Control Loans
- 59.025 Air Pollution Control Loans
- 59.031 Small Business Pollution Control Financing Guarantee

Environmental Protection Agency

- 66.001 Air Pollution Control Program Grants
- 66.418 Construction Grants for Wastewater Treatment Works
- 66.426 Water Pollution Control - State and Area-wide Water Quality Management Planning Agency
- 66.451 Solid and Hazardous Waste Management Program Support Grants
- 66.452 Solid Waste Management Demonstration Grants
- 66.600 Environmental Protection Consolidated Grants Program Support
- 66.800 Comprehensive Environmental Response, Compensation and Liability (Superfund)

Note: Numbers refer to the Catalog of Federal Domestic Assistance Programs, 1980 and its subsequent updates before 2006.

6.3. State and Federal Actions and Programs Necessary to further the Town of Penfield's LWRP Programs

This part is a more focused and descriptive list of State and federal agency actions that are necessary for further implementation of this LWRP. It is recognized that a State and federal agency's ability to undertake such actions is subject to a variety of factors and considerations; that the consistency provisions referred to above, may not apply; and that the consistency requirements cannot be used to require a State or federal agency to undertake an action it could not undertake pursuant to other provisions of law. Reference should be made to Section IV and Section V, which also discusses State and federal assistance needed to implement the LWRP.

I. State Actions and Programs

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

- Funding assistance with planning studies and/or design and construction of projects targeted to control the erosion of steep slopes in the Town's waterfront area.
- Review and approval for septic system installation and replacement in non-sewered areas of the waterfront, particularly along Avalon Trail.
- Implement and administer Article 24 of the State's Environmental Conservation Law for Irondequoit's wetlands areas.
- Map, adopt, and administer 6 NYCRR Part 505 Coastal Erosion Management.
- Technical assistance, review, and approval of the Irondequoit Creek Valley Multi-use Trail.
- Technical assistance, review, and approval of public access improvements within the Town's waterfront areas.

DIVISION OF HOMES AND COMMUNITY RENEWAL

- Funding and technical assistance with revitalization efforts in the LaSalle's landing area.

ENVIRONMENTAL FACILITIES CORPORATION

- Funding assistance for the planning, design and construction of sewer extensions or other improvement projects within the Monroe County Sewer Districts.

DEPARTMENT OF STATE

- Funding and technical assistance for LWRP implementation of various planning, design and construction projects, as outlined in Section IV of this Program.
- Funding assistance through the Environmental Protection Fund for park improvement projects and the development of the Irondequoit Creek Valley Multi-use Trail.
- Funding and technical assistance through the Brownfield Opportunity Area Program for properties in and around the LaSalle's Landing area.

NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY

- Funding and technical assistance with energy efficiency studies and projects.

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

- Provide improvements to Empire Boulevard which will improve circulation and access for pedestrians and bicyclists.
- Provide traffic calming improvements to Empire Boulevard.

EMPIRE STATE DEVELOPMENT CORPORATION

- Assistance is needed for the preparation of economic feasibility studies for the reuse of various deteriorated and unutilized structures, with the siting or improvement of public facilities and with revitalization efforts in the LaSalle's Landing area.

OFFICE OF GENERAL SERVICES

- Prior to any development occurring in the water or on the immediate waterfront, OGS will be contacted for a determination of the State's interest in underwater or formerly underwater lands and for authorization to use and occupy such lands.

OFFICE OF PARKS, RECREATION, AND HISTORIC PRESERVATION

- Funding assistance for the planning, design and construction of expansion or improvement projects at LaSalle's Landing Park, Abraham Lincoln Park, and Ellison Park.
- Funding approval under programs such as the Land and Water Conservation Fund and the Clean Water / Environmental Protection Fund for development of or improvements to waterfront parkland.
- Funding is also needed for the development of the Irondequoit Creek Valley Multi-use Trail.
- Provide funding assistance to both Monroe County and the Town of Penfield for the planning, development, construction, major renovation, or expansion of existing and planned recreational facilities located in or adjacent to Penfield's waterfront area.

II. Federal Actions and Programs

FEDERAL HIGHWAY ADMINISTRATION

- Funding and technical assistance for the design and construction of improvements to Empire Boulevard for traffic calming and circulation / access for pedestrians and bicyclists.

DEPARTMENT OF COMMERCE

- Funding and technical assistance for economic development projects in the LaSalle's Landing area.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

- Funding assistance for community projects through the Community Develop Block Grants program.

SMALL BUSINESS ADMINISTRATION

- Funding and technical assistance for local businesses along the waterfront to stimulate economic development.

SECTION 7: LOCAL COMMITMENT AND CONSULTATION WITH FEDERAL, STATE, REGIONAL AND LOCAL AGENCIES

7.1. Local Commitment

The Town of Penfield initiated its efforts to update its Local Waterfront Revitalization Program in October 2008, at which time it established an Advisory Committee to oversee and guide the preparation of the update. The Advisory Committee was comprised of representatives from the Town government and local community, including local residents and business owners. This committee met five times during the planning process.

To strengthen local commitment for the Town's planning efforts, the Advisory Committee held a public information meeting to provide local citizens an opportunity to comments on significant issues and opportunities in the Town. The meeting was held on May 11, 2009. The purpose of this meeting was to introduce the LWRP and solicit initial comments from the public about their concerns for the waterfront. This meeting was attended by approximately 30 people. The information gathered at this meeting was utilized to shape the LWRP policies, as well as the proposed projects and implementation measures outlined in the program.

Prior to adoption, the Penfield Town Board holds a public hearing on the LWRP. This hearing affords the general public an opportunity to hear a presentation of the program as well as provides the Town Board an opportunity to hear resident's general support or remaining issues.

7.2. Consultation

The Advisory Committee forwarded draft sections of the LWRP to the Department of State for their review and comment. In addition, draft documents were distributed to a number of involved and interested agencies to gather their comments on program findings and recommendations. The agencies that were contacted for their input included the Monroe County Department of Planning and Development, the New York State Department of Environmental Conservation, the surrounding municipalities of Webster and Irondequoit.

The draft LWRP was reviewed and approved by the Penfield Town Board and forwarded to the New York State Department of State. The Department of State initiated a 60-day review period for the draft program pursuant to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act and the State Environmental Quality Review Act. Copies of the draft LWRP were distributed to all applicable Federal agencies, potentially affected State agencies, Monroe County, and the Towns of Webster and Irondequoit. Comments received on the draft LWRP were reviewed by the Town and the Department of State, and changes were made, as required, to reflect the substantive comments.

APPENDIX A: LOCAL CONSISTENCY REVIEW LAW AND WATERFRONT ASSESSMENT FORM

PENFIELD TOWN BOARD RESOLUTION NO. 15T-075

DATE March 4, 2015

BY Councilman Moore

Law & Finance COMMITTEE

NAME Adopting Local Law No. 1 of 2015 – Penfield Waterfront Consistency Review Law

WHEREAS, the Town Board of the Town of Penfield conducted a public hearing concerning the proposed local law which provides a framework for agencies in the Town of Penfield to consider the policies and purposes contained in the Local Waterfront Revitalization Program Update when reviewing applications for actions or direct agency actions located in the coastal area and to ensure that said actions and direct action are consistent with said policies and purposes was held on January 21, 2015 at 7:00 p.m. at the Penfield Town Hall, 3100 Atlantic Avenue, Penfield, New York 14526; and

WHEREAS, notice of the public hearing was given in the manner prescribed by law; and

WHEREAS, on January 21, 2015, the Penfield Town Board held a public hearing on the proposed Local Waterfront Revitalization Program Update, the Penfield Waterfront Consistency Review Law identified in Appendix A of the LWRP Update and all those who wished to be heard, either for or against the proposed local law were given the opportunity to be heard at the public hearing and subsequent to it;

NOW, THEREFORE, BE IT

RESOLVED, AND HEREBY IS ENACTED, by the Town Board of the Town of Penfield, Local Law No. 1 of 2015, which is attached hereto as Schedule A and made a part hereof; and

BE IT FURTHER

RESOLVED, This Local Law shall be effective upon filing with the office of the Secretary of State, and the Town Clerk is directed to immediately file a copy of this Local Law with the New York State Secretary of State as required by law.

Moved:	<u>Moore</u>	
Seconded:	<u>Kohl</u>	
Vote:	Kohl	<u>Aye</u>
	LaFountain	<u>Aye</u>
	Metzler	<u>Aye</u>
	Moore	<u>Aye</u>
	Quinn	<u>Aye</u>

FILED
PENFIELD, N.Y.
2015 FEB 27 AM 9:35
AMY M. STEKLOF
TOWN CLERK

Schedule A
LOCAL LAW No. 1 of 2015
TOWN OF PENFIELD
WATERFRONT CONSISTENCY REVIEW LAW

Be it enacted by the Town Board of the Town of Penfield as follows:

GENERAL PROVISIONS

I. Title.

This Local law will be known as the Town of Penfield Waterfront Consistency Review Law.

II. Authority and Purpose.

- A. This local law is adopted under the authority of the Municipal Home Rule Law and the Waterfront Revitalization of Coastal Areas and Inland Waterways Act of the State of New York (Article 42 of the Executive Law).
- B. The purpose of this local law is to provide a framework for agencies of the Town of Penfield to incorporate the policies and purposes contained in the Town of Penfield Local Waterfront Revitalization Program (LWRP) when reviewing applications for actions or direct agency actions within the Waterfront Revitalization Area Boundary; and to assure that such actions and direct actions by Town agencies are consistent with the LWRP policies and purposes.
- C. It is the intention of the Town of Penfield that the preservation, enhancement and utilization of the unique waterfront area of the Town takes place in a coordinated and comprehensive manner to ensure a proper balance between protection of natural resources and the need to accommodate limited population growth and economic development. Accordingly, this local law is intended to achieve such a balance, permitting the beneficial use of waterfront resources while preventing loss and degradation of living waterfront resources and wildlife; diminution of open space areas or public access to the waterfront; disruption of natural waterfront processes; impairment of scenic, cultural or historical resources; losses due to flooding, erosion and sedimentation; impairment of water quality; or permanent adverse changes to ecological systems.
- D. The substantive provisions of this local law shall only apply when there is in existence a Town of Penfield Local Waterfront Revitalization Program which has been adopted in accordance with Article 42 of the Executive Law of the State of New York.

III. Definitions.

- A. "Actions" include all the following, except minor actions:
 - (1) projects or physical activities, such as construction or any other activities that may affect natural, manmade or other resources in the waterfront area or the environment by changing the use, appearance or condition of any resource or structure, that:

- (i) are directly undertaken by an agency; or
 - (ii) involve funding by an agency; or
 - (iii) require one or more new or modified approvals, permits, or review from an agency or agencies;
 - (2) agency planning and policymaking activities that may affect the environment and commit the agency to a definite course of future decisions;
 - (3) adoption of agency rules, regulations and procedures, including local laws, codes, ordinances, executive orders and resolutions that may affect waterfront resources or the environment; and
 - (4) any combination of the above.
- B. "Agency" means any board, agency, department, office, other body, or officer of the Town of Penfield.
- C. "Consistent" means that the action will fully comply with the LWRP policy standards, conditions and objectives and, whenever practicable, will advance one or more of them.
- D. "Direct Actions" mean actions planned and proposed for implementation by an agency, such as, but not limited to a capital project, rule making, procedure making and policy making.
- E. "Environment" means all conditions, circumstances and influences surrounding and affecting the development of living organisms or other resources in the waterfront area.
- F. "Environmental Assessment Form" or "EAF" is a form used in determining the environmental significance or non-significance of actions in accordance with the State Environmental Quality Review Act (SEQRA).
- G. "Local Waterfront Revitalization Program" or "LWRP" means the Local Waterfront Revitalization Program of the Town of Penfield, approved by the Secretary of State pursuant to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act (Executive Law, Article 42), a copy of which is on file in the Office of the Clerk of the Town of Penfield.
- H. "Minor actions" include the following actions, which are not subject to review under this chapter:
- (1) maintenance or repair involving no substantial changes in an existing structure or facility;
 - (2) replacement, rehabilitation or reconstruction of a structure or facility, in kind, on the same site, including upgrading buildings to meet building or fire codes, except for structures in areas designated by the Coastal Erosion Hazard Area (CEHA) law where structures may not be replaced, rehabilitated or reconstructed without a permit;
 - (3) repaving or widening of existing paved highways not involving the addition of new travel lanes;
 - (4) street openings and right-of-way openings for the purpose of repair or maintenance of existing utility facilities;

- (5) maintenance of existing landscaping or natural growth, except where threatened or endangered species of plants or animals are affected, or within Significant Coastal Fish and Wildlife Habitat areas;
- (6) granting of individual setback and lot line variances, except in relation to a regulated natural feature, a bulkhead or other shoreline defense structure;
- (7) minor temporary uses of land having negligible or no permanent impact on waterfront resources or the environment;
- (8) installation of traffic control devices on existing streets, roads and highways;
- (9) mapping of existing roads, streets, highways, natural resources, land uses and ownership patterns;
- (10) information collection including basic data collection and research, water quality and pollution studies, traffic counts, engineering studies, surveys, subsurface investigations and soils studies that do not commit the agency to undertake, fund or approve any action;
- (11) official acts of a ministerial nature involving no exercise of discretion, including building where issuance is predicated solely on the applicant's compliance or noncompliance with the relevant local building code.
- (12) routine or continuing agency administration and management, not including new programs or major reordering of priorities that may affect the environment;
- (13) conducting concurrent environmental, engineering, economic, feasibility and other studies and preliminary planning and budgetary processes necessary to the formulation of a proposal for action, provided those activities do not commit the agency to commence, engage in or approve such action;
- (14) collective bargaining activities;
- (15) investments by or on behalf of agencies or pension or retirement systems, or refinancing existing debt;
- (16) inspections and licensing activities relating to the qualifications of individuals or businesses to engage in their business or profession;
- (17) purchase or sale of furnishings, equipment or supplies, including surplus government property, other than the following: land, radioactive material, pesticides, herbicides, storage of road de-icing substances, or other hazardous materials;
- (18) adoption of regulations, policies, procedures and local legislative decisions in connection with any action on this list;
- (19) engaging in review of any part of an application to determine compliance with technical requirements, provided that no such determination entitles or permits the project sponsor to commence the action unless and until all requirements of this Part have been fulfilled;

- (20) civil or criminal enforcement proceedings, whether administrative or judicial, including a particular course of action specifically required to be undertaken pursuant to a judgment or order, or the exercise of prosecutorial discretion;
 - (21) adoption of a moratorium on land development or construction;
 - (22) interpreting an existing code, rule or regulation;
 - (23) designation of local landmarks or their inclusion within historic districts;
 - (24) emergency actions that are immediately necessary on a limited and temporary basis for the protection or preservation of life, health, property or natural resources, provided that such actions are directly related to the emergency and are performed to cause the least change or disturbance, practicable under the circumstances, to waterfront resources or the environment. Any decision to fund, approve or directly undertake other activities after the emergency has expired is fully subject to the review procedures of this Part;
 - (25) local legislative decisions such as rezoning where the Town Board determines the action will not be approved.
- I. "Waterfront Assessment Form (WAF)" means the form, a sample of which is appended to this local law, used by an agency to assist in determining the consistency of an action with the Local Waterfront Revitalization Program.
 - J. "Waterfront Revitalization Area Boundary" means the Waterfront Revitalization Area Boundary as delineated in the Town of Penfield Local Waterfront Revitalization Program.

IV. Management and Coordination of the LWRP

- A. The Town of Penfield Planning Department shall be responsible for coordinating review of actions in the Town's waterfront revitalization area for consistency with the LWRP, and will advise, assist and make consistency recommendations to other Town agencies in the implementation of the LWRP, its policies and projects, including physical, legislative, regulatory, administrative and other actions included in the program.
- B. The Planning Board shall coordinate with the New York State Department of State regarding consistency review of actions by Federal agencies and with State agencies regarding consistency review of their actions.
- C. The Planning Department shall assist the Town Board in making applications for funding from State, Federal, or other sources to finance projects under the LWRP.
- D. The Planning Department shall perform other functions regarding the waterfront area and direct such actions or projects as the Town Board may deem appropriate, to implement the LWRP.

V. Review of Actions.

- A. Whenever a proposed action is located within the Town's waterfront area, each Town agency shall, prior to approving, funding or undertaking the action, make a determination that it is consistent with the LWRP policy standards summarized in Section H herein. No action in the waterfront area shall be approved, funded or undertaken by that agency without such a determination.

- B. Whenever a Town agency receives an application for approval or funding of an action, or as early as possible in the agency's formulation of a direct action to be located in the waterfront area, the agency shall refer a copy of the completed WAF to the Planning Board within ten (10) days of its receipt and prior to making its determination, shall consider the recommendation of the Planning Board with reference to the consistency of the proposed action.
- C. After referral from an agency, the Planning Board (or the Town Board in the case of the LaSalle's Landing District) shall consider whether the proposed action is consistent with the LWRP policy standards set forth in Section H herein. The Planning Board shall require the applicant to submit all completed applications, WAFs, EAFs, and any other information deemed necessary to its consistency recommendation.

The Planning Board (or the Town Board in the case of the LaSalle's Landing District) shall render its written recommendation to the agency within thirty (30) days following referral of the WAF from the agency, unless extended by mutual agreement of the Planning Board and the applicant or in the case of a direct action, the agency. The Planning Board's recommendation shall indicate whether the proposed action is consistent with or inconsistent with one or more of the LWRP policy standards and shall elaborate in writing the basis for its opinion. The Planning Board (or the Town Board in the case of the LaSalle's Landing District) shall, along with a consistency recommendation, make any suggestions to the agency concerning modification of the proposed action, including the imposition of conditions, to make it consistent with LWRP policy standards or to greater advance them.

In the event that the Planning Board's recommendation is not forthcoming within the specified time, the agency shall make its consistency decision without the benefit of the Planning Board's recommendation.

In the event that an action requires approval by the Planning Board or the Town Board, the consistency review shall be included in the Planning Board or Town Board's review and a written consistency determination shall be made prior to any decision on the action before the Board having jurisdiction.

- D. If an action requires approval of more than one Town agency, decision making will be coordinated between the agencies to determine which agency will conduct the final consistency review, and that agency will thereafter act as designated consistency review agency for the specific action being reviewed. Only one WAF per action will be prepared. If the agencies cannot agree, the Town Board shall designate the consistency review agency.
- E. Upon receipt of the Planning Board's recommendation, the agency shall consider whether the proposed action is consistent with the LWRP policy standards summarized in Section H herein. The agency shall consider the consistency recommendation of the Planning Board, the WAF and other relevant information in making its written determination of consistency. No approval or decision shall be rendered for an action in the waterfront area without a written determination of consistency having first been rendered by a Town agency.

The Zoning Board of Appeals is the designated agency for the determination of consistency for variance applications subject to this law. The Zoning Board of Appeals shall consider the written consistency recommendation of the Planning Board in the

event and at the time it makes a decision to grant such a variance and shall impose appropriate conditions on the variance to make the activity consistent with the objectives of this law. The Town Board shall have jurisdiction of all such matters within the LaSalle's Landing District.

- F. Where an EIS is being prepared or required, the draft EIS must identify applicable LWRP policies standards in Section H and include a thorough discussion of the effects of the proposed action on such policy standards.
- G. In the event the Planning Board's recommendation is that the action is inconsistent with the LWRP, and the agency makes a contrary determination of consistency, the agency shall elaborate in writing the basis for its disagreement with the recommendation and state the manner and extent to which the action is consistent with the LWRP policy standards.
- H. Actions to be undertaken within the waterfront area shall be evaluated for consistency in accordance with the following summary of LWRP policy standards, which are derived from and further explained and described in Section III (Policies) of the Town of Penfield LWRP, a copy of which is on file in the Town Clerk's office and available for inspection during normal business hours. Agencies which undertake direct actions must also consult with Section IV (Proposed Uses and Projects), in making their consistency determination. The action must be consistent with the policies to:
 - Policy 1: Foster a pattern of development in the waterfront area that enhances the community character, preserves open space, makes efficient use of infrastructure, makes beneficial use of a waterfront location, and minimizes adverse effects of development.
 - Policy 2: Preserve historic resources of the waterfront area
 - Policy 3: Enhance visual quality and protect scenic resources throughout the waterfront area
 - Policy 4: Minimize loss of life, structure, and natural resources from flooding and erosion.
 - Policy 5: Protect and improve water quality and supply
 - Policy 6: Protect and restore the quality and function of the ecosystem
 - Policy 7: Protect and improve air quality in the waterfront area
 - Policy 8: Minimize environmental degradation in the waterfront area from solid waste and hazardous substances and waste
 - Policy 9: Provide for public access to, and recreational use of, the waterway, public lands, and public resources of the waterfront area
 - Policy 10: Protect water-dependent and water-enhanced uses and promote siting of these uses in suitable locations.
 - Policy 11: Promote sustainable use of living aquatic resources
 - Policy 12: Protect agricultural lands
 - Policy 13: Promote appropriate use and development of energy and mineral resources

- I. The Town shall maintain a file for each action made the subject of a consistency determination, including any recommendations received from the Planning Board. Such files shall be made available for public inspection upon request.

VI. Enforcement.

No action within the Penfield waterfront area which is subject to review under this Chapter shall proceed until a written determination has been issued from a Town agency that the action is consistent with the Town's LWRP policy standards. In the event that an activity is being performed in violation of this law or any conditions imposed thereunder, the Building Inspector or any other authorized official of the Town shall issue a stop work order and all work shall immediately cease. No further work or activity shall be undertaken on the project so long as a stop work order is in effect. The Town Attorney and Code Enforcement Officer shall be responsible for enforcing this Chapter.

VII. Violations.

- A. A person who violates any of the provisions of, or who fails to comply with any condition imposed by, this Chapter shall have committed a violation, punishable by a fine not exceeding two hundred and fifty dollars (\$250.00) for a conviction of a first offense and punishable by a fine of one thousand dollars (\$1,000.00) for a conviction of a second or subsequent offense. For the purpose of conferring jurisdiction upon courts and judicial officers, each week of continuing violation shall constitute a separate additional violation.
- B. The Town Attorney is authorized and directed to institute any and all actions and proceedings necessary to enforce this local law. Any civil penalty shall be in addition to and not in lieu of any criminal prosecution and penalty.

VIII. Applicability.

This Article shall supersede and repeal any previous local regulations regarding Town of Penfield waterfront consistency review.

IX. Severability.

The provisions of this local law are severable. If any provision of this local law is found invalid, such finding shall not affect the validity of this local law as a whole or any part or provision hereof other than the provision so found to be invalid.

X. Effective Date.

This local law shall take effect immediately upon its filing in the office of the Secretary of State in accordance with Section 27 of the Municipal Home Rule Law.

Town of Penfield
WATERFRONT ASSESSMENT FORM

A. INSTRUCTIONS (Please print or type all answers)

- 1. Applicants, or in the case of direct actions, Town of Penfield agencies, shall complete this WAF for proposed actions which are subject to the consistency review law. This assessment is intended to supplement other information used by a Town of Penfield agency in making a determination of consistency.
- 2. Before answering the questions in Section C, the preparer of this form should review the policies and explanations of policy contained in the Local Waterfront Revitalization Program (LWRP), a copy of which is on file in the Town of Penfield Clerk's office. A proposed action should be evaluated as to its significant beneficial and adverse effects upon the coastal area.
- 3. If any question in Section C on this form is answered "yes", then the proposed action may affect the achievement of the LWRP policy standards contained in the consistency review law. Thus, the action should be analyzed in more detail and, if necessary, modified prior to making a determination that it is consistent with the LWRP policy standards. If an action cannot be certified as consistent with the LWRP policy standards, it shall not be undertaken.

B. DESCRIPTION OF SITE AND PROPOSED ACTION

- 1. Type of agency action (check appropriate response):
 - (a) Directly undertaken (e.g. capital construction, planning activity, agency regulation, land transaction) _____
 - (b) Financial assistance (e.g. grant, loan, subsidy) _____
 - (c) Permit, approval, license, certification _____
 - (d) Agency undertaking action: _____
- 2. Describe nature and extent of action: _____

- 3. Location of action (Street or Site Description): _____

4. Size of site: _____
5. Present land use: _____
6. Present zoning classification: _____
7. Describe any unique or unusual land forms on the project site (i.e. steep slopes, swales, ground depressions, other geological formations):

8. Percentage of site which contains slopes of 15% or greater: _____
9. Streams, lakes, ponds or wetlands existing within or contiguous to the project area?
 (a) Name: _____
 (b) Size (in acres): _____
10. If an application for the proposed action has been filed with the agency, the following information shall be provided:
 (a) Name of applicant: _____
 (b) Mailing address: _____
 (c) Telephone number: Area Code () _____
 (d) Application number, if any: _____
11. Will the action be directly undertaken, require funding, or approval by a state or federal agency? Yes___ No___
 If yes, which State or federal agency? _____

C. WATERFRONT ASSESSMENT

(Check either "Yes" or "No" for each of the following questions)

	YES	NO
1. Will the proposed action be located in, or contiguous to, or have a potentially adverse effect upon any of the resource areas identified on the waterfront revitalization area map:		
(a) Significant fish or wildlife habitats?	----	----
(b) Scenic resources of local or statewide significance?	----	----
(c) Important agricultural lands?	----	----
(d) Natural protective features in an erosion hazard area	----	----

If the answer to any question above is yes, please explain in Section D any measures which will be undertaken to mitigate any adverse effects.

2. Will the proposed action have a <u>significant effect</u> upon:	YES	NO
--	------------	-----------

	(a)	Commercial or recreational use of fish and wildlife resources?	-----	-----
	(b)	Scenic quality of the waterfront environment?	-----	-----
	(c)	Development of future, or existing water dependent uses?	-----	-----
	(d)	Land or water uses within the harbor area?	-----	-----
	(e)	Stability of the shoreline?	-----	-----
	(f)	Surface or groundwater quality?	-----	-----
	(g)	Existing or potential public recreation opportunities?	-----	-----
	(h)	Structures, sites or districts of historic, archeological or cultural significance to the Town of Penfield, State or nation?	-----	-----
3.		Will the proposed action <u>involve</u> or <u>result</u> in any of the following:	YES	NO
	(a)	Physical alteration of land along the shoreline, land under water or the designated waterfront area?	-----	-----
	(b)	Physical alteration of two (2) acres or more of land located elsewhere in the waterfront area?	-----	-----
	(c)	Expansion of existing public services or infrastructure in undeveloped or low density areas of the waterfront area?	-----	-----
	(d)	Energy facility not subject to Article VII or VIII of the Public Service Law?	-----	-----
	(e)	Mining, excavation, filling or dredging in waterways?	-----	-----
	(f)	Reduction of existing or potential public access or along the shore?-----	-----	-----
	(g)	Sale or change in use of publicly-owned lands located on the shoreline or under water?	-----	-----
	(h)	Development within a designated flood or erosion hazard area?	-----	-----
	(i)	Development on a beach, dune, barrier island or other natural feature that provides protection against flooding or erosion?	-----	-----
	(j)	Construction or reconstruction of erosion protective structures?-----	-----	-----
	(k)	Diminished surface or groundwater quality?	-----	-----
	(l)	Removal of ground cover from the site?	-----	-----
4.		PROJECT	YES	NO
	(a)	If a project is to be located adjacent to shore:		
		(1) Will water-related recreation be provided?	-----	-----
		(2) Will public access to the foreshore be provided?	-----	-----
		(3) Does the project require a waterfront site?	-----	-----
		(4) Will it supplant a recreational or maritime use?	-----	-----

- (5) Do essential public services and facilities presently exist at or near the site? -----
- (6) Is it located in a flood prone area? -----
- (7) Is it located in an area of high erosion? -----
- (b) If the project site is publicly owned:
 - (1) Will the project protect, maintain and/or increase the level and types of public access to water-related recreation resources and facilities? -----
 - (2) If located in the foreshore, will access to those and adjacent lands be provided? -----
 - (3) Will it involve the siting and construction of major energy facilities? -----
 - (4) Will it involve the discharge of effluents from major steam electric generating and industrial facilities into waterways?-----
- (c) Is the project site presently used by the community as an open space or recreation area? -----
- (d) Does the present site offer or include scenic views or vistas known to be important to the community? -----
- (e) Is the project site presently used for commercial fishing or fish processing? -----
- (f) Will the surface area of any waterways or wetland areas be increased or decreased by the proposal? -----
- (g) Does any mature forest (over 100 years old) or other locally important vegetation exist on this site which will be removed by the project? -----
- (h) Will the project involve any waste discharges into waterways? -----
- (i) Does the project involve surface or subsurface liquid waste disposal? -----
- (j) Does the project involve transport, storage, treatment or disposal of solid waste or hazardous materials? -----
- (k) Does the project involve shipment or storage of petroleum products? -----
- (l) Does the project involve discharge of toxics, hazardous substances or other pollutants into waterways? -----
- (m) Does the project involve or change existing ice management practices? -----
- (n) Will the project affect any area designated as a tidal or freshwater wetland? -----
- (o) Will the project alter drainage flow, patterns or surface water runoff on or from the site? -----

APPENDIX B: IRONDEQUOIT BAY HARBOR MANAGEMENT PLAN

PLANS AND STUDIES Reference Form

Title: Irondequoit Bay Harbor Management Plan

Board Action: Adopted

Action Date: 11/2003

Acting Board: Town Board

Prepared By: Dufresne Henry

Contact:
Department Planning
3100 Atlantic Ave
Phone: (315) 340-8682
E-mail: planning@penfield.org

Other Names:

Other Documents: Biological Study

Notes: Harbor Management Law No. 12 of 2008

IRONDEQUOIT BAY HARBOR MANAGEMENT PLAN

Prepared for:

Towns of Irondequoit, Penfield & Webster
Monroe County
Irondequoit Bay Coordinating Committee
New York State Department of State

Prepared by:

Dufresne-Henry (formerly The Cavendish Partnership)
151 St. Paul Street, Floor 5
Rochester, NY 14604

With:

Nutter Associates
F-E-S Associates
Drake Environmental Consultants

November 2003

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Thanks also to the following for their participation

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Bob Henry, Irondequoit Fish and Game Club
Bob Jonas, Monroe County Water Quality Coordinating Committee
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2. Minimum Bottom Elevations for Various Use Activities
3. Summary Description of Confirmed Waste Sites around Irondequoit Bay
4. Compatibility of Activities with Wetland and Adjacent Area
5. Implementation Schedule

FIGURES (following tables)

1. Boat Storage Market Absorption Prediction

APPENDICES (following figures)

- A. [Bibliography](#)
- B. Irondequoit Bay Hiking Trail Plan (not included)
- C. Draft Irondequoit Bay Comprehensive Harbor Management Law (not included)

EXHIBITS (following appendices)

1. Harbor Management Area Boundary
2. Regional Context
3. Regional Watershed
4. Soils and Wetlands
5. Natural Protective Features
6. Recreational Facilities and Public Access
7. Historic Sites
8. Current Water Surface Use
9. Slopes and Water Depth
10. Irondequoit Bay - Improvements in Trophic State
- 11a. Significant Habitats and Natural Areas
- 11b. Biological Study Sampling Sites
12. Visual Resources
13. Confirmed and Suspected Waste Sites
14. Water Surface Use Map
15. Proposed Speed Limit Map

ACRONYMS USED IN THE IRONDEQUOIT BAY HARBOR MANAGEMENT PLAN

BMPs = Best Management Practices
CSOs = Combined Sewer Overflows
DEIS = Draft Environmental Impact Statement
EMC = MC Environmental Management Council
EPOD = Environmental Protection Overlay District
IBCC = Irondequoit Bay Coordinating Committee
IBHMPAC = Irondequoit Bay Harbor Management Plan Advisory Committee
IGLD = International Great Lakes Datum
LLDD = LaSalle's Landing Development District
LWRP = Local Waterfront Revitalization Plans
MC = Monroe County
MCDOH = MC Department of Health
MCDOT = MC Department of Transportation
MCDPD = MC Department of Planning and Development
MCEHL = MC DOH Environmental Health Lab
MCWA = Monroe County Water Authority
NURP = National Urban Runoff Program
NYS = New York State
NYS DEC = NYS Department of Environmental Conservation
NYS DOS = NYS Department of State
NYS OGS = NYS Office of General Services
NYS OPRHP = NYS Office of Parks, Recreation and Historic Preservation
NYNHP = New York Natural Heritage Program
PWC = Personal watercraft
RMSC = Rochester Museum and Science Center
RTS = Rochester/Genesee Regional Transit Service
SEQR = State Environmental Quality Review Act
SPDES = State Pollution Discharge Elimination System
USACE = U.S. Army Corps of Engineers
WDD = Waterfront Development Districts
WQMP = Water Quality Management Plan

PLAN SUMMARY

Irondequoit Bay: once Native American hunting and fishing grounds; a harbor of refuge and trading station for the French, the English, and the new American nation; playground of the 1890's, has undergone a dramatic ecological and residential rejuvenation over the last 30 years due to an unprecedented investment of public planning and funds, citizen action and stewardship. One of the largest coastal bays of Lake Ontario, Irondequoit Bay offers 1,680 acres of water surface available to public use adjacent to the third largest metropolitan center in New York State. The bay is surrounded by steep embankments and wooded uplands that tower high above the water's edge. Rare birds and plant species are scattered through the surrounding forests and wetlands. A wide range of habitat types results in a diversity of fish and wildlife that is quite unusual adjacent to a highly populated area. Adjacent urban and suburban community residents and visitors are provided a rare opportunity to experience nature through such activities as hunting, fishing, hiking, nature study and bird watching. Irondequoit Bay is also popular for its recreational activities including boating, fishing, water skiing, sailing and winter sports. The entire bay functions as a valuable ecological system, and is a major nursery area for the Lake Ontario ecosystem. The maximization of enjoyment of this resource for all users combined with the protection of the bay's unique, diverse and sensitive ecological features is an objective highly worthy of effort and expenditure. The document examined in this executive summary, *The Irondequoit Bay Harbor Management Plan*, is the culmination of that effort.

The *Irondequoit Bay Harbor Management Plan* has been prepared as part of New York State's Coastal Resources and Local Waterfront Revitalization Program, authorized by the Waterfront Revitalization of Coastal Areas and Inland Waterways Act to aid in the planning and regulation of water use activity in intensely-used waterfront areas.

The *Harbor Management Plan* was prepared to help assure greater consistency in reviewing plans among the local municipalities and various state and federal agencies. Upon its approval, the Plan would mandate state and federal agencies to adhere to the guidelines which it sets forth. The approved plan will help New York State Department of Environmental Conservation (NYS DEC), Monroe County and the sponsoring Towns of Irondequoit, Webster and Penfield cooperate to make better use of the Bay, and will also provide justification for municipal regulation of structures in, and uses of, water and underwater lands.

The *Harbor Management Plan* is intended as an addendum to the Local Waterfront Revitalization Plans (LWRPs) adopted by the Towns of Irondequoit (1988), Penfield (1991) and Webster (1997). The LWRPs provided guidance for the regulation of landside development in the Bay ecosystem and have been approved by the NYS Secretary of State, with the concurrence of the U.S. Office of Ocean and Coastal Resource Management. Subsequent to LWRP adoption, each Town amended its zoning ordinance to reflect LWRP findings in the waterfront area. The Harbor Management Plan addresses the regulation and use of the water surface.

The study area boundaries are Lake Ontario along the north edge of the Bay; Bay Road and Creek Street on the east; Browncroft Boulevard on the south; and NYS Route 590 and Culver Road on the west. The majority of the area included within the overall study area boundary lies within the jurisdictions of the towns of Irondequoit, Penfield and Webster. Small areas of land in the southern portion of the Bay are within the jurisdiction of the City of Rochester and the Town of Brighton.

GOALS

The following Goals were developed by the Irondequoit Bay Harbor Management Plan Advisory Committee (IBHMPAC). The Goals have been used in the development of Plan Policies, Water Surface Use Recommendations and Project Recommendations.

Resource Protection

Goal 1: Better protect and enhance the sensitive natural areas and resources of the Bay.

Objectives:

1. Increase stakeholders' awareness and appreciation of the sensitive natural areas and resources of the Bay.
2. Provide better understanding of significant fish and wildlife value, their sensitivity to development and adjacent water surface use impacts.
3. Prepare Irondequoit Bay Biological Study.
4. Balance water dependent uses and protection of sensitive natural resources of the Bay, based on the Carrying Capacity Study of the Bay.

Goal 2: Improve and protect water quality of Irondequoit Bay for desired uses which emphasize a healthy aquatic ecosystem.

Objective:

Ensure desired Bay water quality for its designated best use.

Goal 3: Ensure that development around the Bay occurs without impacting significant resources (e.g. environmental, historical, archeological, aesthetic features).

Objectives:

1. Have new developments fit the topography, accessibility, relationship to adjacent uses, subsurface conditions and availability of public services and utilities.
2. Manage woodlots around the Bay to maintain aesthetic character protect the views, protect steep slopes, and wildlife habitats.

Water Surface Use Conflicts

Goal: Minimize and resolve water surface use conflicts and conflicts among all of the stakeholders of Irondequoit Bay.

Objectives:

1. Provide for an appropriate mix of commercial and active and passive recreational opportunities on the Bay's water and associated land areas.
2. Ensure that development and water surface use will be designed and conducted in harmony with the environment so as not to conflict with overriding interest of conserving the natural beauty of the Bay.

Public Access

Goal: Improve public access to diverse recreational opportunities on Irondequoit Bay.

Objectives:

1. Provide adequate and safe public access to a mix of active and passive recreational opportunities on the Bay's water and adjacent up-lands.
2. Identify, acquire, develop and maintain land around the Bay for public recreational use.
3. Coordinate and formalize development of trails around the Bay.
4. Increase points of public access through public ownership.
5. Increase public access of views to and from the Bay.

Economic Development

Goal: Make Irondequoit Bay an integral part of local and regional tourism development efforts.

Objectives:

1. Protect and improve/upgrade existing water dependent commercial and recreational uses where access, utilities and parking can be made available without significant impact on the Bay's resource value.
2. Encourage new water dependent recreational uses or expansion of such existing uses in the LaSalle's Landing, Sea Breeze areas and other Waterfront Development zoning districts identified in the local Master Plans, LWRPs and Monroe County Parks Department Plans.

An informal ranking of the goals was performed by the IBHMAC as an analysis exercise to assist in determining an overall direction for the Plan. The ranking demonstrated a unanimous critical interest in resource protection. Other criteria ranked include reduction of water surface use conflicts (2nd), public access (3rd) and economic development (4th).

WATER SURFACE USE RECOMMENDATIONS

The *Harbor Management Plan* recommends the adoption of a water surface use scenario that balances the interests and desire for development and active recreation with the need to protect the Bay's fragile natural resources.

In proposed regulations that should be incorporated into a new Comprehensive Harbor Management Law adopted by all of the participating municipalities, Irondequoit Bay should have a boat storage build-out of approximately 2,250. This number includes both wet and dry storage, which was arrived at by evaluation of environmental needs and the concentration of some docks into harbor areas. This represents an ability to add another 35% capacity over the next decades to accommodate increases in market demand. The increase in boat storage would be focused on areas of the Plan designated as Harbor Areas, and would be strongly discouraged from areas of the Plan designated as Resource Protection Areas.

Bay-wide Recommendations

The *Harbor Management Plan* is designed to have long-range vision since recreational demands and regional population have historically demonstrated only a slow pattern of growth and future growth is hard to predict. The following recommendations are made:

- Adopt a land and water use concept plan as depicted on [Exhibit 14, Water Surface Use Map](#).
- The total build-out boat storage spaces (wet and dry), as indicated in Section V.B.2, *Recommended Harbor Management Plan Scenario*, should be adopted as part of the Plan.
- Future development of the waterfronts of upland areas should be limited based on suitability of access and other aquatic and upland resource protection issues.
- The Plan supports implementation of Town and County plans for the Bay ecosystem, including the *Sea Breeze Revitalization Plan*, the *LaSalle's Landing Plan* and the *Irondequoit Bay Hiking Trail Plan*.
- Dockage in residential zones should be considered an accessory use.
- All existing and fully approved docks, dry storage, moorings, marinas and boat launches should be allowed to continue, subject to DEC permitting.
- A Comprehensive Harbor Management Law should be adopted which addresses wake, speed, boat storage, water surface use, noise and dredging, among many other items.
- A Harbormaster position should be created to enforce and regulate the Harbor Management Law and educate stakeholders.

Winter and Off-Season Use

Winter use of the Bay's water area consists of a moderate incidence of ice fishing, skating, snowmobiling and related activity at various points in the Bay

which are accessible from Empire Blvd., Lakeshore Dr., the outlet bridge and individual properties. It appears that there is less freezing over of the Bay than in previous decades due to a variety of reasons, some climatic and some related to development.

- It is recommended that winter use of the Bay be consistent with safety, noise and clean water considerations and be appropriately regulated. Of particular concern is minimizing user conflicts, limiting the noise from motorized activity and addressing safety concerns regarding operation of motor vehicles on the ice. Noise ordinances from the three Towns should be reviewed for consistency and incorporated into the Harbor Management Law.

The increasing use of “bubbler” systems to prevent ice formation around docks means that ice is less stable in those areas.

- It is recommended that a permit system be established, directed by the Harbormaster, for all installations of ice prevention systems. Standard specifications should be developed by the Harbormaster including a provision that dock owners who utilize bubblers post warning notices in appropriate spots pertaining to the dangers of thin ice.
- A “carry-in, carry-out” policy should be established and promoted to reduce the amount and type of litter left on the ice.

Hunting

Town firearm and hunting ordinances and the regulations discussed in the DEC *Hunting and Trapping Regulations Guide* apply on Irondequoit Bay.

Wake and Speed Limit

Vessel speed and wake limits are currently regulated under Article 4, Part 1, Section 45-aaa of NYS Navigation Law as follows:

1. No vessel shall be operated on Irondequoit Bay, which is located within Monroe County, at a speed exceeding 25 mph.
2. No vessel shall be operated in the channel between Irondequoit Bay and Lake Ontario or within 200 feet of the shore, the channel, a dock, pier, raft or float or an anchored or moored vessel in a manner or at a speed that causes a wake that unreasonably interferes with or endangers such dock, pier, raft or float or an anchored or moored vessel but in no event at a speed exceeding 5 mph, unless for the purpose of enabling a person engaged in water skiing to take off or land.
3. The provisions of this section shall not apply to any vessel competing in or practicing for a regatta or boat race over a specified course held by a bona fide club or racing association, provided that due written notice of the date of the race has been given to the appropriate law enforcement agency at least

fifteen days prior to such race, pursuant to the provisions of section 34 of this chapter, and all provisions of this section have been complied with.

4. Any person who operates a vessel in violation of any of the provisions of this section shall be guilty of a violation punishable as set forth in section 73-c of this article.
5. Nothing in this section shall be construed as prohibiting any town or county from continuing, adopting or enacting any other local laws, resolutions or ordinances related to persons operating a vessel within its limits, but no such municipality shall have the power to make less restrictive any of such provisions.

The existing navigation law should be revised as follows:

- The no-wake/5-mph zone within 200 feet of the shore, the channel, a dock, pier, raft or float or an anchored or moored vessel should be expanded to 300 feet.
- Wave-attenuating devices are not subject to the 300-foot no-wake/5-mph zone.

See [Exhibit 15, Proposed Speed Limit Map](#)

Area-specific Recommendations

See [Exhibit 14, Water Surface Use Map](#)

The water use areas, much like traditional zoning, define allowable uses, non-conforming uses and prescribe performance standards for the use and installation of improvements over the water surface. The following recommendations are made to minimize congestion, increase public safety and fulfill other stated goals of the Harbor Management Plan. Water Surface Use has been categorized as:

- Resource Protection Areas;
- Harbor Areas;
- Navigation Ways;
- Near Shore Areas; and
- Open Water Areas.

Resource Protection Areas

Irondequoit Bay's natural resources are recommended to be protected with a Resource Protection Area. This water surface area is depicted on the proposed Water Surface Use Map and is generally associated with the following natural resource areas:

- Monroe County Environmental Management Council's designated Environmentally Sensitive Areas;
- New York State Natural Heritage Areas; and
- Coves and environmentally sensitive areas as identified in the 1984 Gross Overview of Fish and Wildlife Resources prepared by the DEC; and the 2002 Biological Study of Irondequoit Bay by Jim Haynes, et al.

Environmentally sensitive parcels within Resource Protection Areas should be acquired to limit development in these areas. All undeveloped coves and the extreme southwest section of the Bay are recommended for maximum protection due to the diversity of fish and wildlife habitat and emergent wetlands. Minimal waterfront access is recommended in these areas. No additional development is recommended within these areas.

Speed/Wake Recommendations for the Resource Protection Areas

Regulations outlined in Section 45-aaa of NYS Navigation Law have been proposed to be extended to include most Resource Protection Areas. As such, the most appropriate craft in these areas would include non-motorized boats, such as canoes, kayaks, self-propelled paddleboats, rowboats and wind surfers.

An educational program should be initiated to help boaters understand the environmental significance of all Resource Protection Areas and the need to operate under reduced speed and wake conditions.

Boat Storage in the Resource Protection Areas

Boat storage is incompatible with Resource Protection Areas and is discouraged in such areas. If permitted, dock, slip and mooring development in Resource Protection Areas would be limited based upon the proximity to significant habitat areas and their potential impact on environmental features. Specific recommendations for boat storage in Resource Protection Areas include:

- When docks and piers are not permissible for environmental reasons, other options for riparian access should be explored.
- Shared docking facilities should be considered in the application process. If shared docking is not possible, a maximum of one dock per parcel may be permitted.
- When allowed, docks should not extend offshore more than 50 feet and be limited to a maximum of 200 square feet as recommended in *Environmental Objectives and Development Management Measures* (IBCC, 1985), unless a reasonable extension would avoid the need to dredge.

Dredging in the Resource Protection Areas

No dredging should be permitted within the Resource Protection Areas.

Harbor Areas

Harbor areas are recommended within Irondequoit Bay to provide public access, safe refuge, transient berthing and economic development opportunity. The recreational demand on the Bay has grown significantly over the past decade and a half and is expected to continue to grow, exceeding current boat storage capacity. All Harbor areas should meet three primary locational criteria including water depth, waterfront development district zoning and landside support (parking and utilities).

Four Harbor Area Areas are recommended for the Bay and are designated as the North Harbor, the Center Harbor, Glen Edith and the South Harbor on the Water Surface Use Map.

North Harbor

The North Harbor includes the Outlet channel, a portion of the Irondequoit Bay Marine Park which includes the boat launch and parking facilities, a portion of the public/transient dock area shown in the *Sea Breeze Revitalization Plan* and the area around Mayer's Marina. It excludes the environmentally sensitive areas north of the southernmost outlet channel markers.

The Harbor includes two recommended docking areas, one at Sea Breeze and the other in the area around Mayer's Marina. The depth of the water within the North Harbor is a limitation and dredging would be required to provide ample water depth. Consistent with the land use plans, a key recommendation of the North Harbor is to provide facilities for public access to the water, including two boat launches, transient docking for the Sea Breeze area and a public mooring area. The North Harbor should be designed to accommodate boats that take refuge in the Bay from Lake Ontario in rough weather.

The recommended carrying capacity ceiling for the North Harbor area is approximately 414 wet berths, including transient docks, seasonal docks and permanent moorings. The North Harbor is considered to be the best location for intensive build-out of wet storage due to its proximity to the Irondequoit Bay outlet and availability of required landside support such as parking, utilities, public access and appropriate zoning.

Center Harbor

The Center Harbor Area includes the area around Newport Marina. Any additional storage in this area would be contingent on providing additional landside support. The recommended carrying capacity for the Center Harbor Area is a total of 217.

Glen Edith

The former Glen Edith Restaurant and adjacent parcels provide both landside support and access as well as water depth. This area, on the east side of the Bay, has historically been used for commercial and docking purposes.

The recommended maximum build-out for the Glen Edith area is a total storage of up to 100 boats, including transient and seasonal docks, dry storage and permanent moorings.

Potential South Harbor

Based on historical observations it is anticipated that because of environmental limitations such as sedimentation and reduction of lake levels the Bounty Harbor Marina and Sutter's Marina may no longer be viable for marina activity. These two facilities are considered pre-existing non-conforming uses in a Resource Protection Area. If these facilities are no longer viable, Irondequoit Bay Park West could be considered for a marina facility to compensate for the loss of boat storage. This new marina could be developed at the north end of the park where water depths are the greatest, landside support is available and access to the open waters of the Bay is most direct. This would replace the 186 slips at the Bounty Harbor Marina and 160 slips at Sutter's Marina and would be contingent upon closing these existing facilities. However, care must be taken in the design of the facility to avoid adverse environmental and visual impacts. Trail, vehicular and shuttle connections to LaSalle's Landing are also recommended in the development of this area.

Consolidation of marina and storage slips located south of the proposed marina site into the overall Irondequoit Bay Park West marina would limit impacts on the sensitive shallow areas. The marina could be considered for lease to a private operator or for operation by Monroe County Department of Parks. Such development would be subject to appropriate State and Federal approvals. Additional site-specific analysis will need to be performed before this recommendation is considered.

Use of the informal launch ramp at the bottom of Orchard Park Blvd. by vehicles with trailers is inappropriate based on the ecological sensitivity of this area. It is recommended that this launch ramp be reconfigured so that boats on trailers will not be able to use this facility. To compensate for the loss of this ramp, it is recommended that a small-scale ramp be constructed in the South Harbor Area.

Special Anchorage Areas

Special Anchorage Areas are proposed to be part of Harbor Areas providing formal locations for anchoring and mooring vessels. The Special Anchorage Areas are designated on the Water Surface Use Plan. Water surface uses allowed within the Special Anchorage Areas include:

- Transient Anchorage;
- Transient Mooring;
- Seasonal Mooring; and
- Other passive recreational uses not in conflict with anchorage and mooring activities.

The Harbormaster should be responsible for managing the Special Anchorage Areas and assigning permits to parties for permanent or transient moorings. A priority system should be developed to provide Town residents and littoral property owners that have restricted water access with first opportunities to secure seasonal moorings.

Speed/Wake Recommendations for the Harbor Areas

Speed and wake control in the Harbor Areas and Special Anchorage Areas would be based on the proposed changes to the Navigation Law. An educational program should be instituted to assure compliance with the no-wake/5-mph regulations.

Boat Storage in the Harbor Areas

Subject to DEC permitting, the Harbor Areas should be considered appropriate for additional boat storage facilities if supported by adequate landside area, water surface area and dredging if able to be performed in an environmentally acceptable manner. Limits on boat storage in each of the Harbor Areas should be consistent with the recommended maximum boat storage as previously described.

Navigational Dredging in the Harbor Areas

The only area considered appropriate for dredging is the North Harbor Area. Dredging in the North Harbor Area should only be considered with further biological and chemical analysis and approval by the DEC and the USACE. No permits for dredging new and/or expanded areas should be issued for marinas that currently operate in proposed Resource Protection Areas.

Navigation Ways

Navigation ways are recommended for Irondequoit Bay to insure that travel is not limited or impacted by water surface use or improvements and to insure safe use of the Bay. Navigation ways are proposed to delineate the Navigation Channel and private Fairways.

Navigation Channel

The Outlet Channel is the only navigation channel. This channel is considered a federal navigation channel, is identified with channel markers and extends from Stony Point through the Outlet to Lake Ontario. This navigation channel is regulated with a no-wake/5-mph zone pursuant to the navigation law.

Any channel marker placed in the water should be consistent with this Plan and approved by the US Coast Guard.

Fairways

Fairways are unmarked navigation ways where previous dredging operations have created a channel to access marina facilities. These channels are considered pre-existing non-conforming uses. Fairways function as overlay zones and are primarily designed to maintain clear paths of travel connecting berthing areas and destinations. Speed and wake regulations within Fairways should be that of the underlying area. Anchoring or sitting should be discouraged within the Fairways.

Speed/Wake Recommendations for the Navigation Ways

The no-wake/5-mph speed limit should continue to be enforced in the Navigation Channel. Speed within fairways will be regulated based on the Navigation Law.

Boat Storage in the Navigation Ways

Boat storage is inappropriate for navigation ways and should be prohibited.

Navigational Dredging in the Navigation Ways

Dredging in navigational ways should only be considered following a site-specific analysis and approval by the DEC and the USACE. Dredging in private fairways should be considered a pre-existing non-conforming activity. Maintenance dredging in these areas should only be considered in order to accommodate the existing use.

Near Shore Areas

Near Shore Areas are defined in this Plan as being within 300 feet of shore and other areas described within the NYS Navigation Law. Near Shore Areas are generally appropriate for passive uses.

Speed/Wake Recommendations for the Near Shore Areas

The no-wake/5-mph speed limit regulations outlined in Section 45-aaa of NYS Navigation Law should apply to the Near Shore Areas.

Boat Storage in the Near Shore Areas

When docks and piers are not permissible for environmental reasons, other options for riparian access should be explored. This may include shared docking facilities, mooring off shore with minimal shoreline development, or access to nearby off-site dock facilities. When allowed, docks associated with single family residences should not extend offshore more than 50 feet and be limited to a maximum of 200 square feet, unless a reasonable extension would avoid the need to dredge. In no case should a structure extend offshore more than 200 feet. No additional commercial boat storage (including dry storage) should be allowed in Near Shore Areas. Multi-family residential sites would be limited based on the linear feet of shoreline contained within the parcel. The calculations to determine the maximum number of boats stored on a multi-family parcel are based on the length of shoreline as follows:

- 0-100 linear feet 1 pier or 2 boats
- 101-250 linear feet 2 piers or 4 boats
- 251-500 linear feet 3 piers or 6 boats
- greater than 500 feet 1 pier or 2 boats per 150 linear feet

The dock structure associated with multi-family parcels should not extend off-shore more than 200 feet. If adequate water depth is not found within 200 feet of the shoreline, alternative docking/boat storage options should be explored.

Dredging in the Near Shore Areas

No dredging is recommended in the Near Shore Areas of the Bay.

Open Water Areas

The remainder of the Bay not encumbered by any of the above stated designations is designated as Open Water Areas. These are areas that support active recreational use based on the following characteristics:

- Sufficient surface area;
- Adequate water depth;
- Access to Fairways and Harbor Areas; and
- Less sensitive shoreline conditions.

All existing uses should be allowed to continue in this area, as shown in [Exhibit 8 Current Water Surface Use](#). All organized events (e.g. sailing, water skiing, fishing) should be permitted by the Monroe County Sheriff's Department and coordinated through the Harbormaster. Provisions for reasonable access around racecourses should be considered in establishing all such courses.

Speed/Wake Recommendations for the Open Water Areas

The regulations outlined in Section 45-aaa of NYS Navigation Law should apply to the Open Water Areas. The speed limit should remain at the current 25 mph. Under emergency conditions as determined by the three Town Supervisors the speed limit may be reduced.

Boat Storage in the Open Water Areas

Boat storage (docks and moorings) is not recommended within the Open Water Areas of the Bay.

Dredging in the Open Water Areas

Dredging is not recommended in the Open Water Areas of the Bay.

PLAN PROJECTS

Based on the recommendations of the Recommended Harbor Management Plan Scenario (Section V.B.2), as well as the key public revitalization plans evaluated in the Inventory phase, the following projects have been identified as critical to the success of the *Harbor Management Plan*:

1. Maintenance and Dredging Plan for the North Harbor Area and Associated Navigation Channels
2. Sea Breeze Boardwalk and Public Dock
3. LaSalle's Landing Trail and Boardwalk Sections
4. Public Waterfront Park on the Webster Sandbar
5. Irondequoit Bay Hiking Trail
6. Education and Signage Program

7. Expanded Irondequoit Bay Biological Study
8. Land Acquisition/Protection Program
9. Erosion Control Projects
10. Irondequoit Bay Park Master Plans
11. Webster Properties Master Plan
12. Designation as State/Great Lakes Heritage Area
13. Harbormaster Station and Vessel
14. Water Taxi/Shuttle Stops
15. "Friends of the Bay" Stewardship Organization
16. Bay-wide Emergency Response Plan
17. Enforcement Coordination

IMPLEMENTATION PLAN

Irondequoit Bay Coordinating Committee

The IBCC was created in 1984 by an intermunicipal agreement among the Towns of Irondequoit, Penfield and Webster and the County of Monroe. Ex-officio members include representatives from the Monroe County Environmental Health Lab, Parks Department, Department of Planning and Development, Environmental Management Council, Water Quality Coordinating Committee, Soil and Water Conservation District, Fishery Advisory Board and the NYS DEC and DOS. The IBCC is an advisory committee, whose mission is to coordinate all levels of public and private use of the Bay ecosystem, and to develop, recommend and monitor related policies. It is recommended that the IBCC and the associated technical staff be the advisory body for implementation of the Harbor Management Plan.

Comprehensive Harbor Management Law

A Comprehensive Harbor Management Law is recommended to be adopted by all the local municipalities governing Irondequoit Bay. The Management Law should address issues of water surface use, permitting, vessel operation and use (including speed, wake and noise), enforcement authority, docking and sanitation. A proposed Comprehensive Harbor Management Law is included as Appendix C of this document. Generally, it includes the following provisions:

Harbormaster Position

A central goal of the Harbor Management Plan is to establish a coordinated intergovernmental approach to better manage the varied water activities that take place on the Bay. In order to achieve this goal, a major objective established by the IBHMPAC and IBCC is to create a Harbormaster position for the Bay. The Harbormaster may be a sworn employee of a local law enforcement agency, and would have knowledge of freshwater aquatic environments, boating and state and local laws and regulations. He/She would act as an ambassador for the Bay and be a person with good communications skills. The Harbormaster would bring sound overall harbor management principles and oversight to bear on the implementation of the Harbor Management Plan and water use activities in general. The Harbormaster would be a presence on the Bay, especially during weekends, holidays and other peak times during the boating season, providing information and assistance to boaters, educating the public as to the availability of facilities and informing Bay users as to boating and berthing rules and regulations.

Friends of Irondequoit Bay

The Plan recommends the creation of a non-profit educational and stewardship group to advocate for and receive funds to acquire open space, educate the public and increase awareness of the Bay and its function as a regional resource. This group could be a new organization or a committee of an existing organization. In either case, relationships should be developed with existing organizations such as The Nature Conservancy, The Genesee Land Trust, Water Education Collaborative, fishing organizations, recreational interests, historic interests, etc.

Best Management Practices

As detailed in the inventory section of this plan, limiting pollutant loads in stormwater runoff is essential for continued progress toward meeting the water quality goals for Irondequoit Bay. It is recognized that land development within the Bay watershed, and especially that occurring in the watershed areas which drain directly to the Bay, should incorporate adequate stormwater management practices. These practices should be designed to (1) minimize erosion and avoid sediment transport to the Bay during construction, (2) mitigate the effects of increased stormwater pollutant loads resulting from land disturbance and increases in impervious cover due to development activities and (3) prevent the discharge of pollutants from storage and maintenance facilities.

I. HARBOR MANAGEMENT PLAN AREA

I.A HARBOR MANAGEMENT PLAN AREA BOUNDARY

See [Exhibit 1](#), *Harbor Management Area Boundary*

[Exhibit 1](#) identifies the overall study area for the Harbor Management Plan. The overall study area boundaries are: Lake Ontario along the north edge of the Bay; Bay Road and Creek Street on the east; Browncroft Boulevard on the south; and New York State (NYS) Route 590 and Culver Road on the west. The majority of the area included within the overall study area boundary lies within the jurisdictions of the towns of Irondequoit, Penfield and Webster. Small areas of land in the southern portion of the Bay are within the jurisdiction of the City of Rochester and the Town of Brighton.

The overall study area as defined above is consistent with:

- The Local Waterfront Revitalization Plans (LWRPs) of the Towns of Irondequoit, Penfield and Webster;
- The topography, drainage and natural watershed of the Bay;
- The road pattern surrounding the Bay and giving access to it; and,
- Land use and development patterns in the area.

Within the overall study area, Water Surface Use Areas are defined along the waterfront edges of the Bay and Irondequoit Creek, its principal tributary. These Areas are the basis for the analysis of, and planning for, water uses within the Bay and the Creek.

I.B REGIONAL CONTEXT

See [Exhibit 2](#), *Regional Context*; and [Exhibit 3](#), *Regional Watershed*.

I.B.1 Population

Irondequoit Bay is located in the Rochester metropolitan area, within five miles of the center of the City of Rochester. It is readily accessible from both the urban and suburban areas of the County.

Table 1 shows growth in both population and housing units between 1970 and 1990 in Monroe County and in the five municipalities that border the Bay. As the numbers show, some of the towns and the City of Rochester have experienced population declines in these two decades; other towns have been stable, while still others have seen modest growth. It should be noted that although population levels have not increased dramatically, there has been a significant growth in the number of housing units in the area, reflecting nationwide changes in family characteristics and demographic trends towards smaller households.

Much of the development occurring within the study area has been the construction of housing units, both single family and town houses. Most of this housing development has been accompanied by construction of docking facilities, thereby increasing the number of boats using the Bay. While there has not been a “boom” in housing development within the study area, construction has been steady. Difficulties in obtaining approval of docking facilities has slowed some residential development, and there is, and will be, an increasing scarcity of appropriate sites for such development.

I.B.2 Transportation

Irondequoit Bay is easily accessible from anywhere within metropolitan Rochester. The NYS Rte. 590 runs parallel to the west side of the Bay in the Town of Irondequoit and ends at the Bay opening at Lake Ontario. NYS Route 104 (Rte. 104) runs east west through Irondequoit and Webster and crosses the Bay with exits at Culver Rd. in Irondequoit and Bay Road in Webster. Lake Road, at the north end of the Bay, provides local access to the Webster sandbar area. Empire Blvd., on the south end of the Bay, connects Irondequoit with Penfield.

In 1999, a new seasonal Bay outlet bridge was opened connecting Lake Rd. in Webster and Irondequoit at the mouth of the Bay. The bridge is closed to automobile traffic from April 1 to December 1, giving boaters unfettered access to the Lake during this time period.

Most of the roads that provide direct access to the Bay shoreline are under town jurisdictions. There are a number of private roads that also lead to the shoreline and serve a small number of residences. The German Village area in the Town of Irondequoit is inaccessible by car, requiring residents of about 20 homes to park and walk to their homes. Another area within Irondequoit, off Schnakel Drive, is also inaccessible by car. Some of the roads that provide shoreline access are substandard in width and have steep winding grades. These roads can be hazardous in winter weather and are detrimental for emergency access.

The Rochester/Genesee Regional Transit Service (RTS) provides bus service to the Culver Rd./Pearl Avenue/Sea Breeze area in the Town of Irondequoit. On weekdays, RTS bus service is provided along Empire Blvd., Bay Rd. and Creek St. on a route from downtown Rochester to the Xerox facilities on Phillips Road in Webster. There is no other bus service to the Bay.

The New York State-designated Seaway Trail, a tourism route, follows Lake Rd., Bay Rd. and Empire Blvd. through the study area. There are no separate bicycle paths or system of hiking trails within the immediate Bay area, although the *Irondequoit Bay Hiking Trail Plan*, prepared by Monroe County in cooperation with the Towns of Irondequoit, Penfield and Webster, recommends a course of action to develop a continuous public access trail around the Bay. The Town of Irondequoit's *Sea Breeze Revitalization Plan* (1999) also recommends trails and linkages to the Seaway Trail. (See *Recreational Facilities and Public Access to the Waterfront*, Section II.A.2).

Seaplanes occasionally use the Bay for landing and take-off. A seaplane is parked at the Bounty Harbor marina located at the south end of the Bay, off Empire Blvd.

I.B.3 Drainage Basin

See [Exhibit 3, Regional Watershed](#); and [Exhibit 4, Soils and Wetlands](#)

[Exhibit 3](#) depicts a general map of the 169 square mile Irondequoit Basin. The Basin includes Irondequoit Bay and Creek, Allen's Creek, as well as the Erie Canal and areas within the basin that are tributary to Irondequoit Creek. The basin encompasses portions of Monroe, Ontario and Wayne Counties. The Wayne County portion is small and is not considered to present any problems of a water quality or resource management nature. Portions of the City of Rochester within the Irondequoit Basin have combined sanitary and storm sewers that drain runoff through the sanitary system.

Most of the surface drainage and storm water drainage flows into Irondequoit Creek or the Bay. Small areas of the plateau in both Webster and Irondequoit drain directly into Lake Ontario.

Numerous small tributary streams and intermittent streams also flow into the Bay. They originate on the plateau, are fed in part by storm drainage outlets and cut through the steep slopes, creating deep trenches and valleys.

The level of Irondequoit Bay is determined by Lake Ontario. The levels of the two water bodies are the same, except for brief periods when the lake is tilted from strong winds or when the volume of discharge from Irondequoit Creek is exceptionally high. See Section II.C.3.1, *Existing Water Depths*, for a detailed discussion of water level variations.

Wetland areas comprise the entire perimeter of the Bay as it is designated as a Class I NYS wetland (RE-1). As is shown on [Exhibit 4, Soils and Wetlands](#), and further described in Section II.C, *Environmental Issues*, special wetland areas are observed along the Bay with a considerable concentration in the "mud flats" area immediately north of Empire Blvd. The wetland area also extends south of Empire Blvd. along Irondequoit Creek.

The wetlands perform important drainage functions. They provide a "sponge" effect during periods of flooding or high water tables, providing temporary storage and a large area through which the water may migrate.

Throughout the Bay ecosystem there are numerous examples of poor drainage, which have had an adverse effect on slope stability and water quality over the years. In some areas, storm drainage from plateau development has been allowed to flow through the steep slope area without adequate control, causing mudslides, gullyng, slumping and other problems of erosion while bringing sediment into the Bay. Many culverts, improperly maintained, are choked with sediment and are no longer functional. The natural drainage pattern has in many instances been modified by construction and filling without providing adequate means for handling the new drainage flows.

I.C HISTORY OF THE IRONDEQUOIT BAY ECOSYSTEM

The following history is taken largely from *Cultural Resources Survey of Irondequoit Bay Outlet Crossing*, by J.B. Higgins and Associates, with Bero Associates, Architects and the Rochester Museum and Science Center (1990).

Before white settlers arrived in the area, the slopes and uplands of Irondequoit Bay were highly favored as hunting and camping grounds by the Seneca Indians, and the Bay waters provided them with an abundance of fish. The first white contact with the Bay was recorded in 1610. In 1669, the French explorer Chevalier LaSalle, on route to explorations of the Mississippi River, entered the Bay with a fleet of nine canoes. In 1687, during the French and Indian Wars, the Marquis de Denonville entered the Bay with a much larger fleet in his campaign against the Seneca Nation. His actions helped to strengthen the friendship between the Seneca's and the English, however, leading ultimately to the demise of French influence in the area. The French destroyed many Seneca villages and left for Canada, returning thirty years later to set up a trading post near the opening to the Bay. The English too set up a post at the Bay, in 1717, calling it Fort Schuyler. The trading post operated for one year and then was abandoned because of the high expense of its maintenance. The English returned to the Bay during the French and Indian War in 1759, but it was not until the American Revolution that any permanent settlements were established.

During the revolution, white settlers began to arrive from New England and eastern New York and settled on lands that were part of the Phelps and Gorham Purchase of 1788. The purchase consisted of 2.6 million acres of land from the Pennsylvania border to Lake Ontario, with Seneca Lake as the eastern boundary and the Genesee River as the western boundary. In 1796 settlers founded the Town of Northfield, now the present towns of Webster, Irondequoit, Brighton, Pittsford, Perinton, Penfield and Henrietta.

Original white settlement along Irondequoit Bay was concentrated at the southern end at Indian Landing, in large part because Irondequoit Creek was already a mill and transportation site. The Genesee River, with its steep falls, was virtually impossible to navigate. Early Northfield entrepreneurs established the Town of Tryon at the landing in 1805. They set up commercial enterprises and enticed new settlers to the area. Commercial vessels sailed into the Bay and traded at Tryon, which was expected to be the metropolis of the area. The building of the Erie Canal, however, provided a more reliable water route to the Great Lakes and Tryon gradually diminished in importance. Today it is almost obliterated, with only a few houses and paths to recall its former promise.

As Rochester began to grow, so too did Monroe County. The Town of Irondequoit was founded in 1839 from land divided from Brighton, and Webster was founded in 1840 from land that was once part of Penfield. These towns were based on a primarily agrarian economy. Farmers settled south of Lake Ontario and concentrated on growing fruits and vegetables. Extensive mill development occurred along Irondequoit Creek in Penfield, in the present-day area of Linear Park. The area was opened up for further development in the

1870's with the introduction of railroad lines, including a line across the Lake Ontario outlet.

In the final decades of the 19th century, many technological and laborsaving developments helped to make leisure time available to a larger segment of the population. Recreational activities, once thought of as frivolous, now had a place in the lives of the middle class. Resorts and parks were developed, offering an escape from the everyday routine of work. The local result was an enthusiastic interest in lakeside and bayside recreation and resorts. Hotels began appearing along the shores of Lake Ontario and Irondequoit Bay. As the lakeside became known as an attractive vacation spot, subdivisions were created and seasonal cottages were built, with the greatest construction occurring in the 1920's.

After the Depression of the 1930's, development around the Bay did not boom again until the Bay was fully opened to Lake Ontario by the USACE in the mid-1980's. Unrestricted boat travel between the Lake and the Bay created a renewed interest in living around the Bay and a renewed impetus for shoreline development.

II. INVENTORY AND ANALYSIS OF EXISTING CONDITIONS

II.A LAND USE

II.A.1 Existing Land Use and Zoning

II.A.1.1 Land Use

The majority of land in the study area is in residential use, most of it for single-family houses on individual lots. Waterfront commercial uses, including small marinas, waterfront restaurants, small shops and service or storage uses, are primarily limited to three areas (1) the Sea Breeze/Culver Rd. peninsula area clustered around the Seabreeze Amusement Park in the Town of Irondequoit, (2) the neighboring “sandbar”/Lake Rd. area on the Bay outlet in the Town of Webster and (3) the Empire Blvd. area, primarily in the Town of Penfield. Marinas are listed in Section II.B.1.1, *Boating*. Restaurants on or close to the water are present on Newport Road, Culver Rd., Empire Blvd. and Lake Rd. The property at Glen Edith (formerly a restaurant), along the Webster edge of the Bay, is located south of the Rte. 104 bridge.

Other commercial uses include Seabreeze Amusement Park and various non-water-related commercial uses along Empire Blvd., Culver Rd. and Bay Rd. Institutional uses include Dewitt School on Dewitt Road in Webster and the Bay View YMCA off Bay Rd. in Penfield.

Public parks encompass approximately 230 acres of land in the Harbor Management Area, including Monroe County Irondequoit Bay Parks East and West; the Ellison Park/Tryon Park wetlands; and the Irondequoit Bay Marine Park on west side of the outlet in Irondequoit. Irondequoit Bay Marine Park is located between NYS Rte. 590 and the Bay in the Sea Breeze area. The property is owned by New York State and is managed as a park by Monroe County. In addition, the County has recently acquired approximately ten acres and created a new county park in Devil’s Cove/Helds Cove. Additional land is owned by public entities and not designated as parkland, including: the former town landfill in the Town of Brighton; the abandoned landfill on Newport Rd. and the sewage treatment plant site off Bayshore Boulevard in the Town of Irondequoit; groundwater well sites owned by the Village of Webster along Dewitt Rd.; and land owned by the State of New York along the former Hojack railroad line along Lake Rd., both in the Town of Webster. The Town of Penfield has recently acquired a parcel of land at the confluence of Irondequoit Creek and the Bay in the LaSalle’s Landing area for use as open space.

While much of the public land around the Bay is not developed for active recreational use, it does provide public access to the Bay and it helps preserve some of the sensitive environmental areas including steep wooded slopes, wetlands and wildlife habitats.

There is relatively little privately owned undeveloped land remaining within the Bay area, and as-yet undeveloped parcels generally have environmental constraints, including steep slopes and wetlands. One large parcel is Willow Point, just north of the Webster/Penfield town line, which is currently partially developed and is being planned

for development for additional single-family housing. A proposal for new docking facilities for this project has been submitted to New York State Department of Environmental Conservation (NYS DEC) for review.

II.A.1.2 Local Land Use Plans

Each of the municipalities in the Irondequoit Bay ecosystem has a comprehensive land use plan, and the Towns of Webster and Brighton have completed comprehensive plan updates. Except for Brighton, each of the communities also has adopted a Local Waterfront Revitalization Plan. The Towns of Penfield and Irondequoit adopted the *LaSalle's Landing Development Plan* in 1997. Official adoption of Irondequoit's *Sea Breeze Revitalization Plan* is pending completion of a draft generic environmental impact statement that will incorporate recommendations of the Harbor Management Plan.

II.A.1.3 Zoning

Town of Irondequoit Zoning

The majority of Irondequoit within the study area is zoned residential, primarily single-family (R-1, R-2 and R-3), with a few small parcels of multi-family (R-5). Seabreeze Amusement Park and both sides of Culver Rd. in the Sea Breeze area are zoned commercial. A few small waterfront parcels are zoned waterfront development districts (WDDs), including Newport House, and parcels along Empire Blvd. are zoned LaSalle's Landing Development District (LLDD). The WDD zone permits restaurants, motels, hotels, yacht clubs, marinas and amusement parks, as well as multi-family residential. All uses are subject to special permit. The LLDD district permits a variety of uses, including water enhanced or water dependent uses, but excludes any uses that would require dredging or significant water depths.

Town of Penfield Zoning

Lands on the north side of Empire Blvd. in Penfield are zoned LLDD, which permits a variety of uses, including water enhanced or water dependent uses, but excludes any uses which would require dredging or significant water depths. Lands south of Empire Blvd. are zoned residential. The Bay shoreline, much of which is included in Bay Park East, is zoned Conservation-Residential (CR-2), permitting large lot single-family use (each at two acres). The remaining lands in the study area are zoned residential, with the exception of business areas along Bay Rd. and Empire Blvd.

Town of Webster Zoning

Most of the land in the Harbor Management Area in the Town of Webster is zoned residential, primarily single family. There are two small medium/high density residential districts, both near the southern town line between Bay Rd. and the shore, one at Willow Point and the other north of Glen Edith. Webster has two WDDs along the Bay, one encompassing the sandbar, and the other at Stony Point Landing. The WDD permits residential, public, restaurant, marina, retail or other uses that would benefit from and enhance the waterfront setting.

Town of Brighton Zoning

The small part of the Town of Brighton in the study area is zoned residential, partly single family and partly multi-family.

City of Rochester Zoning

The small part of the City of Rochester in the study area is in Tryon Park and is zoned as open space.

II.A.1.4 Subdivision Regulations

Town planning boards are empowered to regulate and approve subdivision plats as specified in Section 276-278 of the Town Law. Subdivision regulations are intended to insure that development meets acceptable standards of construction and design. All of the towns in the Bay ecosystem have adopted subdivision regulations.

II.A.1.5 Other Regulations

As part of their zoning laws, each of the three towns has adopted Environmental Protection Overlay Districts (EPODs) to protect sensitive environmental features within the Bay ecosystem. In addition, each town has adopted erosion and sedimentation control or drainage ordinances that regulate stormwater runoff during construction to insure that soil sediments do not enter water bodies. Each of the towns has also enacted docking regulations consistent with their LWRPs (see Section II.D.3, *Construction Regulation for Docks and Other Water Structures*).

Under the Freshwater Wetlands Act, Article 24 of the NYS Environmental Conservation Law, the entire perimeter of Irondequoit Bay has been classified by DEC as a Class I Wetland. This is the highest classification that can be assigned to a wetland. Under Article 34, the Coastal Erosion Hazard Management Act, DEC has jurisdiction over designated coastal erosion hazard areas that contain “natural protective features” and/or a “structural hazard area.” See [Exhibit 5](#), *Natural Protective Features*. The NYS DEC regulates any physical disturbance at or below the mean high water level of the Bay under the Article 15 Protection of Water Permit Program. The NYS DEC also has jurisdiction over construction projects involving five acres or more of disturbance.

The U.S. Army Corps of Engineers (USACE) regulates physical disturbance below the ordinary high water level (mean high water level) under Section 404 of the Clean Water Act. Docks and other structures are also regulated under Section 10 of the U.S. Rivers and Harbors Act. For more information see Section D, *Legal and Regulatory Issues*.

II.A.2 Recreational Facilities and Public Access to the Waterfront

See [Exhibit 6](#), *Recreational Facilities and Public Access*

Irondequoit Bay has become an important regional recreational resource. However, as with other Rochester area water resources, significant areas of residential and commercial development and/or environmentally sensitive land effectively limit public access to the water. Public access to the Bay’s waterfront is limited to public parkland and commercial uses open to the public (marinas and waterfront restaurants). In addition, there are locations that have scenic access to the water.

The majority of the Bay shoreline is in private ownership, much of it in single-family homes. There are a number of large residential developments that have common ownership of the shoreline (Bay Village; Bay Tree; Stoney Point; Point Pleasant; Willow Point, the Bluffs) and have built common docking facilities for their residents. The commercial marinas on the Bay (Mayer’s; Newport; Sutter’s; Bounty Harbor) provide

private docking facilities and some boat launching. Restaurants open to the public on Newport Rd. in Irondequoit and in the northeast corner and southern end of the Bay afford some degree of public access to the shoreline and are accessible by boat.

There are four large areas of public land which have been dedicated for parkland around the Bay and these areas are under the responsibility of Monroe County: Irondequoit Bay Park East (110 acres), Irondequoit Bay Park West (182 acres) and Devil's Cove Park (ten acres) and Irondequoit Bay Marine Park (32 acres). As part of the new seasonal bridge connecting the Town of Irondequoit to the Town of Webster, the existing boat launch has been upgraded, parking has been expanded and restrooms have been constructed. The Town of Irondequoit's *Sea Breeze Revitalization Plan* makes several recommendations regarding this area. In addition to these four areas on the Bay, Ellison Park, a county park which includes the wetlands south of Empire Blvd. and Tryon Park, provides significant public access to the area south of Irondequoit Bay.

According to the *Waterfront Recreation Opportunities Study*, prepared by the Monroe County Department of Planning and Development (MCDPD) in 1990, the sandbar is "an outstanding waterfront resource." It is a narrow strip of land extending approximately one mile across the Bay from the Webster mainland, separating the Bay from Lake Ontario. It is a unique maritime environment, with a marina, cottages on small lots and several restaurants. The sandbar is traversed by Lake Rd., which connects at the western end with a seasonal bridge permitting boating access to the Bay in summer. Views to the Lake and Bay are spectacular. The Town of Webster has proposed building a park on the sandbar, including bay-side improvements such as parking for automobiles and boat trailers, a fishing pier with a handicap fishing station, a boat launch, landscaping, benches and restroom facilities. Funding has not yet been secured for the park, however. A private development proposal has also been made for the property.

Public access at the south end of the Bay includes Ellison Park, Irondequoit Bay Park East and Irondequoit Bay Park West. Monroe County has acquired 1135 Empire Blvd. and 909 Empire Blvd. parcels (11.3 and 33.6 acres, respectively). Both Irondequoit Bay Parks, for the most part, are unimproved. These parks offer opportunity for greater public access to the water and recreational facilities such as a boat launch, fishing pier and trails. Other public access opportunities include: the Town of Irondequoit's proposed passive recreation park near the Newport Marina; the east side abandoned Rte. 104 rest area (Newport Cove); the Glen Edith properties, north of Rte. 104; Devil's Cove/Helds Cove; the proposed LaSalle's Landing promenade; and the Penfield town park, north of Empire Blvd. at the Penfield/Irondequoit town line.

Given the resurgence of the Bay for water oriented recreation, it is anticipated that there will be increased demand for public access points to the Bay and increased numbers of boating related facilities and services. To address this demand, Monroe County and the Towns of Irondequoit, Penfield and Webster have completed the *Irondequoit Bay Hiking Trail Plan*, which documents a course of action for the development of a trail network around the Bay. The study identifies a trail route which generally follows Lake Rd., Bay/Dewitt Rds., Empire Blvd., the existing trail from Empire Blvd. to Bay Park West, Bay Shore Blvd. and the Sea Breeze Expressway/NYS Rte. 590. The trail also connects (via secondary access routes) existing parks and publicly owned areas, as well as several areas with special views or of special interest.

II.A.3 Open Space

Open space around Irondequoit Bay is becoming increasingly scarce. Most land surrounding the Bay is privately owned and includes residential development and some commercial development. A majority of the remaining open space is also privately owned and is undevelopable due to steep slopes and other environmental constraints. In recent years open space in the north end of the Bay from Rte. 104 north has decreased substantially. Residential development along both the west and east shorelines and upland areas has consumed land that was open space just a few years ago. Remaining open space north of Rte. 104 includes: the uplands of the Irondequoit Bay Marine Park in Sea Breeze; a tract of land in Irondequoit north of Rte. 104 and south of Little Massaug Cove; and the publicly owned Village of Webster well fields, the abandoned Rte. 104 rest area and private property on the Bay's east side. Public open space south of Rte. 104 includes: Devil's Cove Park; Ellison Park, including Irondequoit Bay Park East and West; and the Town of Penfield's park on Empire Blvd.

II.A.4 Recently Developed Sub-area Land Use Plans

The following plans have been recently developed by the towns for specific areas of the Bay.

II.A.4.1 *Sea Breeze Revitalization Plan*

In 1999, in an effort to revitalize one of its oldest neighborhoods, the Town of Irondequoit prepared the *Sea Breeze Revitalization Plan*. The purpose of the plan is to provide economic development, improve quality of life, attract destination tourism and protect the environmental qualities of the area.

Historically, the Sea Breeze peninsula grew as a multi-faceted resort and recreational center accessible by streetcar. The Seabreeze Amusement Park today is one of Upstate New York's most attractive and popular amusement parks. The draft plan makes the following recommendations to support the revitalization of the Sea Breeze area:

Parks and Open Space

The Sea Breeze Plan recommends that parks and open space be enhanced and preserved, with a primary goal of improving public access to the waterfront. The development of the Irondequoit Bay Marine Park is recommended for completion. With the recommended realignment of Rte. 104, there will be an opportunity to enhance the north end of the Marine Park with a Bayside boardwalk and an amphitheater/festival site. Transient docking and a small-scale "muscle power" marina with a community boating program could be included in this area. A Lake boardwalk and overlook are recommended for development north of the Seabreeze Amusement Park along Culver Rd. overlooking Lake Ontario.

Tourism and Visitors

The Plan recommends the initiation of a regional clearinghouse organization or board that will help guide tourism and ensure that tourism development benefits both the local and regional communities. The clearinghouse would consist of representatives from around the region who would come together to develop a master plan for regional tourism. The plan would help ensure that communities do not exceed the demand for

specific types of destinations and services, and would provide economic data and inform other destinations of current regional activity and development. Such a plan would help give Sea Breeze a tourism identity.

Nature/Eco Center

The Sea Breeze Plan also recommends the establishment of a center aimed at educating and entertaining the public regarding local history, wildlife, natural habitats and environmental preservation and conservation. Irondequoit Bay provides a unique opportunity to entertain visitors and residents of area with environmental education. Sea Breeze could display and interpret its history and environmental sensitivity in an amusement park and trolley museum, interpretive trails, signage and a nature/ecological center. It is recommended that consideration be given to re-creating the historic Secret Cove, which could be a safe area for canoeing and kayaking and also be an extension of the existing man-made wetland project.

Irondequoit Bay Use

Proposed programs and facilities that relate to the use of the Bay in the Sea Breeze area include:

- Boardwalk/amphitheater;
- Community boating program;
- Transient docking and related fairways;
- Public dock;
- Fishing pier;
- Special anchorage and mooring area;
- Evaluation of dredging needs;
- Water taxi; and
- Non-motorized-watercraft marina.

II.A.4.2 LaSalle's Landing Development Plan

In 1997, the Towns of Irondequoit and Penfield prepared the *LaSalle Landing Development Plan* for the area of Empire Blvd. along the Bay's south shoreline. The plan recommends the following:

- Coordinated stormwater runoff control and management to address water quality concerns;
- Acquisition of public open space or parkland in the LaSalle Landing area. To date, the County has purchased two parcels south of Empire Blvd. Also, the Town of Penfield has purchased land for a town park located north of Empire Blvd. along the Irondequoit Creek outlet;
- Improved pedestrian and bicycle access through and to the area, including separation of pedestrian and vehicular traffic, construction of a boardwalk along the Bay front, a signalized intersection and a pedestrian-activated crosswalk signal;
- Controlled points of vehicular access; shared access easements and off-street parking; and other traffic management and calming techniques;
- Protection for environmentally sensitive areas, wildlife habitats and scenic views and vistas;
- A nautical style architectural design theme and coordinated signage and landscaping regulations;
- Use of incentive zoning to encourage provision of site-specific amenities;
- Prohibition of marina activities through coordinated zoning provisions; and
- Elimination of septic systems through provision of access to sewers.

II.A.5 Archeological and Historic Resources

See [Exhibit 7, Historic Sites](#)

The long history of Native American occupation and use of the Bay ecosystem resulted in a number of still extant trails and a significant concentration of archeological sites around the Bay. The Rochester Museum and Science Center's (RMSC) Archeological Site File Data Base indicates over 50 known sites around the Bay, primarily Native American burial mounds and cemeteries. Because of the unusual concentration of sites, RMSC considers the entire Bay area to be sensitive archeologically. Details on the sites are generally not made public, but information is made available to local government officials and/or developers of individual sites, so that the proper field investigations and mitigation can be assured. [Exhibit 7, Historic Sites](#), shows non-Native American sites identified as being historic by the State and by local agencies.

II.B. WATER SURFACE USE

II.B.1 Existing Water Surface Use

See [Exhibit 8, Current Water Surface Use](#)

Irondequoit Bay is the largest coastal bay in Monroe County. It is connected to Lake Ontario at its north end by a protected outlet channel. Irondequoit Creek flows into the Bay at its south end. The Bay is popular for numerous water recreational activities

including: boating, hunting, fishing, water skiing, personal watercraft (PWC) use, ice skating, ice fishing, hiking and nature study. Increased levels of recreational activity have reduced the quality of the recreational experience for some activities. For example, it has been reported that increased docks have reduced the available open water surface area for other recreational activities. Winter recreationists have suggested that the use of bubblers has changed the formation of ice on the Bay affecting ice fishing and skating.

Exhibit 8 shows the current pattern of surface water use on the Bay. The following surface water uses are included: anchorages, fishing areas, areas where swimming has been observed, canoeing areas, PWC areas, water skiing areas and moorings. The exhibit indicates two water surface areas experiencing problems with boating congestion (1) an area at the north end of the Bay, just south of the outlet and (2) an area reaching north and south of the Rte. 104 bridge. Boat traffic flow along the main and branch navigation channels of the Bay is also indicated on the Water Surface Use exhibit.

Some water surface activities on the Bay are summarized as follows:

II.B.1.1 Boating

Sailing is a long-standing use of the Bay, although shifting wind patterns at the water level can create difficult sailing conditions. Regattas have traditionally been held south of the Rte. 104 bridge, in the center of the Bay. This is the main channel for navigation. Local sailing clubs have registered increasing complaints about conflicts with motorboats and lack of respect for racing areas used for regattas. The net effect appears to be that many regattas are now taking place out on the Lake. Clubs include the Rochester Canoe Club, located north of Point Lookout in Irondequoit, and the Newport Yacht Club at Little Massaog Cove.

Motorboat use of the Bay has been generally growing since the opening of the Bay in 1985. During the past several years, wake conditions and competition for space in the narrowest part of the Bay, beneath and around the Rte. 104 bridge, have caused increased water use conflicts and safety concerns.

Canoeing and kayaking at the south end of the Bay is increasing. This is concentrated in the southern end of the Bay, primarily south of Empire Blvd. on Irondequoit Creek and its wetland areas. Canoeists have found that boat wakes from increased motorboat traffic create conditions that are not conducive to canoeing. The construction of docks along the shoreline has also eliminated much of the near shore area that was suitable for canoeing. Most canoeing occurs between Empire Blvd. and Panorama Trail along Irondequoit Creek.

Commercial boat traffic is minimal at present on the Bay. The Harbortown Belle, a dinner and excursion boat based at Voyager Marina on the Genesee River routinely visits the Bay. Charter fishing vessels based at various marinas operate on the Bay and traverse the Bay to Lake Ontario. Implementation of the Sea Breeze Plan would bring a water taxi and additional excursion boat(s) to be based at the proposed public dock. If implemented, the proposed "fast ferry" to Toronto would bring additional tourists to the area, increasing the market for area attractions.

Major Commercial Marinas, Boat Rental Facilities and Private Clubs with marina facilities on Irondequoit Bay include:

Major Marinas (in excess of 150 slips)

Bounty Harbor Marina
1384 Empire Blvd., Penfield, NY
Wet slips, winter storage and food

Mayer's Marina
7 Lake Road, Webster, NY
Wet slips, boat launch, fuel, repairs, winter storage

Newport Marina
500 Newport Road, Irondequoit, NY
Wet slips, dry storage, fuel, pump-out, restaurant.

Sutter's Marine
512 Bay Front Street, Irondequoit, NY
Wet slips, fuel, pump-out, launch and repair facilities
Property leased from Monroe County. (Portion of Irondequoit Bay Park West)

Boat Rentals

Bay Creek Paddling Center
South side of Empire Blvd. on Irondequoit Creek, Penfield, NY;
Canoe and kayak rentals and boating instruction

Bayside Boat & Tackle
1200 Empire Blvd., Penfield, NY
Motorboat, rowboat, sunfish sailboat, paddleboat, canoe and kayak rental and boat launch

Private Clubs

Irondequoit Bay Fish and Game Club
658 Bay Front South, Irondequoit, NY

Newport Yacht Club
694 Seneca Road, Irondequoit, NY
Wet slips and upland dry storage

Rochester Canoe Club
41 Southland Drive, Rochester, NY

Pump-Out Facilities can be found at Newport Marina, Sutter's Marina and Irondequoit Bay Marine Park.

New residential docks have been developed over the past ten years at the Bluffs of Webster and Stoney Point residential projects off Bay Rd. in Webster and the Baytree residential development south of Newport Cove.

Boat launching on the Bay increased dramatically with the opening of the Bay to Lake Ontario. The construction of the County-operated launch site at the north end of the Bay

accounts for much of this increase. The major marinas also offer boat-launching facilities and an informal launching site also exists in Bay Park West at Orchard Park Boulevard. The Town of Penfield has recently constructed a canoe launch at the mouth of Irondequoit Creek on Empire Blvd.

Anchorage areas on the Bay are used for extended periods of time during the day to fish, swim or merely sit and enjoy the water. The popular areas are those where water is calm, including Devil's Cove/Helds Cove, mid-Bay along the Webster shoreline and the south-Bay shoreline in Irondequoit, although activity in this area has lessened due to competition with general boat traffic occupying the main channel leading to this area.

Moorings are used by a limited number of boats -- primarily sailboats -- on the Bay, mostly north of the Rte. 104 bridge. Moorings are generally associated with residential uses and are used in areas where dock lengths would be very long to achieve needed water depth.

"Bubbler" system use is increasing to prevent ice formation around docks and has resulted in less stable ice in those areas.

II.B.1.2 Recreational Activities

Personal Watercraft (PWC): activity is growing on the Bay in general, particularly in the northern area near the outlet, on both the Lake and Bay side. This area is the most heavily congested on the Bay due to the location of the boat launch and channel traffic between the Lake and Bay. NYS motorboat registrations for Monroe County grew from a total of 31,904 in 1997 to 31,984 in 1998, with registrations for boats of less than 16 feet, which includes PWCs, growing from 13,176 to 13,265. While no exact statistics are recorded, the Monroe County Sheriff's Office estimates that over 5,000 of the less than 16 feet craft are PWCs and that this number is growing rapidly. The Sheriff's Office estimates that on a sunny peak weekend day in July 1998, there were typically some 50-100 PWCs on the Bay, and that this was an increase of some 33% over previous years. The County Sheriff's Office has given attention to enforcing the no-wake/ 5-miles per hour (mph) speed limit within 200 feet of the shoreline.

Water skiing is a popular activity on the Bay because of the predominately calm conditions. Water skiers have found that conditions are best during off-peak hours (early morning) as wakes increase as more boats get on the Bay. The most frequented locations are the northeast and southeast corners of the Bay. A water skiing club, the Aqua Snow Skiers Club, uses the southeast corner for competitive course skiing.

Swimming is a significant activity on the lake side of the Bay outlet. Within the Bay it is not as significant, although it occurs to a limited degree at the Hillsboro Cove (Webster) area and at the Willow Point site in Webster. The Bay is generally perceived to be of inadequate quality for swimming.

Fishing for recreation is a popular activity on the Bay. Improving water quality has resulted in the development of a thriving fishery. Warm water species including largemouth and smallmouth bass, northern pike, yellow perch, walleye, brown bullhead, freshwater drum and carp are caught in many areas throughout the Bay. Cold water species such as salmon, brown trout and steelhead can be caught as they migrate from Lake Ontario through the Bay to Irondequoit Creek. The Bay also serves as an

important nursery habitat for many Lake Ontario fish species, most notably Alewife and Emerald Shiner.

An experimental effort was undertaken in the mid-1980's to re-establish the Bay and Irondequoit Creek as an Atlantic salmon habitat. The effort included intensive fish surveys and stocking efforts in Irondequoit Creek. Investigations in this regard indicated that improving water quality in Irondequoit Creek in the mid to upper reaches, in and around Powder Mills Park has resulted in the occupation of these waters by various salmonid species. The success of these species, particularly brown trout and rainbow trout has hampered the efforts to re-establish the Atlantic salmon population due primarily to inter-species competition among these desirable cold water fish.

Popular fishing locations in Irondequoit Bay include the Northeast corner of the Bay along Lake Rd. in Webster, areas adjacent to Irondequoit Bay Marine Park and Irondequoit Bay Park West, Big and Little Massaug Cove, Devil's/Helds Cove, Stony Point, Snider Island and along Empire Blvd. at the south end of the Bay. Fishing is also popular in Irondequoit Creek from the Bay to Linear Park in Penfield.

There is currently no commercial fishery in Irondequoit Bay, nor are there plans for any commercial fishery.

Winter use of the Bay's water area consists of moderate incidence of ice fishing, skating, snowmobiling and related activity at various points in the Bay which are accessible from Empire Blvd., Lakeshore Drive, the outlet bridge and individual properties. It appears that there is less freezing over of the Bay than in previous decades due to a variety of reasons, some climatic and some related to development.

II.B.1.3 Hunting

Town firearm and hunting ordinances and the regulations discussed in the DEC *Hunting and Trapping Regulations Guide* apply on Irondequoit Bay.

II.B.2 Water Surface Regulations

Currently, surface use regulations in place on the Bay are the speed limit/no-wake zones created by an amendment to the New York State Navigation Law in 1987. This establishes a 25-mph speed limit on the Bay and a no-wake/ 5-mph limit within 200 feet of the shoreline, a dock, pier, raft or float, or an anchored or moored vessel. These speed limits are enforced by the Marine Patrol of the Monroe County Sheriff's Office and the State Park Police who patrol the Bay. In addition, the bordering towns are authorized to regulate boating speed within 1,500 feet of the Town's shorelines under various laws.

State Navigation Law requires that the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) issue a permit for any organized water surface activity, such as a race or regatta, which is copied to and monitored by the County Sheriff. The private sailing clubs located on the Bay annually apply for permits for their races, usually held on weekends during the summer.

A variety of conflicts have been experienced in the recreational use of the Bay, and because of the increased boating activity, incidents of these conflicts have increased. Among the more serious conflicts are the following: (1) conflicts between sail boats and

motor boats, particularly during times of organized sail boat racing, (2) conflicts between PWCs and other boats, (3) conflicts between boaters and shoreline residents, particularly during periods of high water level, when wakes may cause property damage, (4) conflicts between sea planes and other recreational uses of the water and (5) conflicts between canoeists, kayakers, rowers and motor boats.

The OPRHP is the designated state agency for administration of the New York State Navigation Law. The Bureau of Marine and Recreational Vehicles has general responsibility for boating safety in New York State and provides funding and training for marine law enforcement as well as boating education programs. The Monroe County Sheriff's Office Marine Patrol is partially funded through this program. Under the NYS Navigation Law and the NYS Town Law, no local law or ordinance pertaining to the regulation of vessels and/or the establishment of a vessel regulation zone can take effect until it has been submitted to and approved by the Commissioner of Parks, Recreation and Historic Preservation. None of the Bay area municipalities have submitted surface use regulations for such approval.

II.B.3 Boat Storage Inventory

Boat storage includes wet slips, commercial dry storage on land and, where applicable, water mooring areas. In 1999, a comprehensive inventory of boat storage on Irondequoit Bay was prepared. At this time, there was a total of approximately 1670 boat slips, including 890 in the Town of Irondequoit, 200 in the Town of Penfield and 580 in the Town of Webster. The bay-wide total represents an increase of 63 slips, or about ten percent, since 1992, when an inventory done by the MCDPD counted 1505 wet and dry slips.

Mooring is currently not a major form of boat storage on Irondequoit Bay. There are two small areas used for mooring, adjacent to Point Pleasant in Irondequoit and south of Stony Point in Webster. These include a total of approximately 18 moorings.

II.B.4 Analysis of Boat Usage

Considering the trends in water use, land development and boat traffic on Irondequoit Bay, a key factor in developing a successful harbor management plan for the Bay was determined to be a realistic assessment of the level of boating activity on the Bay, both today and in the future. As part of this Plan, an analysis was conducted of current and projected future boating activity on the Bay.

The historic growth in the number of wet slips on the Bay is not documented. The Bay and its use has evolved over the decades from a resort destination, to an enclosed inlet (the outlet Bridge limiting access to only small vessels) and finally to an open Bay and Harbor of Refuge. Since the Bay's opening, demand for dockage has increased in number, size and quality. During the years 1992-1999 the number of wet slips on the Bay increased by approximately 20 slips per year, or just over 1% growth per year. In order to understand order of magnitude implications of growth in the demand for slips, [Figure 1](#) was prepared representing 1%, 2% and 5% annual growth scenarios.

The analysis concludes that over a term of 25 years, even slow growth could have a substantial impact on boat storage on the Bay.

II.B.4.1 Generators of Boating Activity

There are three main generators of boating activity on the Bay: (1) Boats stored in or around the Bay, at docks, moorings, or in dry storage, (2) Boats entering the Bay at boat launches located within the Bay and (3) Boats coming to the Bay from elsewhere, through the Bay outlet to Lake Ontario.

The three generators of boating activity have very different characteristics, and were assessed separately to determine the number of boats, the type of activity and level of activity at various times. The results of this analysis are presented in the sections below.

Boat Storage

Commercial marinas contribute the most to boat traffic from boats stored on the Bay, especially during peak times. The boat traffic survey, which looked at origins and destinations, identified boat circulation patterns that led from the marina facilities to the outlet. This is probably partly do to the concentration of boats stored at these facilities, but also due to the availability of gas and food. Single docks do not seem to contribute significantly to traffic probably because they are spread throughout the Bay, and possibly because people who live on the Bay have more flexibility when to go boating and as a result, avoid peak times. There are very few commercial dry storage or mooring facilities on the Bay, but these would have the potential of contributing to boat usage as much as a commercial marina facility.

Boat Launches

Boat launches are an important way for members of the public who do not own waterfront property to have access to boating on the Bay. The following existing launches are located on the Bay and accommodate powerboats:

- The Irondequoit Bay Marine Park located in the Sea Breeze area, adjacent to the Bay outlet;
- Mayer's Marina on the sandbar in Webster; and
- Sutter's Marina in Bay Park West in Irondequoit.

There are also a number of smaller boat launches at various places around the Bay, including hand carry/small boat launches at the Bayside Pub on the Webster sandbar, on Bay Front South near its intersection with Orchard Park Blvd., at the NYS Department of Transportation (DOT) historic marker on Empire Blvd. and at the canoe and kayak rental facilities on Empire Blvd.

Use of boat launches is a major source of boating activity on Irondequoit Bay. While a specific count of all launchings is not available, it is known that the Irondequoit Bay Marine Park at the outlet is the Bay's largest and most intensely used public boat launch. In 1992, it was estimated that between 100 and 150 boat launchings occurred on a peak Saturday in July or August at the Irondequoit Bay Marine Park.

Boats from Elsewhere

The Bay outlet serves as the entrance to the Bay for boats from the Genesee River and Lake Ontario. The Bay functions as a harbor of refuge for boats coming from Lake Ontario. No data is available on the number of boats entering Irondequoit Bay from elsewhere.

II.B.4.2 Characteristics of Boat Traffic

An important characteristic of Irondequoit Bay boat traffic is its variability, depending on season, day of the week, time of day, weather and location within the Bay. Peak traffic days tend to be weekend days in July and August when the weather is good, and on those days, boaters may experience conflicts. On many other days, particularly weekdays and when the weather is not optimal, few conflicts may occur. Certain areas of the Bay experience more conflicts than others, with the most serious problems being at the outlet and around the Rte. 104 bridge.

The outlet to Lake Ontario is located at the north end of the Bay and an estimated 75% of boats in the Bay are engaged in transit to and from the outlet. These two facts mean that, particularly at peak times, there may be significant congestion at the outlet and in the navigation channel and fairways leading to it. The fact that one of the largest marinas, Bounty Harbor, is located at the southern tip of the Bay means that these boats must traverse the entire length of the Bay to reach the outlet. The 1992 survey indicated that, aside from the boat launch at Irondequoit Bay Marine Park, the Bounty Harbor generated more boats on a peak day (87) than any other point of origin on the Bay.

The deep-water areas north and south of the Rte. 104 bridge are the most suitable locations for most kinds of boating activity, including motor boating, sailing, racing, etc.; however, the bridge is located at the narrowest part of the Bay. As a result, varying uses, including transit to the Outlet, compete for space in this constrained area.

II.B.4.3 Vessel Use Surveys: Usage and Destination

Vessel use surveys have been conducted, in the past, on Irondequoit Bay. Two direct surveys were conducted during the summer of 1991 by the Irondequoit Bay Monitoring Committee (IBMC); and F-E-S Associates (marine and environmental consultants). These were supplemented by an aerial photo count of instantaneous vessel use published in 1996. It is important to note that there is no standard methodology for conducting vessel use surveys. The IBMC study concentrated on usage and overall destinations. The F-E-S study was based on instantaneous "snapshot" of usage. It is also important to recognize that boating counts for any given time period will be significantly influenced in a complex way by prevailing weather conditions at the time of the counts.

Interpretation of the boat usage on the Bay in terms of the "degree of saturation" or, analogous to motor vehicle studies, in terms of "level of service" is very difficult due to the lack of any standards by which vessel activity level can be evaluated. This is especially true for Irondequoit Bay which functions as both a body of water suitable for recreational use itself and as a launch and/or docking harbor for use of Lake Ontario. The data collected in 1991 is useful for general interpretation only because additional docks have been constructed, and more importantly, the use of personal watercraft has significantly increased since the surveys were conducted.

The following general conclusions can be made based on these surveys:

- Three areas on the Bay receive the heaviest boat traffic on peak days. These areas are:

The outlet channel, due to the movement of boats between Irondequoit Bay, Lake Ontario, and the public boat launch at the Irondequoit Bay Marine Park.

Devil's Cove/Helds Cove, since it is a popular area for anchorage.

The area around the Rte. 104 bridge, since it is in the middle of the Bay, it is the narrowest section of the Bay and the bridge piers are an obstruction to boat navigation. Devil's Cove and the Newport Marina are popular destinations for boaters in this area, thereby increasing congestion around the bridge.

- Weather has a profound effect on the level of use on Irondequoit Bay. Peak usage occurs on Saturday and Sunday afternoons between Memorial Day and Labor Day, when the weather is sunny and warm, with calm winds. Rough conditions on Lake Ontario can increase the level of use of the Bay if conditions are right for boating on Irondequoit Bay. Smaller boats will tend to stay on the Bay in these conditions. Windy conditions can also increase the level of use within Devil's Cove/Helds Cove. Boats of all sizes tend to seek refuge from the wind in this cove since it is the only protected cove that has enough surface area and water depth for a significant number of boats to anchor.
- The public boat launch at the Irondequoit Bay Marine Park contributes more boats on the Bay than any other single marina facility. This is followed by commercial marinas and residential (multi-slip) marinas. Single docks associated with residences appeared to contribute very little to the observed boat traffic. Most of the boats launched at the Marine Park are, however, headed for Lake Ontario if conditions are suitable. Parking is the limiting factor for the number of boats launched on a peak day.
- In general, most boats in use on Irondequoit Bay are in transit to or from the outlet.

Current Plans and Proposals

The Plan is a unique planning tool, in which, if adopted will guide the three towns in creating and enforcing municipal regulations, such as dock ordinances, no-wake zones, etc. The Plan is not a regulatory document for each municipality involved; and therefore, does not address site-specific details for the entire Bay, such as dock applications pending at the time it was drafted.

The Town of Irondequoit's *Sea Breeze Revitalization Plan* calls for expansion of the Marine Park on the Bay east of NYS Rte. 590, including transient docking and a small-scale hand powered watercraft marina. A public dock is suggested to accommodate such vessels as a regional ferry, an excursion/tour boat and/or a water taxi, as well as short-term public docking.

II.C. ENVIRONMENTAL ISSUES

II.C.1 Landforms, Soils and Erosion Potential

See [Exhibit 9](#), *Slopes and Water Depth*

The Irondequoit Bay ecosystem is geologically unique. The Bay in preglacial times served as the mouth of the Genesee River. The glacier reworked the landscape, and when it receded, the Genesee River assumed its present alignment, the old valley was partially filled with sediment and the Bay became the outlet for a much smaller water course, Irondequoit Creek. The Bay ecosystem today consists of several major landforms that differ significantly in their natural characteristics and lend themselves to different kinds of land use.

Approximately 40% of the land area around the Bay is on the plateau, the relatively flat uplands which surround the Bay. It is from the plateau area that the Bay valley and its tributary drainage system were cut. Slopes on the plateau vary from level to about 7% (seven feet of vertical rise to 100 feet of horizontal distance).

The steep slope area comprises about 40% of the land area around the Bay. This area consists of Bay valley walls, which were largely formed from the preglacial Genesee River, and stream valley walls, which were formed by the many streams that have dissected the steep slope area. The slopes within this area are exceptionally steep, ranging from 15% to over 60%. Many of the slopes are in excess of 30%. Elevation changes of 100 to 150 feet are experienced in the steep slope area as one descends from the edge of the plateau to the Bay or the Irondequoit Creek wetlands.

The wetland areas comprise about 10% of the land area around the Bay. Scattered wetlands are observed along the Bay shore and a large contiguous area of wetlands lies to the south of the Bay along Irondequoit Creek.

The final landform, the shore area, also comprises about 10% of the land area around the Bay. Included in this area are the sandbar at the north end of the Bay and all of the relatively flat land that lies between the steep slopes and the Bay or its wetlands. Slopes in the shore area are gentle, varying from level to 7%. Parts of the shore area have been formed by artificial filling, and much of the shore area is subject to frequent or periodic flooding as the level of the Bay water fluctuates.

II.C.1.1 Soil Characteristics

See [Exhibit 4, Soils and Wetlands](#)

The characteristics of soils in the Bay ecosystem have been determined largely by glacial history, for the glaciers provided the parent material from which the current soils were derived. The characteristics of the soils have also been influenced by topography, drainage and vegetation.

Plateau soils north of Ridge Road are predominantly deep, sandy and very well drained, with considerable amounts of gravel. Their coarse texture results from the fact that they were formed from beach deposits when Lake Iroquois, the postglacial lake that eventually receded into Lake Ontario, was at this level.

Plateau soils south of Ridge Rd. have much less gravel and sand and are higher in silt and clay content. They are underlain by glacial till, the relatively dense material deposited and compacted by the glacier. These soils are generally moderately well drained and deep except along Empire Blvd. in Penfield, and in portions of Webster, where bedrock is close to the surface.

The steep slopes around the Bay are formed predominantly from sediments laid down in the preglacial Genesee River valley when the entire area was covered by a lake, although some bedrock outcrops are found in the deeper stream valleys. The material is predominantly of fine sands and silts of nearly uniform consistency; this composition makes the material highly susceptible to erosion. The soils are stabilized by the native vegetation, but once this vegetation is removed the soils are highly unstable. They are well drained.

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

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

The wetland soils are classified as fresh water marsh soils. They are high in organic material and have very low bearing strength.

II.C.1.2 Erosion Potential

See [Exhibit 4, Soils and Wetlands](#)

The erosion potential of an area can be determined by analyzing soil characteristics and topography. The erosion potential of a given soil is related to the size and uniformity of its particles. If the soil is of relatively uniform particles of the size of silt or fine sand, such as the soil on the steep slopes around the Bay, it will be highly erodible. The degree of slope also has a direct influence on erosion potential: the greater the slope, the greater the erosion potential. Generally, the Ark port soils (AtF3) found in the Bay ecosystem have a “severe” erosion potential.

Areas with “severe” erosion potential present serious problems for development which in many cases cannot be satisfactorily handled. Grading, cutting and filling operations necessary for building structures and roads and installing underground utilities will result in severe erosion in such areas during rainy periods, creating sediment problems downstream and hazards for the construction operation and neighboring land uses. If construction is undertaken in such areas, temporary vegetation, mulching and other measures must be provided to control erosion. Where the erosion potential is very severe, erosion cannot be effectively controlled during construction without incurring prohibitive costs.

Areas with moderate erosion potential may be developed without creating serious erosion problems within their limits if effective erosion control is practiced during construction. The development of such areas, however, may modify the drainage pattern, creating erosion hazards in “downstream” areas more susceptible to erosion. Generally the Hilton (HIB), Hudson (HUB), Colonie (COB, COD3) and Collamer soils (CIA) are of this classification.

The areas with “slight” erosion potential may be readily developed without creating significant hazards of erosion, other than those arising from modifications of the

drainage pattern in more erodible “downstream” areas. The Alton (AnB) series soils fall into this classification.

II.C.1.3 Natural Limitations for Homesite Development

In addition to erosion potential, other land characteristics impose limitations for development. Some of the more significant of these features are (1) depth to seasonal high water table, (2) slope, (3) flooding hazards and (4) depth to bedrock. An analysis of the limitations of land around the Bay for the development of homesites based on these five characteristics was undertaken in 1992 by the MCDPD.

Three degrees of limitations were cited: slight, moderate and severe. The pattern is observed to correspond closely with that of the erosion potential analysis. Generally the plateau area is classified as having only slight or moderate limitations for development, while the wetlands, steep slopes and shore area are classified as being severely limited for development. Attempts to develop certain areas with very severe limitations have resulted in structural problems such as cracked foundations and water inundation and have caused slumping, severe erosion and other problems of soil instability.

Again, however, the general classes obscure significant variations. Certain portions of the shore area, for example, pose far less serious limitations for development than the wetlands, even though both areas have been placed within the same general class.

II.C.1.4 Implications for the Harbor Management Plan

Many of the easily developed, relatively flat sites around Irondequoit Bay without erosion or wetland problems have already been developed, and the remaining undeveloped sites tend to be steep, highly erodible and/or with wetland issues. All three towns around the Bay follow required environmental review procedures, and new development will be carefully reviewed so as not to increase environmental problems. Given these facts, it is expected that the scale of new development around the Bay will be relatively limited within the time frame of the Harbor Management Plan.

II.C.2 Water Quality

See [Exhibit 10](#), *Irondequoit Bay: Improvements in Trophic State*

Monroe County has taken a lead role in the effort to improve water quality in Irondequoit Bay through a comprehensive, basin scale effort sustained over a period in excess of thirty years, using County, State and Federal funds.

Degraded water quality conditions in the Bay have been recognized since the early 1900's (Bannister and Bubeck, 1978). It was clear that the problem principally stemmed from treated and untreated sewage discharges to the Bay and its tributary streams. Beginning in the 1960's, the County Pure Waters Program was implemented to address sewage discharges. As a result of this program, all municipal wastewater effluent previously discharged to the Bay and its tributaries was diverted to the Frank E. Van Lare Sewage Treatment Plant by the late 1970's. Additional Pure Waters Program efforts virtually eliminated combined sewer overflows (CSOs) to the Bay from the City of Rochester system in 1986.

In the early 1980's, Monroe County developed the *Irondequoit Basin Framework Plan* for water quality and related resource management in the Irondequoit Basin (Taddiken, 1985), collectively known as the *Water Quality Management Plan* (WQMP). The WQMP, and related policies, established a goal of improving the Irondequoit Bay water quality to at least a stable mesotrophic state, similar to that occurring in nearby Finger Lakes and Lake Ontario. Although point source discharges of pollutant had been largely eliminated, it was recognized that non-point source pollution must also be addressed.

Of primary importance in attaining the established water quality goal is the reduction of phosphorus loading to the Bay. Studies conducted under the National Urban Runoff Program (NURP; O'Brien and Gere, 1983) indicated that runoff from developed and developing areas within the Bay watershed were more significant sources of phosphorus loading than agricultural sources. The primary source of the phosphorus is atmospheric deposition on impervious surfaces with subsequent "wash-off" by precipitation. As a result, the phosphorus yield to the streams in the drainage basin due to stormwater runoff was found to be directly related to the percent of land surface in the basin that is impervious. Further studies of the phosphorus budget for the Bay conducted by the Monroe County Environmental Health Laboratory (MCEHL; 1984) indicated that releases from Bay sediments were also a significant source of phosphorus loading.

As a result of these efforts, Monroe County initiated a three-pronged approach toward meeting the stated water quality goal for Irondequoit Bay. This consisted of (1) implementation of an alum treatment program and other measures to reduce the release of phosphorus from bottom sediments, (2) implementation of a non-degradation strategy to address sources which may add additional pollutant loads to the Bay and (3) a reduction in the amount of phosphorus entering the Bay from tributary streams and from direct runoff areas around the Bay through implementation of stormwater runoff best management practices and public works projects aimed at reducing phosphorus loads emanating from developed and developing areas of the watershed. Each of these efforts is addressed separately below.

II.C.2.1 Reduction of Bay Sediment Releases

Under the Clean Lakes Program, a 1984 MCEHL study indicated that 60-70% of the phosphorus available for algae growth in the upper layers of water during the summer was due to release from Bay sediments, primarily those in the deep central basin. Several restorative methods were investigated to limit this release and alum sediment sealing treatments were chosen as the most cost effective. A pilot alum intervention effort proved the effectiveness of this method and alum treatment was conducted for all areas of the Bay with water depths in excess of 36 feet in 1986. Monitoring of the results indicated that the alum treatments reduced summer phosphorus levels in the upper layers by 60-75% and moved the Bay water quality closer to the target mesotrophic state.

Upon completion of the alum intervention project, it was recognized that further control and stabilization of phosphorus levels could be achieved through supplementation of oxygen in the deep waters of the Bay. The additional oxygen allows for both chemical and biological use of the phosphorus in the middle layers of the Bay during the summer, thus reducing the phosphorus export up to the warm surface layers where excess algae growth is a problem.

The *Irondequoit Bay Oxygen Supplementation Project* was developed to assess the feasibility and efficacy of such an approach (MCEHL, 1991). It consisted of the three-year demonstration (1993-1995) and a two-year biological response study (1996-1997).

In this program, oxygenation of the water column is achieved through the use of an injection system in which oxygen is gravity fed from a high bluff on the east side of the Bay, just north of Rte. 104, to five diffusers located six feet off the Bay bottom. The supplemental oxygen is initiated when measured oxygen levels in the middle layers of the Bay drop below a threshold value in early summer and are continued into the fall.

Monitoring of the effectiveness of the oxygenation project is accomplished through extensive chemical sampling, especially in the upper and middle layers of the Bay water column. The results indicate that the oxygen supplementation has been successful at raising the oxygen level of the middle layers of the Bay during the summer resulting in the establishment of a biological population which is utilizing upward moving phosphorus before it has a chance to reach the warm surface layers (Beelick, 1997). Monitoring and evaluation of this project continues at present.

II.C.2.2 Stormwater Runoff Management

Limiting pollutant loads in stormwater runoff flowing into the Bay is essential for continued progress toward the goals set in the WQMP. In particular, implementation of stormwater runoff management measures (mitigation of impervious surfaces), both for new development and as retrofits to already developed areas, is a priority.

Monroe County, in cooperation with the Towns in the Irondequoit Bay watershed, has encouraged the use of state-of-the-art stormwater best management practices (BMPs) through technical support, outreach and joint public works improvements. Specific efforts include review, comment and technical recommendations on the use of BMPs and effective erosion controls for land development proposals; public education and outreach to build understanding and support for implementation of the WQMP; and the construction and retrofit of large stormwater management works projects.

New York State requirements for construction activities (greater than five acres) require the obtaining of a general stormwater permit (GP-93-01). Phase II Stormwater regulations established a new section, 122.26 (b)(15), which deals with construction activities disturbing more than one but less than five acres. Stormwater runoff from these activities will need a permit by March 10, 2003 unless waived by the NYS DEC.

Of particular note in the later category are the flow control and diversion facilities recently installed in Irondequoit Creek, south of the Bay. Findings from the O'Brien and Gere NURP effort in Irondequoit Creek indicated that the wetland areas surrounding Irondequoit Creek can be effective at removing and retaining certain waterborne constituents. For example, almost 28% of the total annual phosphorus load can be retained by wetlands for the flows passing through.

Based upon this finding, Monroe County initiated several streamflow modifications for Irondequoit Creek just upstream from its discharge to Irondequoit Bay. These include several hydraulic changes intended to divert flow from the main channel of the Creek through the Haywood Millrace and into a nutrient deficient portion of wetlands and,

commencing in 1997, the installation of a flow control structure in a narrow portion of the Irondequoit Creek channel upstream from the Bay.

These actions will increase the frequency of inundation and the dispersion of water into surrounding wetlands during storm events, facilitating the uptake and retention of nutrients and the settling of particulate matter (Coon, 1996; Johnston and Sherwood, 1996). The end effect is expected to be a reduction in the pollutant load reaching the Bay. The effectiveness of these flow controls will be assessed in an intensive monitoring program during the next five years.

In 1998, the Town of Penfield constructed a retaining wall to control erosion in Irondequoit Creek at Linear Park, immediately south of Route 441. The project was funded through the Town, the Monroe County Water Quality Management Agency/Water Quality Coordinating Committee and DEC, and was undertaken to control erosion and sediment which had been a significant source of sediment entering Irondequoit Bay (Burton and Young, 1998; Young and Burton, 1993).

II.C.2.3 Water Quality Summary and Implications

The efforts to date have been effective in improving the water quality of Irondequoit Bay and it is now approaching the specific water quality goal established in the WQMP. An illustration of the water quality goal, along with progress in achieving it, is shown on a chlorophyll-phosphorus plot in [Exhibit 10](#), as supplied by the MCEHL.

As noted above, the primary effort in water quality improvement for the Bay is the continued reduction in nutrient loading, and particularly phosphorus, to the Bay. The sources of the nutrients have been identified as the release of phosphorus from deep bottom sediments and urban runoff from impervious land areas in the watershed. Control efforts center on reductions in sediment-derived phosphorus loading through alum treatment and stabilization of oxygen levels in the middle layers of the water column, and continued efforts to mitigate for impervious cover in the surrounding and upstream watershed through the use of remediative structural means and the use of BMPs in new land development.

II.C.2.4 Current Water Quality Efforts

Current efforts consist of the continuing technical support, water quality monitoring, and public education and outreach identified in the WQMP and related efforts initiated under the Clean Lakes Program and NURP investigations.

II.C.3 Dredging and Navigation Channels

II.C.3.1 Existing Water Depths

See [Exhibit 9](#), *Slopes and Water Depth*

Dredging is required when and where water depths are insufficient to accommodate vessels wishing to utilize a particular water body. Thus, the need for dredging is dependent upon three factors: bottom bathymetry; water surface elevation and its changes over time; and the type and size of vessels wishing to utilize the water body.

The bottom bathymetry of Irondequoit Bay is shown in [Exhibit 9](#). The bottom contours are shown relative to a mean low water surface elevation of 243.3 feet above sea level, referenced to sea level at Rimouski, Quebec known as the International Great Lakes Datum (IGLD) of 1985 and referred to as IGLD-85.

As is evident, water depths for a given surface water elevation will vary substantially through the Bay. A large, deep basin (> 30 feet) occupies the central portion of the Bay extending from the Stony Point area on the north to approximately the Penfield/Webster Town line on the south. Areas north and south of the central basin are comparatively shallow with depths generally two feet or less at mean low water conditions. Dredged channels have been created through portions of the northern and southern shallows as detailed later in this section.

The water depths will vary with the elevation of the Bay water surface, which in turn varies with that of Lake Ontario due to the open connecting channel between the two. These water levels are found to vary on three time scales. Short-term changes, persisting on the order of hours and days, result from meteorological changes in winds and barometric pressure that can physically tilt the surface of the lake. The lake level also varies on an annual basis due to seasonal precipitation and temperature changes, generally peaking in June and with a minimum in December. Finally, the lake water level varies on a long-term, approximately ten to 20-year basis, due to persistent drought or over average precipitation conditions on the entire Great Lakes basin. The magnitude of the variation is generally 0.5 to 1.0 feet for the short-term fluctuations, approximately 1.5 feet for the annual cycle, and four to six feet for the long-term variations. On the basis of both the magnitude and persistence of the variations, it is found that the annual and long-term fluctuations are the most important in terms of vessel use and the consequent need for dredging.

To assess the impact of the water level fluctuations on the adequacy of water depths in the Bay, an analysis has been performed of the historic water level variations recorded on Lake Ontario. To remove the effect of short-term fluctuations, monthly average water level data is utilized. Measurements from the Oswego, NY gauge provide the longest continuous record for Lake Ontario, extending from 1860 to the present. For this analysis, data through the end of 1998 was utilized providing a continuous monthly record of 139 years.

Based upon this 139-year record, three levels were calculated for each month of the year; the average and those on both the low and high sides of it with a return period of approximately ten years. Thus, the high and low levels were calculated for each month with a probability of approximately 10% of occurring or being exceeded, on either the high or low end, in any one year.

II.C.3.2 Water Depth Needs for Various Uses

The water level variation and Bay depth information presented above can be used to ascertain the suitability of available water depths for various recreational boating needs. The water depth needs for recreational boating activities will vary with the type of use and the size of vessel (see Table 2).

Assuming that the nominal recreational boating season runs from approximately early April through the end of October in western New York, the minimum water level during the boating season is expected to occur during the fall months of September and October.

There are several recommendations regarding design depths for boating activities based upon safe vessel operation. These have been recently summarized in an American Society of Civil Engineers' guidebook (ASCE, 1994).

A safety clearance, the depth below the bottom of the deepest draft vessel, is recommended by the USACE at two feet for soft bottoms (sand and mud) and three feet for hard bottoms. The corresponding Canadian government recommendation is 1.6 feet (0.5 m) for sandy bottoms and 2.4 feet (.75 m) for rock bottoms. The State of California (1984) recommends two feet below the deepest vessel or four feet; whichever is greater, for recreational boating facilities.

For the Great Lakes, the State of Michigan recommends a minimum bottom elevation at the end of recreational boat launches at 240.3 feet above sea level (IGLD-85) in Lake Ontario in order to provide a minimum three foot depth for trailered vessels below mean low water, assumed at 243.3 feet (IGLD-85) in this case. Finally, the Irondequoit Bay Coordinating Committee (1985) recommended a minimum depth of four feet for vessels of 25 feet or less. This minimum four foot depth for recreational boating on the Bay was also recognized in the 1992 *Draft Irondequoit Bay Plan* (IBMC) in which it is assumed for all analyses that "If 4.0 feet of water depth is not ...*[present]*...dredging will be performed to provide 4.0 feet of water depth ... calculated using the Low Water Datum." (Italics added).

Obviously, large sailboats with fixed keels will require additional depth. The dredged access channel for the Stony Point facility included consideration for such vessels of a size expected to dock on Irondequoit Bay and had a design water depth of 6.5 feet below a measured, September 1991 water level of 245.1 feet (IGLD-85). Users of other active recreational sailboat channels along the south shore of Lake Ontario, Sandy Creek and Pultneyville, generally require a minimum eight-foot depth, including a safety clearance.

In addition to boating safety, water depths must be considered in terms of water quality impacts of boating activities. Of concern is the potential for an increase in turbidity and the re-suspension of pollutant-laden sediments if powerboats are operated in shallow water. Any such impact will depend upon the engine power, the depth of the water, and the type of bottom sediments present. It has been found that turbulence from motor props will cause a re-suspension of bottom sediments when water depths are less than 30 inches or when the prop is within 12 inches of the bottom (Jackivicz and Kuzminski, 1973). In addition, rooted aquatic vegetation will not develop in heavily used boat channels if props are generally within 12 inches of the bottom.

In general, powerboats up to approximately 25 feet in length will draw approximately 18 to 24 inches of water. Larger powerboats expected to utilize Irondequoit Bay for docking, generally 36 feet in length or less, will draw from 30 to 36 inches of water. Thus, to assure that props remain over 12 inches from the bottom it is necessary to have a minimum of 36 inches (three feet) of depth in areas to be utilized by small boats and a minimum of 48 inches (four feet) of depth in areas to be utilized by larger powerboats.

On the basis of the above factors and discussion, it is concluded that safe and environmentally sound recreational boating on the Bay will require a minimum water depth of three feet for power vessels up to approximately 25 feet in length, a minimum of four feet for larger recreational power boats, and a minimum of 8.0 feet for sailboat use and 6.5 feet for sailboat docking and mooring. It is assumed that a 25-foot length is the upper limit for vessels launched via trailer on a daily basis with larger vessels generally launched via hoist on a seasonal basis and stored in water for the boating season. It is noted that the USACE was a bit more conservative in recommending minimum Bay depths of 3.5 feet for small power boats, five feet for larger cruisers and seven feet for sailboats in its 1979 *Draft Environmental Impact Statement (DEIS)* for the Bay channel opening.

In light of the above minimum recommended depths, and the expected seasonal and long-term water level variations, minimum bottom elevations for various use activities should be as follows on Irondequoit Bay based upon annual average and extreme (ten year return period) water levels:

Comparison of the maximum bottom elevations recommended for various uses with the bottom elevations in the Bay leads to the following conclusions:

- The deep central basin of Irondequoit Bay and the dredged access channel to Lake Ontario (maintained at a nominal eight-foot depth) is well suited for all vessel use. Docking facilities located along the shoreline in these areas will generally provide adequate water depths for all vessels with the exception of cove areas.
- Both the northern and southern shallow areas of the Bay, having bottom elevations of approximately 241 +/- feet, are suited only for small powerboat use (< 25 feet in length) and only under average water level conditions. It should be recognized that facilities located in these areas will not be able to accommodate vessels early or late in the boating season under low water conditions. Unrestricted use during such times may result in unsafe operations and/or water quality impacts from the re-suspension of bottom sediments. Thus, dredging may be needed in these areas to accommodate even small powerboat facilities.
- Larger power boats, > 25 feet in length, will generally not be able to utilize the northern and southern shallow areas of the Bay during the early or later part of the boating season even with average water levels. Problems with access for such vessels will obviously be exacerbated under low water conditions. Thus, facilities anticipating use or access by large power boats will require dredging if located in either the northern or southern sections of the Bay outside the central deep basin.
- Fixed keel sailboat use and docking in the Bay can only be accommodated within the central deep basin and in the Lake access channel. Use of shallower areas of the Bay, including cove areas off the central basin, for temporary mooring of such vessels will only be possible during periods of high water levels.

II.C.3.3 Previous Dredging in Irondequoit Bay

Dredging has occurred in Irondequoit Bay in three separate areas. The largest amount

has been that necessary to create and maintain the outlet channel to Lake Ontario, its connecting channel to the Bay's central basin, and a turning and launch area east of the channel to accommodate operations at the Bay Marina public boat launch adjacent to the outlet. The two other areas consist of an access channel and docking area for the Stony Point residential development southeast of the outlet channel, and an access channel through a shoal and maintenance of docking depths at the Bounty Harbor marina located at the southeast corner of the Bay along Empire Blvd.

Dredging for the creation of the Bay outlet channel occurred in 1985-86. Approximately 35,000 cubic yards of sands with lesser amounts of silts and clays were removed and deposited in a diked area located in the northwest corner of the Bay. While the intent was to create additional emergent marsh with the spoil, failure of the dike caused the dredged material to slough and vegetation was not successfully established. Based on sampling and analysis of this area in the Biological Study of Irondequoit Bay (Haynes et. al. 2002) it appears that a stable productive community has been established.

Follow-up maintenance dredging of the outlet channel occurred in 1988 with the removal of 5,500 cubic yards of sands. These were deposited in the littoral zone of the lake, to the east of the outlet jetty, for beach nourishment. A second and third round of maintenance dredging was conducted in 1993 and 2000, respectively (USACE, 1992). In each case, approximately 12,500 cubic yards of sand was removed from the outlet channel and approximately 4,000 cubic yards of silts and clay was removed from the interior Bay access channel. Extensive physical and chemical testing showed all materials to be physically compatible for beach nourishment. The channel sands were found to be unpolluted while those in the Bay channel were found to be low to moderately polluted, confirming earlier findings regarding sediment quality. For economic reasons, spoil from maintenance dredging has been disposed of at the Rochester Harbor/Irondequoit Bay Open Lake Disposal site located approximately 1.5 miles from shore in water depths of 45 to 65 feet.

Dredging for the Stony Point residential development occurred in 1992. Approximately 12,500 cubic yards of sediment was removed in order to provide an access channel and docking area for shallow and keel boats. Testing of sediments indicated that they were unpolluted and disposal occurred at the Rochester Harbor/Irondequoit Bay Open Lake Disposal Site.

Maintenance dredging occurred for the Bounty Harbor Marina on the south end of the Bay in 1988. Approximately 7,000 cubic yards of material was removed from two locations; approximately 1,500 feet north of the marina in a natural shoal across the access channel from the deep central basin and in the immediate docking area. Sediment testing indicated that sediments to be dredged were unpolluted, with some oil and grease found in the marina area, and would be suited for open lake disposal. Actual disposal consisted of de-watering and disposal of most of the material on the project site.

Historically marina facilities were developed at the south end of the Bay immediately north of Empire Blvd. In recent time the marina development here has been limited to the Bounty Harbor Marina within the Town of Penfield. It is speculated that the naturally shallow water in this area has been a major factor in the disappearance of marinas with associated waterfront dockage. The frequency of need and high associated costs for

navigational dredging has presumably driven these marinas out of business and discouraged proposals for new marinas.

In 1996 the Town of Penfield implemented a prohibition for new marina development, or expansion of existing marinas, through rezoning and modification of their LWRP.

II.C.3.4 Current Dredging Plans and Proposals

While there are no firm plans or timetables, it is anticipated that maintenance dredging for the existing access channels and docking areas will be required on a periodic basis. The lake access channel is projected to require the dredging of approximately 12,500 cubic yards of sands every three to five years.

The Town of Greece is currently working with other south shore communities in the development of a *Regional Dredging Management Plan* to address dredging needs for lake access channels along the Lake Ontario shoreline. The Irondequoit Bay outlet channel is included in this effort.

II.C.3.5 Emergency Dredging

The New York State Uniform Procedures Regulations (6 NYCRR Part 621) defines an emergency as an event which presents an immediate threat to life, health, property, or natural resources. The need for dredging rarely meets this criteria so as to allow individual or commercial dredging under the emergency authorization category of these regulations. Water levels within navigable waters annually vary depending on the time of year and long-term weather conditions. Proper siting of boating facilities must take water levels into account. Not all areas of the Bay are suitable for private or commercial dockage facilities. Within Irondequoit Bay emergency dredging would only qualify for maintenance dredging of the Bay inlet channel. This would be limited to times when water was unusually low and health and safety of boaters was a major concern.

II.C.4 Aquaculture and Maraculture

No current aquacultural or maracultural activities, commercial or amateur, are occurring on Irondequoit Bay, nor are there any known current plans or proposals for such activities.

Intensive aquacultural or maracultural activity is known to have the potential for adverse water quality impacts. This results from the introduction of large quantities of nutrients, especially nitrogen and phosphorus compounds, to water bodies when aquacultural production is present. It is noted in this regard that water quality improvement is an important public goal for the Bay and limiting further introduction of nutrients, especially phosphorus compounds, has been identified as critical to this effort.

II.C.5 Generalized Habitats, Vegetation and Other Natural Resources

See [Exhibit 11a](#), *Significant Habitats and Natural Areas*

The information and conclusions of this section of the inventory are based primarily on existing literature. The project timeline (winter) did not permit extensive field checking of information resources.

II.C.5.1 Natural Setting

Irondequoit Bay is a coastal bay and tributary system, with extensive beds of submergent and emergent wetland vegetation in most coves and tributary mouths. There are steep silt bluffs exceeding 150 ft. along the east shore of the Bay and extensive cattail marshes along the south shore. The New York Natural Heritage Program (NYNHP) lists the entire Bay as a significant warm water fisheries concentration area.

As one of only five bay complexes along the 150-mile southern shoreline of Lake Ontario, from the Niagara River on the west to the City of Oswego on the east, the Bay is, by definition, a unique habitat. Its combination of protected shallow waters, steeply sloping edges and wooded fringes make it entirely unique among the south shore bays.

Together, the bay complexes provide spawning, nursery and feeding grounds for warm water fisheries and seasonal cold water fisheries, and also serve as sheltered resting and feeding areas for birds migrating along the lakeshore flyway. Because of its unique physiological and climatic conditions, the Bay ecosystem harbors a number of rare and unique ecological communities.

Physiographic and Ecological Zones

Irondequoit Bay is located in the Erie-Ontario Lake Plain sub-zone of the Great Lakes Plain. The topography of this area is heavily shaped by erosion, with the Bay representing the pre-glacial outlet of the Genesee River.

The near-lakeshore climate is significantly tempered by the lake, so vegetation is normally held in check until after the danger of frost in spring. Autumns are long and mild, creating an island of more southerly climate between northerly zones. The growing season ranges from 170 to 180 days, permitting growth of more southerly species.

Lake-enhanced precipitation in the winter months normally results in a significant snow pack. Melting of this snow pack may increase erosion on steep or unprotected slopes.

The normal climax forest for the physiological zone is elm-red maple northern hardwoods, although there are significant areas of southern hardwoods with their associated under story plants close to the lakeshore. The mature forests surrounding the Bay are a mixture of northern and southern types.

Geology

The bedrock of the northern portion of the Bay, approximately from the lakeshore south to Inspiration Point, is Grimsby sandstone, while the remainder of the Bay is Camillus shale. Grimsby sandstone is a heavy-bedded siltstone with a significant quartz component. Camillus shale is part of the Queenston shale group, and is generally described as fine and erodible.

II.C.5.2 Ecological Communities

Irondequoit Bay is a very important ecological community: the entire body of water is important for warm water fish spawning, feeding and habitat and for waterfowl resting and feeding; the Bay and its associated steep slopes provide important habitat for migrating hawks, including the rare osprey and bald eagle; the marshes and shrub edges provide additional fish habitat as well as supporting shore birds, wading birds, songbirds, reptiles, amphibians and small animals; upland forests support both nesting and migratory songbirds, as well as other wildlife. It is the interaction of these communities, water, marsh and upland, which provides the rich habitat necessary to support the diversity of species. Habitat preservation is the key to species preservation.

Material for this section is drawn from a number of studies, none covers the entire project area. The most comprehensive study, the *Gross Overview* done by Jack Cooper of DEC (1984), is limited to the portion of the Bay north of Empire Blvd. It is also, by its own admission, a very generalized study. Fieldwork for the Cooper study was performed before the opening of the Bay outlet and reflects conditions from the mid 1980's. Other studies are limited both geographically and in their subject matter, e.g., studies of macroinvertebrates in the Ellison Park wetlands and the study of migratory hawks. The task of this section, then, is to assemble all these sources into a comprehensive picture of Bay ecology.

The NYNHP, which is a cooperative venture between The Nature Conservancy and the DEC, has developed standard ecological community classifications for all of New York's ecological communities. Since their first preliminary publication in 1986, these classifications have become a standard way to categorize plant and animal communities. In classifying the communities, NYNHP applies rarity ratings. Communities listed as "secure" are not rare either in the state or worldwide. Note that lack of rarity does not necessarily mean that the community is unimportant to species survival. It may in fact be vital. There may be widespread occurrences of that community type. There is a sliding scale of rarity which includes "threatened" (many still exist but they are in some way vulnerable), and "endangered" (few exist and those few are vulnerable to extinction). For animals an additional category, "species of concern" is added, usually applied to animals whose population has been observed to be declining or who depend on an endangered ecological community for survival.

The habitat/ecological community categories in the various existing studies are subtly different. For this study, habitat designations have been converted to NYNHP standards wherever possible. Habitat categories discussed and mapped for this study are limited to those that either comprise a significant area, or are listed in previous studies as sensitive or significant.

Aquatic and Wetland Communities

Major aquatic communities include the following NYNHP categories:

Great Lakes Aquatic Bed:

Irondequoit Bay is the prototype for this Great Lakes ecological community, which is defined as "protected shoals," that is, quiet bays that are protected from wave action. The "floating" and "submergent" wetland communities defined in Cooper's (1984) and other studies are included in this habitat. This is the primary warm water fisheries

habitat that makes the Bay so ecologically valuable. Primary spawning and nursery habitat occurs at depths of under six feet. More than 50% of the Bay is less than 6 feet deep. The area serves as an important spawning bed for both game and food fishes. Fishery surveys (Lane, 1988 and 1993; NYS Department of State (DOS), 1987; U.S. Fish and Wildlife Service, 1985) confirm the importance of this habitat. Keys to the success of this habitat for fish spawning, nursery and feeding are the complex structure of natural, wave washed beaches, submergent vegetation, overhanging natural vegetation, gravel/rubble bottoms, and submerged trees and woody debris. (Cooper, 1984). Protection from sedimentation and wave action is also key to community survival. The entire water surface of the Bay is considered as part of this ecological community.

Shallower parts of this community are feeding and resting areas for waterfowl such as mallards, wood ducks and blue winged teal. Deeper areas are frequented by migrating diving ducks such as buffleheads and common goldeneye.

Shallow Emergent Marsh:

Occurring at water depths of less than three feet, this habitat is characterized on Irondequoit Bay by marshes of cattails, rushes, sedges, phragmites and other emergent vegetation along bay edges, in coves and at the shallow south end along Irondequoit Creek, called the "Mud Flats." It is an important habitat for waterfowl and songbird feeding, resting and nesting, for fish spawning and for amphibian reproduction and feeding. The key to success for this habitat is minimization of disturbance from wave action, dredging and vegetation removal. Phragmites and purple loosestrife have minimal wildlife value and tend to replace native cattails, sedges and rushes where disturbance occurs. Invasion by exotic species is evident both in the fringe marshes on the east and west shorelines, and in the wetlands to the south bordering Irondequoit Creek.

Marshes are extremely efficient filters for sediments and pollutants. Their presence greatly enhances water quality by filtration, flow control and erosion control. Monroe County, in recognition of this function, recently installed water control devices in Irondequoit Creek to lengthen water retention times in the marshes surrounding Irondequoit Creek at the south end of the Bay.

In addition to filtration, marshes serve as water storage, ameliorating the effects of storms and providing flood protection. The wetlands at the south end of the Bay are particularly important in this regard. The fringe marshes along the shorelines serve to physically buffer the bases of the erodible steep slopes from wave and wind action.

Fringe marshes serve as important feeding, resting and nesting areas for birds such as Red-winged Blackbird, American and Least Bittern, Common Gallinules, Marsh Wrens and Virginia Rail. Particularly in areas of permanent inundation, they are important as fish spawning areas. They are also important to local amphibian populations. Emergent marshes are rated by NYNHP as secure both in New York State and globally.

Shrub Swamp:

This habitat consists of shrubs that are tolerant of flooding, but which typically spend part of the year growing in soil which is merely damp.

Although the area of shrub swamp is small, it is an important transition zone from marsh or aquatic bed habitats to the purely terrestrial habitats. It is important as a nesting and feeding habitat for a number of songbirds and for shorebirds such as the American bittern. As a fish and amphibian spawning and nursery area, it offers dense protection to fry from larger predators. Typically occurring at the base of coves and in stream valleys, this habitat, with its water tolerance and dense root structure, is also very important for soil stabilization at the toes of steep slopes. The key to preservation of this habitat is minimizing siltation from streams, and discouraging removal of vegetation. Devil's Cove/Helds Cove and a lagoon and associated cove at Willow Point are probably the best remaining examples of this transitional habitat on the Bay. In the large emergent marsh at the south end of the Bay, high areas grade to shrubs and then trees, providing complex habitats for birds and wildlife.

In addition to their fish spawning importance, shrub swamps support a variety of birds such as kingfishers and flycatchers. The Least Bittern, a bird listed by NYNHP as a species of concern, prefers shrub swamps for nesting.

Shrub swamps are rated by NYNHP as secure both in New York State and globally.

Sedge Meadow:

Small areas of sedge meadow exist at various sites around the Bay. This is a wet meadow community consisting of wet or flooded organic soils, dominated by sedges with an intermixture of other wetland herbaceous species. Typically occurring in stream deltas and floodplains, this habitat is important for preservation of several species of rare and unusual songbirds, which use it exclusively for nesting and feeding. The habitat is susceptible to disturbance by development because it typically occurs in flat areas that are not susceptible to deep flooding. Although the presence of this ecological community has been noted in references, it does not appear on any of the existing maps. More information is needed on the exact location of this habitat.

Sedge meadows are rated by NYNHP as secure globally and as apparently secure but possibly rare in parts of its range in New York State.

Terrestrial Communities

Successional Hardwoods:

Successional hardwoods are mixed forests occurring on formerly cleared sites. Their exact composition is highly influenced by local seed supplies available at the time of regrowth. Although a characteristic feature of these ecotypes is that the canopy trees do not reproduce themselves, this does not appear strictly true on the Bay. Normally, as successional trees age, they are replaced by more shade-tolerant species. On the Bay, however, the species mix is quite uniform, consisting principally of oaks (both white and red) with an admixture of cherries, birches and hickories. In difficult growing conditions such as the steep Bay Shore slopes, succession may be a slow process with the successional communities persisting for 100 years or more and only gradually being replaced by other forest types.

Based on previous studies and observations, the forests of the steep slopes surrounding the Bay are provisionally characterized as successional. Some forest areas may sufficiently mature to be in transition to other, more permanent forest types. This is an area for which additional information is needed. The Irondequoit Bay Biological Study to accomplish this is being funded by the NYS DOS and will commence in 2002.

Successional hardwoods appear to be the most frequent ecological community on the steep slopes bordering the Bay to the east and west. Because of the proximity to the lake, southern hardwoods predominate over the northern varieties more typical of the general area.

The Bay shores are, in general, characterized by extremely steep slopes and erodible soils. The presence of hardwoods on these slopes and on the adjacent uplands serves several vital erosion protection functions. Tree roots stabilize the soil; trees draw water from the soil, reducing both runoff and sub-surface flow; leaves and branches reduce the force and amount of water reaching the surface, and tree shade, even in winter, moderates snow melt rates. These factors combine to stabilize the fragile slopes. It is difficult to replace these functions by man-made stabilization methods or with other vegetation. Slope protection is proportional to the density and age of the forest.

This habitat type is, by nature, transitional. If left undisturbed, it will gradually be replaced by more permanent forest types such as the rich mesophytic forest found in the more mature woodlands of the Bay shores. If disturbed, serious erosion may result before the system can re-stabilize.

These forests are used by a variety of terrestrial wildlife such as deer, raccoons, squirrels, and smaller mammals as well as a variety of songbirds such as the Northern Oriole, American Robin, Wood Thrush, White Breasted Nuthatch and Black-capped Chickadee. They are especially important to migrating and resident raptors (hawks), which utilize them as vantage points when foraging in the Bay.

Both types of successional hardwoods are rated by NYNHP as secure both globally and statewide.

Rich Mesophytic Forest:

Rich mesophytic forests occur on moist but well-drained soils, primarily on north and east facing slopes. Although more characteristic of forests in the Appalachians and Finger Lakes Highlands, they occur in stream valleys and more mature woodland areas along the edge of the Bay. This community is characterized by a wide variety of co-dominant tree species, including red and white oak, birch and black cherry, which are valued as lumber and shade trees. Conifers such as white pine may also occur. The under story consists of a well-developed shrub layer and a diverse layer of herbaceous wildflowers.

This is a rich, self-replacing forest type, which provides excellent slope stabilization and supports a variety of wildlife and birds. Its dense, layered cover provides habitat for owls, warblers and a variety of woodpeckers.

The NYNHP lists rich mesophytic forests as apparently secure globally, although possibly rare in parts of their range, and as very vulnerable in New York State, with only 6 to 100 occurrences statewide. This is an ecotype that is worth preservation as a rarity in our area.

Oak Openings:

Oak openings are a grass-savanna community occurring on well-drained, usually somewhat shallow, soils. They are dominated by a Monroe County mature oak

overstory with a ground layer consisting mainly of grasses. This is a rare ecological community, with only six to twenty occurrences globally and five or fewer occurrences in New York State. Because of its rarity as a community, it also supports rare species of plants and may support rare animals that depend on its unique mixture of species and climatic factors. Although not widespread on Irondequoit Bay, it clearly is in need of preservation in its own right as a rarity.

Sand Beach:

Small areas of sand beach occur near the Bay outlet and in a few shoreline areas. These areas provide feeding areas for migratory birds, particularly shorebirds. Sand beaches are rated by NYNHP as demonstrably secure both globally and statewide.

Successional Old Field:

Successional old fields are mixed meadows, occurring on previously cleared sites that have been abandoned. In some older fields, shrubs may begin to replace the herbaceous species. Although they have less ability to stabilize steep slopes than woodlands due to shallower roots and less ability to use water, they do have some stabilization value. This is a transitional community type that usually succeeds to shrublands or forests. It is listed as apparently secure both statewide and globally.

Cultural Ecotypes

Cultural ecological communities which comprise a significant part of the Bay uplands include: flower/herb garden, mowed lawn with and without trees, mowed roadside/pathway, paved and unpaved roads and paths, and riprap/artificial lakeshore. None are unusual. Although some, most notably the residential gardens, may have some value to wildlife and birds, most do not display the diversity necessary for support of a variety of species.

Habitat Importance and Interactions

Remarks in this section are intended to supplement those in the specific habitat descriptions above.

Edge Transition Zones:

The importance to fish and wildlife of undisturbed transition zones between the aquatic bed and upland communities is mentioned in several studies. Cooper (1984) and Lane (1986) The most valuable of these include both an emergent marsh fringe and a shrub swamp fringe between natural aquatic bed and upland ecotypes. This transition zone is often lost when shoreline development occurs.

Raptor Habitat Requirements:

Sanderson and Allen (1994) surveyed migratory raptor (hawk) use of the Bay in spring of 1993. They report that the Bay is an important feeding, resting and foraging site for hawks migrating along the lakeshore flyway, primarily in the months of April and May. Although migrating raptors were observed around the entire shoreline, observation points for the study were primarily located in the southeast end of the Bay, near the emergent wetlands. Both eagles and osprey, as well as northern harriers and a number of other raptors were observed in significant numbers.

The authors report that standing fish crop (food availability), lack of water obstruction, water clarity and availability of perches for foraging and feeding all influence habitat suitability.

Boat traffic was observed to have a negative effect on raptor feeding patterns, often flushing foraging birds or interrupting feeding flights. Raptor use was concentrated at the less-developed southeast portion of the Bay.

Warm water Fisheries Requirements:

As gleaned from several studies, the requirements for warm water fishery spawning, nursery and feeding areas appear to be: warm, clear, shallow water, unsilted gravel or rubble substrate, suitable forage vegetation and organisms, overhanging vegetation, and underwater roots or woody debris. This combination of conditions is mainly encountered along natural, undeveloped shorelines and in coves, which are protected from erosion.

General Aquatic Trends:

Re-routing of wastewater treatment plant discharges, and control of treatment plant overflows has greatly decreased pollutant loading to the Bay since 1987-88. Water quality has dramatically improved since a nadir in the early 1970's, when only four species of submerged aquatic plants, two of them exotics, were found in the Bay. (Forest, 1987) The submerged plant community has rebounded to 12 species as improvements in water quality and clarity and reduction in phosphorous load have improved habitat quality. It is predicted that decreases in phosphorous loadings will improve water clarity and light-dependent rooted aquatics will return and increase. This has proved dramatically true in the last several years as aquatic diversity continues to increase and populations of both forage and game fish continue to rebound.

Concomitant with the improvement in water quality and reduction of sedimentation has been an improvement in fisheries habitats. Both game and forage fish populations have rebounded rapidly from lows in the 1970's. In the latest fishery report, Lane (1988) reports "only two lakes, ... in some years, produced catch rates exceeding that for Irondequoit Bay." He further stated that, at that time, he considered the Bay an underutilized fishery.

Important Habitat Areas:

- The Monroe County Environmental Management Council (EMC) considers the Irondequoit Bay Ecosystem to be one of the top environmentally sensitive areas in Monroe County, and specifically names the northeast shoreline, the Webster well field, Devil's Cove/Helds Cove, the southeast slopes in Penfield, the Empire Blvd. Mud Flats, the southwest slopes in Irondequoit, and the Irondequoit Creek area in Brighton and Penfield as environmentally sensitive sites.
- The NYNHP and numerous studies from other sources list the entire water area of the Bay as an important warm water fish concentration area.
- The Coastal Fish and Wildlife Habitat Rating Form (NYS DOS, 1987) lists the entire shore of the Bay as a significant fish and wildlife habitat and calls it "One of the major coastal bay and tributary systems on the Great Lakes coastal region." The pervasiveness of this view of the entire Bay as important

reinforces its importance. The habitat rating form also gives the Bay a high vulnerability score, based on nesting of unusual bird species.

Coves:

Several studies (notably Cooper, 1984 and Lane, 1986) specify, as noted above, the importance of all of the cove areas as significant habitats. Coves provide a mix of ecological communities with graded transition between aquatic and terrestrial environments. They are particularly important for fish spawning and as waterfowl feeding and resting areas. (Descriptions from Cooper, 1984) The following cove habitats were listed by Cooper as significant. As noted, some have been modified by development. Refer to [Exhibit 11a](#), *Significant Habitats and Natural Areas*.

- Little Massaog Cove on the west side of the Bay is listed as having a well-developed transition zone. It was heavily used by waterfowl, shore birds song birds and raptors and offered excellent habitat for warm water fish spawning, particularly northern pike. The transition area at the border of the cattails in this cove is, however, presently being filled for development.
- Big Massaog Cove, immediately to the south is also mentioned by Cooper as also having excellent pike spawning habitat and as being an important resting site for migrating buffleheads and goldeneye. It is adjacent to the Rte. 104 bridge, but is otherwise relatively undeveloped. It remains a valuable wildlife and fish habitat.
- Newport Cove, immediately to the south of Massaog Cove formerly exhibited similar characteristics, but a roadway construction and development have changed the natural shoreline and the potential for wildlife habitat.
- Although moderately developed, the Densmore Creek alluvial fan/wetland area retains considerable wildlife value, although some natural shoreline has been lost to bulkheading. Cooper noted that northern pike congregate here and may spawn offshore. The gradual transition between upland and aquatic habitat makes this area valuable for a variety of waterfowl, shorebirds and upland animals.
- The Glen Haven/Snider Island Complex also retains much of its wildlife habitat. The transition to a unique forested upland area and the fact that the upland areas are publicly owned and have remained undeveloped creates a site used by waterfowl, fur-bearers and upland birds. The mature forest of oak and beech provides an ample food supply for a variety of animals. The flowing creek adds to the habitat's attractiveness for songbirds.
- On the east side of the Bay, there are six coves, two of which, Willow Point and Devil's Cove/Helds Cove retain substantial wildlife value. Willow Point cove remains undeveloped, although there have been several proposals for shoreline development. This small cove is separated from the Bay by a transient sandbar and functions as a separate wetland complex with emergent marsh and shrub swamp. It is utilized as fish spawning habitat, and by a number of birds, including bitterns, red winged blackbirds and kingfishers. A stream valley with mature trees enhances its wildlife value.

- Devil's Cove/Helds Cove is the largest east side cove. It includes emergent marsh, shrub swamp and upland woods. This area is utilized by migrating raptors such as red tailed hawks and osprey as well as waterfowl, wading birds such as the great blue heron, and American bittern, and perching birds such as the kingfisher and flycatchers.

Additional significant areas:

- The Mud Flats area north of Empire Blvd. is an important part of the migratory route and habitat for many shorebirds and waterfowl (EMC, 1996). These seasonal mud flats are unique in Monroe County, and the EMC cautions that dredging, dumping and/or extensive boat use could threaten the site's existence.
- Cooper's study does not include the wetlands to the south of Empire Blvd., which are included in this study. The south end fringe and the emergent marsh complex to the south of Empire Blvd. towards Browncroft Blvd. are very important wildlife habitat. As water quality in Irondequoit Creek continues to improve, it will probably increase in diversity. The combination of emergent marsh, shrub swamp and upland successional forest offers habitat to a wide variety of birds, reptiles, amphibians, fur-bearers, and other mammals. In a 1996 study for the U.S. Geological Survey and the Monroe County Department of Health (MCDOH), Robert McKinney (McKinney, 1996) found (counting possible, probable and confirmed breeders) 12 wetland bird species, 40 upland species and 16 species which normally utilized both habitats. In addition, he observed six species of non-breeders. The work was performed in July, after spring migration, so included principally resident species.
- The areas of gravel/rubble bottom, around Stony Point, which Cooper listed as important fish spawning habitats, are under considerable pressure from shoreline development in this area. Slopes have been partially cleared, transporting erosion into the rubble bottom areas, and docks have been placed in the water in this area. The current habitat value of this area is unknown.
- The barrier bar areas at Sea Breeze and Oklahoma Beach serve as gatekeepers for the remainder of the ecotypes on the Bay. They are significant for their protective features and also as habitat for large concentrations of shorebirds and other waterfowl.
- The Webster water tower and well fields are an important upland habitat, mentioned by Cooper and also by the NYNHP and others. They are a mix of mature and successional ecological communities that offer a diversity of habitats to upland bird and mammal species.
- Forests on and adjacent to steep slopes are critical to erosion control.

II.C.5.3 Threatened and Endangered Species

The NYNHP lists seven endangered plants, one endangered insect and two nesting birds that are species of concern for the project area. Two rare migratory species also regularly visit the Bay, the bald eagle and the osprey. In addition, two rare or potentially threatened ecological communities exist in the project area.

The NYNHP information policies forbid public publication or disclosure of known locations of endangered or threatened species. This policy is in place to discourage collecting and poaching of rarities. Habitats known or purported to support endangered or threatened species have been added to the mapping of significant habitats.

This relatively large listing for a small area serves as an indicator of the uniqueness and sensitivity of the Bay ecosystem as a whole. It also speaks to careful environmental evaluation of development initiatives to minimize interference with threatened or endangered species.

II.C.5.4 Habitat Gains and Losses

Comparing forested areas today with those depicted on the Cooper map of 1984, there is a significant loss of forest, mostly to residential development. This loss is especially noticeable in the northeast quadrant of the study area. Also in comparison with the Cooper map, significant areas of shore edge emergent marsh and shrub swamp are being lost to marina and residential development. On the positive side, the quality and diversity of the aquatic bed habitat appears to be continuing to increase. Remaining forests on the slopes are becoming more diverse and mature.

There are many small development projects in progress on the Bay. Each alone does not have a significant impact, but the cumulative effects, especially when added to larger projects, are very large. Habitat preservation will occur only if cumulative effects are tracked and analyzed, and if preset preservation goals are formulated and implemented.

Additional data gathered in the previously mentioned Irondequoit Bay Biological Study will contribute significantly to a comprehensive environmental analysis of the Bay. As previously discussed, a large number of studies on the Bay exist but most of them are limited either by geographic area or subject area (fisheries, raptors, macroinvertebrates, water quality, etc.) Providing a comprehensive overview which makes sense from a planning and implementation viewpoint is difficult given the fragmentation of the data. What seems most needed is a geographic framework in which to place the existing information.

II.C.5.5 Summary of the Biological Study of Irondequoit Bay (Haynes et. al. 2002)

See [*Exhibit 11b. Biological Study Sampling Locations*](#)

During the development of the IBHMP, the IBCC through a grant from the NYS DOS, commissioned the preparation of a biological study to assess the natural resources of Irondequoit Bay, identify distinct communities, determine the significance of these communities, and assess the potential impacts specific recommendations may have on these resources. This study also assessed the general characteristics of Bay sediments in relation to the acceptability of dredging and the type of chemical analysis that would be required before dredging could be permitted. The following are the purposes and objectives of the biological study:

Purposes of biological study are to provide:

1. Scientific data that will become the basis for the environmental review of the IBHMP, and that will be used to support the recommendations and policies contained in the Plan.
2. An assessment of the potential for dredging in areas that have been identified for additional deepwater access to Irondequoit Bay.

Objectives of the biological study are to:

1. Identify, map, and assess existing littoral (shallow water, near shore, sunlight reaches bottom) habitat, including field sampling of plants and animals living less than 16 feet (5 meters) deep (1 meter = 39.37 inches).
2. Identify, map, and assess existing upland habitat (including vegetative cover-type maps), ground-truth vegetation communities in sensitive areas, and characterize, mostly by literature review, vertebrate species likely to inhabit upland vegetation communities.
3. Identify key habitats and biological resources in the study area.
4. Determine compatibility of dredging with environmental conditions in areas specified in the preliminary IBHMP by doing sediment particle-size analysis.

This biological study represents the first comprehensive scientific study on Irondequoit Bay since the NYS Surveys in the 1930s. It includes significant data that can be used as a baseline for further assessment and determining changes within the natural communities present on the Bay. The study contains a diverse set of sub-studies that include:

1. Particle-size analysis of sediments at potential dredging sites
2. Aquatic macrophyte (large plants) studies
 - a. Mapping and community selection
 - b. Collection and identification
 - c. Sediment and metaphyton (algae) evaluation
3. Sampling and identifying aquatic animals
 - a. Fish
 - b. Amphibians
 - c. Wetland birds
 - d. Macroinvertebrates
4. Surveying and characterizing terrestrial plant communities
 - a. Creating maps with existing data
 - b. Identifying upland community types and species
5. Assess upland habitat suitability for important vertebrates
 - a. Bats
 - b. Distributional surveys of amphibians, reptiles, birds and mammals

c. Linkages of vertebrate distributions to terrestrial vegetation habitats

The following is a summary of conclusions drawn from the study:

Aquatic Habitats

Six aquatic habitats were identified by the researchers based on macrophyte beds observed in May 2002.

Aquatic macrophyte bed distribution

- The extensive aquatic macrophyte beds harbor diverse and abundant macroinvertebrate and fish communities.
- Few aquatic macrophytes grow deeper than five feet --probably due to lack of sunlight – and few aquatic macrophytes are found shallower than two feet – probably as a result of wave action; therefore, the critical depths to avoid disturbing in order to protect macrophyte survival and growth are between two and five feet.
- A comparison of historical submersed aquatic macrophyte beds (1940-1982) and beds mapped in 2002 appear to indicate that they have largely disappeared from the southeastern (Penfield) corner of the Bay, possibly due to boating activity and associated dredging.

Characterization of Species

- No federal or state species of aquatic macrophytes, macroinvertebrates, fish, amphibians or wetland birds listed as endangered, threatened or of special concern were sampled in this study. However, a young bald eagle {status?} was seen and several listed species of birds are able to live in the study area
- One amphibian previously unrecorded in the study area, the gray tree frog, was observed.

Policy Recommendations

- Aquatic habitats sampled with critical priority for protection are Devil's/Helds Cove (Area A-6: high species diversity, important spawning and nursery habitat) and the southwestern corner of the Bay (Area A-3: high diversity, warm water fishes). These areas and areas similar to these, such as undeveloped coves, should receive the highest protection available.
- Aquatic habitats sampled with high priority for protection are Seabreeze (Area A-4: high aquatic macrophyte diversity, longnose gar captured), Webster Sandbar/Stoney Point (Area A-5: high diversity, extensive area, macrophytes disturbed in boat traffic channels, walleye captured), and Irondequoit Bay Park West (Area A-1: high abundance and diversity of fish, especially in late spring, probably spawning season). Only small portions of these areas should be developed and development should have limited impact on the shore.
- Because of very shallow water (less than one foot in many places) and the apparent limitation of aquatic macrophyte growth by the discharge of Irondequoit Creek into the Bay, much of the middle, southern part of the Bay had few fish in the summer and fall, but it is valuable migratory bird habitat.

Terrestrial Habitats

Nine terrestrial areas around the Bay were identified by members of the IBTS for study.

Species Distribution

- Twelve NYS-protected plants of special concern were found, ranging from seven species in the southeastern corner of the study area (Area T-1: mostly Irondequoit Bay Park East) to none in the most developed areas (Area T-6: Rte. 104 bridge, Newport Landfill and Marina; Area T-9: Empire Blvd. commercial district)
- An “oak opening” habitat, formally listed as threatened by NYS was found in Area T-3. Threatened “shrub swamp transitional habitat” reportedly exists along the shore of the Bay, but it was not observed in this study.
- A high quality cherry, oak and maple hardwood stand was found in the upland of Area T-3, and stands of aspen/poplar, beech, chestnut, maple and oak were found in Areas T-1, T-2 and T-8. Cottonwood grew along the shore and black locust grew in the upland regions of all areas examined.

Species Characterization

- Large contiguous upland forest tracts support a high diversity of birds and mammals, many of which were observed during plant surveys. One threatened bird, seven birds of special concern and 13 mammals limited (required habitat) or influenced (used for food or temporary cover) by the availability of wetlands potentially could occur in the study area, but none were observed.
- The study area is an important regional center of bat biodiversity, especially the area from Point Lookout to Rte. 590 where all five species observed in the study were found.

Dredging

Historical sources of pollutants (e.g. sewers) contaminated the sediments in Irondequoit Bay. The NYS DEC developed a protocol for sediment chemical analysis required for dredging based on grain size. Potential dredging areas were defined by the IBTS staff based on the proposed Harbor Management Plan. Four sediment samples were taken in these areas. The results indicate that these areas contain high amounts of silt and organic material; therefore, substantial chemical analyses are needed before dredging can be permitted.

Erosion

The land contiguous to the Bay is highly susceptible to erosion. All-terrain-vehicle activity is removing vegetation at many locations around the Bay, especially areas T-1, T-3 and T-8, leaving soils highly vulnerable to erosion, landforms subject to destabilization, and protected plants in danger.

Environmental Impacts

Before further development proceeds, intensive surveys are needed to establish that important plant communities and species are not being removed by land clearing or dock building, and that plant communities are not being fragmented or eliminated which will diminish the diversity of animals that can live around the Bay.

The entire perimeter of the Bay is a Class I wetland that has the highest level of legal protection by New York State. The various submersed and emergent plant communities that comprise the Irondequoit Bay wetland perform valuable ecological functions as fish and wildlife habitat, and they should be preserved to the maximum extent possible in their natural state.

The forests on the steep slopes surrounding the Bay also perform valuable ecological functions. In addition to providing diverse habitats for a surprisingly robust array of birds and mammals, presence of these natural vegetation communities is essential to stabilize highly erodable soils on the very steep cliffs that surround the Bay.

To the extent that the remaining natural aquatic and terrestrial habitats around the Bay are consumed for human activities, the diversity and abundance of plants, animals and ecological communities comprising the Bay ecosystem will decrease. Before development plans are approved, intensive on-site surveys need to establish important plant and animal communities and species that could be impacted. This information can then inform the scope and design of the proposed development. It should be noted that fragmentation and elimination of plant communities will diminish the diversity of animals that can live around the Bay.

Study Limitations

Coves and other areas specifically targeted for development were not sampled. By starting the project in May instead of April, early development of aquatic macrophyte beds, fish spawning in the early spring, some likely calling amphibians, some likely breeding birds, and spring ground cover plants could not be observed and tabulated.

II.C.6 Aesthetic and Scenic Resources

See [Exhibit 12](#), *Visual Resources*

Irondequoit Bay is a significant aesthetic resource. Although the water itself is a beautiful natural feature of the Bay, it is the visual complexity of the entire Bay ecosystem that makes the visual quality of the Bay so spectacular. The Bay is surrounded by steep embankments and wooded uplands that tower high above the water's edge. Rare birds and plant species are scattered throughout the surrounding woodlots and wetlands. The water is calm and soothing, and together with the all the natural elements working in concert one can easily escape the urban center that is only a few miles away. However, the visual quality of the Bay is slowly deteriorating. Houses are appearing high upon the sensitive embankments, cluttering and interrupting the flow of the natural landscape.

The entire Bay is a valuable visual resource, especially those several areas that exhibit a high degree of variety, harmony and contrast. Substantial research has outlined specific characteristics of the landscape which are said to contribute to high visual quality. Elements that have proven to be significant in visual quality research include: landform (USDA Forest Service, 1974), open land (Litton, 1982; Barringer, 1982), shoreline configuration (Pearce and Waters, 1983) special scenic features (Pemaquid, 1986), and views to the water (Kaplan, 1977; Litton, 1972).

While a complete visual quality analysis is beyond the scope of this study, after general observations the following areas are considered to have critical scenic value:

- Devil's Cove/Helds Cove - convoluted shorelines, long unobstructed views;

- Irondequoit Bay Park East;
- Irondequoit Bay Park West;
- Big Massaug Cove;
- Webster sandbar;
- Irondequoit Creek Valley; and
- Newport Rd. - views of Rte. 104 bridge;

Implications for the *Harbor Management Plan* include encouraging efforts to promote careful site development so as to preserve views of the Bay's special scenic features, including that of the water itself; and also encouraging provision of public access to the water and to vantage points which make it possible to enjoy the aesthetic and scenic resources of the Bay.

II.C.7 Water and Sewer Service

II.C.7.1 Water Service

Areas surrounding Irondequoit Bay are served by a variety of municipal water districts. Water service is comprehensively available throughout the Study Area and is therefore generally not a limiting factor for development, although service patterns can affect fire service.

The Sea Breeze water district buys water from the Monroe County Water Authority (MCWA). The MCWA serves the remainder of Irondequoit. A large 30-inch line serves Empire Blvd. and extends to eastern Penfield. The City of Rochester Water Bureau services the Tryon Park area, and the Browncroft Water District serves the portion of Brighton within the Bay area.

The Monroe County Water Authority has extended its services to the Town of Webster. The Village of Webster operates a well field north of the Rte. 104 bridge that has 12 wells and was designed for a service capacity of 10.5 million gallons per day. A few scattered residences, such as those along Avalon Trail and Wilbur Tract Road in Penfield, still obtain water from private wells. Public water service may be readily extended to any area where it is desired, but generally the service follows existing roads.

II.C.7.2 Sewer Service

The west side of the Bay is generally served by the Irondequoit Bay District of the Monroe County Pure Waters system. The conveyance system in this district includes the 5.5 mile long Cross Irondequoit Tunnel, 37 miles of interceptor sewers, and the Irondequoit Pump Station in Durand Eastman Park, built to lift sewage from the Cross Irondequoit tunnel to the Van Lare wastewater treatment facility. This pump station is one of the largest such facilities in the nation. The completion of this conveyance system allowed abandonment of eight existing sewage treatment plants and the discontinuance of their discharges to Irondequoit Creek and tributaries. The Southeast Irondequoit Sewage Treatment plant was taken off line and abandoned in 1987 and sewage is now being conveyed to the Van Lare Plant via the Culver Goodman and Cross Irondequoit Tunnels.

In 1988, Monroe County conducted the *Irondequoit Bay Local Collector Sewer Study* to evaluate the current situation of public sewer and individual sewage disposal systems in the Bay ecosystem. The study projected that over 1,200 units of new construction could be developed in the Bay ecosystem in the future, given present zoning and environmental protection regulations at that time.

Sanitary service to units not within sewer districts is accomplished through use of individual on-site disposal systems. The MCDOH surveys performed in the late 1960's indicated an on-site failure rate of 40%, and investigation has revealed that many on-site systems do not meet current siting requirements.

The study concluded on-site treatment and disposal systems were not recommended for future Bay development. Their use should be limited to interim treatment for existing units until sewerage service becomes available, and/or as a permanent method for isolated units where sewers are economically infeasible.

Topography, physical features, drainage basin separation and access conditions make it impractical to construct a single sewerage system for the entire Bay ecosystem. Sewer facilities and costs have been identified for five separate major sewer drainage basin areas that are contiguous with the Bay, and seven additional minor basin areas. The total capital construction costs for these facilities were estimated to be \$4.6 million. Of the approximately 460 existing unsewered units within the study area, it was concluded that sewer service might be economically feasible for all but 45 units located in difficult areas.

No specific administrative structure has been recommended for facilities that may be constructed. The DEC's Revolving Loan Program is identified as a funding source.

In the early 1990's a new pumping station with additional capacity was constructed to serve the Point Pleasant Estates area and its environs, tying into the homes on Bay Front North and Schnackel Drive. In 1996 the Town of Penfield, working with Monroe County Pure Waters, completed an 8-inch diameter sewer trunk line, including two pump stations, along Empire Blvd. to the Penfield/Irondequoit town line with adequate capacity to serve adjacent properties in Irondequoit.

Properties on the Webster sandbar are currently served by individual on-site wastewater disposal systems. A force main in this area is awaiting approval for State funding pending completion of an environmental review.

II.C.8 Waste Sites

See [Exhibit 13](#), *Confirmed and Suspected Waste Sites*

Sixteen confirmed waste disposal sites within the *Harbor Management Plan* study area and eight suspected waste sites have been identified. The locations of both the confirmed and suspected sites are shown in [Exhibit 13](#). Table 3 provides a summary description of the confirmed waste sites.

The presence of a waste site may affect the type or degree of development and use for affected properties. The degree to which the use may be impaired is dependent upon

the results of detailed investigations of the site which must be conducted on a case-by-case basis at the time development is proposed. Such studies, and any necessary remediation, are usually initiated by the project sponsor as part of the property acquisition process or during regulatory review by municipal governments upon recommendation of the Monroe County EMC and/or the MCDOH.

Beyond the potential for use limitations, there are no recognized significant environmental impacts on the Bay from the presence of any of the identified waste sites.

There are no current plans or proposals for investigating and remediating the identified waste sites.

II.D LEGAL AND REGULATORY ISSUES

II.D.1. Regulatory Authority

Several agencies have regulatory authority over the surface waters, near-shore and wetlands of the Bay. The following lists agencies with permitting authority within Irondequoit Bay:

Federal

U.S. Army Corps of Engineers, Buffalo District
1776 Niagara Street Buffalo, NY 14207
Copies of all "Joint Applications" are shared between agencies for agency jurisdictional reviews
Contact: Chief of Regulatory Branch, (716) 879-4104

U.S. Fish and Wildlife Service
3817 Luker Road, Cortland, NY 13045
Generally brought into application review by USACE on projects requiring individual permit (major) from USACE.
Contact: (607) 753-9334

U.S. Environmental Protection Agency, Region II
Marine and Wetlands Protection Branch
26 Federal Plaza, New York, NY 10278
Generally brought into application review by USACE on projects requiring individual permit (major) from USACE.
Contact: (212) 264-5170

U.S. Coast Guard
Marine Safety Division
1055 East 9th Street
Cleveland, OH 44114
Contact: (216) 902-6047

State

NYS Department of Environmental Conservation, Region 8

6274 East Avon-Lima Rd, Avon, NY

Resource management responsibilities for wildlife, habitat, fisheries, coastal erosion, and dredging; regulatory jurisdiction over Freshwater Wetlands Permits, Protection of Waters Permits, Coastal Erosion Hazard Area Permits, and Water Quality Certifications

Contact: Deputy Regional Permit Administrator, Fisheries Manager and Natural Resources Supervisor, (585) 226-5400

NYS Office of General Services

Corning Tower, Empire State Plaza

Albany, NY 12242

Administers NYS Public Lands Law; Serves as arbiter for riparian disputes; DEC shares all applications for major dockage facilities

Contact: (518) 474-2121

NYS Department of State

Division of Coastal Resources and Waterfront Revitalization

41 State St., 8th Floor, Albany, NY 12231

Administers Coastal Zone Mgmt. Program in NYS. Applications are shared with NYS Coastal Consistency Form completed by DEC staff.

Contact: (518) 474-0050

NYS Office of Parks, Recreation and Historic Preservation

Marine and Recreational Vehicles

Empire State Plaza, Building 1, 13th Floor, Albany, NY 12238-0001

Applications are circulated for review when cultural resource concerns are identified.

Agency administers program for reviewing and approving floating docks and related proposals.

Contact: (518) 474-0445

The MCDOH regulates septic systems, and Monroe County Pure Waters is responsible for wastewater treatment in the area. Local municipalities have zoning power as well as power to regulate docking.

While not regulatory, the following also are involved in aspects of development and water use on the Bay:

Monroe County Department of Planning and Development

50 West Main Street, Suite 8100, Rochester, NY 14614

Contact: (585) 428-2970

Monroe County Soil and Water Conservation District

249 Highland Avenue, Rochester, NY 14620

Consulted on erosion control measures, stormwater management facilities, etc.

Receives applications through the Irondequoit Bay Coordinating Committee (IBCC). Staff participates at IBCC Technical Staff mtgs.

Contact: Executive Director, (585) 473-2120

U.S.D.A. Natural Resource Conservation Service

249 Highland Avenue, Rochester, NY 14620

Contact: District Conservationist, (585) 473-2120

New York State Sea Grant - Oswego
101 Rich Hall, SUNY College at Oswego, Oswego, NY 13126
Extension Specialists in marina and waterfront development. Consulted with or refer project sponsors to on larger more complex projects.
Contact: Extension Program Coordinator, (315) 312-3042

New York State Sea Grant - SUNY Brockport
Morgan II, Second Floor
SUNY College at Brockport
Brockport, NY 14420-2928
Tel: (716) 395-2638
Email: SGBrockp@cornell.edu
Agency Role: Extension Specialist on Zebra Mussels.
Contact: Coastal Resources Specialist and Fisheries Specialist, (585) 395-2638

II.D.2 Riparian Rights and Use of Lands Under Water

The State of New York holds title, on behalf of the public, to lands submerged by navigable rivers, lakes and coastal waters. On Lake Ontario and its tributaries, the boundary between these “lands under water” and the privately owned upland is the elevation of the mean low water line. For Irondequoit Bay, the mean low water elevation is recognized as 243.3 feet, International Great Lakes Datum 1985. Under state law, the New York State Office of General Services (OGS) is the agency designated to administer matters pertaining to these publicly owned lands.

In New York State, the interest that a shoreline owner has in gaining access to navigable water has long been acknowledged and reflected in the laws regarding the administration of submerged lands. To secure that interest the riparian owner may be allowed to place a single dock upon publicly held land for private non-commercial use. The riparian owner enjoys the exclusive use of this dock against other private interests and also holds the right to apply to the NYS OGS for authorization to place additional installations upon submerged lands.

While the right of access cannot be extinguished by State action without compensation to the upland proprietor, this right cannot be enlarged by the upland owner without compensation to the State of New York. Where shore front proprietors wish to erect permanent or substantial installations on submerged land, authorization is required in the form of a lease or easement.

A lease or easement in underwater lands is a legal instrument that allows the shorefront proprietor to use underwater lands for a specific purpose. Through the provisions of the Public Lands Law, the New York State Legislature has delegated the authority to convey the right to use underwater lands to the Commissioner of General Services. The Public Lands Law, together with the policies adopted by the NYS OGS, serve as the administrative guidelines for the conveyance of leases and easements.

The NYS OGS Division of Land Utilization Submerged Lands Program has been established to ensure that the conveyance of underwater lands administered by OGS yields the highest possible economic return to the public and complies with the provisions of the State Environmental Quality Review Act (SEQR). The Division’s staff

review the regulatory notices of the USACE, the NYS DEC and NYS DOS to determine if proposed shoreline development will impact publicly owned submerged lands.

The proposed installation must also meet all local codes and ordinances. As part of the application for a lease or easement, an upland proprietor must notify the locality of his or her intention to apply for a conveyance of underwater land. An easement does not relieve the applicant of the responsibility for obtaining any regulatory permits required by NYS DEC and the USACE.

A lease or easement is different from regulatory permits that may be established to control density and regulate waterways. Although less than complete ownership, a lease or easement in underwater lands gives the upland owner a real property interest in the area on which a marine installation is located. This interest is assignable with the consent of the Commissioner of General Services.

The NYS OGS Submerged Lands Program is a multi-purpose effort aimed at the comprehensive management of a valuable public resource. The NYS OGS has stated that it recognizes that this often requires the achievement of a delicate balance between economic development and environmental preservation. The program's commitment is to work together with local communities to ensure that the public's right to enjoy the waters of New York State is not diminished by the development of the shoreline.

An issue in the Bay area is the situation of "keyhole" development where large upland areas with relatively small shoreline are developed for residential uses at densities that result in large numbers of docks on the Bay. There have been instances where from 28 to 250 units have been constructed on upland areas away from the shoreline and docks proposed for each of the residential units even though few if any units actually front on the shoreline.

II.D.3 Construction Regulations for Docks and Other Water Structures

Under existing regulations, structures proposed for placement in Irondequoit Bay are generally regulated and controlled by multiple levels of government - local, State and Federal, with overlapping jurisdictions. A summary of the requirements and principal standards, under each levels of government, for the placement of structures in the Bay is provided in this section.

II.D.3.1 Local Government Regulations

Each of the three Towns bordering the Bay has controls, either through their respective zoning ordinances or through a separate docking ordinance. All are generally based upon the 1985 IBCC recommendations contained in the *Environmental Objectives and Development Management Measures*, although there are some differences and inconsistencies, as discussed below.

While absent any formal approval authority, waterfront developments in any of the Towns requiring site plan or subdivision approval may also be subject to review and comment by the MCDPD and the IBCC.

The primary features of the 1985 IBCC recommendations regarding piers, docks and wharves on the Bay are as follows:

- Whenever possible, piers should not extend offshore more than 50 feet, except to reach adequate water depths for boat docking so as to reduce the amount of dredging necessary.
- The width of any pier shall not exceed eight feet and the maximum surface area shall not exceed seven hundred square feet.
- The number of piers permitted per single-family residentially zoned waterfront lot is limited by the length of water frontage as follows:

<u>Lot Water Frontage</u>	<u>Number of Piers</u>
Up to 100 feet	1
101 - 250 feet	2
251 - 500 feet	3
> 500 feet	One additional for each 150 feet above 500 feet

- The number of piers permitted for parcels zoned for multi-family, townhouse or condominium residential uses shall be limited to provide docking space at the rate of one boat slip per residential unit and shall be for the use of residents and limited non-commercial public access.
- No more than three piers should be constructed per commercially zoned water front lot except by special permit consideration on a case-by-case basis considering the location, natural features of the site, and the need for additional docks.
- All piers should have a minimum clearance of ten feet from adjacent property lines.
- Moorings should be placed a minimum of 20 feet inward from property line extensions into the Bay, or such that objects moored to them swing no closer than ten feet from property line extensions, and not more than one hundred feet from shore.
- The number of moorings permitted for commercial lots are four for the first 500 feet of water frontage and one mooring per 100 feet for lots with 500 or more feet of frontage.
- The number of moorings permitted per single-family residentially zoned water front lot should be limited by water frontage as follows:

<u>Lot Water Frontage</u>	<u>Number of Moorings</u>
Up to 100 feet	1
101 - 250 feet	2
251 - 500 feet	3
> 500 feet	One additional mooring for each 150 feet above 500 feet

- Public and private marinas should utilize piers and docks that float or are supported on piles and should be located so as to minimize dredging for access and docking to the extent possible.
- Parking for marinas and boat launches should be provided as follows:
 - 0.6 parking spaces per boat slip;
 - 30 car-trailer spaces per launch ramp;
 - 10 single spaces per launch ramp;
 - 1000 square feet of retail floor area; and
 - Two spaces per boat slip that includes charter fishing.
- Dimensional standards for docking facilities were provided in a diagram and table from a 1947 National Association of Engine and Boat Manufacturers publication.

The Town of Irondequoit's docking standards are contained in Chapter 235 (Zoning) of the Town Code, covering the Waterfront Development and LaSalle's Landing Development District. The primary requirements are identical to the 1985 IBCC recommendations.

The Town of Penfield's docking standards are contained in Section 4-25 of Article IV of the Town Zoning Ordinance, adopted 1988, and are applicable to all waterfront properties. Under this section, docks are permitted uses for all water front properties having a minimum of fifteen feet of frontage on the water body. The primary standards are identical to the 1985 IBCC recommendations with the following exceptions:

- A minimum pier width of three feet is established and the maximum surface area is increased to 800 square feet.
- The number of piers, docks or wharves per waterfront lot used for single family residential purposes shall not exceed one per lot, independent of the length of water frontage.
- Dock setback from lot line extensions into the Bay is based upon a clearance of ten feet plus the beam width of the boat. In addition, the procedure for extending lot lines in the case of a curved shoreline is specified in the ordinance.
- Commercial operation, renting or leasing of docks, launches and similar structures is expressly prohibited for residentially zoned properties.

The Town of Webster regulates docks pursuant to Article IV, Sections 225-23 through 225-33 of the Town Zoning Ordinance. These regulations were adopted in 1993 and amended in 1996. The ordinance requires site plan review by the Town Planning Board for all docking facilities except minor residential dockage, which still requires issuance of a building permit and compliance with all provisions of the ordinance.

The Town of Webster standards differ in several ways from the older 1985 IBCC recommendations. The primary differences are as follows:

- Docks associated with lots for single-family, multiple dwellings or townhouses shall not extend offshore more than two hundred feet.

- All docks must be located within a littoral parcel's "dockage envelope," a water area generally established by extension of property lines out two hundred feet. Exceptions to this general rule, and alternative procedures for establishing the dockage envelope, are specified for areas on a substantially curved shoreline including coves.
- The minimum width of docks is set at two feet.
- The number and length of docks for residential uses is fixed at that necessary to provide a maximum of one boat slip per residential unit. The configuration of docks and moorings within the dockage envelope is at the discretion of the Planning Board and determined on the basis of the physical characteristics, environmental features and level of use and development of the adjacent littoral parcel and those neighboring it. A minimum setback of ten feet from the dockage envelope boundary is required.
- The number and length of docks and moorings within the dockage envelope for marinas and yacht clubs is at the discretion of the Planning Board. It is based upon the physical characteristics, environmental features and level of use and development of the adjacent littoral parcel and those neighboring it as well as the availability of parking, service and support facilities on the adjacent littoral parcel necessary for utilization of the proposed dockage.
- Development of dry-storage marinas is encouraged to minimize coverage of Bay waters by dockage
- New York State DEC: proof of permit approval and lease by the NYS OGS.
- Compliance with the State Environmental Quality Review Act.

II.D.3.2 State of New York Regulations

New York State has approval authority for all structures and many activities occurring in the nearshore waters and adjacent land areas of Irondequoit Bay. This authority rests primarily with DEC, with additional jurisdiction by the NYS OGS and NYS DOS in certain situations.

NYS Department of Environmental Conservation Authority

The NYS DEC authority stems from four sources: (1) DEC designation of Irondequoit Bay as a regulated wetland pursuant to Article 24, The New York Freshwater Wetlands Act and its associated regulations (6 NYCRR Part 663), (2) the regulation of disturbances to water body banks and beds pursuant to Article 15, Protection of Waters and its associated regulations (6 NYCRR Part 608), (3) the regulation of certain activities in designated Natural Protective Feature Areas pursuant to Article 34, the Coastal Erosion Hazard Areas Act and its associated regulations (6 NYCRR Part 505) and (4) the requirement that a Water Quality Certification be issued by the DEC for any required Federal Permits and actions pursuant to Section 401 of the Federal Water Pollution Control Act and its amendments.

The applicability of each of these DEC regulatory programs to structures in the Bay is described separately below.

Article 15 - Protection of Waters

Article 15 of the NY Environmental Conservation Law provides the DEC with the responsibility to regulate a variety of activities for disturbance of the bed or bank of protected streams and below the mean high water level of navigable waters. This regulation also addresses dock and mooring facilities on or above underwater land not owned by New York State. It also covers docking facilities for five or more boats and mooring areas for ten or more boats. The regulations implementing this regulatory program are found in 6 NYCRR Part 608.

The regulations also require that a permit be obtained for any excavation disturbance to the bed or bank of Irondequoit Bay, a protected water; for dredging or filling in navigable waters and adjacent marshes and wetlands, and for a dock, pier, wharf, platform, or breakwater in, on or above navigable waters with certain exceptions. The exceptions include, among others, structures authorized by the Commissioner of General Services pursuant to the NYS Public Lands Law, docking facilities providing docking for five or fewer boats and encompassing an area of less than four thousand square feet, and a mooring area providing mooring for fewer than ten boats.

The standards for permit issuance under Article 15 are given in Part 608.8. For a permit to be issued it must be found that the proposal is (1) reasonable and necessary, (2) will not endanger the health, safety or welfare of the people of the State of New York and (3) will not cause unreasonable, uncontrolled or unnecessary damage to the natural resources of the state.

401 Water Quality Certification

Pursuant to the Federal Water Pollution Control Act, any applicant for a federal license or permit within NY State must obtain a Water Quality Certification from DEC. This can be in the form of a “blanket” certification issued for Corps nationwide permits, regional permits, general permits, or an individual permits. Implementation of this program in New York is as specified in 6 NYCRR Part 608 (see appendix) . The Water Quality Certification is to assure that actions and activities permitted by federal authorities will not result in a contravention of established water quality standards or effluent limitations.

Given this narrow focus, an individual Water Quality Certification is often required for larger projects not covered by the U.S. Army Corps’ issued nationwide, general, or regional permits. When individual Water Quality Certifications are required NYS DEC uses this approval to ensure that stormwater discharges from landside, ancillary development or access facilities will be properly managed to protect water quality.

Article 24 - Freshwater Wetlands

Article 24 of the Environmental Conservation Law, the New York State Freshwater Wetlands Act, provides authority for the regulation of a broad range of activities occurring in and immediately adjacent to wetland areas. Wetlands are defined under NYS Law by the presence and dominance of certain vegetation that is indicative of periodic and sustained inundation. Wetland areas are generally regulated under the NYS program if they are 12.4 acres or larger in size.

All New York State regulated wetland areas are mapped and classified by the DEC utilizing standards found in 6 NYCRR Part 664. Final maps are then filed, with public notice, at local and county government offices. Classification of wetlands is based upon the functions and benefits provided by the wetland on a scale of I through IV, with Class I being of the highest value.

The regulated area consists of the wetland itself plus a surrounding "Adjacent Area," commonly referred to as a wetland buffer. The adjacent area is generally the land area contained within 100 feet, measured horizontally from the wetland perimeter boundary but can be extended further, as provided in Part 664.7(d), where necessary to protect and preserve the wetland.

The perimeter of Irondequoit Bay has been designated and mapped as a Class I wetland, with wetland identification RE-1, under the NYS regulatory program. Certain areas around the Bay, generally consisting of shallow coves containing emergent marsh and identified as having particular ecological significance (Cooper, 1984), are mapped with an expanded adjacent area extending 300 feet from the wetland boundary.

It is noted that Irondequoit Bay is one of only two open water bodies along the south shore of Lake Ontario which has been entirely been designated, or the entire perimeter, has designated as regulated wetland. The other open water body so designated is Braddocks Bay, also in Monroe County. The inclusion of open water areas is provided in Part 664.6 (a)(7) wherein it is stated:

"Unvegetated open water is part of a wetland as a wetland cover type if it is substantially enclosed by wetland vegetation and is no larger than 2.5 hectares (approximately 6.2 acres). If the body of open water that is substantially enclosed by wetland vegetation is larger than 2.5 hectares (approximately 6.2 acres), then only that portion of the open water that is within 50 meters (approximately 165 feet) of the wetland vegetation is considered to constitute a wetland cover type and to be part of a wetland."

Following this definition, the regulated wetland area for Irondequoit Bay, shown on [Exhibit 4](#), consists of a variable width (ca. 165 feet) fringe extending into the water from the Bay shoreline or marsh edge, as appropriate to the specific location, plus an adjacent area inland from the shoreline or marsh edge extending for a distance of 100 feet, or 300 feet for designated areas of significance

Based upon the wetland designation, the DEC has regulatory authority over a broad range of activities specified in Part 663.4n. Of particular relevance for structures in Irondequoit Bay, and access to the Bay shoreline, are the specified activities requiring permits if occurring in the wetland and/or adjacent area. These activities, and a description of their respective regulatory definitions and DEC assigned compatibility ratings, is presented in Table 4. The compatibility ratings are C (compatible), N (usually incompatible) and X (incompatible).

Specific standards for wetlands permit issuance are contained in 6 NYCRR Part 663.5. For activities designated usually incompatible (N), permit issuance can be made if a three-part compatibility standard is met. The activity must be (1) compatible with the

preservation, protection and conservation of the wetland and its benefits, (2) would result in no more than insubstantial degradation to, or loss of, any part of the wetland and its associated benefits and (3) would be compatible with the public health and welfare.

For activities that cannot be shown to meet the three compatibility standards, or for those designated by regulation as being incompatible (X), a weighing of project benefits and impacts is done. The weighing standard is dependent upon the wetland class, with a more stringent test applied to the higher value wetlands.

Irondequoit Bay has been designated a Class I wetland, the highest value. The weighing standard for Class I wetlands states that a reduction in the benefits provided "is acceptable only in the most unusual circumstances." Further, "A permit will be issued only if it is determined that the proposed activity satisfied a compelling economic or social need that clearly and substantially outweighs the loss of or detriment to the benefits(s) of the Class I wetland." In discussing the specific standards, it is stated that "the vast majority of activities that could not avoid reducing a benefit provided by a Class I wetland would not be approved." Further, the definition of compelling economic or social need is that the proposed activity carries more than a sense of desirability or urgency, "but of actual necessity; that the proposed activity must be done; that it is unavoidable."

Article 34 - Coastal Erosion Hazard Areas

Article 34 of the NYS Environmental Conservation Law, the Coastal Erosion Hazard Areas Act, provides for the regulation of a broad range of activities within designated areas of the New York State Ocean and Great Lakes shoreline identified as being prone to coastal erosion. Details of the designation of erosion areas and the pertinent regulations are contained in 6 NYCRR Part 505, as amended in March 1988.

Within the towns of Irondequoit, Webster and Penfield, the DEC administers the regulatory program established under Article 34. Pursuant to the act, the Department identified and prepared official maps delineating "erosion hazard areas" along the shoreline. The official maps are filed with local and county governments and are available for review in the regional DEC offices.

Mapped erosion hazard areas are defined as coastal land areas containing either a "structural hazard area" or a "natural protective feature area," or both. Structural hazard areas occur in actively eroding shorelines where the annual recession rate is 1 foot per year or more. Natural protective feature areas are those land areas along the shoreline containing natural features that provide protection from erosion and/or high water conditions. Natural Protective Features are defined as near shore areas, beaches, dunes and bluffs and a Natural Protective Feature Area is one containing these features. All development is prohibited within natural protective feature areas unless specifically allowed by the coastal erosion management regulations, 6 NYCRR Part 505.8, or authorized through the variance provisions. Nearshore areas extend 1,000 feet underwater from the mean low water line or to a point where low water depth is 15 feet or greater. Beaches extend from mean low water to the seaward toe of a dune or bluff and include shorelands subject to seasonal or more frequent inundation. Where no dune or bluff exists, the landward limit of a beach may be defined by vegetation or by inundation. Bluffs include any bank with a steeply sloped face adjoining a beach or body of water. Where no beach exists, the seaward limit of the bluff is the mean low water line. The landward limit of a bluff is 25 feet landward of the bluff's receding edge or of

the point of inflection at the top of the bluff. A dune is a ridge or hill of loose earth the principal component of which is sand. Dunes are not a dominant feature on the Bay.

Areas mapped as natural protective feature areas within Irondequoit Bay are shown in [Exhibit 5, Natural Protective Features](#). It is noted that no area of the Bay has been mapped as a structural hazard area, although structural hazard areas do exist along the sandbar in the Town of Webster extending toward the Bay shoreline from the Lake Ontario frontage of the sandbar.

All activities are regulated within erosion hazard areas under this program unless specifically excepted by the regulation. They include construction, modification, restoration or placement of structures or any other actions or use which materially alters the land including grading, dredging, excavation, fill or other disturbance of soils.

On the basis of the above definitions, this program will regulate the placement of structures and dredging in water areas of the Bay out to a distance of 1,000 feet from the shoreline for all mapped natural protective feature areas. In addition, access to and structures on the shoreline in support of Bay water uses will also be regulated under this program for these same areas.

Permit issuance standards under this program are found in Part 505.6 of the regulations. In order for a permit to be issued an activity must be found to be (a) reasonable and necessary, (b) not likely to cause a measurable increase in erosion at the site or at other locations and (c) prevents, if possible, or minimizes adverse impacts to natural protective features. In addition to these general permit issuance standards, there are further restrictions, requirements and exceptions provided for some regulated activities if they occur within natural protective features (Part 505.8).

For near shore areas, excavating and dredging is prohibited if it would diminish the erosion protection afforded by the near shore area. However, a permit may be issued for dredging in support of constructing or maintaining navigation ways. Permits are not required for docks, piers, wharves or structures floating or built on openwork supports if they have a top area of 200 square feet or less. In addition, docks, piers, wharves or other structures built on floats and removed in the fall of each year are also excepted.

The only other widely present natural protective features on Irondequoit Bay are bluffs and nearshore areas. The bluffs are precipitous or steeply sloped faces directly adjoining the shoreline and extending landward 25 feet from the bluff edge. Natural Protective Features are defined as near shore areas, beaches, dunes and bluffs and a Natural Protective Feature Area is one containing these features. All development is prohibited within natural protective feature areas unless specifically allowed by the coastal erosion management regulations, 6 NYCRR Part 505.8, or authorized through the variance provisions. Nearshore areas extend 1,000 feet underwater from the mean low water line or to a point where low water depth is 15 feet or greater. Beaches extend from mean low water to the seaward toe of a dune or bluff and include shorelands subject to seasonal or more frequent inundation. Where no dune or bluff exists, the landward limit of a beach may be defined by vegetation or by inundation. Bluffs include any bank with a steeply sloped face adjoining a beach or body of water. Where no beach exists, the seaward limit of the bluff is the mean low water line. The landward limit of a bluff is 25 feet landward of the bluff's receding edge or of the point of inflection at the top of the bluff. A dune is a ridge or hill of loose earth the principal component of which is sand.

NYS Department of State Authority

The New York State Department of State administers the Federal Coastal Zone Management Act within New York State. This includes working with local government with respect to promulgating Local Waterfront Revitalization Plans that are consistent with the 44 New York State Coastal Zone Management Policies.

These policies are generally designed to promote the beneficial use of coastal resources, prevent impairment of certain coastal resources and provide for management of activities which may impact coastal resources.

Federal and state approvals of projects within the Irondequoit Bay area must have been determined to be consistent with the 44 policies, or an approved LWRP. For projects in municipalities which do not have approved LWRPs state and federal agencies coordinate with the Albany office of NYS DOS. When a project is determined inconsistent with the policies or an LWRP the project must be modified by the sponsor or the approval must be denied.

II.D.3.3 Federal Regulations

The Federal government jurisdiction for activities in the Bay is administered through the USACE regulatory program, with involvement of the U.S. Environmental Protection Agency (EPA) and the U.S. Fish and Wildlife Service. The program controls the placement of any structure in, under, or over navigable waters and adjacent wetlands under Section 10 of the Rivers and Harbors Act of 1899 as well as the discharge of dredge or fill materials into waters of the United States, including wetlands, pursuant to Section 404 of the Federal Clean Water Act. Projects are authorized through the issuance of nationwide permits, regional permits and general and individual permits. In addition to the USACE program, the U.S. Coast Guard has authority over the placement of navigational aids and markers.

III. GOALS AND POLICIES

III.A GOALS

The following Goals were developed by the Irondequoit Bay Harbor Management Plan Advisory Committee (IBHMPAC). The Goals have been used in the development of Plan Policies, Water Surface Use Recommendations and Project Recommendations.

III.A.1 Resource Protection

Goal 1: Better protect and enhance the sensitive natural areas and resources of the Bay.

Objectives:

5. Increase stakeholders' awareness and appreciation of the sensitive natural areas and resources of the Bay.
6. Provide better understanding of significant fish and wildlife value, their sensitivity to development and adjacent water surface use impacts.
7. Prepare Irondequoit Bay Biological Study.
8. Balance water dependent uses and protection of sensitive natural resources of the Bay, based on the Carrying Capacity Study of the Bay.

Goal 2: Improve and protect water quality of Irondequoit Bay for desired uses which emphasize a healthy aquatic ecosystem.

Objective:

Ensure desired Bay water quality for its designated best use.

Goal 3: Ensure that development around the Bay occurs without impacting significant resources (e.g. environmental, historical, archeological, aesthetic features).

Objectives:

3. Have new developments fit the topography, accessibility, relationship to adjacent uses, subsurface conditions and availability of public services and utilities.
4. Manage woodlots around the Bay to maintain aesthetic character protect the views, protect steep slopes and wildlife habitats.

III.A.2 Water Surface Use Conflicts

Goal: Minimize and resolve water surface use conflicts and conflicts among all of the stakeholders of Irondequoit Bay.

Objectives:

3. Provide for an appropriate mix of commercial and active and passive recreational opportunities on the Bay's water and associated land areas.
4. Ensure that development and water surface use will be designed and conducted in harmony with the environment so as not to conflict with overriding interest of conserving the natural beauty of the Bay.

III.A.3 Public Access

Goal: Improve public access to diverse recreational opportunities on Irondequoit Bay.

Objectives:

6. Provide adequate and safe public access to a mix of active and passive recreational opportunities on the Bay's water and adjacent up-lands.
7. Identify, acquire, develop and maintain land around the Bay for public recreational use.
8. Coordinate and formalize development of trails around the Bay.
9. Increase points of public access through public ownership.
10. Increase public access of views to and from the Bay.

III.A.4 Economic Development

Goal: Make Irondequoit Bay an integral part of local and regional tourism development efforts.

Objectives:

3. Protect and improve/upgrade existing water dependent commercial and recreational uses where access, utilities and parking can be made available without significant impact on the Bay's resource value.
4. Encourage new water dependent recreational uses or expansion of such existing uses in the LaSalle's Landing, Sea Breeze areas and other Waterfront Development zoning districts identified in the local Master Plans, LWRPs and Monroe County Parks Department Plans.

An informal ranking of the goals was performed by the IBHMAC as an analysis exercise to assist in determining an overall direction for the Plan. The ranking demonstrated a unanimous critical interest in resource protection. Other criteria ranked include reduction of water surface use conflicts (2nd), public access (3rd) and economic development (4th).

III.B POLICIES AND SUB-POLICIES

Six overriding policies have been recommended to guide future decision-making regarding Irondequoit Bay. The policies directly support the goals of the *Harbor Management Plan*, and in turn, are supported by water surface use recommendations, project recommendations and implementation recommendations of the *Plan*.

Policy 1: Better protect and enhance the sensitive natural areas and resources of the Bay.

Policy 1a. Increase stakeholders' awareness and appreciation of the sensitive natural areas and resources of Irondequoit Bay. Involve the community through organizations, events and public access. Develop a story line for the Bay that tells of its regional and national significance as an environmental, cultural and recreational resource.

Policy 1b. Provide a better understanding of significant fish and wildlife value, their sensitivity to development and adjacent water surface use impacts. Study and monitor the condition and status of the Bay's natural resources, habitats and ecologies. Monitor and evaluate the effectiveness of existing local and state regulatory measures in protecting sensitive areas and propose new measures to control development and protect sensitive natural resources.

Policy 1c. Balance water dependent uses and protection of sensitive natural resources of the Bay. Encourage active recreational uses in areas of the Bay that are appropriate. Promote public docking and boat storage in areas close to the Irondequoit Bay outlet, in areas with adequate landside support and in areas with adequate water depth. Protect the open water areas of the Bay for controlled recreational use. Discourage active recreational use, docking and boat storage within environmentally sensitive areas.

Policy 2: Improve and protect the water quality of Irondequoit Bay for desired uses which emphasize a healthy aquatic ecosystem.

Policy 2a. Ensure desired Bay water quality for its designated best use. Monitor water quality and associated impacts including conducting field assessment of existing large scale developments to evaluate the adequacy of their storm water management facilities and preparing periodic corrective measures reports which incorporate the findings of field assessments for use by town officials to bring facilities into compliance. Conduct field inspection and inventory and evaluation of eroded slopes around the Bay.

Policy 2b. Educate town, county and state staff involved in storm water management related to the Bay by facilitating workshops on the findings of corrective measures reports and other studies. Seek funding sources to fix and upgrade storm water management facilities and protect and stabilize eroded slopes where problems are identified.

Policy 3: Ensure that development around the Bay occurs without impacting significant resources (e.g. environmental, historical, archeological, aesthetic features).

Policy 3a. Have new developments fit the topography, accessibility to adjacent uses, subsurface conditions and availability of public services and utilities.

Policy 3b. Manage woodlots around the Bay to protect the views, steep slopes and wildlife habitats.

Policy 3c. Monitor and assess the impact of development on the Bay. Conduct a field assessment of recent developments around the Bay to document where deviations from the stated goals have occurred. Institute consistent development regulations to address the findings of the field assessments.

Policy 3d. Follow *NYS Silviculture Best Management Practices and Guideline for Logging Operations* developed by the Cornell Cooperative Extension.

Policy 4: Minimize and resolve water surface use conflicts and conflicts among all of the stakeholders of Irondequoit Bay.

Policy 4a. Insure the safety of recreational users and stakeholders of Irondequoit Bay by adopting and enforcing speed, wake and water surface use regulations. Educate all users regarding new regulations and their purposes.

Policy 4b. Protect the Bay's natural resources and ecosystems by controlling water surface use in designated sensitive areas.

Policy 4c. Protect open water areas and the rights of existing Bay residents and users to continue to enjoy the recreational use of the Bay.

Policy 4d. Create a Harbormaster position to coordinate marine activity and educate users on the Bay.

Policy 4e. Support the activities of various private and not-for-profit organizations such as local trails committees, etc., in forwarding the stewardship of the Bay. Support the creation of a new community stewardship and watch program for the Bay.

Policy 4f. Develop and implement a Water Surface Use Plan to minimize conflicts among competing users. Implement uniform, bay-wide, boat storage, dockage, mooring, dredging and bubbler ordinances.

Policy 4h. Develop a Bay-wide emergency response plan.

Policy 5: Improve public access to diverse recreational opportunities on Irondequoit Bay.

Policy 5a. Provide adequate and safe public access to a mix of active and passive recreational opportunities on the Bay's water and adjacent up-lands. Identify, acquire, develop and maintain land around the Bay for public recreational use. Coordinate and formalize trails around the Bay.

Policy 5b. Implement existing and future plans for the Bay ecosystem including the *Sea Breeze Revitalization Plan*, the *LaSalle's Landing Plan* and the *Irondequoit Bay Hiking Trail Plan*. Assist in the procurement and/or acquisition of needed open space required public access easements.

Policy 5c. Work with the Monroe County Parks Department to update various Bay parks master plans consistent with this *Harbor Management Plan*.

Policy 6: Promote Irondequoit Bay an integral part of local and regional tourism development efforts.

Policy 6a. Promote a public image of Irondequoit Bay as a regionally significant natural and recreational resource. Organize periodic awareness activities and forums to create interest in the Bay.

Policy 6b. Protect and improve existing water dependent commercial and recreational uses where access, utilities and parking can be made available without significant impact on the Bay's resource value.

Policy 6c. Encourage new water dependent recreational uses or expansion of such existing uses in the LaSalle's Landing and Sea Breeze areas and other Waterfront Development Districts identified in the local Master Plans and LWRPs and Monroe County Parks Department Plans.

Policy 6d. Provide for regulatory and financial support for public access to the Bay through acquisition of key parcels, easements and adoption of view shed protection measures.

Policy 6e. Make infrastructure investments around the Bay to encourage tourism, including facilities for transient boaters, potential water taxi, lodging, inter-modal transportation linkages, parking and interpretive signage and amenities for trail users and visitors.

IV. ANALYSIS OF ALTERNATIVES

Three build-out scenarios were prepared to assess the impacts of varying approaches to utilizing the Bay as a resource.

1. No Action Scenario: Based on current land and water use regulations
2. Environmental Protection Scenario: Based on new regulations which restrict the development of slips in certain conditions
3. Harbor Scenario: Based on new regulations that encourage active recreational development in parts of the Bay.

IV.A NO-ACTION SCENARIO

One thousand six hundred and seventy 1670 boat storage spaces were identified around the Bay in 1999. This represents an increase of 155 over the 1,505 spaces reported in the 1992 inventory, primarily due to housing and related dockage development at the Stony Point and the Bluffs projects in Webster. On average, the pace of new dockage development during this period was 24 slips annually.

The No-Action build-out analysis assumes that:

- Irondequoit, Penfield and Webster ordinances allow one wet slip (or mooring) per single-family residential waterfront parcel. All dockage will be subject to environmental requirements and to DEC permitting;
- Dockage development for multi-family residential parcels is determined through environmental review and DEC permitting procedures, although under no circumstances is more than one dock per residential unit allowed;
- Subdivision of waterfront parcels permits the increase of the number of allowable docks or slips; and
- Dry boat storage will increase per current Town regulations.

A projected future build-out of docks was developed, as follows:

- *Town Plans* – Where Town-sponsored area master plans have been prepared, they were used as the basis for the Build-Out Analysis. This applies to the Sea Breeze area in Irondequoit and the LaSalle's Landing area in Penfield and Irondequoit.
- *By Right* – New York State Law pertaining to the State's ownership and regulation of "lands under water" (generally bayward from the mean low water level) gives each owner of a residential parcel with water frontage the right to access navigable waters. On Irondequoit Bay there are approximately 1,000 waterfront parcels which form the basis for the Build-Out Rationale.
- *Existing* – The existing number of slips was considered to be the build-out number where existing dockage development meets or exceeds the limit of one slip per single-family residential waterfront parcel, or where existing dockage appears to maximize environmental protection and/or present and conceivable future needs.

- *Assumed Capacity* – For several sites, which have been identified as having current or possible future development interest, the Build-Out estimate was based on the evaluation of factors including topography, access and environmental conditions.

A total build-out of up to approximately 2,600 wet slips, commercial dry storage slips and moorings would be projected if this scenario was chosen. The build-out analysis is assumed to be liberal, in that all identified sites are projected to be developed. In fact, many of the sites are difficult to build on, for reasons of access, steep slopes or fragile environmental conditions and may not meet DEC's permit issuance criteria. A significant number of these sites may therefore remain undeveloped within the time horizon of this plan.

IV.B ENVIRONMENTAL PROTECTION SCENARIO

A second boat storage build-out scenario was prepared that assumed new regulations would be developed to further protect Irondequoit Bay as an environmental resource. The build-out analysis was based on the following assumptions:

- Monroe County EMC identified environmentally sensitive areas (1996) recommended for public acquisition and protection would have minimal waterfront access permitted. Only one dock per protection area would be allowed for transient and shuttle or water taxi access.
- Unique Ecological Communities as identified for this report and by the Natural Heritage Program are recommended for public acquisition. Only minimal waterfront access would be permitted, including one dock per protection area for transient and shuttle access.
- All coves are recommended for additional protection due to fish spawning habitat and emergent wetlands. Only minimal waterfront access would be permitted including one dock per parcel. No additional development would be allowed within the cove areas.
- Boaters would have to seek dockage elsewhere, possibly outside the county.
- No dredging would be allowed outside of the Harbor and designated navigation ways.
- Development of the waterfronts of upland parcels will be limited based on suitability of access. No access is assumed for designated parcels.
- No additional dry storage would be permitted.
- Multi-Family sites would be limited to one slip per unit or based upon linear feet of usable shoreline, whichever is fewer. Calculations for allowable docks/slips is based upon current IBCC recommendations of: 0-100 linear feet (LF) allows one pier (two slips); 101-250 LF allows two piers (four slips); 251-500 LF allows three piers (six slips); greater than 500 LF allows an additional one pier (two slips) per 150 LF.

- Sutter's Marina lease will be allowed to expire and the slips are eliminated.
- The Bounty Harbor marina is closed and slips eliminated.

Additional Water Surface Use Assumptions that might be consistent with the Environmental Protection Concept include:

- Uniform enforcement of noise ordinance.
- Strict speed limit controls and enforcement in near shore areas.
- Ban on two-stroke engines.

Based on the above factors and assumptions, a total build-out for the Environmental Protection Scenario is up to approximately 1,560 boat storage spaces.

IV.C HARBOR SCENARIO

A third boat storage build-out scenario was prepared that assumed new regulations would be adopted to strongly encourage development on Irondequoit Bay as a recreational harbor. This build-out analysis was based on the following assumptions:

- Three primary harbor areas would be identified. Water surface zoning would be created to control water skiing, anchorage areas, sail racing, mooring areas, etc. Navigation channels and fairways would be created, marked and maintained.
- A Harbormaster would be hired to enforce regulations and educate visitors.
- Mooring areas would be developed that could accommodate five to 15 boats per acre. Moorings would be designated for a mix of seasonal and transient uses.
- The Sea Breeze waterfront would be developed based upon the *Sea Breeze Revitalization Plan*.
- The Newport Marina would expand its docking by 50%, provided that land-based facilities could support such expansion.
- Irondequoit Bay Park West would be built out with a higher level of marine use. A new 200-slip marina would be constructed within the Park to the north of the Irondequoit Bay Fish and Game Club and Sutter's Marina. A beach and boat launch would be developed as well.
- The Glen Edith area would become a potential harbor area.
- The Rte. 104 overlook in Webster and the former landfill would provide landside support to a mooring area below.
- Multi-family residential developments would be allowed to provide up to one slip per unit regardless of shoreline length. Docking would be limited to 200 feet in length to

protect open water areas and recreational use of the Bay. The upland parcel would have to support waterfront development.

Based on the above factors and assumptions, a total build-out for the Harbor Scenario would be up to 3,660 boat storage spaces if this scenario was chosen.

V. Preferred Alternative

Three critical factors form the rational basis for the Water Surface Use Plan: environmental protection, public access and resolving water surface use conflicts. (See [Exhibit 14](#), *Water Surface Use Map*).

V.A INTRODUCTION

The Water Surface Use Plan is the central element of the Harbor Management Plan for Irondequoit Bay. It considers types of surface water use, sources and extent of boating traffic in the Bay, development plans for key waterfront sites, water quality and the effect of all these on both the environment and recreational use of the Bay. The role of the plan is to guide the use of the water areas of the Bay, supplementing existing plans and regulation of the land surrounding the Bay, as found in the existing local waterfront revitalization plans, comprehensive plans and zoning ordinances.

The Water Surface Use Plan is based upon the goals and objectives developed by the IBHMPAC and approved by the IBCC, the inventory and analysis of existing conditions, review of prior reports and plans, reconnaissance of bay area sites and environmental conditions, comments received from the Towns of Irondequoit, Penfield and Webster, Monroe County, the IBCC and the NYS DOS and comments made at public information meetings conducted in the three Towns.

V.B WATER SURFACE USE PLAN

V.B.1 Rational Basis

Environmental Protection is considered the highest priority for Irondequoit Bay.

- The NYNHP currently lists the entire Bay as a significant warm water fisheries concentration area.
- The Western New York Chapter of The Nature Conservancy identified the coastal habitat of the Bay as crucial to migratory songbirds (1995).
- The NYS DOS lists the entire the Bay and wetland complex as a significant fish and wildlife habitat and calls it “One of the major coastal Bay and tributary systems on the Great Lakes coastal region.”
- The 1998 NYS Open Space Plan has identified lands adjoining the Bay as a high priority for protection and/or acquisition.
- The EMC identified the Bay ecosystem as one of three environmentally sensitive ecosystems in Monroe County. They also identified seven sites surrounding the Bay as environmentally sensitive sites most worthy of protection.
- An informal survey of the IBHMPAC unanimously ranked Environmental Protection as a critical criteria in evaluating Water Surface Use alternatives.
- Additional studies have been performed confirming unique and important habitat areas within and surrounding the Bay (see Appendix A: Bibliography).
- The areas of the Bay best suited for development have already been developed. Remaining open parcels generally have environmental constraints.

- The IBCC has completed a biological analysis of the Bay that has determined that the Bay is a significant ecological resource and has identified specific areas that should be protected.

Public access to the water's edge and to the water's surface should be a high priority.

- The Bay's urban location places over one million people within a 45-minute drive.
- The demand for water access is evidenced by overcrowded boat launches and heavy water surface use.
- Each of the three bordering municipalities have adopted LWRPs that promote policies, land uses and projects in support of increased public access.
- Public opinion expressed at various hearings and meetings place a heavy emphasis on public access to the Bay's shoreline and public enjoyment of the water surface.
- The USACE designated the Bay as a harbor of refuge and created a safe channel to the Bay from Lake Ontario.

Existing water surface use conflicts need to be mitigated.

- The safe use of the Bay's water surface is threatened by competing uses, high vessel speed, excessive boat wake, reckless operation and drinking while boating.
- Environmentally friendly uses and safe operating standards need to be identified and implemented, particularly in sensitive habitat areas.
- Specific water surface uses need to be provided for including navigation ways, harbor uses and anchorage areas.
- Both active and passive recreational use of the Bay needs to be accommodated in appropriate locations.

V.B.2 Recommended Harbor Management Plan Scenario

Although three build-out scenarios for the Bay were detailed Section IV, *Analysis of Alternatives*, the *Harbor Management Plan* recommends the adoption of a fourth, "blended," alternative. Three factors contributed to the development of this scenario:

- Growth, while unpredictable, is inevitable, and, as illustrated by the market absorption exercise (see [Figure 1](#)), even if it is limited to a conservative 2% over the next 25 years, would result in 2,713 slips on the Bay.
- The Environmental Protection Scenario assumes moving pre-existing facilities at Sutter's and the Bounty Harbor, which appears to be unlikely, and does not consider a build out of Bay Park West that has been in discussion since acquisition of the property by Monroe County.
- The Harbor Scenario, at full build-out, does not agree with the strongly expressed emphasis on environmental protection of the Bay.

In proposed regulations that should be incorporated into a new Comprehensive Harbor Management Law adopted by all of the participating municipalities, it is recommended that Irondequoit Bay have a boat storage build-out of approximately 2,250. This number

includes both wet and dry storage, which was arrived at by evaluation of environmental needs and the concentration of some docks into harbor areas. This represents an ability to add another 35% capacity over the next decades to accommodate increases in market demand. The increase in boat storage would be focused on areas of the Plan designated as Harbor Areas and would be strongly discouraged from areas of the Plan designated as Resource Protection Areas.

It is recommended that 2,250 boat storage spaces (including wet slips, permanent moorings and dry slips) be adopted as a carrying capacity ceiling for Irondequoit Bay. Permitting and regulatory agencies should consider this ceiling in reviews and approvals. The ceiling should be allocated by Town as follows:

Town of Irondequoit	1,200
Town of Penfield	50
<u>Town of Webster</u>	<u>1,000</u>
Total	2,250

V.B.3 Bay-wide Recommendations

The *Harbor Management Plan* is designed to have long-range vision since recreational demands and regional population have historically demonstrated only a slow pattern of growth and future growth is hard to predict. The following recommendations are made:

- Adopt a land and water use concept plan as depicted on [Exhibit 14, Water Surface Use Map](#).
- The total build-out boat storage spaces (wet and dry), as indicated in Section V.B.2, *Recommended Harbor Management Plan Scenario*, should be adopted as part of the Plan.
- Future development of the waterfronts of upland areas should be limited based on suitability of access and other aquatic and upland resource protection issues.
- The Plan supports implementation of Town and County plans for the Bay ecosystem, including the *Sea Breeze Revitalization Plan*, the *LaSalle's Landing Plan* and the *Irondequoit Bay Hiking Trail Plan*.
- Dockage in residential zones should be considered an accessory use.
- All existing and fully approved docks, dry storage, moorings, marinas and boat launches should be allowed to continue, subject to DEC permitting.
- A Comprehensive Harbor Management Law should be adopted which addresses wake, speed, boat storage, water surface use, noise and dredging, among many other items.
- A Harbormaster position should be created to enforce and regulate the Harbor Management Law and educate stakeholders.

Winter and Off-Season Use

Winter use of the Bay's water area consists of a moderate incidence of ice fishing, skating, snowmobiling and related activity at various points in the Bay which are accessible from Empire Blvd., Lakeshore Dr., the outlet bridge and individual properties. It appears that there is less freezing over of the Bay than in previous decades due to a variety of reasons, some climatic and some related to development.

- It is recommended that winter use of the Bay be consistent with safety, noise and clean water considerations and be appropriately regulated. Of particular concern is minimizing user conflicts, limiting the noise from motorized activity and addressing safety concerns regarding operation of motor vehicles on the ice. Noise ordinances from the three Towns should be reviewed for consistency and incorporated into the Harbor Management Law.

The increasing use of "bubbler" systems to prevent ice formation around docks means that ice is less stable in those areas.

- It is recommended that a permit system be established, managed by the Harbormaster, for all installations of ice prevention systems. Standard specifications should be developed by the Harbormaster including a provision that dock owners who utilize bubblers post warning notices in appropriate spots pertaining to the dangers of thin ice.
- A "carry-in, carry-out" policy should be established and promoted to reduce the amount and type of litter left on the ice.

Hunting

Town firearm and hunting ordinances and the regulations discussed in the DEC *Hunting and Trapping Regulations Guide* apply on Irondequoit Bay.

Wake and Speed Limit

Vessel speed and wake limits are currently regulated under Article 4, Part 1, Section 45-aaa of NYS Navigation Law as follows:

Subsection 6. No vessel shall be operated on Irondequoit Bay, which is located within Monroe County, at a speed exceeding 25 mph.

6. Subsection 7. No vessel shall be operated in the channel between Irondequoit Bay and Lake Ontario or within 200 feet of the shore, the channel, a dock, pier, raft or float or an anchored or moored vessel in a manner or at a speed that causes a wake that unreasonably interferes with or endangers such dock, pier, raft or float or an anchored or moored vessel but in no event at a speed exceeding 5 mph, unless for the purpose of enabling a person engaged in water skiing to take off or land.

Subsection 8. The provisions of this section shall not apply to any vessel competing in or practicing for a regatta or boat race over a specified course held by a bona fide club or racing association, provided that due written notice of the date of the race has been given to the appropriate law enforcement agency at least fifteen days prior to such race, pursuant

to the provisions of section 34 of this chapter, and all provisions of this section have been complied with.

Subsection 9. Any person who operates a vessel in violation of any of the provisions of this section shall be guilty of a violation punishable as set forth in section 73-c of this article.

Subsection 10. Nothing in this section shall be construed as prohibiting any town or county from continuing, adopting or enacting any other local laws, resolutions or ordinances related to persons operating a vessel within its limits, but no such municipality shall have the power to make less restrictive any of such provisions.

The existing navigation law should be revised as follows:

- The no-wake/5-mph zone within 200 feet of the shore, the channel, a dock, pier, raft or float or an anchored or moored vessel should be expanded to 300 feet.
- Wave-attenuating devices are not subject to the 300-foot no-wake/5-mph zone.

See [Exhibit 15, Proposed Speed Limit Map](#)

V.B.4 Area-specific Recommendations

See [Exhibit 14, Water Surface Use Map](#)

The water use areas, much like traditional zoning, define allowable uses, non-conforming uses and prescribe performance standards for the use and installation of improvements over the water surface. The following recommendations are made to minimize congestion, increase public safety and fulfill other stated goals of the Harbor Management Plan. Water Surface Use has been categorized as:

- Resource Protection Areas;
- Harbor Areas;
- Navigation Ways;
- Near Shore Areas; and
- Open Water Areas.

V.B.4.1 Resource Protection Areas

Irondequoit Bay's natural resources are recommended to be protected with a Resource Protection Area. This water surface area is depicted on the proposed Water Surface Use Map and is generally associated with the following natural resource areas:

- Monroe County EMC's designated Environmentally Sensitive Areas;
- New York State Natural Heritage Areas; and
- Coves and environmentally sensitive areas as identified in the 1984 Gross Overview of Fish and Wildlife Resources prepared by the DEC; and the 2002 Biological Study of Irondequoit Bay by Jim Haynes, et al.,

Environmentally sensitive parcels within Resource Protection Areas should be acquired to limit development in these areas. All undeveloped coves and the extreme southwest section of the Bay are recommended for maximum protection due to the diversity of fish and wildlife habitat and emergent wetlands. Minimal waterfront access is recommended in these areas. No additional development is recommended within these areas.

Speed/Wake Recommendations for the Resource Protection Areas

Regulations outlined in Section 45-aaa of NYS Navigation Law have been proposed to be extended to include most Resource Protection Areas. As such, the most appropriate craft in these areas would include non-motorized boats, such as canoes, kayaks, self-propelled paddleboats, rowboats and wind surfers.

An educational program should be initiated to help boaters understand the environmental significance of all Resource Protection Areas and the need to operate under reduced speed and wake conditions.

Boat Storage in the Resource Protection Areas

Boat storage is incompatible with Resource Protection Areas and is discouraged in such areas. If permitted, dock, slip and mooring development in Resource Protection Areas would be limited based upon the proximity to significant habitat areas and their potential impact on environmental features. Specific recommendations for boat storage in Resource Protection Areas include:

- When docks and piers are not permissible for environmental reasons, other options for riparian access should be explored.
- Shared docking facilities should be considered in the application process. If shared docking is not possible, a maximum of one dock per parcel may be permitted.
- When allowed, docks should not extend offshore more than 50 feet and be limited to a maximum of 200 square feet as recommended in *Environmental Objectives and Development Management Measures* (IBCC, 1985), unless a reasonable extension would avoid the need to dredge.

Dredging in the Resource Protection Areas

No dredging should be permitted within the Resource Protection Areas.

V.B.4.2 Harbor Areas

Harbor areas are recommended within Irondequoit Bay to provide public access, safe refuge, transient berthing and economic development opportunity. The recreational demand on the Bay has grown significantly over the past decade and a half and is expected to continue to grow, exceeding current boat storage capacity. All Harbor areas should meet three primary locational criteria including water depth, waterfront development district zoning and landside support (parking and utilities).

Four Harbor Area Areas are recommended for the Bay and are designated as the North Harbor, the Center Harbor, Glen Edith and the South Harbor on the Water Surface Use Map.

North Harbor

The North Harbor includes the Outlet channel, a portion of the Irondequoit Bay Marine Park which includes the boat launch and parking facilities, a portion of the public/transient dock area shown in the *Sea Breeze Revitalization Plan* and the area around Mayer's Marina. It excludes the environmentally sensitive areas north of the southernmost outlet channel markers.

The Harbor includes two recommended docking areas, one at Sea Breeze and the other in the area around Mayer's Marina. The depth of the water within the North Harbor is a limitation and dredging would be required to provide ample water depth. Consistent with the land use plans, a key recommendation of the North Harbor is to provide facilities for public access to the water, including two boat launches, transient docking for the Sea Breeze area and a public mooring area. The North Harbor should be designed to accommodate boats that take refuge in the Bay from Lake Ontario in rough weather.

The recommended carrying capacity ceiling for the North Harbor area is a total of 414 wet berths, including transient docks, seasonal docks and permanent moorings. The North Harbor is considered to be the best location for intensive build-out of wet storage due to its proximity to the Irondequoit Bay outlet and availability of required landside support such as parking, utilities, public access and appropriate zoning.

Center Harbor

The Center Harbor Area includes the area around Newport Marina. Any additional storage in this area would be contingent on providing additional landside support. The recommended carrying capacity for the Center Harbor Area is a total of 217.

Glen Edith

The former Glen Edith Restaurant and adjacent parcels provide both landside support and access as well as water depth. This area, on the east side of the Bay, has historically been used for commercial and docking purposes.

The recommended maximum build-out for the Glen Edith area is a total storage of up to 100 boats, including transient and seasonal docks, dry storage and permanent moorings.

Potential South Harbor

Based on historical observations it is anticipated that because of environmental limitations such as sedimentation and reduction of lake levels the Bounty Harbor Marina and Sutter's Marina may no longer be viable for marina activity. These two facilities are considered pre-existing non-conforming uses in a Resource Protection Area. If these facilities are no longer viable, Irondequoit Bay Park West could be considered for a marina facility to compensate for the loss of boat storage. This new marina could be developed at the north end of the park where water depths are the greatest, landside support is available and access to the open waters of the Bay is most direct. This would replace the 186 slips at the Bounty Harbor Marina and 160 slips at Sutter's Marina and would be contingent upon closing these existing facilities. However, care must be taken in the design of the facility to avoid adverse environmental and visual impacts. Trail, vehicular and shuttle connections to LaSalle's Landing are also recommended in the development of this area.

Consolidation of marina and storage slips located south of the proposed marina site into the overall Irondequoit Bay Park West marina would limit impacts on the sensitive shallow areas. The marina could be considered for lease to a private operator or for operation by Monroe County Department of Parks. Such development would be subject to appropriate State and Federal approvals. Additional site-specific analysis will need to be performed before this recommendation is considered.

Use of the informal launch ramp at the bottom of Orchard Park Blvd. by vehicles with trailers is inappropriate based on the ecological sensitivity of this area. It is recommended that this launch ramp be reconfigured so that boats on trailers will not be able to use this facility. To compensate for the loss of this ramp, it is recommended that a small scale ramp be constructed in the South Harbor Area.

Special Anchorage Areas

Special Anchorage Areas are proposed to be part of Harbor Areas providing formal locations for anchoring and mooring vessels. The Special Anchorage Areas are designated on the Water Surface Use Plan. Water surface uses allowed within the Special Anchorage Areas include:

- Transient Anchorage;
- Transient Mooring;
- Seasonal Mooring; and
- Other passive recreational uses not in conflict with anchorage and mooring activities.

The Harbormaster should be responsible for managing the Special Anchorage Areas and assigning permits to parties for permanent moorings. A priority system should be developed to provide Town residents and littoral property owners that have restricted water access with first opportunities to secure seasonal moorings.

Speed/Wake Recommendations for the Harbor Areas

Speed and wake control in the Harbor Areas and Special Anchorage Areas would be based on the proposed changes to the Navigation Law. An educational program should be instituted to assure compliance with the no-wake/ 5-mph regulations.

Boat Storage in the Harbor Areas

Subject to DEC permitting, the Harbor Areas should be considered appropriate for additional boat storage facilities if supported by adequate landside area, water surface area and dredging if able to be performed in an environmentally acceptable manner. Limits on boat storage in each of the Harbor Areas should be consistent with the recommended maximum boat storage as previously described.

Navigational Dredging in the Harbor Areas

The only area considered appropriate for dredging is the North Harbor Area. Dredging in the North Harbor Area should only be considered with further biological and chemical analysis and approval by the DEC and the USACE. No permits for dredging new and/or expanded areas should be issued for marinas that currently operate in proposed Resource Protection Areas.

V.B.4.3 Navigation Ways

Navigation ways are recommended for Irondequoit Bay to insure that travel is not limited or impacted by water surface use or improvements and to insure safe use of the Bay. Navigation ways are proposed to delineate the Navigation Channel and private Fairways.

Navigation Channel

The Outlet Channel is the only navigation channel. This channel is considered a federal navigation channel, is identified with channel markers and extends from Stony Point through the Outlet to Lake Ontario. This navigation channel is regulated with a no-wake/5-mph zone pursuant to the navigation law.

Any channel marker placed in the water should be consistent with this Plan and approved by the US Coast Guard.

Fairways

Fairways are unmarked navigation ways where previous dredging operations have created a channel to access marina facilities. These channels are considered pre-existing non-conforming uses. Fairways function as overlay zones and are primarily designed to maintain clear paths of travel connecting berthing areas and destinations. Speed and wake regulations within Fairways should be that of the underlying area. Anchoring or sitting should be discouraged within the Fairways.

Speed/Wake Recommendations for the Navigation Ways

Speed within navigation channels will be regulated based on the Navigation Law.

Boat Storage in the Navigation Ways

Boat storage is inappropriate for navigation ways and should be prohibited.

Navigational Dredging in the Navigation Ways

Dredging in Navigation Ways should only be considered following a site-specific analysis and approval by the DEC and the USACE. Dredging in private fairways should be considered a pre-existing non-conforming activity. Maintenance dredging in these areas should only be considered in order to accommodate the existing use.

V.B.4.4 Near Shore Areas

Near Shore Areas are defined in this Plan as being within 300 feet of shore and other areas described within the NYS Navigation Law. Near Shore Areas are generally appropriate for passive uses.

Speed/Wake Recommendations for the Near Shore Areas

The no-wake/5-mph speed limit regulations outlined in Section 45-aaa of NYS Navigation Law should apply to the Near Shore Areas.

Boat Storage in the Near Shore Areas

When docks and piers are not permissible for environmental reasons, other options for riparian access should be explored. This may include shared docking facilities, mooring off shore with minimal shoreline development, or access to nearby off-site dock facilities.

When allowed, docks associated with single family residences should not extend offshore more than 50 feet and be limited to a maximum of 200 square feet, unless a reasonable extension would avoid the need to dredge. In no case should a structure extend offshore more than 200 feet. No additional commercial boat storage (including dry storage) should be allowed in Near Shore Areas. Multi-family residential sites would be limited based on the linear feet of shoreline contained within the parcel. The calculations to determine the maximum number of boats stored on a multi-family parcel are based on the length of shoreline as follows:

- 0-100 linear feet 1 dock or 2 boats
- 101-250 linear feet 2 docks or 4 boats
- 251-500 linear feet 3 docks or 6 boats
- greater than 500 feet 1 dock or 2 boats per 150 linear feet

The dock structure associated with multi-family parcels should not extend off-shore more than 200 feet. If adequate water depth is not found within 200 feet of the shoreline, alternative docking/boat storage options should be explored.

Dredging in the Near Shore Areas

No dredging is recommended in the Near Shore Areas of the Bay.

V.B.4.5 Open Water Areas

The remainder of the Bay not encumbered by any of the above stated designations is designated as Open Water Areas. These are areas that support active recreational use based on the following characteristics :

- Sufficient surface area;
- Adequate water depth;
- Access to Fairways and Harbor Areas; and
- Less sensitive shoreline conditions.

All existing uses should be allowed to continue in this area, as shown in [Exhibit 8, Current Water Surface Use](#). All organized events (e.g. sailing, water skiing, fishing) should be permitted by the Monroe County Sheriff's Department and coordinated through the Harbormaster. Provisions for reasonable access around racecourses should be considered in establishing all such courses.

Speed/Wake Recommendations for the Open Water Areas

The regulations outlined in Section 45-aaa of NYS Navigation Law should apply to the Open Water Areas. The speed limit should remain at the current 25 mph. Under emergency conditions as determined by the three Town Supervisors the speed limit may be reduced.

Boat Storage in the Open Water Areas

Boat storage (docks and moorings) is not recommended within the Open Water Areas of the Bay.

Dredging in the Open Water Areas

Dredging is not recommended in the Open Water Areas of the Bay.

V.C LAND USE and DEVELOPMENT

V.C.1 Economic Development

Economic development efforts have the potential for significantly affecting the use of the Bay. Two primary areas of economic development have been identified: Sea Breeze and LaSalle's Landing. In both cases the Towns have sponsored plans which are intended to revitalize these areas for recreation and economic development. The Harbor Management Plan endorses the goals of these plans and specific capital improvements from each of them are recommended for implementation as part of the *Harbor Management Plan*.

The Webster sandbar is the third area that has potential for economic development. The *Town of Webster Comprehensive Plan* recommends the sandbar as a waterfront development area, with a public park and a trail along the NYS DOT former railbed traversing the sandbar. It also recommends the preparation of a revitalization plan for the sandbar area, focusing on development of the proposed park, increasing public access to the waterfront through development of water dependent and water related uses, maximization of the seasonal maritime environment, improvement of deteriorated housing conditions, provision of adequate utility infrastructure and insuring that the rail right-of way can be utilized as a public walkway along the Lake. The *Harbor Management Plan* endorses these goals and encourages the implementation of the *Webster Comprehensive Plan*.

V.C.2 Public Access

The Plan recommends improvements in public access, particularly at Sea Breeze, LaSalle's Landing and on the Webster sandbar. These proposals are more fully described in the Sea Breeze, LaSalle's Landing and the Webster plans, the *Irondequoit Bay Hiking Trail Plan* and Section VI of this plan.

The establishment of an education/signage program for the Bay ecosystem would help orient visitors and residents, give information about the Bay's attractions and provide information about rules and regulations governing its use.

V.C.3 Zoning

Most of the parcels around the Bay are already developed; however, there are a few significant exceptions. Several of these parcels are zoned single-family residential, including the Damascus Temple property in Webster, the Village of Webster well field and a significant tract of land immediately to its south. There are two specific areas where the Plan recommends changes in zoning: the Webster sandbar and at Glen Edith. Both are in Webster and are currently zoned Waterfront Development, permitting a wide range of uses, with little restriction on density or height of structures. Both of these parcels have the potential for providing increased public access to the water and both are environmentally sensitive. This Plan endorses the recommendation of the *Webster Comprehensive Plan* to change the zoning of these parcels to Restricted Waterfront Development.

The Restricted Waterfront Development zone permits only low-medium density uses, including residential, restaurant, small shops, boat docking and other water-dependent uses. Lodging should be permitted in the form of bed and breakfasts, but hotels should not be permitted. Office use should not be permitted, except home offices. Height should be restricted to two stories and views to the water should be preserved, especially from public rights of way and other public areas. No waterfront development should be permitted in these areas unless it provides public access to the waterfront.

V.D WATER QUALITY CONSIDERATIONS

As detailed in Section II.C.2, *Water Quality*, Monroe County has and continues to take a lead role in efforts to improve water quality in Irondequoit Bay through a comprehensive, basin-scale effort sustained over a period in excess of thirty years.

Activities to date are based upon the 1985 *Water Quality Management Plan*, the 1996 *Policy Report* and related policies. The primary goal is the improvement of the Bay water quality to at least a nutrient-stable (mesotrophic) state, similar to that occurring in nearby Finger Lakes and Lake Ontario, from the nutrient-rich (eutrophic) water quality condition at the time. With the elimination of point source discharges of pollutants, it has been recognized that this would only be possible if non-point source pollution to the Bay was also addressed.

Of primary importance in attaining the established water quality goal is the reduction of phosphorus loading to the Bay. The primary source of the phosphorus is atmospheric deposition on developed, impervious surfaces with subsequent “wash-off” by precipitation. Studies indicated that releases of phosphorus from Bay sediments were also a significant fraction of total phosphorus loading.

As a result of these efforts, a three-pronged approach was taken by Monroe County to reach the water quality goal for the Bay. This consists of (1) implementation of an alum treatment program and other measures to reduce the release of phosphorus from bottom sediments, (2) implementation of a non-degradation strategy to address new pollutant sources including stormwater runoff from new development and (3) a reduction in the amount of phosphorus entering the Bay from existing development by improving dispersion and increasing retention time of stormwater flowing through the wetland complex at the south end of the Bay.

The efforts to date have been effective and successful in improving the water quality of the Bay and the water quality is now approaching the goals established in the WQMP.

Implications for the Irondequoit Bay Harbor Management Plan are:

- Disposing of human waste in New York State waters is prohibited; while it is not believed that additional regulation of boat discharge is needed at this time, new ancillary support facilities for the use of the Bay should include pumpout facilities and existing pumpout facilities should be continued.
- Ancillary support facilities for direct use of the bay, including marinas, launches and other access facilities, must incorporate careful stormwater management practices to

mitigate any increases in impervious cover and to avoid the discharge of pollutants from storage and maintenance facilities.

- Water enhanced land uses, such as restaurants, shops and residential developments, must likewise incorporate stormwater best management practices to mitigate for increases in impervious cover.
- Both new ancillary support facilities and water enhanced land uses should be supported by and connected to sanitary sewers.

It is, therefore, recommended that the primary effort in water quality management for Irondequoit Bay be the continuation of the current efforts aimed at reducing nutrient loading, particularly phosphorus, to the Bay waters. This includes intervention aimed at reducing sediment derived phosphorus loading through alum treatment and/or stabilization of oxygen levels in the middle layers of the water column and continued efforts to mitigate for impervious cover in the surrounding and upstream watershed.

V.E HARBOR MANAGEMENT PLAN PROJECTS

Based on the recommendations in Section V, *Selection of Alternatives*, as well as the key public revitalization plans evaluated in Section II, *Inventory and Analysis of Existing Conditions*, the following projects have been identified as critical to the success of the *Harbor Management Plan*:

V.E.1 Maintenance and Dredging Plan for the North Harbor Area and Associated Navigation Channels

It is imperative that periodic maintenance dredging be undertaken at the jetty at the mouth of the Bay outlet as siltation at this location begins to restrict channel width and depth. This is a safety condition that requires commitment from various agencies. In addition, selective dredging may be required in conjunction with the Sea Breeze Boardwalk and Public Dock improvements identified below.

V.E.2 Sea Breeze Boardwalk and Public Dock

The creation of a new boardwalk and public dock west of the Irondequoit Bay Marine Park was identified as an important public improvement by the 1999 *Sea Breeze Revitalization Plan*. The project includes design and construction of a public dock, boardwalk, transient dockage, small amphitheater and festival site and a boat livery facility along the portion of the Irondequoit Bay State Marine Park shoreline adjacent to the Bay outlet. The boardwalk and public dock at Sea Breeze will function as a part of the trail system being planned around Irondequoit Bay. Funding should be provided via an appropriate mix of State, Federal and Local Sources.

The permitting process for the proposed new docks at Sea Breeze should include consideration of any adverse effects docks would have on the environmentally fragile wetland in that area. It is understood that the twenty transient slips included in the plan are a proposal only, and as such are considered a maximum number, subject to permitting.

V.E.3 LaSalle's Landing Trail and Boardwalk Sections

The 1997 *LaSalle's Landing Development Plan*, prepared jointly by the Towns of Irondequoit and Penfield, identified the creation of a shoreline trail as a priority public capital improvement project for Irondequoit Bay. The plan recommended that the two Towns, in cooperation with Monroe County, the Seaway Trail and New York State, pursue grant funding for a continuous trail along the south shoreline. The trail is proposed to be an intermodal trail system (with access for bicycles, pedestrians and hikers) which includes two sections of proposed boardwalk improvements (across Irondequoit Creek and across the water area east of the NYS DOT scenic pull-off area). The design of the two proposed sections of boardwalk was further detailed in the May, 1997 *Conceptual Design Report for Boardwalks* prepared for the Towns by LaBella Associates. The Town of Penfield and Monroe County have acquired additional property within the area.

V.E.4 Public Waterfront Park on the Webster Sandbar

The *Town of Webster Comprehensive Plan* recommends a waterfront park on the Webster sandbar. The sandbar has spectacular views of the Bay and the Lake, at-grade access to the water, excellent fishing potential, a number of existing restaurants and marinas. The location provides easy boating access to Lake Ontario, thus minimizing potential boating conflicts in the Bay. On the north side of Lake Rd. is a NYS DOT-owned abandoned rail right-of-way on a raised road bed which provides both scenic water views and the potential to connect to the nearby Seaway Trail and other planned Webster trails. This is recommended for trail development in both the *Webster Comprehensive Plan* and the *Irondequoit Bay Hiking Trail Plan* and would connect with the proposed Sandbar Park.

Two parcels of land flanking Lake Rd. create a six-acre property that is the last remaining undeveloped area of significant size along the Lake or Bay within the Town of Webster that provides at-grade access to the Bay. The Town commissioned a site plan for a park at this location in 1997, including picnicking and fishing areas and a small car-top boat launch on the Bay side, and unsuccessfully sought funding for the park at that time. The *Comprehensive Plan* recommends that a more detailed public access plan be prepared for the entire sandbar, and that efforts be renewed to obtain the funding for the park.

V.E.5 Irondequoit Bay Hiking Trail

The *Irondequoit Bay Hiking Trail Plan* recommends a route for development of a continuous public trail around the Bay, including the sections in Sea Breeze, LaSalle's Landing and the Webster sandbar discussed above. As part of the Harbor Management Plan, it is recommended that the continuous hiking trail be completed, as described more fully in the *Hiking Trail Plan*, incorporated herein as Appendix B.

V.E.6 Education and Signage Program

A strongly positive approach to educating individuals about their role in insuring boating safety and environmental protection is recommended. A comprehensive education and sign program can also act not only to provide notice of the Bay's boating wake and

speed regulations, but also to inform users and visitors of the history, recreation and events surrounding Irondequoit Bay. The program should include at least the following areas:

- History;
- Safety on the Bay in summer and winter;
- Weather conditions;
- Emergency services;
- Environmental protection;
- Directory of services and facilities;
- Special events and programming; and
- Communication with the Harbormaster.

Methods of implementing the education and signage program may include:

- Kiosks located at Sea Breeze Landing/Boat Launch, LaSalle's Landing, Webster Sandbar Park, Irondequoit Bay Park East, Irondequoit Bay Park West, private marinas and boating clubs;
- Public telephone or telephone link to Harbormaster at kiosk locations;
- Flyer handouts, to be available at kiosk locations, Town Halls, libraries, community centers and other appropriate locations, and also distributed by the Harbormaster and County Sheriff's office;
- Website;
- Special events, including an Annual Irondequoit Bay Appreciation Day;
- Media assistance and press releases;
- Research and reporting; and
- Partnerships with existing boater safety, environmental protection, educational, tourism and business organizations.

The education and signage program should be considered a high priority project that has the ability to have great impact at a minimal expense.

V.E.7 Expanded Irondequoit Bay Biological Study

An expanded Irondequoit Bay Biological Study should be prepared based on the recommendations contained in the initial report.

V.E.8 Land Acquisition/Protection Program

A constituency and a funding mechanism for an aggressive land acquisition program should be established. Public-private partnerships with land conservation organizations should be considered as one useful funding option.

V.E.9 Erosion Control Projects

It is recommended that structural methods for protecting the sand bluffs on the east side of Irondequoit Bay be studied and a pilot project in a key location based upon this study be undertaken.

V.E.10 Irondequoit Bay Park Master Plans

Preparation of Master Plans for Irondequoit Bay Park East and Irondequoit Bay Park West are recommended. One alternative plan for Irondequoit Bay Park West should include landside support to the South Harbor Area.

V.E.11 Webster Properties Master Plan

Preparation of a Master Plan for the development and/or protection of the NYS DOT overlook on Rte. 104, the Webster well field site and the former landfill property is recommended. The Plan should include possible surplus Rte. 104 right-of-way for public access and use and consider providing landside support to the Central Harbor Area.

V.E.12 Designation as State or Great Lakes Heritage Area

To enhance awareness and to provide a mechanism for education, the Plan recommends seeking a designation of Irondequoit Bay as a State Heritage Area or other similar statewide, regional or national designation.

V.E.13 Harbormaster Station and Vessel

The Plan recommends the development of a Harbormaster Station, the acquisition of a vessel and the provision of storage for such vessel. A potential location with high visibility and excellent access is adjacent to the boat launch at Sea Breeze. An appropriately sized building should be considered.

V.E.14 Water Taxi/Shuttle Stops

A plan, funding strategy and implementation strategy for public docks at key destinations should be developed. The docks could serve water taxi service, shuttle service or passenger drop-off and pick-up. Potential locations may include:

- Sea Breeze;
- LaSalle's Landing;
- Webster sandbar;
- Devil's Cove/Helds Cove;
- Center Harbor Area; and
- Irondequoit Bay Park West and East.

V.E.15 "Friends of the Bay" Stewardship Organization

The creation of a non-profit educational and stewardship group to advocate for and receive funds to acquire open space, educate the public and increase awareness of the Bay and its function as a regional resource is recommended.

V.E.16 Bay-wide Emergency Response Plan

It is recommended that a coordinated Bay-wide emergency response plan be developed, incorporating and coordinating existing plans, to insure comprehensive coverage of emergencies, delegate appropriate roles and responsibilities and eliminate unnecessary

redundancies. The plan should be developed by the IBCC with input from the Monroe County Office of Emergency Preparedness, the Monroe County Sheriff's Department, the local law enforcement and emergency response units and the United States Coast Guard.

V.E.17 Enforcement Coordination

Enforcement of existing public safety and environmental regulations is critical for the safety of users of the Bay and protection of natural resources. The IBCC should host meetings for the various enforcement agencies with jurisdiction on Irondequoit Bay. These agencies include:

- United States Army Corps of Engineers;
- United States Fish and Wildlife Service;
- United State Environmental Protection Agency;
- New York State Department of Environmental Conservation;
- New York State Department of State;
- New York State Police;
- New York State Park Police;
- Monroe County Sheriff's Office;
- Monroe County Health Department;
- Monroe County Office of Emergency Preparedness;
- Municipal Police Departments;
- Municipal Building Inspectors; and
- Municipal Fire Marshals.

This coordination has begun with boat tours for enforcement officials. This should be supplemented with a meeting, or meetings, to allow the various agencies to discuss enforcement issues prior to the boating and construction season. Meetings may also be held in late fall to discuss issues identified during the season. This will assist in improving the level of communication and understanding between agencies.

VI. IMPLEMENTATION PLAN

VI.A TECHNIQUES AND AUTHORITIES

VI.A.1 Irondequoit Bay Coordinating Committee

The IBCC was created in 1984 by an intermunicipal agreement among the Towns of Irondequoit, Penfield and Webster and Monroe County. Ex-officio members include representatives from the Monroe County Environmental Health Lab, Parks Department, Department of Planning and Development, Environmental Management Council, Water Quality Coordinating Committee, Soil and Water Conservation District and Fishery Advisory Board and the NYS DEC and DOS. The IBCC is an advisory committee, whose mission is to coordinate all levels of public and private use of the Bay ecosystem and to develop, recommend and monitor related policies. As stated in the intermunicipal agreement, “all parties regard the IBCC as the steward of Irondequoit Bay, providing an effective mechanism to balance the rights of all stakeholders while protecting the Bay’s ecosystem.”

It is recommended that the IBCC and the associated technical staff be the advisory body for implementation of the Harbor Management Plan.

VI.A.2 Comprehensive Harbor Management Law

A Comprehensive Harbor Management Law is recommended to be adopted by all the local municipalities governing Irondequoit Bay. The Management Law should address issues of water surface use, permitting, vessel operation & use (including speed, wake and noise), enforcement authority, docking and sanitation. A proposed Draft Comprehensive Harbor Management Law is included as Appendix C of this document. Generally, it includes the following provisions:

Water Surface Use

Water surface use regulations in the proposed Harbor Management Law are based on recommendations in the Plan. Specific areas where certain provisions of the Law pertain include Harbor Areas, Special Anchorage Areas, Resource Protection Areas, Near Shore Areas, Navigation Channels, Fairways and Open Water Areas. These provisions in the Law correspond to the descriptions of these areas in the *Water Surface Use Map, Exhibit 14* of the *Harbor Management Plan*.

Speed & Wake Regulations

Speed and wake can be regulated with the Harbor Management Law. Existing speed and wake laws should be augmented with additional speed and wake regulations that are specific to the Water Surface Use Areas described in the Water Surface Use Plan. The State Navigation Law for Irondequoit Bay should be amended to be consistent with the Harbor Management Law regarding speed and wake.

Uniform Docking & Mooring Regulations

The Uniform Docking and Mooring provision in the Law supports the Policies and Water Surface Use Plan of this document. The provisions generally encourage a higher density of docking in appropriate harbor areas and discourage docking and mooring in

environmentally sensitive areas.

Noise Ordinance

The Harbor Management Law includes noise limit provisions as discussed in the Water Surface Use Plan chapter of this document.

Creating a Harbormaster Position

A central goal of the Harbor Management Plan is to establish a coordinated intergovernmental approach to better manage the varied water activities that take place on the Bay. In order to achieve this goal, a major objective established by the IBHMPAC and IBCC is to create a Harbormaster position for the Bay. The Harbormaster may be a sworn employee of a local law enforcement agency, and should have knowledge of freshwater aquatic environments, boating and state and local laws and regulations. He/She would act as an ambassador for the Bay and be a person with good communications skills. The Harbormaster would bring sound overall harbor management principles and oversight to bear on the implementation of the Harbor Management Plan and water use activities in general. The Harbormaster would be a presence on the Bay, especially during weekends, holidays and other peak times during the boating season, providing information and assistance to boaters, educating the public as to the availability of facilities and informing Bay users as to boating and berthing rules and regulations. The position should be equipped with a vessel, office space with boat slip (potentially located in Sea Breeze adjacent to Irondequoit Bay Marine Park) and would be supported by a technical assistant.

The Harbormaster duties would include, but not be limited to, the following:

- Be a visible presence on the Bay particularly during peak boating times;
- Assist boaters and other visitors; conduct public relations and educational activities; arrange emergency assistance; offer guidance and information about local facilities, attractions, marinas, pump-out facilities, vessel repair, parts and equipment, recreation, restaurants and lodging; provide information about boating rules and regulations, including speed and wake restrictions; inform visiting boaters of the rules regulating water use, including speed and wake;
- Be authorized to issue tickets for violations and work closely with the NYS DEC enforcement officials and local law enforcement agencies to monitor boating rules; enforce speed and wake restrictions;
- Assist the participating agencies and jurisdictions in implementing the Harbor Management Plan and carrying out their responsibilities for the Bay; Assist in monitoring no-discharge regulations on the Bay;
- Assist the three towns in making use of the proposed Irondequoit Bay Uniform Docking and Mooring Law;
- Monitor the use of the navigable channel into and along the Bay; the orderly flow of boat traffic within the various sub-areas of the Bay; and the use and regulation of docking and mooring spaces around the Bay;
- Meet regularly with the IBCC and the Towns of Irondequoit, Webster and Penfield;
- Conduct periodic surveys of boater types, times of peak activity and sub-area usage;

- Coordinate and schedule activities and organized events to minimize conflicts among the various users of the Bay; and
- Prepare an annual report for the IBCC.

It is recommended that the Harbormaster be a Civil Service position. An appropriate budget should be developed to include salary, benefits, technical support and annual supplies. New York State has a reimbursement program for marine law enforcement that could provide 50% of the cost of this program. Additional funding support should be sought via the Environmental Protection Fund administered by the NYS DOS Coastal Resources/Local Waterfront Revitalization Program and possibly in part using a portion of, or a surcharge on, launching fees.

VI.A.3 Friends of Irondequoit Bay

The Plan recommends the creation of a non-profit educational and stewardship group to advocate for and receive funds to acquire open space, educate the public and increase awareness of the Bay and its function as a regional resource. This group could be a new organization or a committee of an existing organization. In either case, relationships should be developed with existing organizations such as The Nature Conservancy, The Genesee Land Trust, Water Education Collaborative, fishing organizations, recreational interests, historic interests, etc.

VI.B BEST MANAGEMENT PRACTICES

As detailed in the inventory section of this plan, limiting pollutant loads in stormwater runoff is essential for continued progress toward meeting the water quality goals for Irondequoit Bay. It is recognized that land development within the Bay watershed, and especially that occurring in the watershed areas which drain directly to the Bay, should incorporate adequate stormwater management practices. These practices should be designed to (1) minimize erosion and avoid sediment transport to the Bay during construction, (2) mitigate the effects of increased stormwater pollutant loads resulting from land disturbance and increases in impervious cover due to development activities and (3) prevent the discharge of pollutants from storage and maintenance facilities.

The avoidance of erosion impacts and mitigation for land disturbance and impervious cover increases can both be achieved as individual development projects are reviewed at the local level. This can be done through more diligent attention to compliance with existing NYS requirements and recommendations regarding Stormwater Best Management Practices. These requirements and recommendations are contained in the 1992 DEC publication entitled *Reducing the Impacts of Stormwater Runoff From New Development* and any subsequent updates.

This document calls for the preparation of a Stormwater Management and Erosion Control Plan as part of planning for individual development projects. The plan must meet specific performance standards and the erosion control portion of the plan must comply with provisions and recommendations contained in the 1997 *New York Guidelines for Urban Erosion and Sediment Development*. The stormwater management portion of the plan must include an analysis of existing conditions, an identification of

potential mitigation measures and a quantitative evaluation of the effectiveness of the selected stormwater controls in mitigating project impacts.

The Towns of Irondequoit, Penfield and Webster should modify their Site Plan and Subdivision requirements to include the preparation and submission of Stormwater Management and Erosion Control Plans for all land development projects occurring in the Irondequoit Bay watershed. These Plans should comply with the specific requirements of Appendices D, E and F of the DEC State Pollution Discharge Elimination System (SPDES) General Permit No. GP-93-06. Suggested wording for insertion in the zoning ordinances, including design specifications and subdivision regulations of the three towns, is as follows:

“Applicants shall be required to prepare and submit Stormwater Management and Erosion Control Plans for all land development projects occurring in the Irondequoit Bay Harbor Management Plan area. These Plans shall comply with the specific requirements of the NYS SPEDES General Permit No. CP-93-06, Appendices D, E and F.”

The prevention of the discharge of pollutants from storage and maintenance facilities is currently under the jurisdiction of the NYS DEC for petroleum products and other toxic/hazardous substances and under the jurisdiction of the MCDOH for sanitary wastes. Current NYS DEC regulations and registration procedures for petroleum product and toxic/hazardous substance storage have been adequate to avoid any known water quality and/or aquatic wildlife impacts associated with the use of such materials. With respect to sanitary sewage, it is recommended that current efforts to provide sanitary sewers to all areas surrounding Irondequoit Bay be continued and, where feasible, accelerated to eliminate the use of individual on-site wastewater treatment facilities and to prohibit new development in areas not served by sanitary sewers.

VI.C IMPLEMENTATION SCHEDULE

Table 5 summarizes projects or actions identified in the Harbor Management Plan. They are assigned a relative priority rating on a scale of one to three. They are further described as either short- or long-term projects, and, where appropriate, as either finite or ongoing projects. Potential responsible and involved entities and funding sources are also listed.

Table 1. Irondequoit Bay Area Population (Pop.) and Housing Units (H.U.), 1970-1990

Municipality	1970		1980		1990	
	Pop.	H.U.	Pop.	H.U.	Pop.	H.U.
Brighton	35,065	12,403	35,776	15,103	34,455	16,068
Irondequoit	63,675	20,060	57,648	21,904	52,377	22,177
Penfield	23,782	7,039	27,201	9,582	30,219	11,758
Rochester	292,233	105,544	241,741	102,642	231,636	101,154
Webster	24,739	7,078	28,925	10,078	31,636	12,095
Monroe Co.	711,917	228,554	702,238	264,352	713,968	285,524

Source: U.S. Census of Population and Housing, 1970, 1980, 1990.

Table 2. Minimum Bottom Elevations (IGLD-85) for Various Use Activities

Type of Vessel/Facility	Minimum Water Depth (feet)	Required Bottom Elevation (Annual Average Water Level Basis)	Required Bottom Elevation (Ten Year Extreme Water Level Basis)
Power Boats up to 25 ft and Launch Facilities	3.0	241.9	240.8
Larger Power Boats	4.0	240.9	239.8
Fixed Keel Sailboat Docking	6.5	238.4	237.4
Fixed Keel Sailboat Use	8.0	236.9	235.9

Table 3. Summary Description of Confirmed Waste Sites Around Irondequoit Bay

Municipality	Map Number	Description
Irondequoit	I-1	Municipal waste, construction and demolition debris, tree/brush
	I-5	Municipal waste, construction and demolition debris, agricultural/nursery wastes
	I-15	Ash
	I-47	Industrial
Brighton	B-6	Construction and demolition debris
	B-7	Municipal waste, construction demolition debris, tree/brush
Penfield	P-3	Animal waste (rendering plant)
	P-12	Construction and demolition debris
	P-18	Construction and demolition debris
	P-6	Construction and demolition debris
	P-28	Construction and demolition debris
	P-2	Construction and demolition debris
	P-19	Construction and demolition debris
Webster	W-11	Construction and demolition debris
	W-8	Construction and demolition debris
	W-6	Municipal waste, construction demolition debris

Source: Monroe County Environmental Management Council, 2001.

Table 4. Compatibility of Activities with Wetland and Adjacent Area

Item Number	Activity Definition	In Wetland	In Adjacent Area
13	Restoring, reconstructing or modifying existing functional structures or facilities which involves the temporary disturbance of less than 50 square meters (approximately 540 square feet) of ground surface.	C	C
14	Expanding or substantially modifying existing functional structures or facilities involving a ground disturbance in excess of 50 square meters.	N	C
16	Intensive, organized, and repetitive use of all-terrain vehicles, air and motor boats, and snowmobiles.	N	C
20	Filling	X	N
25	Grading and dredging not included under activity 26	X	N
26	Dredging less than 400 cubic meters (approximately 523 cubic yards) to maintain present navigation channels.	C	C
22	Clear cutting of trees.	N	C
23	Clear cutting vegetation other than trees except as part of an agricultural activity.	X	N
28	Constructing roads.	X	N
31	Installing a dock, pier, wharf or other structure built on floats or open-work supports and having a top surface area of 20 square meters (approximately 200 square feet) or less.	C	C
32	Installing a dock, pier, wharf or any other structure used as a landing place on water except for activities covered under number 31	N	N
33	Constructing groins, bulkheads and other shoreline stabilization structures.	X	N
38	Introducing or storing any pollutant including petrochemicals, solid wastes, sewage effluent and toxic materials, except pesticides, which are covered separately.	X	X
42	Construction of residences and related structures or facilities	X	X
43	Construction of commercial or industrial facilities, public buildings, or related structures or facilities.	X	X

C: Usually Compatible; N: Usually Incompatible; X: Incompatible

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Table 5. Recommended Action/Project/Policies

No.	Recommended Action / Project / Policies	Short/Long Term Finite/Ongoing	Priority (1-3)	Potential Responsible/Involved Entities	Potential Funding Sources	Notes
1	Policy 1b--Monitor and evaluate the effectiveness of existing local and state regulatory measures in protecting sensitive areas and propose new measures to <i>control</i> development and <i>protect</i> sensitive natural resources (after Biological Study).	Short, Ongoing	1	NYS DEC, MCSWCD, NYS DOS, IBCC, EMC, USACE	In-kind	
2	A monitoring effort should be initiated to assess the impact of recreational use of the passive areas on habitat and shoreline erosion	Short Term	1	Towns, IBCC	Grants	
3	Adopt zoning and land use recommendations as recommended in the Webster Comprehensive Plan.	Short Term	1	Town of Webster	n/a	
4	Irondequoit Bay biological study	Short Term	1	IBCC, Towns, County, State	State, Local	
5	Include standardized erosion control measures and practices into the local Site Plan and Subdivision codes.	Short Term	1	Towns of Penfield, Irondequoit and Webster, MCSWCD, IBTS	n/a	
6	Establish Water Surface Use Areas	Short Term	1	The Towns	n/a	
7	Create a Harbormaster position.	Short Term	1	The Towns/IBCC	Towns, County, State, Federal	
8	Adoption of Comprehensive Harbor Management Law	Short Term	1	The Towns	n/a	
9	Development of the waterfronts of upland areas should consider access and other aquatic and upland resource protection issues.	Short Term	1	Towns	In-kind	Covered in Water Surface Use Areas, docking ordinance,
10	Provide appropriate public access	Ongoing	1	Towns, County, State	Towns, County, State, Federal, Private	

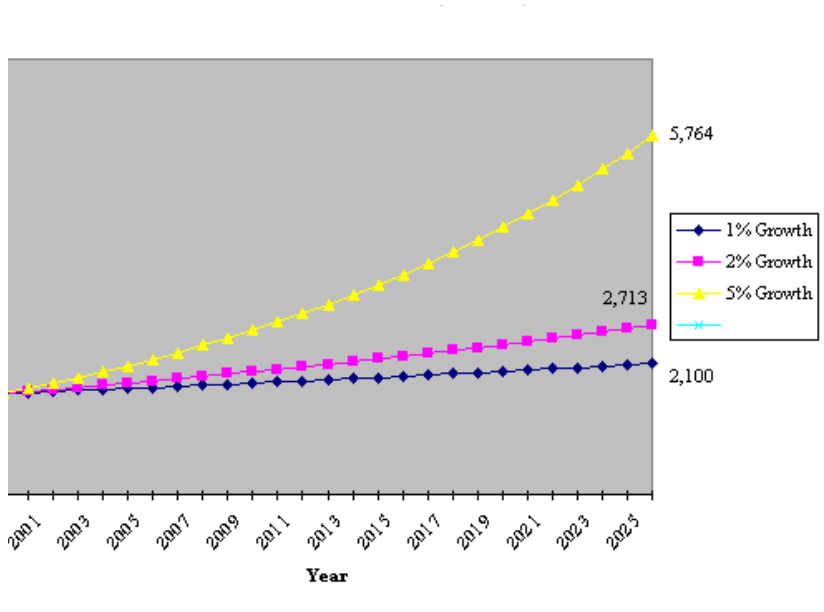
IRONDEQUOIT BAY HARBOR MANAGEMENT PLAN

11	Policy 2a--Monitor water quality and associated impacts including conducting field assessment of existing large scale developments to evaluate the adequacy of their storm water management facilities and preparing periodic corrective measures reports which incorporate the findings of field assessments for use by town officials to <i>bring</i> facilities into compliance. Conduct field inspection and inventory and evaluation of eroded slopes around the Bay.	Ongoing	1	MCHD, MCSWCD	In-kind	
12	Policy 2b--Facilitate workshops on the findings of corrective measures reports and other studies. Seek funding sources to fix and upgrade storm water management facilities and protect and stabilize eroded slopes where problems are identified.	Ongoing	1	MCSWCD, IBCC	Grants	
13	Policy 3b--Manage woodlots around the Bay to protect views, steep slopes, and wildlife habitats.	Ongoing	1	MCSWCD, Towns, County Parks, DEC, IBCC	n/a	
14	Policy 3c--(Related to significant historical, archeological, aesthetic, or environmental features.) Monitor and assess the impact of development. Conduct a field assessment of recent developments around the Bay to document where deviations from the stated goals have occurred. Institute consistent development regulations to <i>address</i> the findings of the field assessments.	Ongoing	1	State, RMSC	Grants, student interns	per SEQR
15	Coordinated acquisition and protection of environmentally sensitive areas.	Ongoing	1	Towns, County, State, Nature Conservancy, Land Trusts, "Friends of the Bay"	Grants	
16	Maintenance & dredging plan for the boat launch and federal navigation channel	Ongoing	1	USACE	Federal, State, Local, Private, Grants	
17	LaSalle's Landing trail & boardwalk sections	Ongoing	1	Town of Penfield & Irondequoit, State	Federal, State, Local, Private, Grants	

IRONDEQUOIT BAY HARBOR MANAGEMENT PLAN

18	Education and signage program	Ongoing	1	IBCC, Towns, County, Water Education Collaborative	Federal, State, Local, Private, Grants	
19	Public waterfront park on the Webster Sandbar	Long Term	1	Town of Webster	Federal, State, Local, Private, Grants	
20	Harbormaster station & vessel	Long Term	1	IBCC, Towns, County		
21	Establish a coordinated permit process for installation of ice prevention systems (including warning notices) to be enforced by Harbormaster.	Short Term	2	IBCC, Towns	In-kind	
22	Irondequoit Bay bluff erosion control pilot project	Short Term	2	MCSWCD, MCDPD, Towns of Webster and Penfield	Grant	
23	"Friends of the Bay" stewardship organization	Short Term	2	IBCC, Towns, County	Private, Grants	
24	Policy 4h--Develop a Bay-wide emergency response plan	Short Term	2	Towns, County, State, Federal agencies	Grants	
25	Sewerage systems for the entire Bay area--based on study conducted by Monroe County (economically feasible for all but 45 units located in difficult areas).	Ongoing	2	Towns/Private developers	NYS DEC's Revolving Loan Program	
26	Sea Breeze boardwalk and public dock	Long Term	2	Town of Irondequoit	Federal, State, Local, Private, Grants	
27	Irondequoit Bay Park master plans	Long Term	2	MC Parks	In-kind	
28	Maintenance & dredging plan for the North Harbor Area	Long Term	3	Towns	Federal, State, Local, Private, Grants	
29	Irondequoit Bay hiking trail	Long Term	3	Towns, County, IBCC	Federal, State, Local, Private, Grants	
30	Newport Cove Park Plan	Long Term	3	Town of Irondequoit	State and Town	
31	New York State Department of Transportation overlook master plan	Long Term	3	State DOT, IBCC	State, Federal	
32	Designation as State Heritage Area/Great Lakes or similar designation--supports regional & National significance as an environmental, cultural, and recreational resource (Policy 1a)	Long Term	3	IBCC, State	n/a	
33	Water taxi/Shuttle stops	Long Term	3	Private	Private	

Figure 1. Boat storage market absorption prediction



APPENDIX A: BIBLIOGRAPHY

Allen, Michael and Sanderson, Matthew. 1994. **Survey of Migratory Raptors Near Irondequoit Bay, Monroe County, NY During the spring of 1993.**

American Society of Civil Engineers. 1994. **Planning Design Guidelines for Small Craft Harbors**, ASCE Manuals and Reports on Engineering Practice No. 50, ASCE, New York, NY.

Bannister, T.T. and R.C. Bubeck. 1978. Limnology of Irondequoit Bay, Monroe County, New York in J.A. Bloomfield (ed.) **Lakes of New York State-Volume 2**. Academic Press, New York, NY.

Barringer, F., 1982, *Coastal Splendors on a Scale from 1 to 100*. **The Washington Post**. Jan 15, 1982, p. AB.

Beelick, K. 1997. **Zooplankton and Planktivorous Fish Distribution with Regards to Dissolved Oxygen in Irondequoit Bay During the summer 1997**. M.S. Dissertation, Cornell University, Ithaca, NY.

The Cavendish Partnership. 1999. **The Sea Breeze Peninsula Revitalization Plan**. Town of Irondequoit, New York.

Coon, W.F. 1996. **Hydrology, Sedimentology, and Biology of Ellison Park Wetland at the Mouth of Irondequoit Creek near Rochester, NY**. USGS Water Resources Investigation Report 96-4269, USGS, Ithaca, NY.

Cooper, J. undated, believed 1984. **A Gross Overview of Fish and Wildlife Resources of Irondequoit Bay**. NYS DEC Region 8 Office, Avon, NY.

Cornell Cooperative Extension, NYS silviculture, **Best Management Practices and Guidelines**.

Dickinson, N. 1983. **Physiological Zones of Southern and Western New York**. New York State Department of Environmental Conservation.

Exotic Pest Council. 1996. **Invasive Nonindigenous Plants**. American Horticultural Society.

F-E-S Associates. May 1992. **Draft Environmental Impact Statement, Willow Point Bayfront Recreation Area, Town of Webster**. Prepared for the Town of Webster Planning Board, Webster, NY.

Government of Canada. 1985. **Guidelines for Harbor Accommodation**. Small Craft Harbors Directorate, Environment Canada, Ottawa.

Genesee Finger Lakes Regional Planning Board. 1969. **Physiographic Features, Regional Inventory and Analysis**. Genesee Finger Lakes Regional Planning Board.

Hart, T. and Capobianco, G. 1991. **Coastal Fish and Wildlife Habitat Rating Form, Irondequoit Bay and Creek.** New York State Department of State Division of Coastal Resources and Waterfront Revitalization.

Haynes, J.M. and Buttner, J.K. 1997. **Indicators of Change in Water Quality and Environmental Health in the Irondequoit Creek Wetland Complex, Final Report:** SUNY Brockport), and Monroe County Department of Health.

Haynes, J.M. and Buttner, J.K. 1997. **Macro invertebrate Survey, Sampling Strategy and Biotic Index for the Irondequoit Creek Wetland: Data Report and Preliminary Analysis** SUNY Brockport), and Monroe County Department of Health.

J.B. Higgins and Associates. 1990. **Cultural Resources Survey of Irondequoit Bay Outlet Crossing.** Monroe County, NY.

Irondequoit Bay Coordinating Committee. 1985. **Environmental Objectives and Development Management Measures.** Monroe County, Rochester, NY.

Irondequoit Bay Monitoring Committee and Monroe County Department of Planning and Development. September 1992. **Draft Irondequoit Bay Plan, 1992, Environmental Setting and Analysis.** Monroe County Department of Planning, Rochester, NY.

Irondequoit Bay Policy Committee and Monroe County Planning Department. 1974. **Irondequoit Bay Plan.** Monroe County Planning Department, Rochester, NY.

Jackivicz, T.P. and L.H. Kuzminski. 1973. The effects of the interaction of outboard motors with the aquatic environment - A review, **Environmental Research**, 6: 436-454.

Johnston, W.H. and E.A. Sherwood. 1996. **Water Resources of Monroe County, New York, Water Years 1984-88 with Emphasis on Water Quality in the Irondequoit Basin.** USGS Water Resources Investigation Report 96-4054, USGS, Ithaca, NY.

Jones, Scott. 1999. Personal communication. NYS DEC.

Kaplan, S. 1977. *Some Methods and Strategies in the Prediction of Preference*, IN: **Landscape Assessment: Values, Perceptions and Resources.** Dube, Brush and Fabos, Stroudsborg, ed., pp. 118-119, PA: Dowden, Hutchinson and Ross.

LaBella Associates. 1997. **Conceptual Design Report for Boardwalks.** Prepared for the Towns of Irondequoit and Penfield.

Lane, Gene. 1988. **Angler Effort and Resultant Catch of Warmwater Sport Fish from Irondequoit Bay in 1985 as Reported by Cooperators.** NYS DEC.

Lane, Gene. 1986. **NYS DEC 1986 Lake Ontario Committee Report: The Importance of Coves - Wetlands to the Irondequoit Bay Fish Community, and Some Parameters Associated With Its Populations** NYS DEC Inland Fisheries Unit.

- Lane, Gene. (Undated, quotes material from 1993) **The Importance of Coves – Wetlands to the Irondequoit Bay Fish Community.** NYS DEC and Great Lakes Fisheries Commission.
- Litton, R.B. Jr. 1972. *Aesthetic Dimension of the Landscape*. Pp. 262-291 In: Krutilla J.V. (ed.) **Natural Environments.** John Hopkins University Press, Baltimore, MD.
- Litton, R.B. Jr., 1982. *Visual Assessment of Natural Landscapes*. Pp. 97-113, IN: Sadler, B. and A.A. Carlson, (eds.) **Environmental Aesthetics: Essays in Interpretation.** Western Geographic Series Vol. 20, Dept. of Geography, University of Victoria, Victoria, B.C.
- McKinney, Robert G. **Breeding Birds of Irondequoit Bay Wetlands.** Personal communication 2/99 (prepared for USGS/Monroe County Health Department publication titled “Hydrology, sedimentology and biology of Ellison Park wetland at the mouth of Irondequoit Creek near Rochester, New York”).
- Mitchell, R. & Sheviak, C. 1981. **Rare Plants of New York State.** New York State Museum.
- Monroe County Department of Engineering. 1988. **Irondequoit Bay Local Collector Sewer Study.** Monroe County Department of Engineering in cooperation with D.D. Day Engineering, P.C. Rochester, NY.
- Monroe County Department of Planning and Development. 1990. **Waterfront Recreation Opportunities Study.** Rochester, NY.
- Monroe County Environmental Health Laboratory. 1984. **Irondequoit Bay Phase I Clean Lakes Project Summary.** Monroe County Health Department, Rochester, NY.
- Monroe County Environmental Health Laboratory. 1991. **Irondequoit Bay Phase II Clean Lakes Project Final Report.** Monroe County Health Department, Rochester, NY.
- Monroe County Environmental Management Council. 1996. **Preservation of Environmentally Sensitive Areas (PESA) in Monroe County.** Rochester, NY.
- Monroe County Water Quality Management Agency. 1986. **Policy Report: Proposed Approach for Water Quality Management in the Irondequoit Basin.** Rochester, NY.
- New York Guidelines for Urban Erosion and Sediment Control. 1997
- New York Natural Heritage Program. Dec. 1998.
- NYS Department of Environmental Conservation. 2001. **New York State Stormwater Management Design Manual.** NYS DEC, Albany, NY.
- NYS Department of Environmental Conservation. 1997. **New York Guidelines for Urban Erosion and Sediment Development.** NYS DEC, Albany, NY.
- NYS Department of Environmental Conservation. 1993. **Reducing the Impacts of Stormwater Runoff from New Development.** NYS DEC, Albany, NY.

- NYS Department of State. 1996. **The New York State Clean Vessel Act Plan**. NYS Department of State in cooperation with the NYS Department of Environmental Conservation, Albany, NY.
- NYS Office of Parks, Recreation, and Historic Preservation. 1983. **New York Statewide Comprehensive Recreation Plan**. Albany, New York.
- Pearce, S.R. and N.M. Waters. 1983. **Quantitative Methods for Investigating the Variables that Underlie Preference for Landscape Scenes**. *Canadian Geographer* 27(4): 328-344.
- O'Brien and Gere Consulting Engineers. 1983. **Nationwide Urban Runoff Program, Irondequoit Basin Study Final Report**. Monroe County Health Department, Rochester, NY.
- Reschke, C. 1986 **Natural and Cultural Ecological Communities of New York State**. New York State Natural Heritage Program.
- Smith, C. & Lavett. 1985. **The Inland Fishes of New York State**. New York State Department of Environmental Conservation.
- State of California Department of Boating & Waterways. 1984. **Layout and Design Guidelines for Small Craft Berthing Facilities**. Sacramento, CA.
- State of Michigan Department of Natural Resources. Undated. **Design Guide for Boat Launch Facilities**. Michigan DNR, Waterways Division, Ann Arbor, MI.
- Taddiken, A. 1985. **Irondequoit Bay Management System/Framework Plan: Water Quality and Resource Management**. Center of Governmental Research, Inc. for Monroe County, Rochester, NY.
- Terrance J. Dewann & Associates; Bristol Design & Planning. 1990. **Scenic Inventory - Mainland Sites of Penobscot Bay**. Critical Areas Program, Maine State Planning Office. Yarmouth, Maine; Canandaigua, New York.
- The Nature Conservancy. 1995. **Migrant Songbirds Along Lake Ontario's Shore**.
- Town of Irondequoit. 1988. **Local Waterfront Revitalization Program**.
- Town of Penfield. 1991. **Local Waterfront Revitalization Program**.
- Town of Webster. 1991. **Growth Management Plan**.
- Town of Webster. 1997. **Local Waterfront Revitalization Program**.
- Town of Webster. 2000. **Comprehensive Plan**.
- Towns of Irondequoit and Penfield, NY. 1997. **LaSalle's Landing Development Plan**. LaBella Associates, Stuart I. Brown Associates, RLB Planning Group, Rochester, NY.

US Army Corps of Engineers. 1979. **Phase I Design and Draft Environmental Impact Statement.** Buffalo District, Buffalo, NY.

US Army Corps of Engineers. 1992. **Finding of No Significant Impact and Environmental Assessment, Maintenance Dredging, Irondequoit Bay.** Buffalo District, Buffalo, NY.

US Army Corps of Engineers. 1984. **Hydraulic Design of Small Boat Harbors.** Engineer Manual 1110-2-1615. Washington, DC.

USDA Soil Conservation Service. 1973. **Monroe County, New York Soil Survey.** USDA Soil Conservation Service/ Cornell University Agricultural Experiment Station.

USDA Forest Service. 1974. **The National Forest Landscape Management** – Volume 2 Chapter 1: The Visual Management System. USDA Agricultural Handbook No. 434, U.S. Government Printing Office. Washington, D.C.

USGS/Monroe County Health Department. 1997. **Hydrology, Sedimentology and Biology of Ellison Park Wetland at the Mouth of Irondequoit Creek Near Rochester, New York.** USGS Water Resources Investigations Report 96-4269.

US Fish and Wildlife Service. 1985. **A Spring Fisheries Survey of Irondequoit Bay, Monroe County, NY.** USFW Division of Ecological Services and NYS DEC Division of Wildlife.

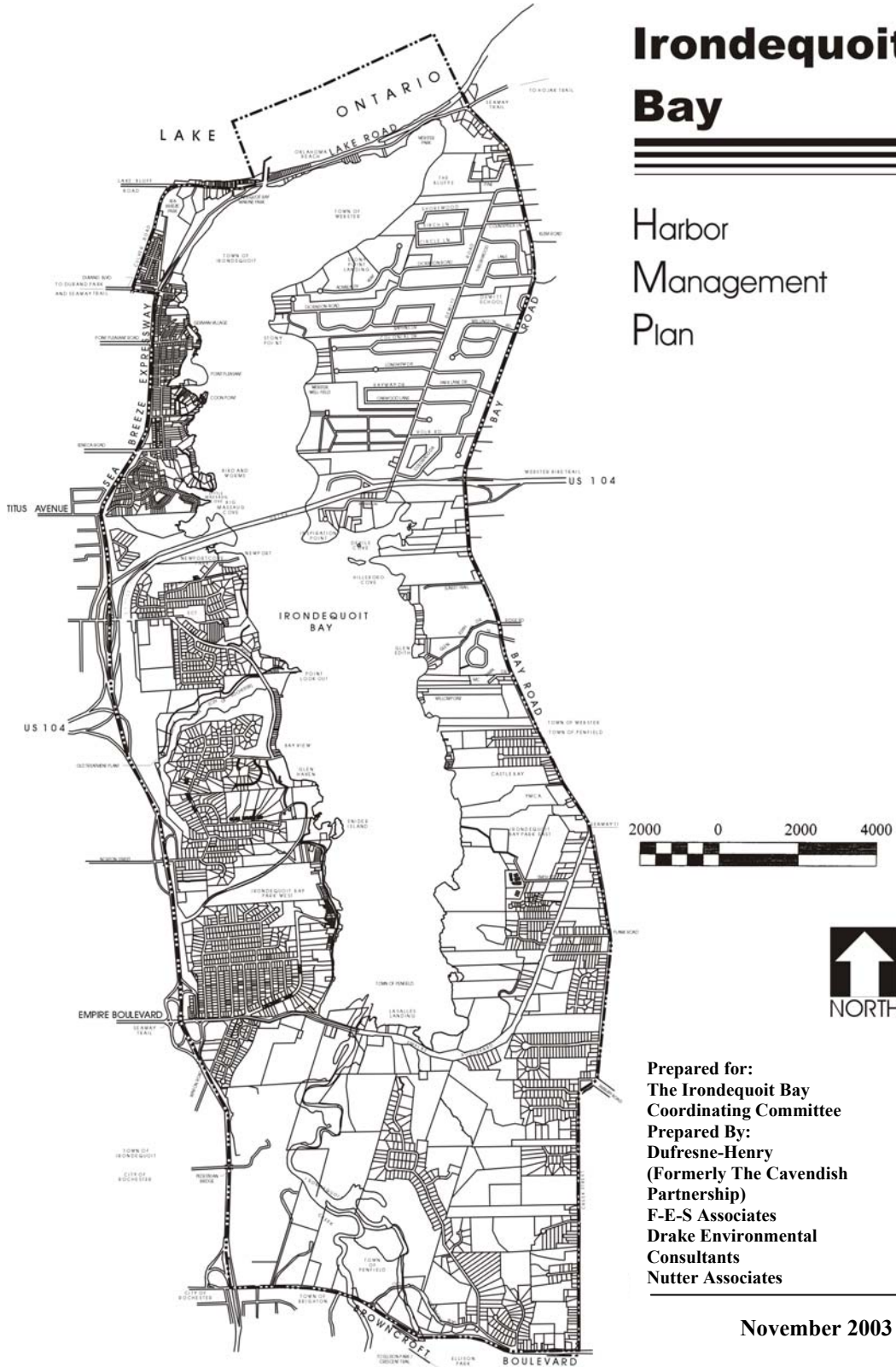
Young, R. and Burton, R., 1993, **Bluff Erosion Along Irondequoit Creek in Linear Park:** Rochester Committee for Scientific Information Bulletin 315, 10 p.

Young, Stephen. 1998. **New York Natural Heritage Program Rare Plant Status list.** NYS DEC.

Exhibits 1 through 15 follow

Irondequoit Bay

Harbor Management Plan



Prepared for:
The Irondequoit Bay
Coordinating Committee
Prepared By:
Dufresne-Henry
(Formerly The Cavendish
Partnership)
F-E-S Associates
Drake Environmental
Consultants
Nutter Associates

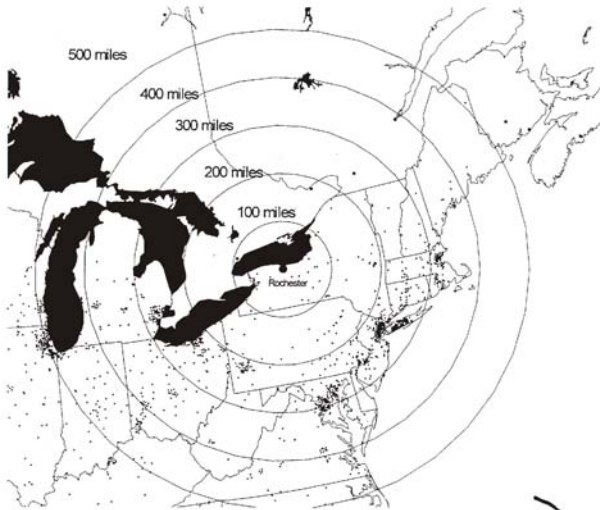
November 2003

EXHIBIT 1

Harbor Management Area Boundary

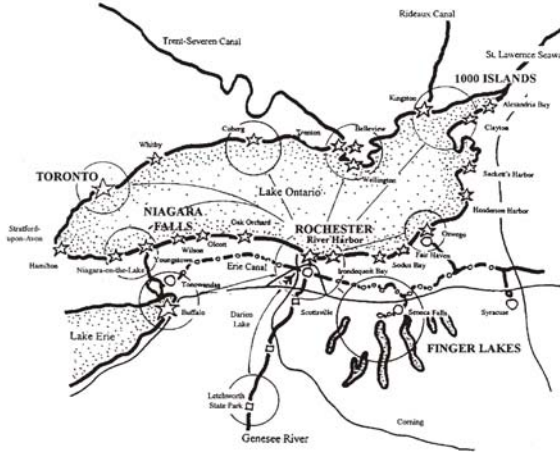
Irondequoit Bay

Harbor Management Plan



Approximate population around Rochester
 100 miles - 6 million
 200 miles - 13.5 million
 300 miles - 59 million
 400 miles - 86.5 million
 500 miles - 105 million

Source: 1990 U.S. Census Data



KEY	
	Waterways & Linkages
	"Fast & Easy Link"
	"Easy Link"
	Full Gateways
	Gateways



Prepared for:
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 Prepared By:
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November 2003

EXHIBIT 2

Regional Context

Irondequoit Bay



Harbor Management Plan

Irondequoit Bay Basin



————— Irondequoit Bay Drainage Basin Boundary
- - - - - Subbasin Boundary

SOURCE: MONROE COUNTY DEPARTMENT OF PLANNING & DEVELOPMENT, 1992



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Regional Watershed

EXHIBIT 3

Irondequoit Bay

Harbor Management Plan

Legend



Major Soils Types

- AtF3 - Arkport
- AnA, AnB - Alton
- CIA, CIB - Collamer
- CoB, CoD3 - Colonie
- HIB - Hilton
- HuB - Hudson



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November 2003

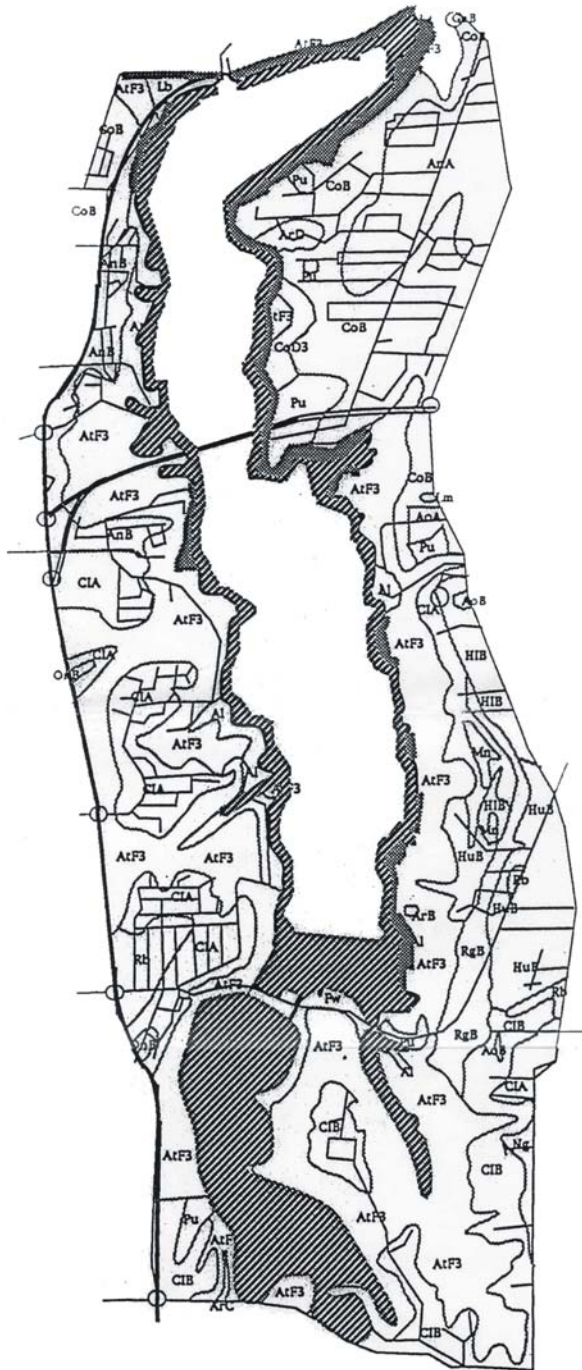
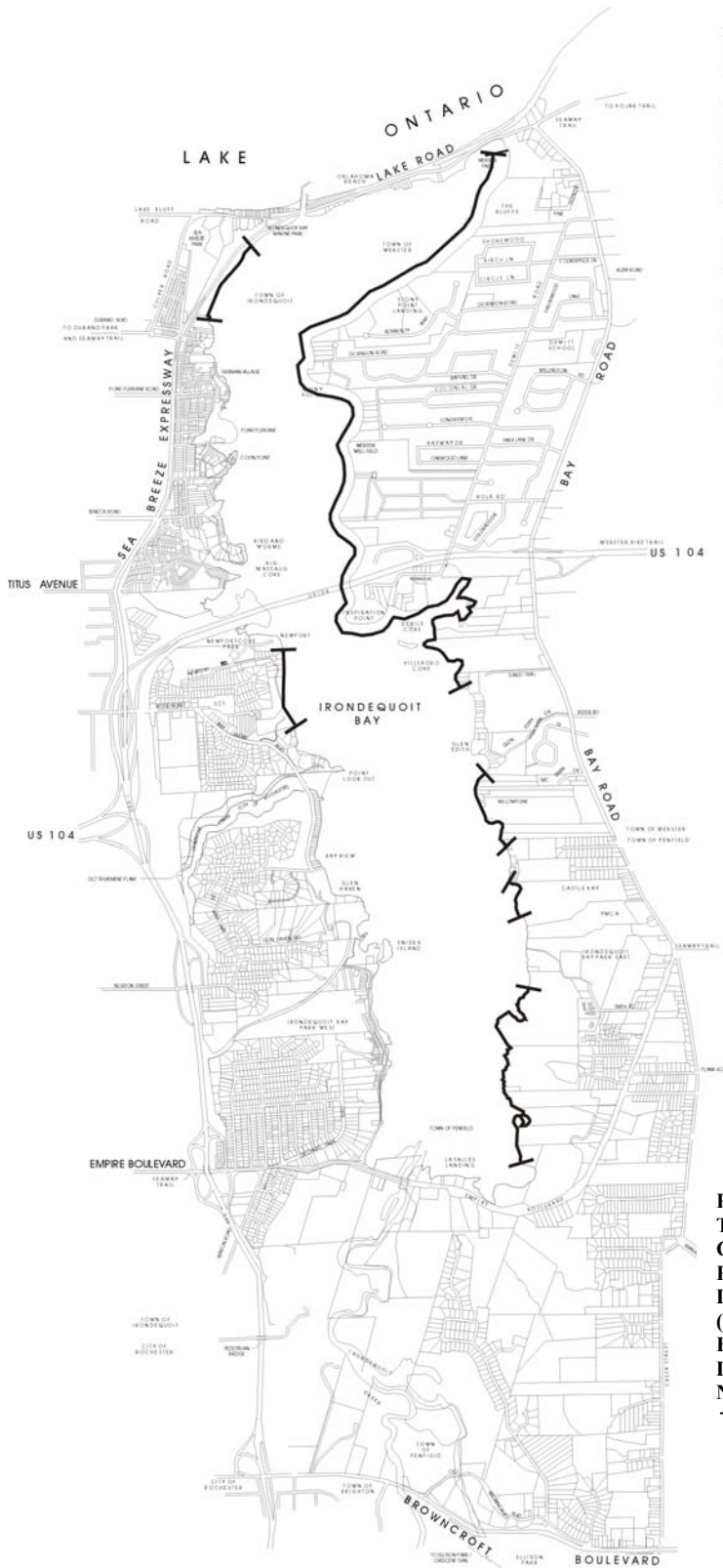


EXHIBIT 4

Soils and Wetlands



Irondequoit Bay

Harbor Management Plan



Prepared for:
The Irondequoit Bay
Coordinating Committee
Prepared By:
Dufresne-Henry
(Formerly The Cavendish Partnership)
F-E-S Associates
Drake Environmental Consultants
Nutter Associates

November 2003

EXHIBIT 5

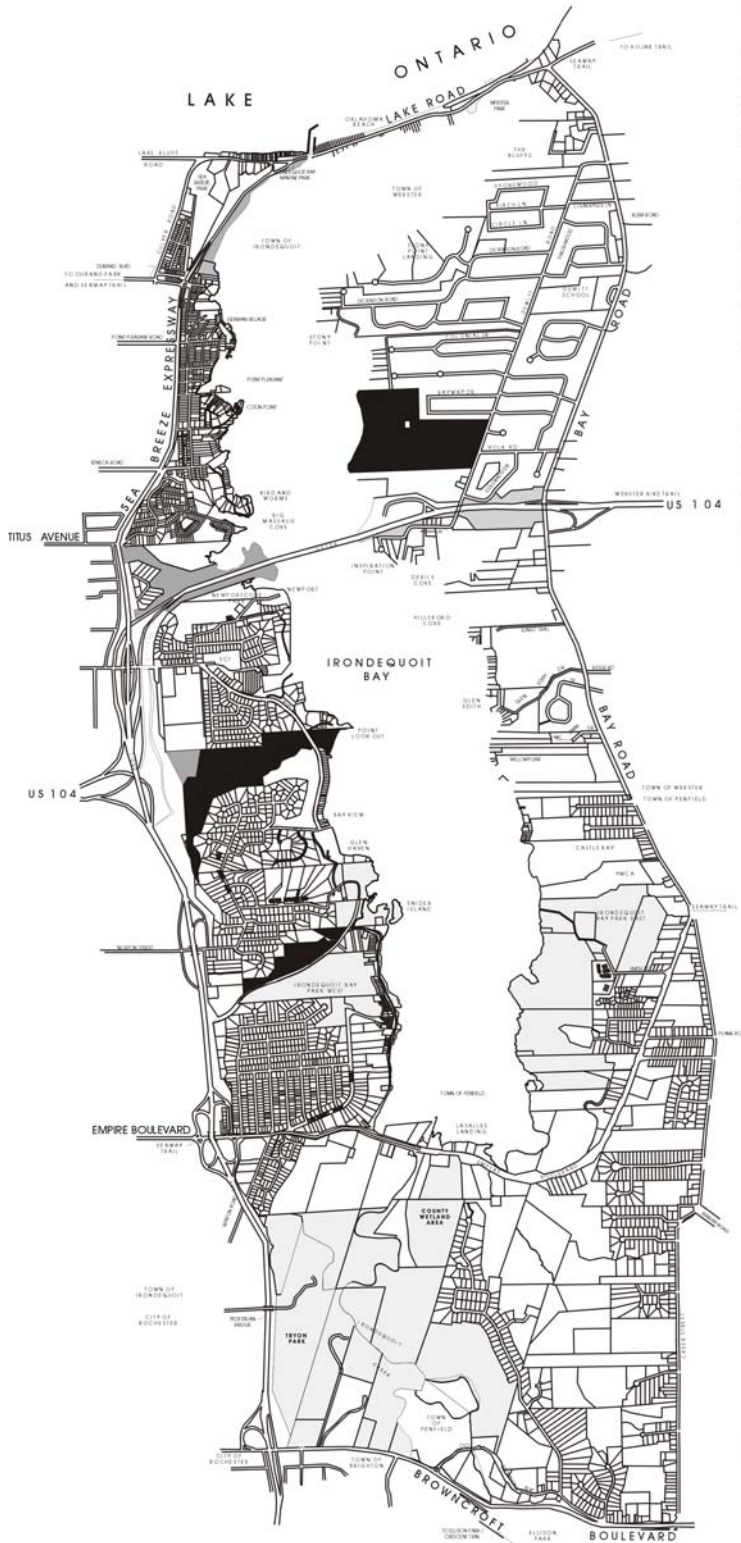
Natural Protective Feature Areas

Irondequoit Bay

Harbor Management Plan

Legend

- Monroe County Park Land
- New York State Park Land
- Other Public Land



Prepared for:
The Irondequoit Bay
Coordinating Committee
Prepared By:
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(Formerly The Cavendish
Partnership)
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Drake Environmental Consultants
Nutter Associates

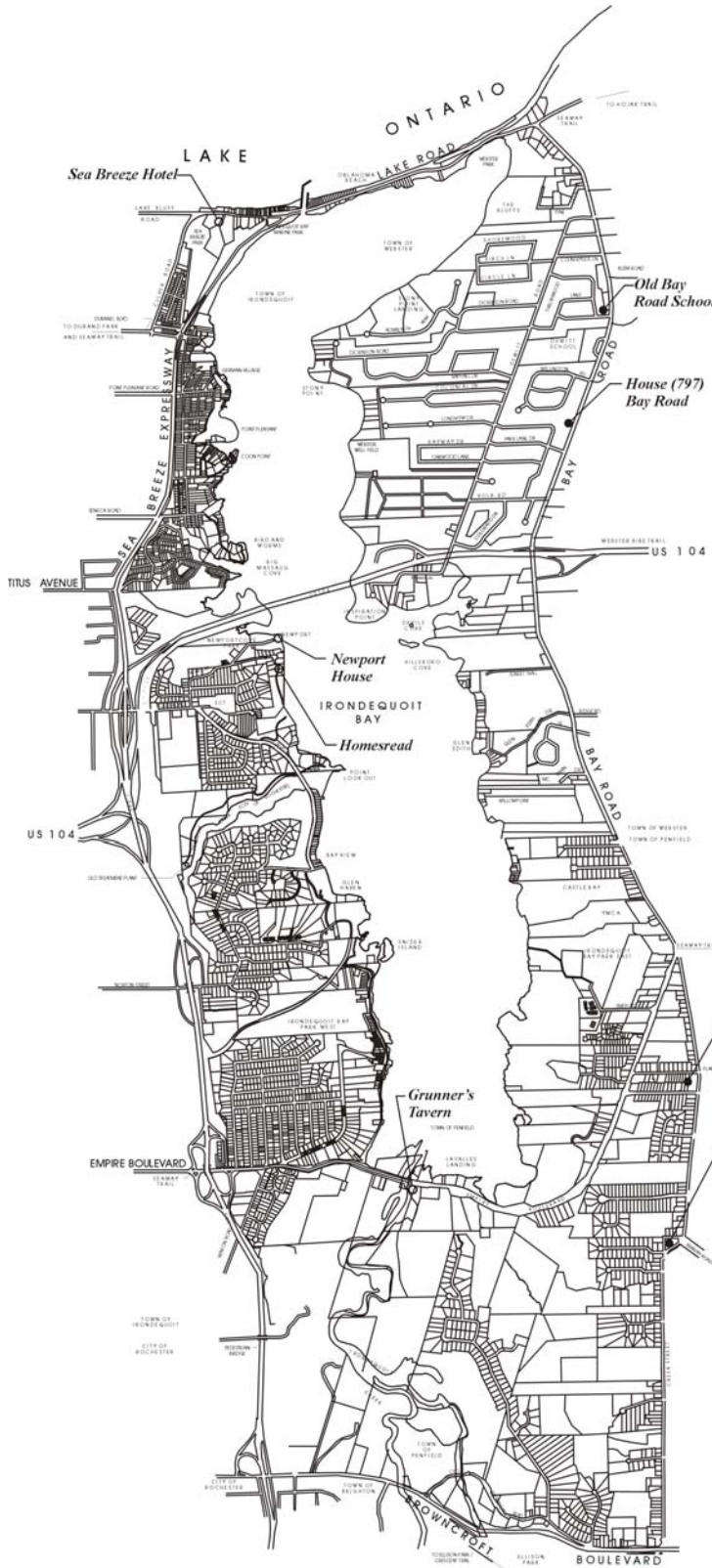
November 2003

EXHIBIT 6

Recreational Facilities & Public Access

Irondequoit Bay

Harbor Management Plan



Legend

- State Sites
- Local Sites

SOURCE: MONROE COUNTY DEPARTMENT OF PLANNING & DEVELOPMENT, 1992



Prepared for:
The Irondequoit Bay Coordinating Committee
 Prepared By:
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 (Formerly The Cavendish Partnership)
F-E-S Associates
Drake Environmental Consultants
Nutter Associates

November 2003

EXHIBIT 7

Historic Sites

Irondequoit Bay

Harbor Management Plan

Legend

- Anchorage
- Swimming
- Fishing
- Canoeing
- Sailboat Racing
- Jet Skiing
- Congested Boating
- Water Skiing
- Moorings
- Boat Traffic Flow

SOURCE: MONROE COUNTY DEPARTMENT OF PLANNING & DEVELOPMENT



Prepared for:
The Irondequoit Bay Coordinating Committee
 Prepared By:
Dufresne-Henry
 (Formerly The Cavendish Partnership)
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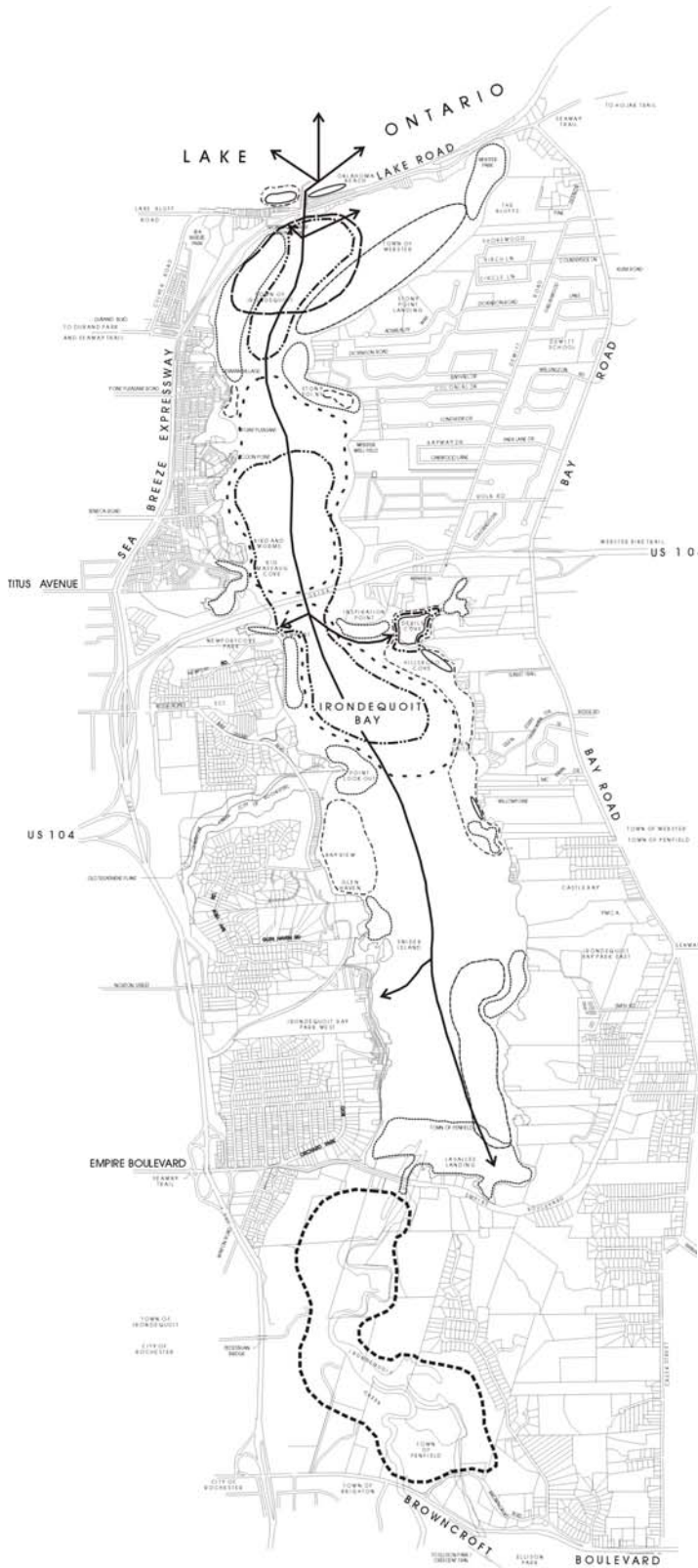
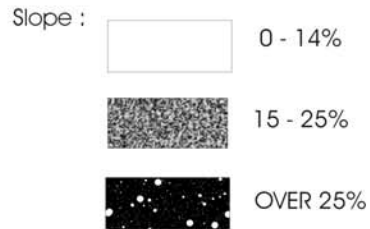


EXHIBIT 8

Water Surface Use

Irondequoit Bay

Harbor Management Plan



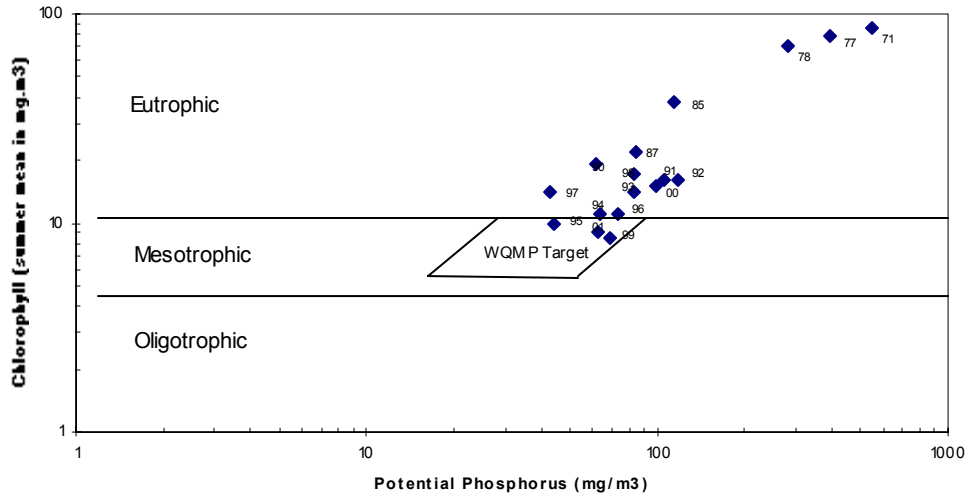
Prepared for:
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November 2003

Slopes and Water-depth

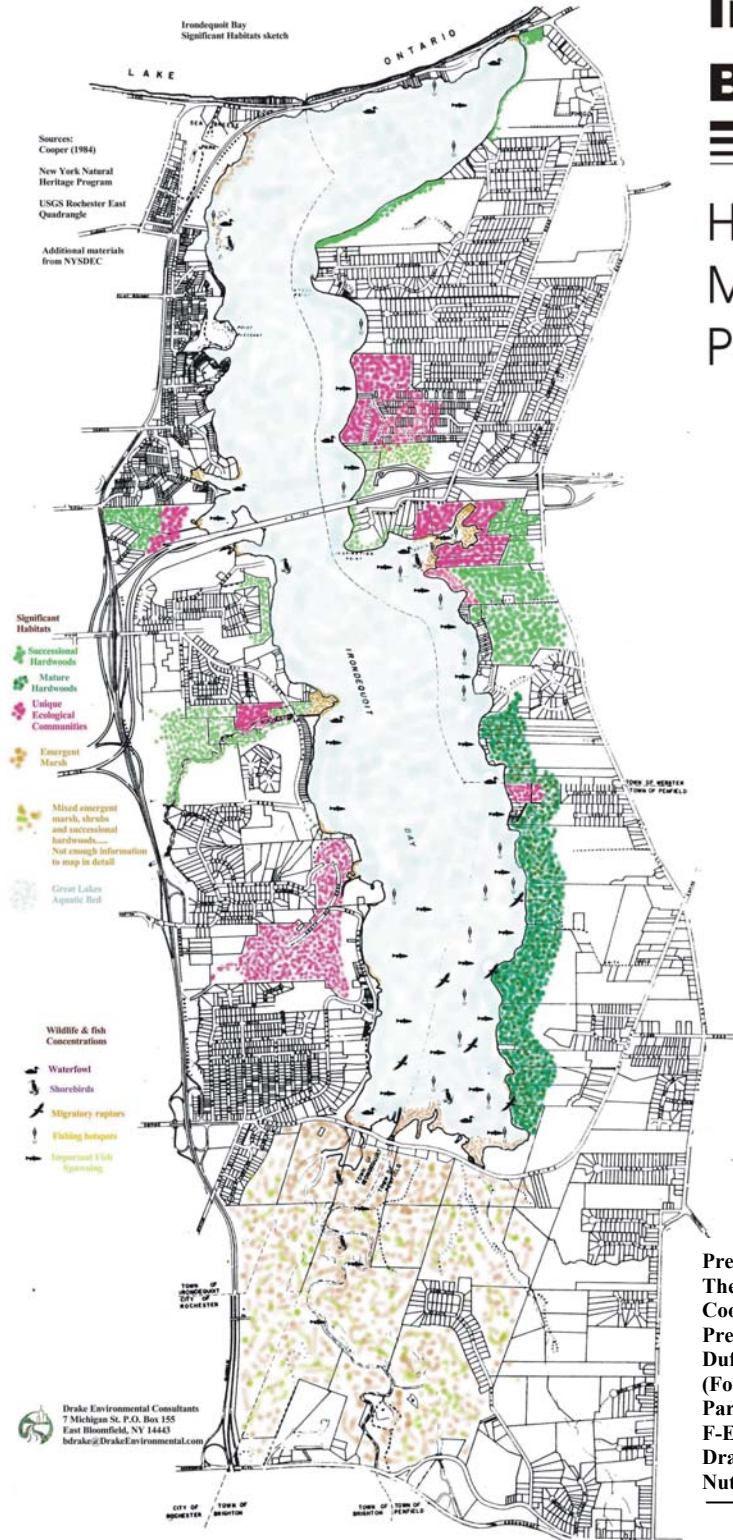
EXHIBIT 9

Exhibit 10. Irondequoit Bay Improvements in Trophic State 1971-2001



Irondequoit Bay

Harbor Management Plan



Prepared for:
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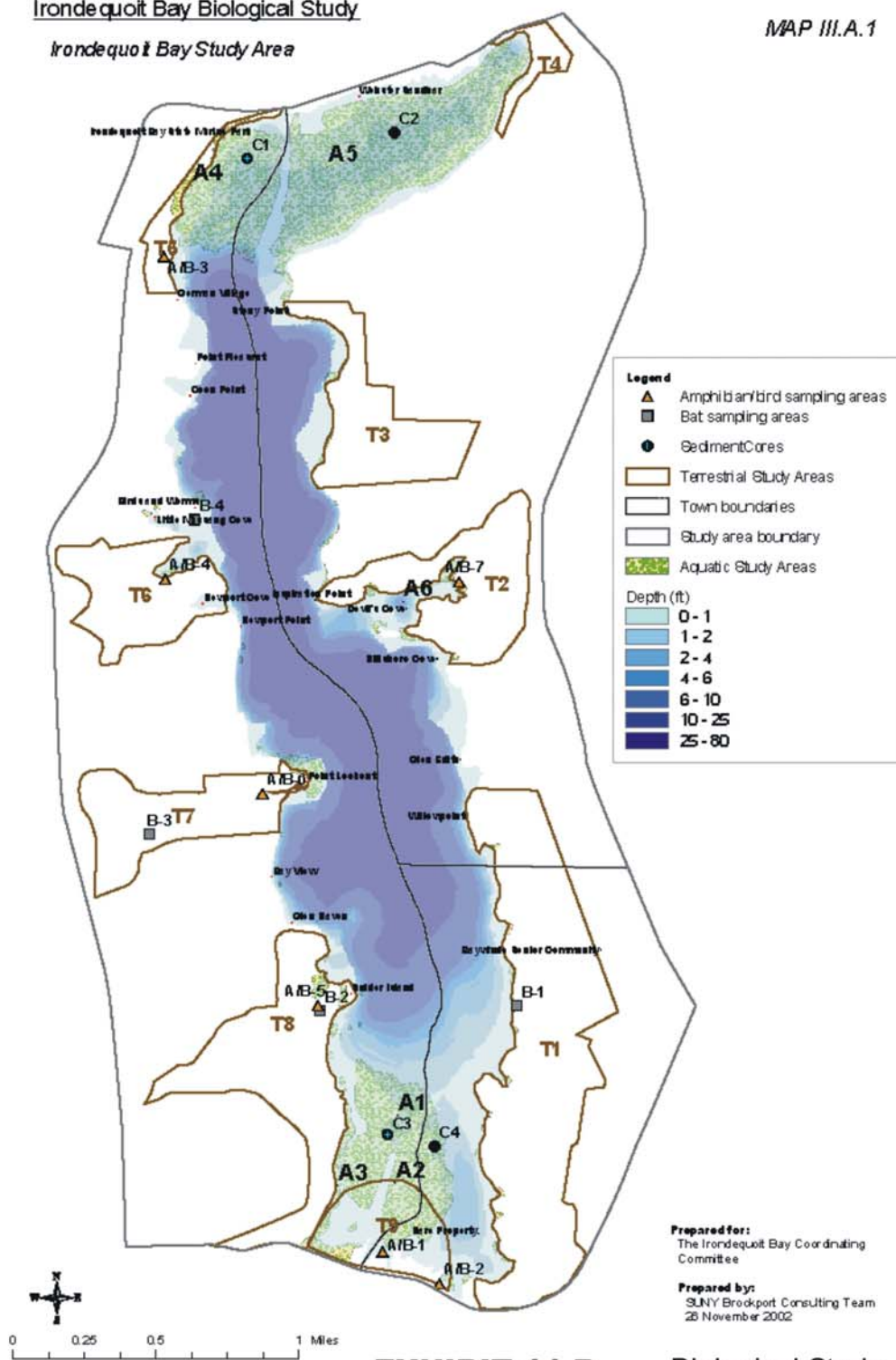
November 2003

EXHIBIT 11A

Significant Habitats & Natural Areas

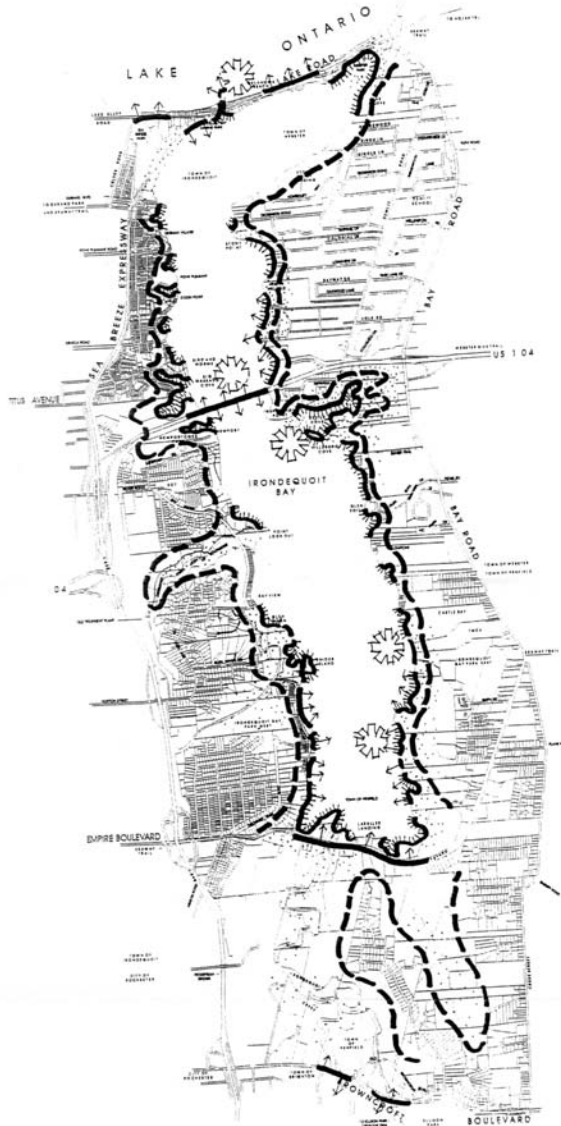
Irondequoit Bay Biological Study

MAP III.A.1



Irondequoit Bay

Harbor Management Plan



Legend

- Landform
- Shoreline Configuration
- Scenic Features
- Public Views to Water
- High Value Landscape Character



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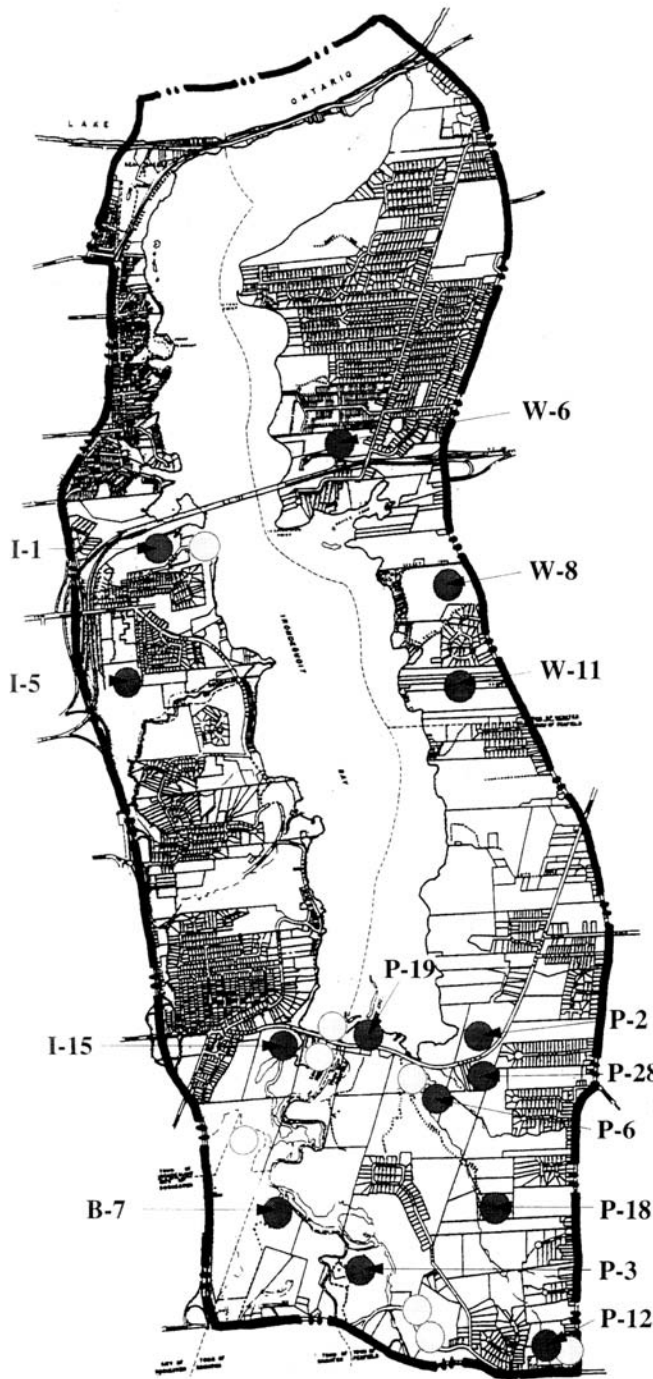
November 2003

EXHIBIT 12

Visual Resources

Irondequoit Bay

Harbor Management Plan



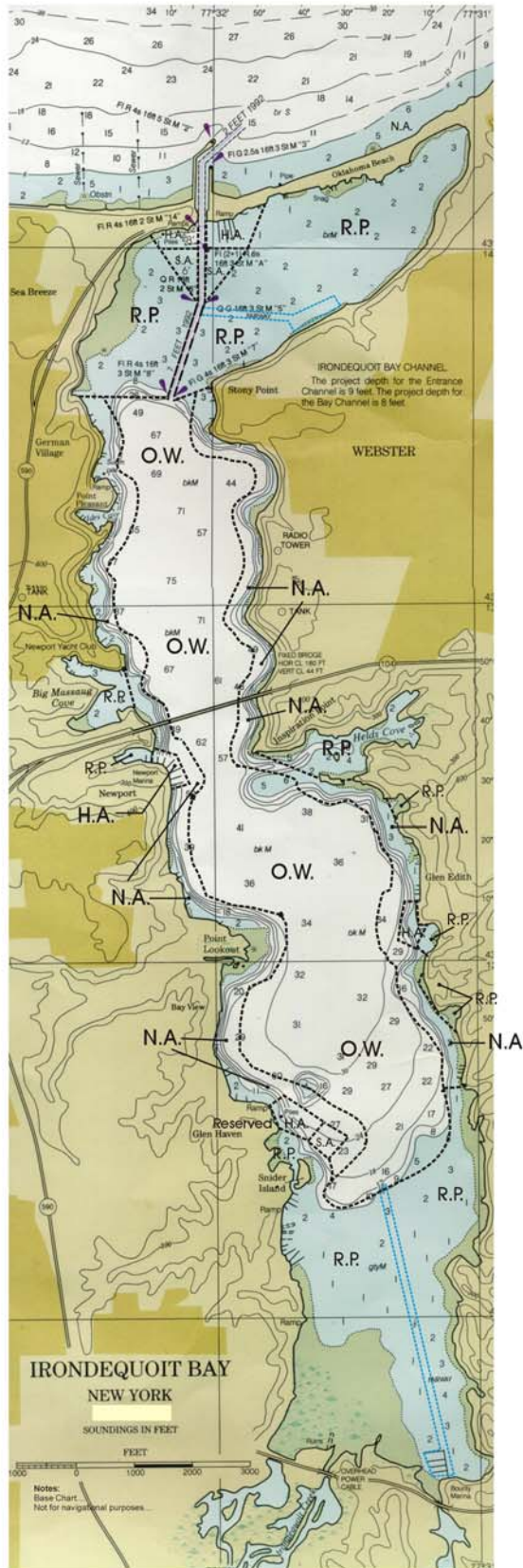
-  Confirmed Wastes Site
-  Suspected Wastes Site



Prepared for:
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Prepared By:
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(Formerly The Cavendish
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Consultants
Nutter Associates

EXHIBIT 13

November 2003
Confirmed & Suspected Waste Sites



Irondequoit Bay

Harbor Management Plan

KEY

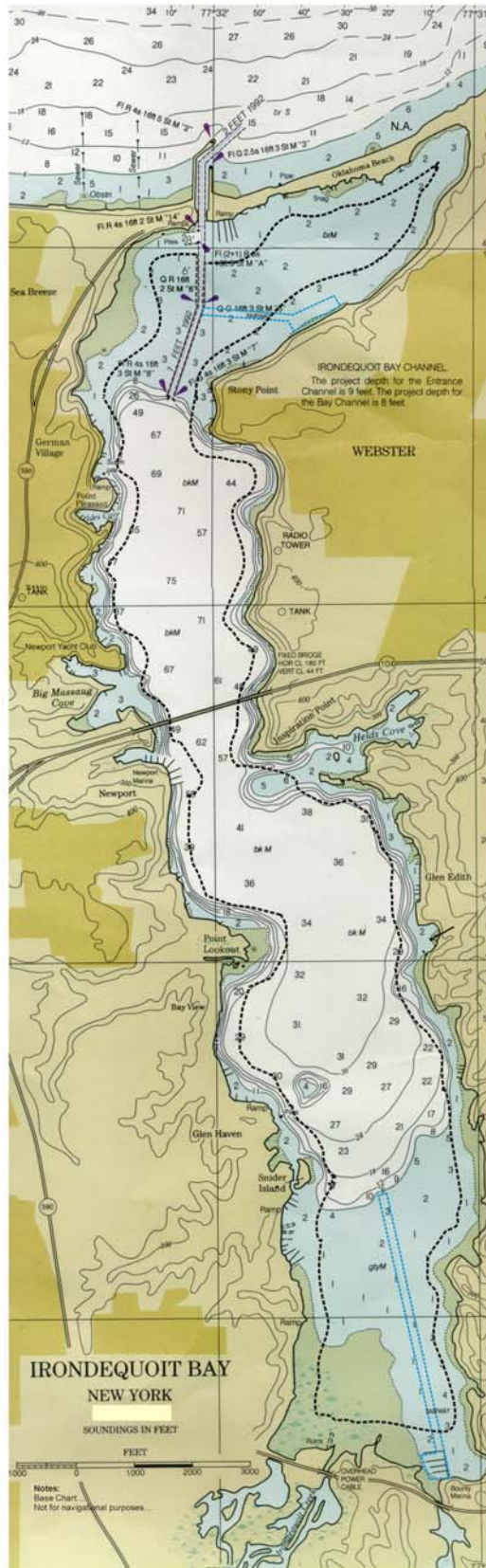
- H.A. HARBOR AREA
- S.A. SPECIAL ANCHORAGE AREA
- R.P. RESOURCE PROTECTION AREA
- N.A. NEAR SHORE AREA
- O.W. OPEN WATER AREA
- NAVIGATION CHANNEL
- PRE-EXISTING NON-CONFORMING FAIRWAY



Prepared for:
**The Irondequoit Bay
 Coordinating Committee**
 Prepared By:
**Dufresne-Henry
 (Formerly The Cavendish
 Partnership)
 F-E-S Associates
 Drake Environmental
 Consultants
 Nutter Associates**

November 2003

EXHIBIT 14
 WATER SURFACE USE MAP



Irondequoit Bay

Harbor Management Plan

KEY

Boat Speed Limit (NYS Navigation Law):

Existing-
 25 mph and no wake, with a maximum of 5 mph, in the outlet channel or within 200 feet of the shore, channel, a dock, pier, raft or float, or an anchored or moored vessel. (unless engaged in starting or dropping off a waterskier)

Proposed (Approximate location) -----
 25 mph and no wake, with a maximum of 5 mph, in the outlet channel or within 300 feet of the shore, channel, a dock, pier, raft or float, or an anchored or moored vessel. (unless engaged in starting or dropping off a waterskier)



Prepared for:
 The Irondequoit Bay Coordinating Committee

Prepared by:
 DUFRESNE HENRY

Exhibit 15
 SPEED LIMIT MAP
 2003

APPENDIX C: IRONDEQUOIT BAY HARBOR MANAGEMENT LAW

**Local Law No. 2 of 2008
The Town of Penfield
Irondequoit Bay Harbor Management Law**

Hearing: 4/23/08

Adopted: 9/17/08

Effective: 9/22/08

**Prepared by the
Irondequoit Bay Coordinating Committee
Technical Staff**

Town of Penfield
Irondequoit Bay Harbor Management Law

ARTICLE I, General Provisions

- A. Purpose
- B. Jurisdiction
- C. Definitions
- D. Administration
 - 1. Harbor Management Committee
 - 2. Harbormaster

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 - 3. Speed Limit/Wake Responsibility
 - 4. Dredging
 - 5. Hazards to Navigation/Abandoned Vessels
 - 6. Marine Maintenance and Environmental Protection
 - 7. Water Skiing
 - 8. Personal Watercraft
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 - 2. Near Shore Areas
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 - c. Standards for Dry Storage Facilities

3. Harbor Areas
 - a. Standards for Public and Private Docks
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- C. Rules, Regulations and Permit Procedures
 1. Public Docks and Moorings – General Provisions
 2. Public Docks
 3. Public Moorings
 4. Private Docks
 5. Private Moorings
 6. Floats/Rafts

ARTICLE IV, Enforcement, Violations and Penalties

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- B. Violations
- C. Revocation of permits and privileges
- D. Penalties for Offenses

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Exhibit A: Water Surface Use Map

**ARTICLE I
General Provisions**

A. Purpose

1. The Town of Penfield accommodates a range of public and private waterfront uses and activities, including recreational and commercial boating, anchorage and mooring areas, marinas, and other maritime festivals, special events and regattas, charter vessels, sport fishing, small craft recreation, personal watercrafts, and swimming.
2. The purpose of this local law is to establish standards, requirements and procedures for the environmental protection of the Irondequoit Bay sensitive natural areas and resources; improve and protect its water quality for desired uses which emphasize a healthy aquatic ecosystem; ensure that development around the Bay occurs without impacting significant resources (e.g. environmental, historical, archeological, aesthetic features); regulate the operation of vessels and matters relevant to navigation and safety; minimize and resolve water surface use conflicts and conflicts among all users and stakeholders of the Bay; improve public access to diverse recreational opportunities on Irondequoit Bay and make it an integral part of local and regional tourism development efforts.

B. Jurisdiction

1. This local law is adopted pursuant to Section 46-a of the Navigation Law and Article IX(2)c of the State Constitution – Municipal Home Rule Law and Article 42, Section 922 of the NYS Executive Law, Waterfront Revitalization of Coastal Areas and Inland Waterways.

2. The provisions of this local law shall apply to all structures and activities on Irondequoit Bay within the corporate limits of the Town of Penfield and to a distance of one thousand five hundred (1,500) feet from the shore as described on the official Water Surface Use Map.
3. All activities conducted on Irondequoit Bay within the limits of the Town of Penfield shall also comply with the requirements of the Town of Penfield Ordinance relating to noise.

C. Definitions

As used in this local law, the following terms shall have the meanings indicated:

ANCHOR – Any weighted device used to secure a vessel temporarily to the harbor bottom.

AUTHORIZED TOWN OFFICIAL – Harbormaster, Building Inspector, Code Compliance Officer, Town Clerk or any other official designated by the Town Board.

BERTH -- See boat slip

BOAT RAMPS (LAUNCHES) – public and private facilities that may provide: boarding piers (sometimes called a courtesy pier, launch dock, pontoon or jetty) where boats are temporarily moored for embarking and disembarking, one or more (paved or unpaved) launch ramps that are sloped surface designed for launching and retrieving trailered boats and parking areas for boats and trailers.

BUBBLER/AERATION SYSTEM – A mechanical device designed to keep ice from forming around docks or docked vessels.

BOAT HOIST – Any mechanical device or structure used for the purpose of raising a boat out of the water and storing it on or off site.

BOAT SLIP – The area of any dock or pier or any other facility the purpose of which is the storage of one boat.

BOAT STORAGE – Any wet berth or dry berth facility used for the purpose of docking, mooring, or indoor or outdoor on-land storage (including racks and trailers) of marine vessels.

CHANNEL – Water area specifically reserved for unobstructed free-flow of vessels operating in Irondequoit Bay, as identified on the official Irondequoit Bay Harbor Management Plan Water Surface Use Map.

DECORATIVE STRUCTURE – Any waterside manmade structure (e.g. fountain, aerator, light, canopy), for use in enabling water dependent activities whose profile is visible above the surface of the water and is affixed in some way to the shore or the Bay bottom to hold its position.

DOCK – A structure that extends from the shoreline into the water designed to provide riparian access and/or securing of watercraft.

DREDGING – To dig or deepen a waterway by manual or mechanical means.

DRY STORAGE -- The vertical storage of boats in rack systems for in-and-out launching and retrieval of boats as well as winter storage. Dry stack racks can be located either outside or inside and are usually located on near a waterfront, often at a marina or boatyard. Dry stack storage facilities can stack boats from two to six levels high. Boats are loaded and unloaded from the racks using forklifts.

ENVIRONMENTAL PROTECTION OVERLAY DISTRICTS (EPODS) –Environmentally sensitive areas within the Town such as steep slopes, watercourses, floodplains, wetlands and woodlots where certain activities are regulated through a permit process.

FAIRWAY – Areas depicted on the Irondequoit Bay Harbor Management Plan Water Surface Use Map, an unmarked navigation way where previous dredging operations have created a channel to access dock facilities. (These channels are considered pre-existing, non-conforming uses in the Harbor Management Plan. Fairways function as overlay zones and are primarily designed to maintain clear paths of travel connecting berthing areas and destinations.)

FLOAT – A structure buoyant on the water surface, anchored to the underwater lands by cables or lines, and detached and independent of a dock or bulkhead, which provides an offshore surface for swimmers or other recreational, water-dependent purposes.

FLOATING HOME – Any vessel used, designed, or occupied as a permanent dwelling unit, business office, base of occupation, or private or social club of whatever nature, including but not limited to a structure constructed upon a barge primarily immobile and out of navigation which functions substantially as a land structure while the same is moored or docked in Irondequoit Bay.

HARBOR AREAS – Areas depicted on the Irondequoit Bay Harbor Management Plan Water Surface Use Map to provide public access, safe refuge, transient berthing and economic development opportunity. All designated Harbor Areas meet three primary location criteria including water depth, Waterfront Development District zoning and landside support (parking and utilities). Four Harbor Areas are designated on the Water Surface Use Map and include the North Harbor, the Center Harbor, Glen Edith and the South.

HARBOR MANAGEMENT COMMITTEE – A committee comprised of representatives from state, county and local agencies with permit and oversight jurisdiction on Irondequoit Bay.

HARBOR MANAGEMENT PLAN – A plan adopted by the Towns of Irondequoit, Penfield and Webster and approved by the New York State Secretary of State and composed of policies, goals, objectives and standards for harbor management within Irondequoit Bay.

HARBORMASTER – Appointed by the Town Boards of Irondequoit, Penfield and Webster, whose primary responsibility is the administration and enforcement of the Irondequoit Bay Harbor Management Plan and local laws pertaining to the management of Irondequoit Bay.

LIFT – See boat hoist.

MARINA – Any dock, pier, or other facility operated for profit, or to which public patronage is invited, providing moorings, dockage or other marine services primarily for power and sailing vessels and other watercraft.

MEAN LOW AND HIGH WATER LEVELS – The approximate average low water level or high water level for Irondequoit Bay, determined by the U.S. Army Corps of Engineers based on 1985 International Great Lakes Datum (IGLD). According to the New York State Department of Environmental Conservation, Division of Environmental Permits, the Mean High Water Level for Irondequoit Bay is 247.3 feet (75.4 m) and the Mean Low Water Level is 243.3 feet (74.2 m) above sea level.

MOORING – A device with its associated tackle, such as chains, floats, and other equipment, manufactured and used specifically for the long-term or transient securing of a vessel to the harbor bottom. This device typically consists of an anchoring weight (mushroom or other) which is placed on the bottom and is connected to a floating device (i.e. ball) cables, chains, or lines.

NAVIGATIONAL AID – A sign, buoy or floating object, buoyant or affixed to land or a structure, and possibly lighted or emitting a sound, that has been installed by a local, State, or Federal agency, or a private entity with the approval of such government agency, for the sole purpose of assisting in the safe operation of a vessel or identifying a way to port or other marine-related destination.

NAVIGATION CHANNEL – Depicted as the Outlet Channel on the Irondequoit Bay Harbor Management Plan Water Surface Use Map. This channel is considered a federal navigation channel, is identified with channel markers and extends from Stony Point through the Outlet to Lake Ontario. This navigation channel is regulated with a no-wake/five (5) mile per hour zone pursuant to the New York State Navigation Law.

NAVIGATION WAYS – Areas depicted on the Irondequoit Bay Harbor Management Plan Water Surface Use Map to ensure that travel is not limited or impacted by water surface use or structures and to ensure safe use of the Bay. Navigation Ways delineate the Navigation Channel and Fairways.

NEAR SHORE AREAS – Areas depicted on the Irondequoit Bay Harbor Management Plan Water Surface Use Map defined in this local law as being all areas within three hundred (300) feet of shore.

OPEN WATER AREA – Area depicted on the Irondequoit Bay Harbor Management Plan Water Surface Use Map not encumbered by any other designations. This area supports active recreational use.

PERMIT HOLDER – A person or entity granted a permit.

PERSONAL WATERCRAFT (PWC) – A vessel that uses an inboard motor powering a water jet pump as its primary source of motive power, such as Jet-skies[®], Wave-runners[®], Sea-doo[®], or hybrids thereof, and which is designed to be operated by a person sitting, standing or kneeling on the vessel.

PIER – a structure, usually wood or masonry, extending into the water, used as a landing place for boats and ships.

RAFT – See float.

RAFTING – Two or more boats anchored together on a temporary basis.

RAMP/RAIL SYSTEM – See boat hoist.

RECREATIONAL STRUCTURES – Structures such as slides and trampolines and their support systems.

RESOURCE PROTECTION AREAS – Areas depicted on the Irondequoit Bay Harbor Management Plan Water Surface Use Map associated with the presence of sensitive natural resources.

SEASONAL – The period from April 1st to December 1st of each calendar year.

SHORELINE – The mean high waterline (247.3 feet above the 1985 International Great Lakes Datum) for Irondequoit Bay at a given location that distinguishes between predominantly aquatic habitat and predominantly terrestrial habitat.

SPECIAL ANCHORAGE AREAS – The water areas designated on the Irondequoit Bay Harbor Management Plan Water Surface Use Map that are reserved specifically for the mooring of vessels.

TRANSIENT MOORING – Any public mooring utilized for short-term purposes.

VESSEL – All waterborne craft or other contrivance capable of being used as a means of transportation in the water, including seaplanes and personal watercraft.

VESSEL OWNER –The person or entity under whose name the vessel was last registered in accordance with the State Vehicle and Traffic Law or documented in accordance with the provisions of 46 U.S.C. Chapters 121-125, and in any other case the last known owner or the person who claims lawful possession of such vessel by virtue of legal title or equitable interest therein which entitles them to such possession.

WATER DEPENDENT USES – Any activity that can be conducted on, in, over or adjacent to a water body, because such activity requires access to water, and involves the use of water as an integral part of the activity.

WATER SURFACE USE MAP – An official map of the Irondequoit Bay water surface use as incorporated in the Irondequoit Bay Harbor Management Plan.

WAVE ATTENUATION DEVICE – A floating mechanism designed solely to diffuse wave energy to protect the shoreline and/or water-dependent improvements.

D. Administration

1. Harbor Management Committee

- a. The Town Board shall appoint a member and an alternate member to the Committee who shall represent a range of harbor interests, including but not limited to navigation and boating safety, commercial operations, recreational marinas, marine infrastructure, special events and maritime history. The Committee shall be composed of six voting members consisting of one representative from each of the Towns of Irondequoit, Penfield and Webster, appointed by their respective town boards; a representative of the County of Monroe appointed by the County Executive; a representative of the New York State Department of Environmental Conservation, appointed by the Regional Director; and the New York State Department of State appointed by the Secretary of State. The Harbormaster shall be a non-voting, ex-officio member of the Committee.

The Committee shall meet at least four times per year. Additional meetings may be scheduled to address issues of importance as deemed necessary.
- b. Committee members shall serve until they are replaced by the appointing authority. Vacancies shall be filled as necessary and in accordance with the initial appointment.
- c. The Chairperson shall be elected for the following year by the members of the Committee at the last meeting of each year.
- d. The Committee shall receive and review reports from the Harbormaster pertaining to recreational boating and marinas; navigation and safety; navigational aids; depth of water and dredging needs; moorings; marine structure conditions and the need for repair; the use of local docks and facilities; regattas; special events and enforcement activities and violations.
- e. The Committee shall make recommendations regarding the use of the Harbor waters as requested by the Town Board and as the Committee may otherwise deem appropriate.

- f. The Committee shall review the Irondequoit Bay Harbor Management Plan and this local law and recommend revisions to the Town Boards, as necessary. The Harbor Management Plan shall be reviewed and updated at least once every ten years, if necessary.
 - g. When requested by the Town Board, or when there is a Harbormaster permit issuance dispute, the Committee shall act as a mediator.
 - h. The Committee shall seek to resolve disputes to the satisfaction of the parties at hand while meeting goals and objectives of the Harbor Management Plan.
 - i. To commence its review, the Committee shall be formally notified by the Town Board of a particular conflict, with a description of the issue at hand. In handling such cases, the Committee shall examine the sites of the proposed activities and affected areas, current zoning, compliance with the Irondequoit Bay Harbor Management Plan, this local law and other applicable sections of the Town Code.
 - j. A Committee member may be removed for cause or in the event of absence from three consecutive meetings.
2. Harbormaster
- The Harbormaster appointment shall be recommended by the Committee and approved by the Town Boards. The duties of the Harbormaster shall be to enforce this local law and provide other assistance as needed to implement the Irondequoit Bay Harbor Management Plan.

Article II

Water Surface Uses and Ancillary Uses

A. Water Surface Uses

- 1. Water Surface Use Map

The Water Surface Use Map defines the designated water surface use of Irondequoit Bay as incorporated in the Irondequoit Bay Harbor Management Plan. Said Map is hereby adopted by the Town Board, is incorporated herein as Exhibit "A" of this local law and declared to be a part hereof.
- 2. Operation of Vessels

All vessels operating in the waters of Irondequoit Bay are to observe the Federal Inland Navigation Rules and comply with Article 4 of the New York State Navigation Law.
- 3. Speed Limit/Wake Responsibility
 - a. No vessel shall be operated on Irondequoit Bay at a speed exceeding twenty-five (25) miles per hour unless such vessel is being operated for the purpose of enabling a person engaged in water skiing or other water sport to be towed, in which case no such vessel shall be operated at a speed exceeding 35 miles per

hour. The Town Board may, by local law, limit the speed of vessels in Irondequoit Bay waters and post notice of such speed limits as stated in this local law at appropriate locations serving boaters, such as marinas, boat launches and parks. Any person who operates a vessel at a speed faster than specified shall be deemed to have violated this local law and be subject to its penalties.

- b. No person shall operate a vessel at a speed greater than is reasonable or prudent, so as not to:
 - i. Endanger the life or limb of another person using the Harbor under all conditions and having regard to the actual and potential hazards then existing.
 - ii. Disturb the reasonable comfort or endanger persons on or operating another vessel or cause damage to another vessel, structure, shoreline property, the environment, or interfere with the free and proper use of the waters of any channel.
- c. All vessels operating on Irondequoit Bay shall be subject to No Wake Zone requirements. The no-wake/maximum five (5) mile per hour zone is located within three hundred (300) feet of the shore, the channel, a dock, pier, raft or float or an anchored or moored vessel. Wave-attenuating devices shall not be subject to the three hundred (300)-foot no-wake/maximum five (5) mile per hour zone.
- d. No vessel shall be operated in the channel between Irondequoit Bay and Lake Ontario or within three hundred (300) feet of the shore, the channel, a dock, pier, raft or float or an anchored or moored vessel in a manner or at a speed that causes a wake that unreasonably interferes with or endangers such dock, pier, raft or float or an anchored or moored vessel but in no event at a speed exceeding five (5) miles per hour.
- e. Notwithstanding the provisions of paragraph d above, a vessel engaged in water skiing or other towed water sport activities shall be permitted to exceed five (5) miles per hour within three hundred (300) feet of shore, the channel, a dock, bridge, pier, raft or float or an anchored or moored vessel to enable a towed participant to take off or land.
- f. The provisions of this section shall not apply to any vessel competing in or practicing for a regatta or boat race over a specified course held by a bona fide club or racing association, provided that a permit has been issued for the same by the Authorized Town Official, and all provisions of this local law have been complied with.

4. Dredging

Dredging within the limits of Irondequoit Bay shall be regulated by the New York State Department of Environmental Conservation and the U. S. Army Corp of Engineers. No dredging hereinafter shall be permitted in any Resource Protection Areas as identified on the Irondequoit Bay Water Surface Use Map except for maintenance dredging which has been previously approved.

The only area deemed appropriate for additional dredging is the North Harbor Area. Dredging in the North Harbor Area should only be considered with further biological and chemical analysis and approval by the New York State Department of Environmental Conservation and the U.S. Army Corps of Engineers. No permits for dredging to accommodate new and/or expanded facilities should be issued outside of the North Harbor Area.

5. Hazards to Navigation; Abandoned Vessels

- a. Any vessel which becomes a menace to navigation shall be immediately removed by the owner.

Failure on the owner's part to remove such vessel shall result in its removal by the Town or its designee. The cost of such removal shall be borne by the owner.

- b. Any vessel which sinks, grounds or otherwise becomes disabled or incapable of navigation which does not pose an immediate threat to navigation on the Bay shall be removed or restored to navigable condition by the owner upon written notice from the Town, which notice shall be sent by registered mail to the vessel's owner.

Failure on the owner's part to remove such vessel shall result in its removal by the Town or its designee. The cost of such removal shall be borne by the owner.

- c. In cases where the Town Board or its designated agent may direct the removal or disposal of a vessel, the cost of removal, including storage charges, shall attach to and shall become a lien upon the vessel and be chargeable against the owner of the vessel. The vessel may be sold upon direction of the court at a public auction to defray expenses, and any surplus shall be returned to the owner of record.

The Town shall not be liable for any damage done to the vessel during its removal, storage and sale.

- d. Unattended vessels shall not be moored or anchored overnight in Irondequoit Bay without registering the vessel with the Town. Vessels moored or anchored overnight without registration may be impounded by the Town. The owner shall be liable for payment of overnight fees, if applicable, along with expenses for its removal and storage. The Town shall not be liable for damage done to impounded vessels during their removal and storage.

- e. Waterfront and shore protection structures shall be maintained and repaired as necessary and must not pose a threat to shoreline erosion, boating and public safety.

- f. The water ski raft and water ski course customarily located seasonally in the southeast corner of the Bay shall not be considered an abandoned or unattached vessel nor a hazard to navigation, thus shall not be subject to the same fees or permits of an abandoned vessel.

6. Marine Maintenance and Environmental Protection

- a. Sanitary equipment aboard a vessel must meet the applicable standards established by the appropriate federal, state and local agencies.

- b. Marina operators shall not discharge any pollutant such as from boat washing, power washing, painting and other maintenance activities, to surface or groundwaters of the state without a State Pollutant Discharge Elimination (SPDES) permit.
- c. Best management practices shall be followed by in-water and waterfront activities including but not limited to use of contained work areas to reduce residuals (e.g. sanding residue, solvents, oils); source controls (e.g. sander vacuums); use of swales around parking areas to contain runoff and facilitate percolation and filtering; use of pervious materials in the upland areas; adequate receptacles for disposal and recycling of solid waste; holding tanks or dry wells to capture first flush runoff; disposal of fish waste; proper on-site storage and disposal techniques for waste fuel and used oil, spent solvents and antifreeze and signage directing users to the disposal areas; petroleum control techniques including the installation of fuel/air separators on all vessels and the use of oil-absorbent bilge pads; minimizing the use of cleaners (teak cleaners, fiberglass polish, detergents) and bottom paints, cleaning outside the water, and use of phosphate-free and biodegradable cleaning compounds.

Fueling stations shall be located where spills can be contained in a limited area; spill contingency plans are in-place for storage and fueling dispensation areas; and spill containment equipment is readily accessible in a nearby locker.

7. Water Skiing

No person shall ride on water skis or similar device, or use or operate a vessel to tow a person thereon within the designated Harbor Areas or the Navigation Channel.

Water skiers in other areas of the Bay shall comply with the provisions of the NYS Navigation Law.

The seasonal water ski raft and course shall be permitted in the southeast corner of the Bay without additional restrictions, regulations, permits or fees as this facility is considered preexisting nonconforming to this law.

8. Personal Watercraft

- a. All operators shall obtain the necessary training and certification prior to operating any personal watercrafts.
- b. All operators and riders of personal watercraft shall wear a United States Coast Guard approved Personal Flotation Device.
- c. No operators of personal watercraft shall:
 - i. Operate said apparatus in such a manner so as to become airborne or completely leave the water while crossing the wake of another vessel (wake-jumping).
 - ii. Operate in any manner or at any speed which is reckless, unsafe or hazardous to public safety, giving due regard to visibility, traffic density, state of wind, water and current, proximity of other craft, operators and water users, and proximity of navigational hazards.

- iii. Tow any water-skier, raft or other non-motorized vehicle, unless the personal watercraft accommodates three people and has an observer/spotter on board that is at least ten (10) years of age.
9. Swimming/Skin Diving
- a. No person shall skin dive or use self-contained underwater breathing apparatus (SCUBA) in Irondequoit Bay unless a regulation red diving flag is displayed in accordance with the Navigation Law. No person shall allow or permit such diving flag to remain in any area unless a person is skin diving in said area while such flag is displayed.
 - b. No person shall operate a vessel within one hundred (100) feet of any area marked for skin diving by the placement of a regulation red diving flag.
10. Commercial Activities
- Any commercial use or activity operating on the waters of Irondequoit Bay shall first receive a permit from the Town in which the docking facilities accommodating such use are located. No such use or activity shall be situated or conducted in a manner which may interfere with the full use of channels and open water, nor shall any vessel engaged in such use or activity be moored or anchored within a minimum of fifty (50) feet of any dock or other vessel docking or launching facilities.
11. Organized Events
- All organized events such as winter festivals, competitions, regattas, races or derbies shall be permitted subject to approval by the Town to minimize conflicts.
12. Vehicle Use
- No automobiles or trucks shall be permitted on the surface of Irondequoit Bay at any time.
13. Use of Bubbler/Aeration Systems
- No bubbler/aeration system shall be installed, modified, enlarged or repaired in Irondequoit Bay without first obtaining a permit for such activity from the Town. Application for the said permit shall be accompanied by a location plan and specifications of the proposed installation, modification, enlargement or repair. The Town shall review said application with the Harbor Management Committee for the determination of its potential impacts. Upon a finding that the proposed system will not create an adverse impact on the Bay or surrounding property owners and other users in the area, the Town may issue a permit subject to conditions and recommendations set forth in the Irondequoit Bay Harbor Management Plan.
- Bubblers involving construction of any type of base shall be subject to approval by the U.S. Army Corps of Engineers (USACE) and the NYS DEC.
- All bubblers installed in Irondequoit Bay shall be accompanied by signs reading "CAUTION: THIN ICE" during the winter season. Said signs shall be visible at a distance of at least 100 feet from the affected area.

14. Operation of Aircraft

Operation of aircraft within the Irondequoit Bay area shall comply with all applicable Federal Aviation Regulations and Town regulations pertaining to the construction of landside support facilities.

15. Marine Sanitation Devices

Any vessel with an approved Marine Sanitation Device or waste holding tank shall comply with all applicable sanitary codes.

16. Decorative/Recreational Structures and Devices

It shall be hereby deemed unlawful to install anchored fountains, water slides, ski jumps, trampolines, driving ranges, or other decorative/recreational structural devices within the waters of Irondequoit Bay.

17. Aquatic Vegetation Control

The installation of any bottom barriers, use of weed harvesters or use of aquatic pesticides within the waters of Irondequoit Bay shall be subject to review by the NYS DEC and may require a permit.

B. Ancillary Uses

1. Dry Boat Storage

Dry boat storage or “ramped boat storage” shall only be permitted in cases where the site is able to accommodate proposed storage structures, adequate parking facilities and launching areas. Dry boat storage can take the place of or be combined with wet storage but the total shall not exceed the number of permitted slips on any given site established by the Town of Penfield dock ordinance.

2. Tree Topping/Removal

Removal or topping of trees within the Irondequoit Bay Harbor Management Plan boundary area shall be prohibited unless it is demonstrated that such activity is to be undertaken to protect the safety of the property owner or structures on said property.

Upon a finding by the Authorized Town Official that said activity is necessary, the property owner shall apply for and obtain an Environmental Protection Overlay District (EPOD) Permit and demonstrate compliance with the conditions of said permit prior to commencement of the activity.

3. Marine Pump-out Facilities

Pump-out facilities shall be subject to permit requirements of the Monroe County Department of Health and the Town of Penfield. Said facilities shall be sited only at marina facilities. All such facilities must adequately demonstrate access to a sanitary sewer or storage tank and have adequate landside accommodations to maintain the pump-out. Temporary storage tanks must be emptied by a NYS DEC-permitted waste hauler and maintained by the property owner/operator.

1. Hunting

Hunting activities shall comply with the regulations identified in the New York State Department of Environmental Conservation Hunting and Trapping Regulations Guide shall apply on Irondequoit Bay within the limits of the Town of Penfield.

**Article III
Docking, Boat Storage and Moorings**

A. Boat Storage Facilities – General Provisions

1. For the purposes of this article, docks, moorings and dry storage are all considered the same in establishing the amount of permitted boat storage on a parcel.
2. Boat storage shall be permitted only as an accessory use to the principal permitted use of a property. Rail systems and boat hoists shall be considered accessory uses to docks and moorings. No dock in any residential zoning district shall be utilized for commercial purposes.
3. No vessel or float shall be so docked, moored or anchored so that it at any time rests within any channel or fairway, interferes with the full use of such channel or fairway or obstructs navigational aids and signage.
4. No vessel or float shall be moored or anchored so that it interferes with access to an adjoining or nearby property.
5. No boat shall be docked, hoisted or moored within ten (10) feet of an adjoining property line, as extended at a 90-degree angle to the shoreline. No accessory structure supporting water dependent uses shall be permitted within ten (10) feet of and adjoining property line.
6. No person shall moor or secure a vessel or float at a public dock or mooring located in Irondequoit Bay without first obtaining a permit from the Authorized Town Official and/or any other appropriate agency having jurisdiction.
7. No dredging shall be permitted within any area of the Bay, with the exception of the North Harbor Area, to accommodate the installation of new docks, moorings or dry storage facilities.
8. No person shall place a mooring or float in the territorial waters of the Town without the consent of the Authorized Town Official and obtaining a permit from the Town Clerk.
9. Rafting at a public dock or mooring is prohibited unless expressly allowed by the Authorized Town Official.
10. The Planning Board shall have the authority of site plan review to approve placement of multiple berths (wet and dry) in or adjacent to Irondequoit Bay.

B. Standards for Boat Storage Facilities

1. Resource Protection Areas

Boat storage is incompatible with Resource Protection Areas and shall be restricted in such areas. If permitted, dock and mooring development in Resource Protection Areas shall be limited based on its proximity to significant habitat areas and its potential impact on such environmental features. Each parcel within Resource Protection Areas, regardless of parcel use, may be permitted to have a maximum of one dock or one mooring.

a. Standards for Docks

- i. Prior to the issuance of a dock permit in these areas the applicant shall be responsible for identifying other reasonable alternatives such as mooring off shore with minimal shoreline development, or access to nearby off-site docking facilities.
- ii. In no case shall any dock in such areas extend offshore more than fifty (50) feet, and exceed a maximum of two hundred (200) square feet in area.
- iii. No commercial docking or marina activity shall be permitted in Resource Protection Areas.

b. Standards for Moorings

- i. No mooring shall be placed so that the swing of the boat attached to the mooring drifts within ten (10) feet of the property line, as extended at a 90-degree angle to the shoreline.
- ii. A mooring shall only be placed in water that is at least eight (8) feet deep but no more than thirty (30) feet deep throughout the boating season.
- iii. A mooring buoy shall be white with a blue stripe large enough to display the permit number issued by the Town but no more than thirty-two (32) inches in diameter.
- iv. A mooring may not be placed further than one hundred (100) feet from the shoreline unless it is located in a Special Anchorage Area as designated on the Water Surface Use Map and approved by the Authorized Town Official.
- v. A mooring shall not be placed any closer than fifty (50) feet to a dock or float.
- vi. A mooring shall be anchored with an appropriate, retrievable, device, as approved by the Authorized Town Official.

c. Dry Storage Facilities

Dry storage structures shall not be permitted in Resource Protection Areas.

2. Near-shore Areas

Near Shore Areas are designated on the Water Surface Use Map and extend three hundred (300) feet from the shore.

a. Standards for Docks

i. In cases where environmental constraints exist or landside support is inadequate, alternative options for riparian access should be explored. This may include shared docking facilities, mooring off shore with minimal shoreline development, or access to nearby off-site dock facilities.

ii. Each single-family residentially zoned parcel within Near Shore Areas may be permitted to have a maximum of one dock or one mooring. Docks shall not extend offshore more than fifty (50) feet, and exceed a maximum of two hundred (200) square feet in area.

iii. The number of docks serving multi-family residential sites shall be limited based on the linear feet of shoreline contained within the parcel. The calculations to determine the maximum number of boats stored on a multi-family parcel shall be based on the length of shoreline as follows:

- 0-100 linear feet 1 dock or 2 boats
- 101-250 linear feet 2 docks or 4 boats
- 251-500 linear feet 3 docks or 6 boats
- greater than 500 feet 1 dock or 2 boats per 150 linear feet

The dock structure associated with multi-family parcels shall not extend off-shore more than two hundred (200) feet and not exceed two hundred (200) square feet for the first dock plus fifty (50) square feet for each additional dock. If adequate water depth is not found within two hundred (200) feet of the shoreline, alternative docking/boat storage options shall be explored.

iv. No new commercial boat storage (including dry storage) shall be allowed in Near Shore Areas.

b. Standards for Moorings

i. No mooring shall be placed so that the swing of the boat attached to the mooring drifts within (ten) 10 feet of the extension of the property line.

ii. A mooring shall be placed in water that is at least eight (8) feet and no more than thirty (30) feet deep throughout the boating season.

iii. A mooring buoy shall be white with a blue stripe large enough to display the permit number issued by the Town but no more than thirty-two (32) inches in diameter.

- iv. A mooring may not be placed further than one hundred (100) feet from the shoreline unless it is located in a Special Anchorage Area designated on the Water Surface Use Map and approved by the Authorized Town Official.
 - v. A mooring shall not be placed any closer than fifty (50) feet to a dock or float.
 - vi. A mooring shall be anchored with an appropriate device as approved by the Authorized Town Official.
 - c. Dry Storage Facilities
 - i. Dry storage structures shall not be permitted in Near Shore Areas.
- 3. Harbor Areas

Harbor areas are established within the Irondequoit Bay to provide public access, safe refuge, transient berthing and commercial marina activities. Harbor areas meet three primary locational criteria including water depth, Waterfront Development District zoning and landside support (at least 0.8 parking spaces per wet or dry berth).

 - a. Standards for Public and Private Docks
 - i. In cases where environmental constraints exist or landside support is inadequate, alternative options for riparian access should be explored. This may include shared docking facilities, dry storage facilities or mooring off shore with minimal shoreline development.
 - ii. Docking in Harbor Areas shall be limited as set forth in Article III-B-3 of this Law.
 - b. Standards for Moorings
 - i. No mooring shall be placed so that the swing of the boat attached to the mooring drifts within ten (10) feet of the property line, as extended at a 90-degree angle to the shoreline.
 - ii. A mooring shall be placed in water that is at least eight (8) feet and no more than (thirty) 30 feet deep throughout the boating season.
 - iii. A mooring buoy shall be white with a blue stripe large enough to display the permit number issued by the Town but no more than thirty-two (32) inches in diameter.
 - iv. A mooring may not be placed further than one hundred (100) feet from the shoreline unless it is located in a Special Anchorage Area as designated on the Water Surface Use Map and approved by the Authorized Town Official.
 - v. A mooring shall not be placed any closer than fifty (50) feet to a dock or float.
 - vi. A mooring shall be anchored with an appropriate, retrievable device, as approved by the Authorized Town Official.

- c. Standards for Dry Storage Facilities
 - i. Dry storage structures may be permitted in the Harbor Areas where wet storage facilities are inappropriate or where such facilities would cause significant impact upon natural resources.
 - ii. Dry storage structures may be combined with wet storage facilities, however the total number of slips for a specific Harbor Area shall not exceed the maximum number set forth in Article III-B-3 of this Section.
 - iii. Dry storage structures must be designed to be compatible with and not a visual nuisance to the surroundings or adversely affect access to property or views from adjoining parcels. Location and design of all dry storage structures shall be subject to site plan approval by the Planning Board.

C. Rules, Regulations and Permit Procedures

- 1. Public Docks and Moorings – General Provisions
 - a. The Town Board may establish by resolution, rules and regulations for the operation of the docks, moorings and marine facilities under its jurisdiction. Such rules shall be posted at the Town Hall and at the Town docks.
 - b. The Town Board may, from time to time, establish by resolution, administrative fees for the transient and seasonal use of Town facilities.
 - c. Applicants utilizing Town facilities shall hold the Town harmless from any and all liability, including counsel fees, costs and disbursements, resulting from operation or dockage of the vessel or the use of the Town facilities by the vessel, owner or crew.
 - d. All fastenings to any docks and moorings of the Town shall be done in a seaman like manner as determined by and subject to periodic inspection by the Town.
 - e. No commercial, ancillary activities or services shall be allowed on public docks without issuance of a special use permit by the Town of Penfield.
- 2. Public Docks
 - a. The Authorized Town Official shall designate and assign available transient berthing space for vessels at the public docks upon payment of required fee. Space shall not be occupied without paying the required fee.
 - b. The Authorized Town Official may also assign seasonal, temporary or interim accommodations for the docking of visiting commercial vessels at these docks upon payment of required fee. Applications for such accommodation shall be made in writing to the Authorized Town Official.
 - c. The Authorized Town Official shall post all docking regulations and safety procedures and other appropriate information to assure safe use of the Bay.
 - d. All vessels shall be berthed under the supervision and direction of the Authorized Town Official. Failure by a captain to act in response to directives of

the Authorized Town Official shall result in the loss of privileges without reimbursement of fees and other penalties as may apply.

- e. Except in the case of emergency or as otherwise approved by the Town, maximum stay at the docks shall be limited to seventy-two (72) hours for recreational pleasure craft. In cases where vessels must overstay this limit because of unsafe or disabling conditions, the vessel owner must promptly notify the Authorized Town Official. The Authorized Town Official may then waive the limit and impose additional fees as may be reasonable given the circumstances.
- f. All vessels must be operated and secured in a safe and protective manner. The Town assumes no liability for damage to craft or injury that may result from dockage public docks.
- g. No rafting is permitted at public docks unless expressly allowed by the Authorized Town Official.

3. Public Moorings

- a. Use and assignment of moorings shall be supervised by the Authorized Town Official. Seasonal moorings shall be occupied only upon the submission and approval of an application and the issuance of a permit.
- b. Mooring application forms shall be available through the office of the Town Clerk. Annual applications may be submitted no earlier than January 1st of each year with the appropriate fee, established by the Town Board.
- c. When an applicant has been approved for a mooring, the Authorized Town Official shall assign a mooring and mooring registration number. A seasonal mooring permit shall be valid for only the stated vessel at a designated mooring, from the date of issue to December 31st of that year.
- d. The mooring float shall be marked by the Town with the mooring registration numbers in black lettering four (4) inches high, minimum.
- e. Relocating moorings shall be prohibited without prior approval of the Authorized Town Official
- f. A permit holder shall be deemed to have forfeited the registered mooring by refusing the grant of a mooring permit when offered, or not occupying the mooring by the permitted vessel for a period of one month from the grant date unless approval has otherwise been granted by the Authorized Town Official.
- g. Only one mooring per person shall be permitted and the permit for said mooring shall be non-transferable.
- h. If a permit holder is temporarily without a vessel, the permit holder may apply to the Authorized Town Official to retain that mooring permit for a designated period of time.
- i. If mooring space is not available the applicant's name will be added to a waiting list upon request. The list shall be maintained in the office of the Town Clerk and made available upon request. It shall contain the names of persons who applied for a mooring, the date of application, the area in which such space is desired,

and the size of the vessel. The waiting list shall be maintained in the order of the date of application (month, day, year). To maintain a place on the waiting list, applicants must reapply on an annual basis.

- j. All moorings in the mooring field shall be available to transient vessels. Transient mooring floats will be distinctly marked. No transient mooring shall be occupied for a period longer than forty-eight (48) hours, unless expressly allowed by the Authorized Town Official.
- k. Overnight transient moorings, beginning at 12:00 PM each day, shall be available from the Authorized Town Official after payment of the appropriate fee.

4. Private Docks

- a. All docks are considered accessory structures and uses and there must be a principal use on the site to accommodate them.
- b. No building permit for a private dock shall be issued unless a NYS DEC Article 15 and/or 24 Permit and an Article 404 Permit from USACE has been issued.
- c. Review of permit applications for all docks shall take into account the specific areas, as identified on the Water Surface Use Map, in which they are being installed, proximity to adjacent property lines, impact on unique environmental features, depth of water and landside support.
- d. Dredging for dock installation and subsequent maintenance dredging is discouraged in all cases; however, dredging may be permitted in the Harbor Areas or where a pre-existing, nonconforming condition occurs, as identified in the Harbor Management Plan.
- e. The Authorized Town Official will inspect the dock upon its completion to ensure safety standards and compliance with all permit conditions.
- f. No dock shall be used for commercial purposes unless approved by the town as a marina activity. Leasing or rental of private residential docks is prohibited.
- g. The Authorized Town Official shall keep an updated inventory of all docks.

5. Private Moorings

- a. All private moorings outside of the Harbor Area shall be accessory to the principal land use.
- b. A private mooring shall not be installed into the waters of Irondequoit Bay unless a Town permit and applicable NYSDEC and USACE permits have been issued.
- c. Issuance of permits for all moorings shall take into account safety, day and night navigation, water depth, bottom conditions, tackle, access and compliance and consistency with the Irondequoit Bay Harbor Management Plan. No moored vessel shall be situated in a manner which may interfere with the full use of channels and open water, nor shall any vessel be moored or anchored within a minimum of fifty (50) feet of any dock, pier or other vessel docking or launching facilities.

- d. All moorings must have the tackle and anchor inspected by the Authorized Town Official prior to their setting.
- e. Every permittee shall be required to maintain the mooring in a safe condition. Any chain, shackle, swivel or other tackle which has become warped or worn by one-third of its normal diameter shall be replaced. Failure to maintain a safe mooring shall be cause for revocation of the mooring permit and shall be deemed a violation of this law. The Authorized Town Official may inspect moorings at any time to determine compliance with this section.
- f. All moorings shall be inspected every three (3) years by a qualified third party inspector. Said inspector shall certify that the mooring is properly installed subject to the requirements of the U.S. Coast Guard.
- g. All costs of any mooring inspection required under the provisions of this law shall be borne by the mooring owner.
- h. The Authorized Town Official shall keep a detailed record of all private moorings. This record shall include the mooring location and number, information from the mooring permit application, date the mooring was set, and any other information deemed necessary by the Harbor Management Committee, and the location of docks, floats and moorings plotted on a map showing the location of all moorings within the Bay.
- i. Leasing or rental of private moorings shall be prohibited.
- j. The Authorized Town Official shall have authority for reasons of safety to direct and order that the location, position or tackle of moorings be changed or use suspended, in periods of storm conditions. The Authorized Town Official shall give notice to the owner or operator of the vessel using such mooring, and compliance shall be required immediately in such circumstances. Failure to comply with such direction or order of the Authorized Town Official by any person shall be a violation of this law, subject to the appropriate penalty.
- k. The owner of a mooring shall be responsible for winterizing the mooring to ensure that it is not damaged or moved by ice or other weather related events.

6. Floats/Rafts

No new floats or rafts shall be allowed on the waters of Irondequoit Bay. Preexisting nonconforming floats and rafts that were compliant at the time of installation may be replaced as needed.

Article IV
Enforcement, Violations and Penalties

A. Enforcing Authority

1. The U.S. Coast Guard, New York State Police, New York State Environmental Conservation Police, New York State Park Police, the Monroe County Sheriff's Office and local police shall be empowered to enforce the provisions of this law. Every person in charge of a vessel must at all times obey the lawful orders of the enforcement officer.
2. The Town Board shall issue application forms, permit forms, mooring tackle standards and otherwise promulgate such forms, fee schedules and information as may be necessary for the administration of this law.

B. Violations

1. It shall be a violation of this law for any person to refuse to move or stop on oral command or order of the Authorized Town Official and enforcement officers exercising the duties lawfully assigned to them.
2. No person shall tie to or berth a vessel at a Town operated dock or bulkhead unless the determined user fee has been paid to the Town and a permit obtained for use and occupancy of such space by such vessel.
3. Any person who fails to move such vessel when ordered by the Authorized Town Official, or any other lawful enforcing authority, shall be in violation of this law and subject to its penalties. Each day that such violation continues shall constitute a separate and additional violation.
4. Any vessel or float moored or anchored in violation of any part of this law shall be removed by the owner or person in charge thereof upon written notice from the Authorized Town Official. If a vessel or float is not removed after the Authorized Town Official provides written notice to its owner, that vessel or float may be removed by the Town.

Such notice shall be served by mail upon the owner of the vessel or float at the last known address of the owner.
5. All expenses incurred by the Town in removing a vessel, mooring or float, including any reasonable attorney fees, shall be borne by the owner of the vessel or float and the Town may enforce that obligation by a civil action. Any such expenses shall be in addition to, and not in lieu of, any penalties as may be prescribed by and imposed under this law or under any other applicable law, ordinance, rule or regulation of the Town.
6. Violations shall subject the violator to the penalties imposed by Article IV-D of this law. Said penalties shall include but are not limited to immediate revocation of permit, fine or imprisonment or any combination thereof.

C. Pre-existing non-conformance

Any pre-existing, non-conforming use of land or structure, shall comply with Article IV of the Code pertaining to such use of land or structure.

D. Appeals

1. Where practical difficulties, unnecessary hardships and results inconsistent with the general purposes of this law may be the result from the application of the provisions thereof, variances may be granted as provided in this section. Any variance granted shall be authorized by the Zoning Board of Appeals. In granting a variance, the Zoning Board of Appeals may impose conditions to protect the best interest of the surrounding property, the neighborhood, or the town as a whole.
2. The criteria for granting variances shall be consistent with Article XI as set forth in the Zoning Ordinance.
3. An individual may appeal the decision of the Authorized Town Official to deny or revoke a permit to the Zoning Board of Appeals within thirty (30) calendar days of receipt of notice of denial/revocation. Such an appeal shall be made by filing with the Authorized Town Official, a written form obtained from the Town Clerk stating the appellant's arguments and setting forth specifically the questions of procedure, fact, law or policy to which exceptions are taken or identifying that part of the Authorized Town Official decision and order to which objection is made. The Zoning Board of Appeals may upon receipt of an appeal of revocation, at its discretion, stay the effective date of the Authorized Town Official's decision.
4. The Zoning Board of Appeals, in making its findings for determination, shall maintain consistency with the goals of the Harbor Management Plan and the regulations of the Harbor Management Law.

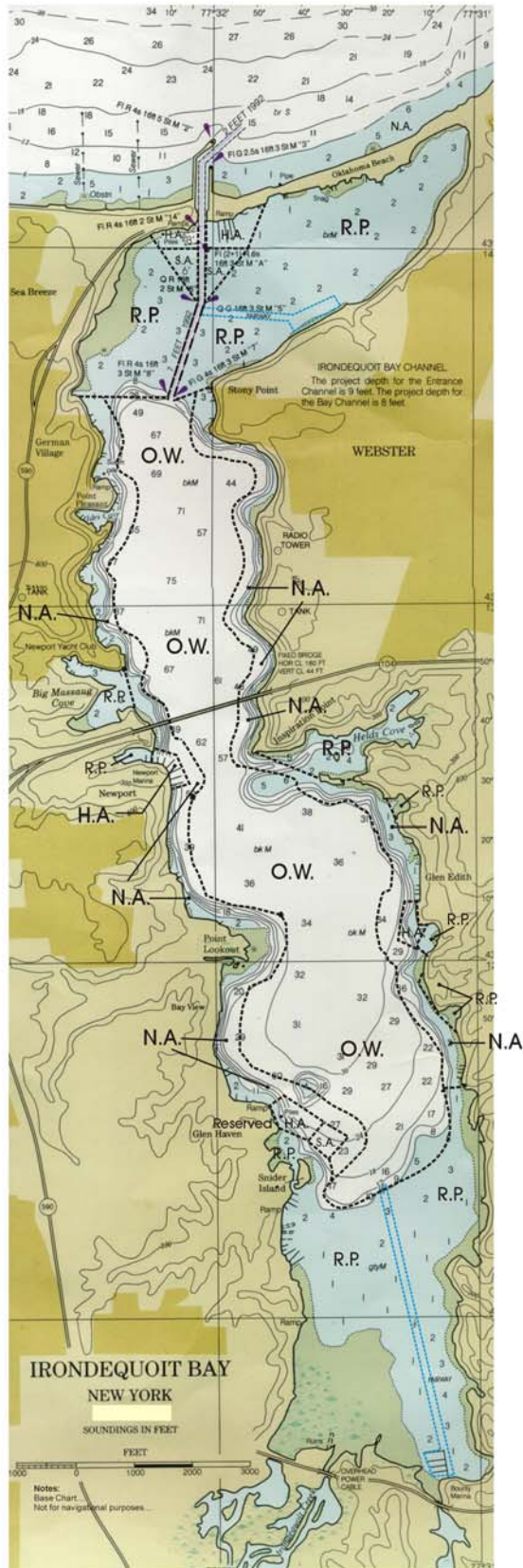
E. Penalties for Offenses

In addition to or as may be limited by the laws of the State of New York, a violation of any provision of this law shall be punishable by not more than fifteen (15) days incarceration or a fine of two hundred fifty dollars (\$250.00) for each violation. Each day of violation shall be deemed a new violation and shall be treated accordingly.

**Article V
Severability**

The provisions of this law are hereby declared to be severable and, if any section, sentence, clause or phrase hereof shall for any reason be held to be invalid, ineffective, in conflict with regulations of the Federal and State authorities or unconstitutional, such decision shall not affect the validity of the remaining provisions hereof, and such provisions shall remain in full force and effect.

Nothing in this law shall be construed as prohibiting the Town or the County from continuing, adopting or enacting any other local laws, resolutions or ordinances related to persons operating a vessel within its limits, however no such municipality shall have the power to make less restrictive any of such provisions.



Irondequoit Bay

Harbor Management Plan

KEY

- H.A. HARBOR AREA
- S.A. SPECIAL ANCHORAGE AREA
- R.P. RESOURCE PROTECTION AREA
- N.A. NEAR SHORE AREA
- O.W. OPEN WATER AREA
- NAVIGATION CHANNEL
- PRE-EXISTING NON-CONFORMING FAIRWAY



Prepared for:
**The Irondequoit Bay
 Coordinating Committee**
 Prepared By:
**Dufresne-Henry
 (Formerly The Cavendish
 Partnership)
 F-E-S Associates
 Drake Environmental
 Consultants
 Nutter Associates**

November 2003

EXHIBIT 14
 WATER SURFACE USE MAP

APPENDIX D: SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT

COASTAL FISH & WILDLIFE HABITAT RATING FORM

Name of Area:	Irondequoit Bay and Creek
Designated:	October 15, 1987
County:	Monroe
Town(s):	Irondequoit, Webster, Penfield, Perinton, Rochester
7½' Quadrangle(s):	Rochester East, NY; Webster, NY; Fairport, NY

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

SIGNIFICANCE VALUE = [(ER + SV + HU + PL) X R] = 80

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

BACKGROUND

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

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

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

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

DESIGNATED HABITAT: IRONDEQUOIT BAY AND CREEK

LOCATION AND DESCRIPTION OF HABITAT:

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

FISH AND WILDLIFE VALUES:

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

The entire Irondequoit Bay complex is used as a resting and feeding area by waterfowl during spring and fall migrations. Species that regularly occur here during these periods include

common goldeneye, mergansers, mallard, blue-winged teal, wood duck, canvasback, redhead, scaup, black duck, and Canada goose. This resource provides waterfowl hunting opportunities in the fall to sportsmen in the local area. Most of this hunting activity occurs along the eastern shore of the bay, in the Town of Webster. Depending on the extent of ice cover each year, some waterfowl may remain in the bay in winter; mid-winter aerial surveys of waterfowl abundance for the ten year period 1976-1985 indicate average concentrations of over 100 birds in the area each year (370 in peak year), dominated by mergansers, scaup, common goldeneye, and mallard. Wetland areas located around the shoreline, and especially at the south end of the Irondequoit Bay, are also productive habitats for a variety of marsh nesting birds. Probable or confirmed breeding bird species in these areas include green-backed heron, least bittern (SC), mallard, blue-winged teal, wood duck, Virginia rail, sora, common moorhen, belted kingfisher, marsh wren, sedge wren (SC), red-winged blackbird, and swamp sparrow.

IMPACT ASSESSMENT:

A **habitat impairment test** must be met for any activity that is subject to consistency review under federal and State laws, or under applicable local laws contained in an approved local waterfront revitalization program. If the proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area.

The specific **habitat impairment test** that must be met is as follows.

In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions would:

- ! destroy the habitat; or,
- ! significantly impair the viability of a habitat.

Habitat destruction is defined as the loss of fish or wildlife use through direct physical alteration, disturbance, or pollution of a designated area or through the indirect effects of these actions on a designated area. Habitat destruction may be indicated by changes in vegetation, substrate, or hydrology, or increases in runoff, erosion, sedimentation, or pollutants.

Significant impairment is defined as reduction in vital resources (e.g., food, shelter, living space) or change in environmental conditions (e.g., temperature, substrate, salinity) beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include but are not limited to reduced carrying capacity, changes in community structure (food chain relationships, species diversity), reduced productivity and/or increased incidence of disease and mortality.

The *tolerance range* of an organism is not defined as the physiological range of conditions beyond which a species will not survive at all, but as the ecological range of conditions that supports the species population or has the potential to support a restored population, where

practical. Either the loss of individuals through an increase in emigration or an increase in death rate indicates that the tolerance range of an organism has been exceeded. An abrupt increase in death rate may occur as an environmental factor falls beyond a tolerance limit (a range has both upper and lower limits). Many environmental factors, however, do not have a sharply defined tolerance limit, but produce increasing emigration or death rates with increasing departure from conditions that are optimal for the species.

The range of parameters which should be considered in applying the habitat impairment test include but are not limited to the following:

1. physical parameters such as living space, circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth (including loss of littoral zone), morphology, substrate type, vegetation, structure, erosion and sedimentation rates;
2. biological parameters such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, meristic features, behavioral patterns and migratory patterns; and,
3. chemical parameters such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxics and hazardous materials).

Although not comprehensive, examples of generic activities and impacts which could destroy or significantly impair the habitat are listed below to assist in applying the habitat impairment test to a proposed activity.

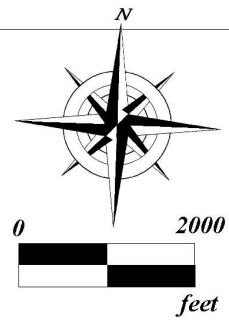
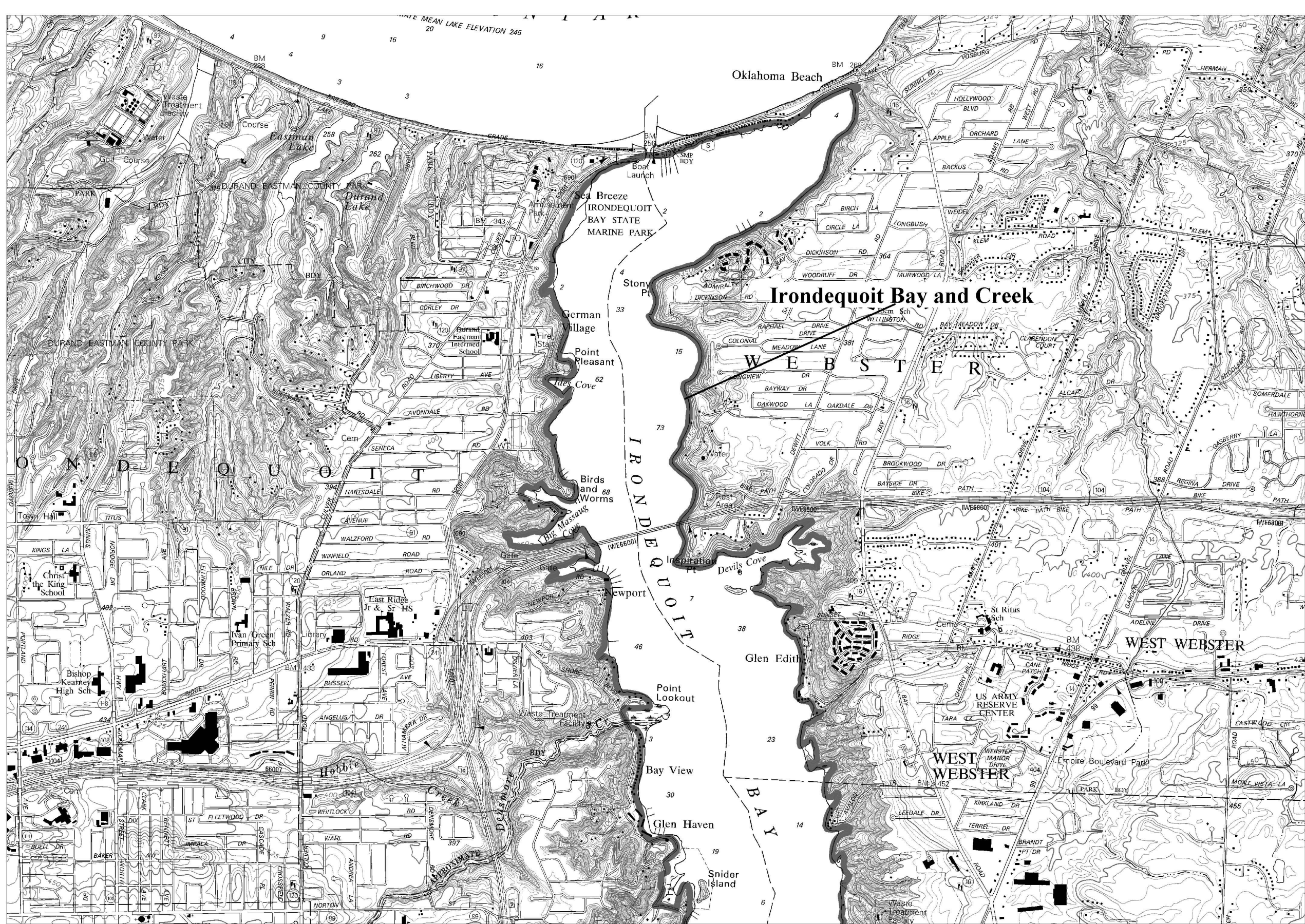
Any activity that degrades water quality, increases temperature or turbidity, alters water depths, or reduces flows in Irondequoit Bay or Creek would adversely affect the fish and wildlife resources of this area. Discharges of sewage or stormwater runoff containing sediments, nutrients, or chemical pollutants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

KNOWLEDGEABLE CONTACTS:

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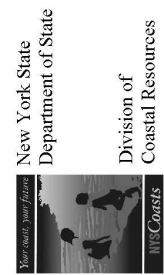
Carl Widmer, Fisheries Manager
or Larry Myers, Wildlife Manager
or Matt Sanderson, Environmental Protection Biologist
NYSDEC - Region 8
6274 E. Avon-Lima Road
Avon, N.Y. 14414
Phone: (716) 226-2466

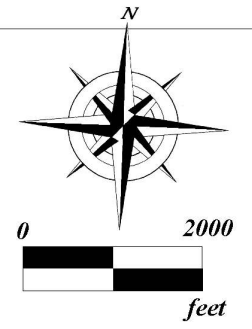
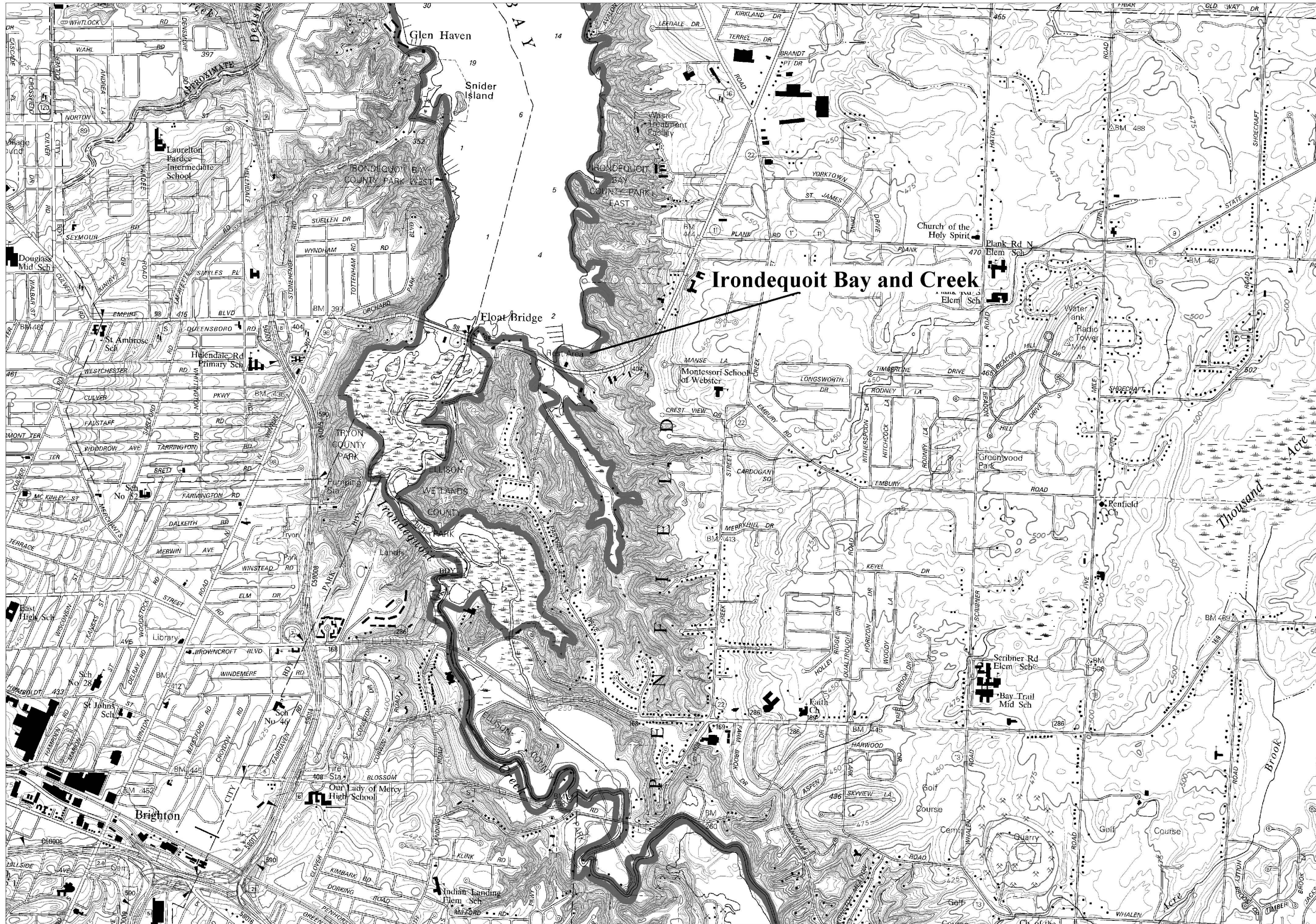
NYSDEC - Information Services
700 Troy-Schenectady Road
Latham, NY 12110
Phone: (518) 783-3932



Significant Coastal Fish and Wildlife Habitats

Irondequoit Bay and Salmon Creek (In part)
Part 1 of 3

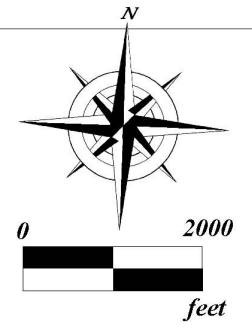
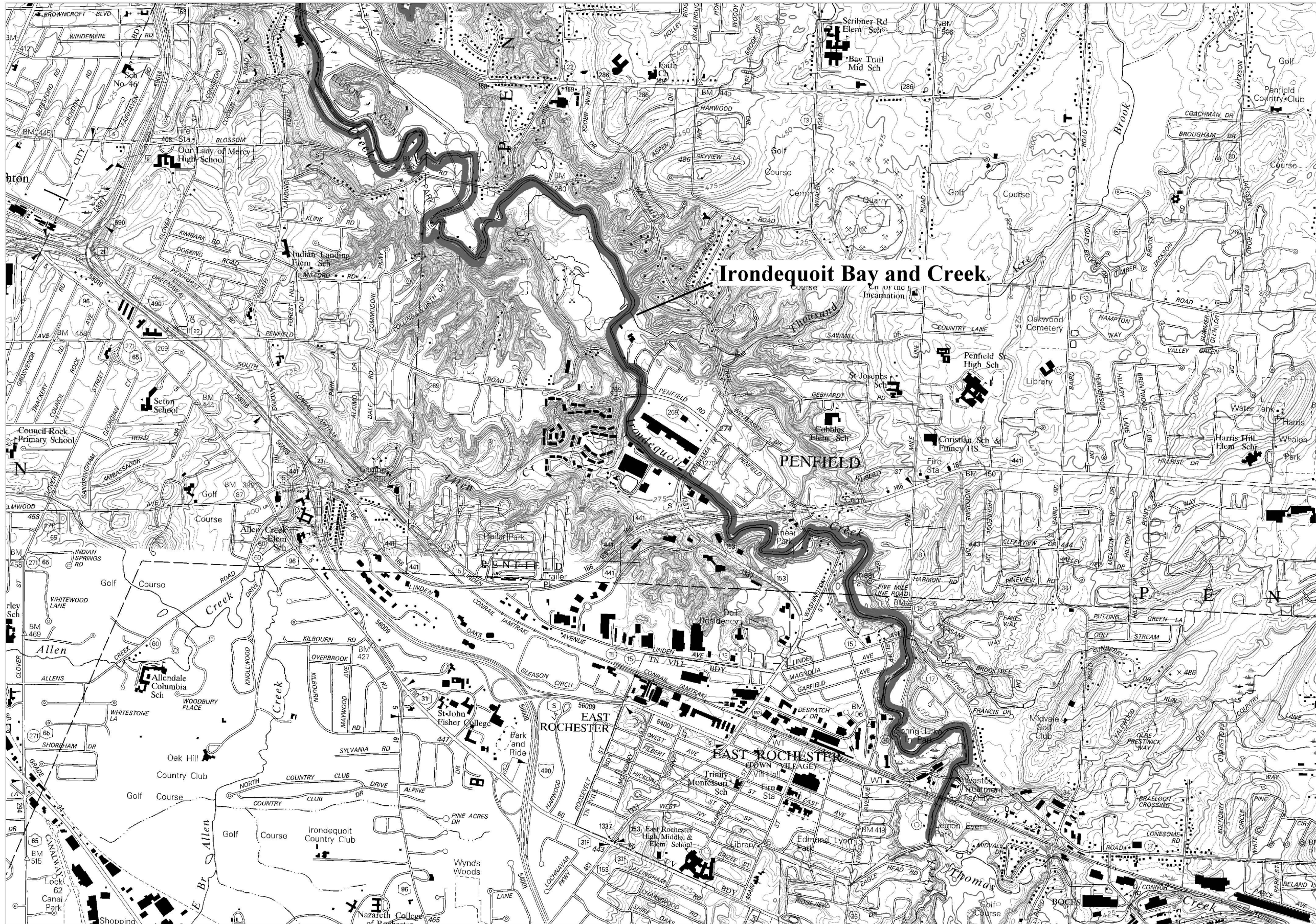




Significant Coastal Fish and Wildlife Habitats

Irondequoit Bay and Salmon Creek (In part)
Part 2 of 3

New York State
Department of State
Division of
Coastal Resources



Significant Coastal Fish and Wildlife Habitats

Irondequoit Bay and Salmon Creek (In part)
Part 3 of 3

New York State
Department of State
Division of
Coastal Resources

