



Ellison Park Area Master Plan Updates (DRAFT)
A Plan for Monroe County Parkland Around Irondequoit Bay

Monroe County, New York

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February 2009



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EXECUTIVE SUMMARY

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The purpose of the Ellison Park Area Master Plan updates is to identify the most appropriate uses for Monroe County's Bay Area Parks in order to meet current and future recreational needs. This report summarizes the site analysis, planning concepts, public participation, preliminary design studies, and recommendations for the six Monroe County Parks located at the south end of Irondequoit Bay. These parks include: Devil's Cove Park, Ellison Park, the Ellison Wetlands, Abraham Lincoln Park, Irondequoit Bay Park West, and Tryon Park.

The Monroe County Department of Parks contracted with Environmental Design and Research (EDR) in 2008 to update the 1985 Ellison Park Comprehensive Master Plan, including the integration of this update with plans for the public lands studied in previous planning efforts. The County envisioned an overall composite program for the public lands located at the south end of Irondequoit Bay. EDR was selected to work collaboratively with County officials to coordinate a planning process, where the defined program was anticipated to include potential project implementation, such as recreational facility improvements, site improvements, building rehabilitation and construction, accessibility improvements, and utility improvements.

The planning process during 2008 and 2009 for the Ellison Park Area Master Plan updates was informed by local residents and representatives who serve on the Monroe County Parks Advisory Committee, as well as by the general public, who attended public outreach sessions. At both public meetings, meeting attendees were given the opportunity to express their opinions in multiple ways. In addition, EDR and Monroe County met with various community groups, and received a significant number of letters and emails. A separate document is on file with the Monroe County Parks Department that catalogs the input received by EDR and Monroe County.

At the outset of the planning process, a vision was established for the Bay Area Parks, which guided the planning process and the development of proposed recommendations. The Bay Area Parklands are a system of parks and trails that protect and preserve important natural, historic, and cultural areas and landscapes. The parks will be preserved and enhanced to provide environmental quality and a diversity of appropriate and sustainable recreational activities. The use of the parks will be promoted and regulated in such a way as to leave them preserved for the enjoyment of future generations.

Monroe County is located in the Finger Lakes region of New York State, where the Genesee River meets the south shore of Lake Ontario. The six parks are situated in the northeastern portion of Monroe County, primarily adjacent to Irondequoit Bay and/or Irondequoit Creek. The parks comprise approximately 1,240 acres and vary significantly in topography, facilities, and ecology. Several of the parks, such as Tryon Park and Abraham Lincoln Park, have steep wooded slopes. The Ellison Wetlands contains fragile ecosystems: steep, erodible slopes in the "Old Rifle Range", as well as flat, wetland marshes near the creek. Most of the parks have few amenities, while Ellison Park has a number of shelters, lodges, recreational fields, trails, and other amenities.

Each park was assessed during the inventory and analysis phase regarding their park character, facilities, uses, access, circulation, topography, soils, and ecological character. Site visits were made by EDR planners and designers, as well as by EDR environmental scientists, who prepared detailed field reports. In addition, the demographic makeup, history, circulation, character, geology and waterways of the entire study area were reviewed.

EXECUTIVE SUMMARY

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The thorough assessment of each park, combined with an extensive amount of public feedback, led to an assessment of the key issues and a detailed list of recommendations. The key issues that were identified in regard to the Ellison Area Parks include: Access and Community Connectivity, Healthy Living to Address Preventable Health Problems, Green Infrastructure, Shared Use of Trails, Waterfront Use and Access, Dog Parks, and Sustainability.

Recommendations were developed regarding ways for the Monroe County Parks Department to address these issues. Some recommendations apply to all or most of the parks, while some of the proposals are park-specific. All of the recommendations fall into one of three categories: Facilities, Programs, or Management and Maintenance. A summary chart was developed that identifies the park, category, recommendation, description, priority, time frame, issues addressed, responsible parties, and additional notes.

The recommendations section includes more than 60 individual proposals, eight of which apply to every park. The eight recommendations for all parks include proposals to: control invasive species, delineate park boundaries, adopt sustainable trail practices, inventory existing trails, develop a trail monitoring program, update park maps, better utilize internet and web tools, and develop a network of waterfront paddling destinations. Park-specific recommendations vary from one park to another and include such proposals as allowing off-road cycling in Tryon Park, and establishing an off-leash dog area within Ellison Park.

The report also includes a section regarding implementation and phasing. Each project varies in priority and in proposed time frame, based on the number of people served by the project, the construction feasibility, and the way in which the project addresses multiple key issues. Each project was assigned a high, medium or low priority, as well as a short-term, mid-term, long-term, or on-going time frame. The projects recommended for the Bay Area Parks encompass a wide number of issues, and vary significantly in cost, effort, and resources required for successful implementation.

Monroe County will not be able to address every recommendation immediately. Some projects present opportunities for the average citizen to participate. In some cases, community groups are already involved, and these groups contribute a valuable service to the community. By assisting with parks and trails, community members also develop a sense of ownership and stewardship. By formalizing old partnerships and cultivating new ones, the County will not only gain assistance in advancing various recommendations, but also enhance the sense of stewardship community residents possess.

The implementation section also includes maintenance and operations guidelines, a discussion of SEQRA documentation, and potential funding sources. The maintenance and operations guidelines can be used to help insure that the Ellison Area Parks continue to meet the goals and objectives of the Master Plan Updates over the long term. The emphasis is on providing parks that are both cost-efficient and ecologically sustainable. The Ellison Park Area Master Plan updates will be subject to review under the New York State Environmental Quality Review Act (SEQRA) because the proposed future actions within each park may affect the environment. Completion of the SEQRA process is necessary prior to the adoption and implementation of the Ellison Park Area Master Plan Updates by Monroe County.

ACKNOWLEDGEMENTS

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In compliance with directives set forth by the Monroe County Legislature, the Monroe County Department of Parks has undertaken a program to develop and update comprehensive master plans for each park under county jurisdiction. The purpose of the master plan is to identify the most appropriate uses for the Monroe County Park System in order to meet future recreational needs. The information presented within this document represents an update to the Ellison Park Comprehensive Master Plan that was completed in 1985.

The initial objectives developed for all the park comprehensive plans were to:

Inventory existing conditions and identify environmental constraints.

Identify sensitive environmental conditions that need to be preserved or enhanced.

Identify areas of public concern complete with a recommended course of action.

Identify facilities or programs that are no longer functional or useable, and need to be replaced or removed.

Identify needed improvements to existing facilities and operations and propose a means to bring them up to present standards.

Propose new facilities or programs necessary to keep pace with anticipated user demands.

Identify the need for additional parklands to be acquired.

Develop detailed goals and objectives complete with anticipated costs and suggested implementation programs.

It should be noted that the recommendations presented in this park master plan update will work in tandem with programs and facilities that are either existing or proposed for other parks. Certain modifications to these recommendations can be expected as the Parks Department continues to update comprehensive master plans for other parks and integrates the individual plans into a countywide program. The Parks Department will look at the merits of each park master plan and establish priorities to achieve a well-balanced program of improvements that will meet the needs and desires of the citizens in our community.

This report summarizes the site analysis, planning concepts, and preliminary design studies for six Monroe County Parks located at the south end of Irondequoit Bay. These parks include: Devil's Cove Park, Ellison Park, the Ellison Wetlands, Abraham Lincoln Park, Irondequoit Bay Park West, and Tryon Park.

A. Background

Monroe County is located in the Finger Lakes region of New York State, where the Genesee River meets the south shore of Lake Ontario. Monroe County has a population of over 735,000 residents. The County is comprised of 19 towns, 10 villages and the City of Rochester, the third largest city in New York State.

Parks in Monroe County were established in 1888 with the creation of the Rochester Parks Commission and the dedication of Highland Park. In 1926, the county began to assume direct responsibility for the management of local parklands. Today, the Monroe County Department of Parks operates 21 parks throughout the county, comprising more than 11,200 acres. Almost all 21 county parks have picnic and hiking areas and most are equipped with sports facilities, shelters and lodges.

The Monroe County Department of Parks contracted with Environmental Design and Research (EDR) in 2008 to update the 1985 Ellison Park Comprehensive Master Plan, including the integration of this update with plans for the public lands studied in previous planning efforts. The County envisioned an overall composite program for the public lands located at the south end of Irondequoit Bay. EDR was selected to work collaboratively with County officials to coordinate a planning process, where the defined program was anticipated to include potential project implementation, such as recreational facility improvements, site improvements, building rehabilitation and construction, accessibility improvements, and utility improvements.

B. Planning Process

The planning process for the Ellison Park Area Master Plan updates was based on the foundation laid by other planning studies and initiatives, and also utilized the knowledge of local residents, who attended public meetings and provided input to the Parks Advisory Committee. The planning for each park is an integral part of a long-range planning process that has been continuous, comprehensive, and participatory.

Relationship to Other Plans and Studies

The Ellison Park Area Master Plan updates build on the following previously completed planning initiatives:

Irondequoit Creek Multi-Use Trail: Feasibility Assessment & Design Recommendations, 2008
Town of Penfield Parks and Recreation Master Plan, 2007
Strategic Plan for the Prevention of Childhood Overweight and Obesity in Monroe County, 2007
Green Building Initiative, 2007
Town of Penfield Open Space Update, 2006
Irondequoit Bay Birding Document, 2003
Irondequoit Bay Harbor Management Plan, 2003
Final Statewide Comprehensive Outdoor Recreation Plan, 2003

Biological Study of Irondequoit Bay, 2002
Town of Penfield Open Space Plan, 2001
Penfield Trail Concepts, 2000
Town of Penfield Comprehensive Plan, 2000
Town of Brighton Comprehensive Plan, 2000
Recreation Demand Study for Penfield, New York, 2000
Irondequoit Bay Hiking Trail Plan, 1999
LaSalle's Landing Development Plan, 1997
Preservation of Environmentally Sensitive Areas in Monroe County, 1996
Athletic Fields in the Town of Penfield, 1995
Town of Penfield Local Waterfront Revitalization Plan, 1991
Town of Webster Local Waterfront Revitalization Plan, 1990
Town of Irondequoit Local Waterfront Revitalization Plan, 1987
Ellison Park Comprehensive Master Plan, 1985
Monroe County Parks Law, 1981

EDR and Monroe County also received numerous position papers and studies related to park use and resource protection from various sources throughout the planning process.

Public Input

The planning process for the Ellison Park Area Master Plan updates was informed by local residents and representatives who serve on the Parks Advisory Committee, as well as by the general public, who attended public outreach sessions. Parks Advisory Committee meetings are open to the public, and the dates are listed on the County website. Public outreach sessions were advertised in advance on the Monroe County web site and in local newspapers.

Public meeting attendees were given the opportunity to express their opinion in multiple ways: feedback forms were distributed to all attendees, and large sheets of paper were used to solicit specific comments. At the first meeting, representatives from Monroe County and EDR were available to discuss issues and concerns with the public. At the second meeting, an open question and comment session was held after a presentation was made by EDR.

EDR and Monroe County also met with various community groups, and received a significant number of letters and emails. The full spectrum of letters and emails was compiled and provided to the Monroe County Parks Department and is available for review by the public.

Parks Advisory Committee (PAC) Meetings

PAC Meeting, March 20, 2008
PAC Meeting, April 24, 2008
PAC Meeting, May 15, 2008
PAC Meeting, June 19, 2008
PAC Meeting, August 21, 2008
PAC Meeting, September 25, 2008
PAC Meeting, October 30, 2008
PAC Meeting, November 20, 2008
PAC Meeting, December 18, 2008

Public Outreach Sessions

Public Meeting, June 19, 2008
Public Meeting, November 25, 2008

C. Guiding Principles

The Ellison Park Master Planning process was guided by the following principles.

National Park Service Management Policies

The [National Park Service] shall promote and regulate the use...[of parks]...to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations. (National Park Service Organic Act of 1916)

New York Statewide Comprehensive Outdoor Recreation Plan (SCORP)

The “heart and soul” of the State’s outdoor recreation system is not in its facilities or activities but its natural and cultural resources. The stewardship of these resources must be maintained and fostered, for if they are lost, the quality of the recreational experience is diminished.

Monroe County Department of Parks Mission Statement

The Department of Parks is comprised of dedicated staff working with community partners in effectively and efficiently providing an array of park services. This ensures that everyone may enjoy recreational and educational opportunities while treasuring the natural, zoological, horticultural, historical and geological features of the Monroe County Parks System.

Vision

The Bay Area Parklands are a system of parks and trails that protect and preserve important natural, historic, and cultural areas and landscapes. The parks will be preserved and enhanced to provide environmental quality and a diversity of appropriate and sustainable recreational activities. The use of the parks will be promoted and regulated in such a way as to leave them preserved for the enjoyment of future generations.

Goals

1. Residents of Monroe County will have access to a Parks and Recreation system that provides a diversity of opportunities for healthy outdoor activity.
2. Passive and active recreational activities that are safe and affordable will be balanced with the conservation of natural and cultural resources.
3. The parks around the Bay will be woven into the larger community, unified by an integrated trails and greenway network.
4. Recreational programs and facilities will be supported by a variety of public and private groups and organizations working in cooperation toward a common set of goals.
5. Community involvement will be actively sought regarding the planning and operation of the Monroe County Parks.

D. Parallel Initiatives

As with most planning efforts, other projects are planned or proposed concurrent to the planning efforts at hand. The purpose of this section is to briefly describe projects that are being proposed within or adjacent to the Ellison Area Parks that could potentially impact park use, effect park resources, or contribute to the objectives of the Master Plan Updates. The projects discussed in this section are not being proposed, developed, or funded by Monroe County. They are independent initiatives sponsored by a variety of public and private organizations.

Proposed Bridge at the Narrows (Cranson Bridge)

Sponsor: Penfield Trails Committee

Members of the Penfield Trails Committee have been pursuing the possibility of a pedestrian bridge over Irondequoit Creek since approximately 2002. The objective was to unify existing trail systems on the east and west sides of the creek into a contiguous network that can extend into Ellison Park. The proposed bridge location is at the narrowest point of the creek, over the weir structure that was installed by the US Army Corp of Engineers. The weir is slated for removal, and the bridge is conceived as being a free-span structure designed for foot traffic only. As a backcountry trail improvement, the bridge will likely have a stepped approach on both sides and will not be ADA-accessible.

The east end of the bridge would be on Monroe County park property (Ellison Wetlands). The west end would be in the Town of Brighton. Connector trails would need to be established through Brighton property into Tryon Park and back to County parkland on the west side of the creek. Partial funding has been secured from the NYS Department of State, Division of Coastal Resources.

The bridge concept has been informally discussed at several points over the years with County and Brighton representatives, but no official review or approval has been initiated. It is important to note that the Town of Brighton would need to provide design review, approval, and access easements prior to bridge construction. Any potential negative environmental impacts caused by having a bridge across the narrows may also need to be weighed at the appropriate time.

The Narrows Bridge could potentially support the following objectives of the Ellison Area Park Master Plan Updates:

- Access and Community Connectivity
- Healthy Living to Address Preventable Health Problems
- Waterfront Use and Access

Irondequoit Creek Valley Multi-Use Trail

Sponsors: Genesee Transportation Council (GTC), Town of Penfield

The Genesee Transportation Council (GTC) conducted site analysis, assessed feasibility, and completed concept-level planning and design for a multi-use trail along Irondequoit Creek in Monroe County. Guidelines for design development, construction and maintenance of the trail system were prepared. The Irondequoit Creek Valley Multi-Use Trail is envisioned as a key community connector – both an interesting alternative transportation route and an exciting recreational pathway – for bicycles and pedestrians traveling in the Irondequoit Creek Valley.

The 4.8-mile multi-use trail proposed in this study would complete the northern connection of the existing trail from Panorama Plaza to Irondequoit Bay. The majority of the proposed trail alignment would be in Monroe County parkland (Ellison Park and Ellison Wetlands). The Irondequoit Creek Valley Multi-Use Trail has the potential to be a high value alternative transportation corridor. The feasibility of the trail is very favorable, due to the minimal number of road crossings, the involvement of very few property owners, and the opportunity to re-use existing infrastructure. To maximize an exceptional location, the trail corridor will be designed to balance a mix of recreation and alternative transportation uses with the preservation of sensitive ecosystems.

As proposed, the GTC project could support the following objectives of the Ellison Area Park Master Plan Updates:

- Access and Community Connectivity
- Healthy Living to Address Preventable Health Problems
- Shared Use of Trails
- Waterfront Use and Access
- Sustainability

Boardwalks on the South End of Irondequoit Bay (Empire Boulevard)

Sponsors: Town of Penfield

The Town of Penfield will undertake construction of projects to enhance access to the Irondequoit Bay waterfront and provide intermunicipal linkages. Work will include installation of two elevated boardwalks traversing Irondequoit Bay wetlands parallel with Empire Boulevard in the LaSalle Landing Development District. Approximately 425 lineal feet of boardwalk will be constructed in the Town of Penfield, and 600 lineal feet will be constructed in the Town of Irondequoit. Funding has been secured from the NYS Department of State, Division of Coastal Resources.

This project will support the following objectives of the Ellison Area Park Master Plan Updates:

- Access and Community Connectivity
- Healthy Living to Address Preventable Health Problems
- Waterfront Use & Access
- Sustainability

Penfield Bicycle Facilities Master Plan

Sponsors: Town of Penfield & Genesee Transportation Council (GTC)

In Fall 2007, the Town of Penfield began the process of developing a Bicycle Facilities Master Plan. A Bicycle Facilities Master Plan is a strategy for providing safe, convenient and well-designed bicycle routes and facilities within a community. A bicycle facility is a structure that enhances accessibility, use, and convenience of bicycle transportation. The Genesee Transportation Council provided funding, and the Town of Penfield provided in-kind services that included GIS data analysis and map production. The project timeline was from April to December 2008.

The Town of Penfield's commitment to bicycling demonstrates a commitment to sustainable transportation, congestion reduction, safer streets, healthful and enjoyable recreation, and an increased quality of life. The Town of Penfield's commitment is aligned with the Rochester area and Monroe County's focus on alternative transportation. Several roadways that connect to the Ellison Area Parks are identified in the Penfield Bicycle Plan as Priority Bicycle Routes. The Penfield Bicycle Facilities Master Plan supports the following objectives of the Ellison Area Park Master Plan Updates:

- Access and Community Connectivity
- Healthy Living to Address Preventable Health Problems
- Sustainability

E. Benefits of Parks

According to the 2002 Statewide Comprehensive Outdoor Recreation Plan (SCORP), the latest recreation survey indicates that almost all New Yorkers had participated in some form of outdoor recreation at least once during the previous 12 months. Relaxing in the park is the most popular activity, followed by recreational walking and jogging, swimming, biking, boating, fishing, hiking, and visiting historic sites. These are only a few of the many recreational opportunities available. Other activities such as bird watching, snowshoeing, horseback riding and surfing are equally important but have fewer participants.

Recreation and open space provide numerous benefits to society, direct and indirect, short term and long term. There are both intangible and intrinsic values that together make it difficult to fully quantify the true benefits. Benefits include tourism; environmental protection; enhanced quality of life; and reduction in public service requirements due to a decreased need for health services. These impact our economy, environment, health and community (SCORP, 2002). The benefits can be personal benefits, related to individual health and wellness, as well as recreation and leisure. These benefits can also be collective community benefits, related to the park's ability to function as an environmental resource and a community gathering place.

In the years that have passed since 1985, one of the biggest changes has been in the public health situation. Parks provide an opportunity to live a healthy lifestyle and address preventable health problems. While all of the other benefits of a park have remained constant and important, the role that a park can play in community health has become a critical issue, particularly as public funding for health care has declined.

Health and Wellness

The most valuable natural resource of any community is the health of the residents. Recreation provides an important opportunity for people to be physically active, which can lead to significant improvements in health. Physical activity on a regular basis can contribute to a decrease in the risk of numerous debilitating diseases and conditions. In 2005, the Centers for Disease Control and Prevention (CDC) reported the following statistics:

- Obesity has risen significantly among adults in the last 20 years
- 30% of U.S. adults age 20 and older – over 60 million people – are obese

- The percentage of young people who are overweight has more than tripled since 1980
- 16% of young people age 6-19 years – over 9 million people – are considered overweight

In Upstate New York, childhood obesity trends exceed or match national trends. For example in 2004, twenty-one percent of Upstate New York 3rd graders are obese, which exceeds the national rate of 16% (Upstate NY, 2004). Childhood overweight and obesity is a precursor for adult obesity. The Strategic Plan for The Prevention of Childhood Overweight and Obesity in Monroe County, NY 2007-2017, cites “the physical environment and the lack of affordable and safe recreational venues for many children,” as a factor in childhood overweight and obesity. The Greater Rochester Health Foundation and its Task Force has set the following goal to decrease childhood obesity:

- Reduce the prevalence of overweight and obesity, as measured by Body Mass Index (BMI), from 12,244 (15%) to 4,081 (5%) of Monroe County children ages 2-10 by 2017.

Increased physical activity and creating safe environments are strategies that will be employed to meet the goal.

Health care costs and insurance rates are escalating, causing serious impacts to the local economy. In 2000, health care costs associated with physical inactivity topped \$76 billion (CDC, 2005). Lack of physical activity is a contributing factor to a growing number of serious illnesses and health problems among all age groups. Land use and building patterns exacerbate the problem by providing new neighborhoods that have few opportunities for walking or biking. Lifestyles have become increasingly sedentary in a post-industrial society.

Despite the proven benefits, more than 50% of American adults do not get enough physical activity to provide health benefits (CDC, 2005). With this in mind, opportunities for exercise and healthful outdoor activity are more than expendable extras. Parks, trails, and open space resources take on new meaning and value. Opportunities for recreation and active transportation support the health and wellness of local residents, and have significant and quantifiable economic impacts.

Regular physical activity has the benefit of looking and feeling better, but also reducing the risk of disease. Unhealthy diet and physical inactivity can cause or aggravate many chronic diseases and conditions, including type-2 diabetes, hypertension, heart disease, stroke, and some cancers (CDC, 2005). Regular physical activity is an important component of a healthy lifestyle, and aids in the prevention of many chronic diseases, disabling conditions and chronic disease risk factors (CDC, 2007).

In addition, research studies have found that overweight and obese children have lowered academic achievement in standard test scores (CA Dept of Ed, 2005). Also, findings in other studies show that children who are physical active perform better academically and miss fewer days of school (Dwyer, 1996). Walking and bicycling provide opportunities to simultaneously obtain the benefits of transportation and physical exercise.

SUMMARY OF PARK RESOURCES

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The following sections comprise the Inventory and Analysis conducted for the overall Study Area, as well as for each individual park.

A. Overall Study Area

Character and Circulation

The six parks are situated in the northeastern portion of Monroe County, primarily adjacent to Irondequoit Bay and/or Irondequoit Creek (see Figure A). The parks comprise approximately 1,240 acres and vary significantly in topography, facilities, and ecology. Several of the parks, such as Tryon Park and Abraham Lincoln Park, have steep wooded slopes. The Ellison Wetlands contains fragile ecosystems: steep, erodible slopes in the “Old Rifle Range”, as well as flat, wetland marshes near the creek. Most of the parks have few facilities or amenities, while Ellison Park has a number of shelters, lodges, recreational fields, trails, and other amenities.

Multiple major roadways running in an east-west direction cross through the study area. Route 104 crosses the Bay north of Devil’s Cove Park. Empire Boulevard crosses the study area to the south of Bay, just north of the Ellison Wetlands. Browncroft Boulevard traverses the study area just south of the Ellison Wetlands, and north of Ellison Park. Blossom Road runs through Ellison Park, crossing over Irondequoit Creek. These roadways are some of the primary routes that are used by park users to access the parks.

Geology

The Ice Ages began about one million years ago and ended in the Rochester area approximately twelve thousand years ago. The last Ice Age consisted of four successive glaciers, the last being the Wisconsin Glacier. This glacier was responsible for the formation of Rochester and specifically the Irondequoit Bay area. The brochure prepared by the Monroe County Department of Parks, ***Glacial Geology and the Mendon Ponds Area***, states that, “During pre-glacial times the Genesee River turned eastward from its present course near West Rush and ran along the course of the present Lehigh Valley Railroad to a point near Fishers, New York. From this point, the river turned northward to Irondequoit Bay, which is a flooded remnant of its ancient valley. Glaciation filled the east and north river valleys of the area, and the post-glacial Genesee was required to cut the new and present cascading course straight to Lake Ontario through what is now Rochester.”

During the Pleistocene Epoch, which ended approximately ten thousand years ago, a variety of animals roamed the area, including woolly mammoths, giant beavers up to 300 pounds, and wild boar.

History

The area that now encompasses Ellison Park has a rich Native American and early American history. Lake Ontario, Irondequoit Bay and Irondequoit Creek played an important role in the settlement of this country, and defined much of the early development of the surrounding communities. Prior to the birth of our nation, this was an important meeting and trading place, and peaceful encounters between Native Americans and Europeans played a significant part in the area’s past. One of the earliest attempts at founding a city in this part of the state also occurred nearby.

Irondequoit Bay has been a landmark on almost every map of the “New World” since it appeared on Champlain’s Map of 1612. It was a gateway to the Seneca Nation, for unlike the Genesee River, there were no barriers, falls, or sheer cliffs along Irondequoit Creek. In 1669, the French explorer Robert Cavalier de LaSalle came to the south end of the Bay in the first recorded visit of white men to Irondequoit Bay. LaSalle dreamed of finding a passage to the south sea and China. Irondequoit Creek became a natural travel route for the French and English, who pursued a lucrative fur trade with the Iroquois Nation, and competed for control of their territory. The area was a key military location in the 1700’s and had its first settlement in 1800.

Several monuments have been erected within the park to commemorate the area’s historic sites. Alongside Irondequoit Creek in Ellison Park, a bronze tablet is mounted on a large boulder to mark the nearby “Indian Landing.” The Monroe County Parks Commission erected the memorial plaque in 1928 near a major disembarkation point for travelers on Irondequoit Creek. The landing was an important junction of transcontinental trails, functioning as the eastern gateway of the Ohio trail, connecting to the Ohio and Mississippi River Valleys.

Across the creek from the memorial is the presumed site of Peter Schuyler’s Trading Post, more popularly known as “Fort Schuyler.” Existing documentation suggests that the original structure was not actually a fort, but rather a trading post commissioned in 1721 by order of William Burnett, the English Colonial governor of New York. He instructed Captain Peter Schuyler, Jr. to go with a company of young men and establish a trading house near Irondequoit Creek. Its purpose was to encourage trade with the Native Americans, and compete with the French for furs. It is not known how long the original building stood, and there is still some question among historians as to its exact location and design. In 1936, a log cabin representative of the era was erected to commemorate this site. The building was modeled after plans of a log blockhouse constructed during the 18th century in Oswego, New York. Some modifications to the plans were made to permit a fireplace to be included. Although in disrepair, this structure still stands today and is located just inside Ellison Park, north of Blossom Road and east of Landing Road.

The vicinity of Indian Landing was also the location of Tryontown, now known as the “Lost City of Tryon.” This city, founded in 1797, was one of the first attempts to establish a permanent settlement in what is now Monroe County. Historians believe that it was founded by John Tryon on the ridge west of Indian Landing and was settled in the late eighteenth and early nineteenth centuries. The village was designed as a residential and business center and contained a storehouse, distillery and ashery, school, cemetery, a public house, and a number of residences and farms. The town flourished for a few years until growth was hampered by John Tryon’s death, the trade embargoes of the War of 1812, and the designation of Charlotte as the lake port for the region. The attraction of waterpower generated by the Genesee River waterfalls and plans for the Erie Canal also drew speculators to nearby Rochester. Overshadowed by its growing neighbors, by 1818 the City of Tryon was left abandoned.

Ellison Park was dedicated when the Frank T. Ellison farm was sold to the county in 1926. Nine acres near Landing Road were purchased from the Chambry estate in 1927 and included the Indian Landing site and the Fort Schuyler site. The park (220 acres) was officially dedicated on September 27, 1927. The park was developed in the late 1920’s and early 1930’s. Early park activities included social and political gatherings, hiking, passive activities, canoeing, and viewing

of the rose garden. The rose garden (completed in 1939) contained formal gardens, stone walled terraces and a fountain. Roses, as well as annual and perennial flowers, were featured in this area throughout the summer, which became a major attraction of Ellison Park. This part of the park no longer exists as originally designed.

A 360-foot toboggan run was completed on the south side of Blossom Road in 1935. The slide, which included a wooden starting chute, was iced down and immediately became a major winter attraction. An article in the local paper indicated that on December 15, 1938, the slide, which attracted 40,000 people, reached speeds of up to “80 miles per hour.” Little is recorded on the demise of the slide; however, it is assumed that liability problems, deterioration, and congestion in the area forced it to close. Aside from foundations, little evidence of the slide’s existence remains today.

The Ellison Wetlands, Abraham Lincoln Park and Irondequoit Bay Park West, were purchased with the aid of state and federal funding in the late 1960’s. The City of Rochester owns Tryon Park, which was dedicated in 1971, but Monroe County currently acts as the park manager. Sewage infrastructure, including an abandoned aboveground delivery pipe from Tryon Park’s previous days as a sewage plant, is currently located in the park. However, some of this infrastructure, specifically a Monroe County Pure Waters facility, will be decommissioned and demolished during 2009. Devil’s Cove Park was acquired in 2000, and is the most recent addition to the Monroe County Parks System. Few improvements have been made to most of these parks since the acquisition of the land.

Demographic Analysis

Irondequoit Creek flows through a natural corridor that is surrounded on most sides by significant development. Approximately 81,000 residents live within two miles of the Bay Area Parks. This density of residents suggests that there are a number of park users living in close proximity. In addition, public input has made evident that park users come from even outside a two-mile radius. In addition, there are a number of community resources within close proximity of the parks. Within 1.5 miles, there are 17 restaurants, 10 churches, and 19 schools. Between the residents living near the parks, and the patrons of these community resources, the numbers suggest that there are a significant number of people who use the Bay Area Parks.

The following information identifies the number of people within walking distance (1/2 mile) of each park:

- Approximately 570 people reside within ½ mile of Devil’s Cove Park
- Approximately 3,500 people reside within ½ mile of Ellison Park
- Approximately 2,400 people reside within ½ mile of the Ellison Wetlands
- Approximately 3,325 people reside within ½ mile of Abraham Lincoln Park
- Approximately 3,150 people reside within ½ mile of Irondequoit Bay Park West
- Approximately 7,650 people reside within ½ mile of Tryon Park

The Bay Area Parks are accessible to people of all ages and levels of skill. However, it is still important to understand the makeup of the nearby population. Of the 81,000 residents living

within two miles of a park, the greatest segment of the population (37%) is between 25 and 49 years of age. 20% of residents are younger than 14 years old, and 17% are over 65 years of age. 16% of residents are between 50 and 64 years of age, and 10% are between 15 and 24 years of age. Two miles is a distance that the average person would travel on a bicycle to reach a park.

Waterways

The Irondequoit Creek basin encompasses 151 square miles in parts of eight townships and two counties, emptying into Irondequoit Bay on Lake Ontario. 78% of the basin lies within Monroe County, with the remaining 22 percent in Ontario County. Of the Monroe County section, the City of Rochester occupies 7 percent of the basin. NYSDEC lists Irondequoit Creek (Ont. 108-P 113-3) on its Priority Waterbodies List (#0302-0024) with a state classification of "B (T)." The best usages of Class B waters are as primary and secondary contact recreation and fishing. These waters shall be suitable for fish propagation and survival. In addition, Irondequoit Creek is recognized as one of the best rainbow trout (steelhead) streams in New York State, but NYSDEC lists sediment as the primary source of contamination threatening the survival and propagation of fish within the creek.

According to Bannister and Bubeck (1978) as noted in the Irondequoit Bay Biological Study (2002), Irondequoit Bay occupies the northern end of a broad valley eroded below sea level by an unknown number of glacial advances and filled with a complex series of glacial and post glacial sediments. The Bay itself can be divided roughly into quarters from north to south. The northern quarter is less than 10 feet deep (except where it has been dredged subsequent to the opening of the Bay in the early 1990s). Next is the deepest portion of the Bay (75 ft) followed by a moderately deep section (10-30 ft). The southernmost quarter is an extensive shallow area less than 10 ft deep. As natural sedimentation proceeded, extensive wetland areas with diverse biota developed along the edges of the Bay, especially at the shallow northern and southern ends. Depositional silts and sands rich in organic deposits lie under the Bay; however, land clearing in the watershed and filling and dumping in the Bay have covered the original sediments in many places. By 1970, about 10% of the water flowing into the Bay came from sewage treatment plants in the watershed (Bannister and Bubeck, 1978).

According to the Biological Study of Irondequoit Bay (2002), the entire perimeter of the Bay is a Class I wetland that has the highest level of protection by New York State. The various submersed and emergent habitats that comprise the Irondequoit Bay wetlands perform valuable ecological functions as fish and wildlife habitat and food. The Biological Study identified multiple locations within and in close proximity of the Bay Area Parks that have critical aquatic and terrestrial habitats.

B. Devil's Cove

Park Character

Devil's Cove is located on the eastern shore of Irondequoit Bay, southwest of the intersection of State Route 104 and Bay Road. The park is natural and undeveloped. The 10.4 acres are a new, unique addition to the park system in that the park is currently accessed by boat only. The park is situated along a narrow ridge on a point within Devil's Cove with steep slopes on all sides. The

property is comprised primarily of an upland forest ecological community; however, the park boundary borders the bay shoreline and a forested wetland along a valley bottom.

Facilities and Uses

Devil's Cove is a popular spot for boating and fishing. The waters of the cove provide a sheltered area for boaters to escape bad weather, as well as a location for anchoring overnight and allowing passengers to fish, swim, and play in the water. The park faces north, and the cove can be a shady refuge on a hot day. The shoreline has a location where park users can beach their boats to access the park. The park itself does not receive heavy use. No man-made structures are apparent and very little trash/debris can be observed. The park appears to receive occasional use by adjacent residents and dog walkers. Although restrooms and picnic tables are not provided, the park seems to provide a rustic location for boaters to relieve themselves and enjoy a picnic.

Access and Circulation

After accessing the park from the water, abandoned footpaths can be used to walk through the park. No official access from land exists, although adjacent residents can utilize private access points to enter the park. No parking areas exist in the park.

Topography and Soils

The topography in Devil's Cove Park does not rise to the elevations that can be found in the other Bay Area Parks, but for its relatively small size, the topography has significant variation. At the shoreline, the elevation reaches approximately 245 feet, and at the highest elevation, the topography reaches 318 feet. 76.4% of the terrain in the park is between 5% and 30% slope. The topography in the park has the following slopes: 2.4% of the topography is between 0 and 5%; 21.2% is between 5 and 10%; 29.2% is between 10 and 20%; 26.0% is between 20 and 30%; 13.5% is between 30 and 40%; 6.7% is between 40 and 50%; and the remaining 1.0% of the slopes are between 50 and 100%. The Park is comprised of only two soil types: AtF3 and Fw. AtF3 is classified as Arkport, Dunkirk and Colonie soils at 20-60% slopes and highly erodible. Fw is a freshwater marsh.

Ecological Character

The ecological character of Devil's Cove can be summarized in three categories: existing cover type; rare, threatened and endangered species; and habitat assessment. The data contained in these categories comes from the Irondequoit Bay Biological Study (2002) and from field visits by EDR's ecological scientists.

1. Inventory of Existing Cover Type

Mature Rich Mesophytic Forest: The mature forest communities within Devil's Cove Park are located primarily on steep ridges and valley slopes. Typical forest canopy species such as maple, red oak, beech, and white oak dominate. Due to the dense canopy of these overstory trees, limited shrub and herbaceous layer vegetation was noted within the mature forested areas. Where observed, the understory is comprised of maple and oak saplings, viburnums, and cherry. On top of the ridge at the point facing the bay there is a substantial stand of willow shrub species. The herbaceous layer is dominated by fern species and on top of the ridge, lily of the valley.

Forested Wetland: A small, forested wetland is located at the base of a drainage on a ravine bottom near the shoreline. The overstory is comprised of upland canopy trees mixed with black willow. Willow saplings makeup the understory while sensitive fern dominates the herbaceous layer.

Invasive species: Currently, invasive plant species are not a problem within this park. Norway maple exists but is not persistent.

2. Rare, Threatened, and Endangered Species

According to the New York State Department of Environmental Conservation (NYSDEC) database, sideoats grama (*Bouteloua curtipendula*), a listed plant species in New York State, has been identified in the vicinity of Devil's Cove Park. Although this is not the optimal time of the growing season to look for certain rare, threatened, or endangered species, no observations of this species were made.

The Biological Study identified multiple locations within and in close proximity of the Bay Area Parks that have critical aquatic and terrestrial habitats. Devil's Cove is a critical priority for aquatic habitat protection due to the high species diversity, important spawning and nursery habitat, and the presence of walleye.

3. Habitat Assessment

Mature Forest and Forested Wetland Habitats: The existing mature forest provides habitat for wildlife species that require forest interior conditions, such as wood thrush, warblers, orioles, red-eyed vireo, black-capped chickadee, and several woodpecker species such as the hairy, red breasted, flicker, and pileated woodpecker. A pair of red tail hawks was observed within the forest canopy. The small forested wetland along the shoreline in the bottom of the ravine provides habitat for waterbirds, including great blue heron, cormorants, mallards, belted kingfishers and wood duck. Herring gulls and common terns were spotted flying a short distance from the shoreline. Common mammals that utilize forested habitat likely include gray squirrel, red squirrel, eastern chipmunk, and whitetail deer (tracks were observed). Older signs of beaver activity were observed near the forested wetland.

Overall the park provides good mature forest habitat to migrating bird species and cover along steep ridges and additionally protects important shoreline habitat within Irondequoit Bay.

C. Ellison Park

Park Character

Ellison Park is located at the south end of Irondequoit Bay between Browncroft Boulevard and Penfield Road. The approximately 400-acre park is situated along Irondequoit Creek on a broad flat floodplain between steep slopes and valleys to the east and west. Forested and emergent wetland ecological communities encompass a portion of the Irondequoit Creek floodplain. This park is the most developed of the six parks, and is comprised primarily of maintained lawns,

SUMMARY OF PARK RESOURCES

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picnic areas, playgrounds, and athletic fields. There are numerous structures within the park, such as roads, bridges, shelters, restrooms, pavilions, and historic buildings.

Facilities and Uses

Ellison Park receives the heaviest use of any of the parks assessed in this Master Plan Update. The Park contains a number of facilities and structures, which include:

- Five softball fields
- Four tennis courts
- Four restrooms
- Four lodges (Creekside, Hazelwood, Pavilion, South)
- Seven picnic shelters (Circle, Island, Old Meadow, Orchard Grove, Roadside, Spruce, Sycamore)
- 5.2 miles of trails (Bridle, Butler's Gap, Coyote Den, Indian Landing, Mill Race, Overlook)
- Ice skating rink (flooded parking area)
- One historic structure
- One historic marker
- Two children's play areas
- One canoe launch (with water monitoring building)
- One disc golf course
- One designated sledding area
- 14,250 feet of roads
- Additional 3,450 feet of park access road (not open to park traffic)
- Parking for approximately 460 cars
- Seven bridges (4 pedestrian and 3 vehicular)
- Maintenance area off of Rich's Dugway Road

Access and Circulation

Ellison Park is divided by Blossom Road, and bounded by Browncroft Boulevard to the north, Landing Road to the west, and Penfield Road to the south. Public comment indicates that the park is primarily accessed from entrances on Blossom Road, Landing Road and Penfield Road. The park is also accessed by water from Irondequoit Creek. The park contains a number of service roads and trails, from which park visitors can access lodges, shelters, and other facilities.

Topography and Soils

Although there are some high elevations in Ellison Park, the topography is primarily flat. At the edges of Irondequoit Creek, the elevation is approximately 246 feet, and at the highest elevations along Landing Road and in the southern tip of the park, the topography reaches 408 feet. The topography in the park has the following slopes: 45% of the topography is between 0 and 5%; 12% is between 5 and 10%; 16% is between 10 and 20%; 10% is between 20 and 30%; 7% is between 30 and 40%; 5% is between 40 and 50%; and the remaining 4% of the slopes are between 50 and 100%. The Park is comprised of four soil types: Al, AtF3, CIB, and W. Al is Alluvial Land. AtF3 is classified as Arkport, Dunkirk and Colonie soils at 20-60% slopes and highly erodible. CIB is a Collamer Silt Loam (2% to 6% slopes) and W is water.

The section of Ellison Park found to the south of Blossom Road is a level plateau and is generally flooded in the spring of the year, although not as severely as the area adjacent to Blossom Road to the north. Irondequoit Creek meanders throughout the park and is the major cause of the spring flooding. A smaller piece of land south of Blossom Road is separated from the main area by Rich's Dugway Road. This area is wooded to the west, and flat and wet to the north, then rises steeply to Rich's Dugway.

The largest part of Ellison Park lies to the north of Blossom Road. Irondequoit Creek also meanders through the center of this area and again causes flooding, at times greater than that on the south. The land adjacent to the stream is flat and poorly drained. A secondary channel parallels Irondequoit Creek and eventually discharges into the wetlands to the north. A large steep hill is found near the center of the northern park area. The northwest section of this park becomes exceedingly flat and does not drain well, becoming the beginning of the wetlands.

The remainder of the park to the west bounded by Blossom Road and Landing Road is rolling meadow with stands of large deciduous and evergreen trees planted in the Civilian Conservation Corps era. This area was once the site of the rose garden and arboretum, which has since been abandoned.

Ecological Character

The ecological character of Ellison Park can be summarized in three categories: existing cover type; rare, threatened and endangered species; and habitat assessment. The data contained in these categories comes from field visits by EDR's ecological scientists.

1. Inventory of Existing Cover Type

Maintained Recreational Areas: The maintained recreational areas of the park are present on a flat floodplain dominated by grass species such as fescues, blue grass, white and red clover, and dandelion. There are tree species such as sugar maple, red oak, white pine, American beech, black cherry, and green ash along roadways and other corridors. Some of these trees can be considered specimen trees with 30 inches or greater diameter at breast height (DBH). In some areas there is an understory/shrub layer present with maple saplings and honeysuckle dominant.

Mature Rich Mesophytic Forest: The mature forest communities within Ellison Park are located primarily on the steep ridges and valley slopes of the eastern and western portions of the park. Typical forest canopy species such as maple, red oak, and hickory are dominant. Due to the dense canopy of these overstory trees, limited shrub and herbaceous layer vegetation was noted within the mature forested areas. Where observed, the understory is comprised of maple and oak saplings. Fern species dominate the herbaceous layer.

Floodplain Forest: There are small areas of forested riparian wetland concentrated along Irondequoit Creek and other open water channels that meander through the park. Canopy trees such as black willow, green ash, silver maple, pin oak, red maple, sycamore, eastern cedar, and cottonwood are present. Willow, maple, cottonwood and willow shrubs make up the understory. Reed canary grass, tear thumb, and sensitive fern dominate the herbaceous layer. Grape is present in the vine layer.

Emergent Wetland: Emergent wetlands also dominate the unmaintained areas along the Irondequoit Creek floodplain. Wetland species such as reed canary grass, tear thumb, sedges, green bulrush, cattail, joe-pye weed, sensitive fern, goldenrod, and boneset dominate most of these emergent areas. This large wetland expanse is heavily dominated by cattail except along open water channels where purple loosestrife and grape vine have started to colonize.

Invasive species: Several of the most common invasive species such as purple loosestrife, common reed, honeysuckle, and Japanese knotweed are present but not at alarming levels. These species should be monitored regularly to ensure that they do not become more dominant.

2. Rare, Threatened, and Endangered Species

According to the NYSDEC database, hooker's orchid (*Platanthera hookeri*), golden puccoon (*Lithospermum caroliniense*), and sweet scented Indian plantain (*Hasteola suaveolens*) all listed plant species in New York State, have been identified in the vicinity of Ellison Park. Although this is not the optimal time of the growing season to look for certain rare, threatened, or endangered species, no observations of these species were made.

3. Habitat Assessment

Mature Forest and Forested Riparian Wetland Habitats: Results of the on-site survey indicate that forest outside of the maintained recreational areas of the park provides habitat for wildlife species that require forest interior conditions, such as wood thrush, warblers, orioles, red-eyed vireo, black-capped chickadee, and several woodpecker species such as the hairy, red breasted, flicker, and pileated woodpecker. The forested riparian wetlands along Irondequoit Creek provide habitat for waterfowl, including Canada goose, great blue heron, belted kingfisher, and wood duck. Common mammals that utilize forested habitat likely include gray squirrel, red squirrel, eastern chipmunk, and whitetail deer. A garter snake was observed near an upland forest area.

Emergent Wetland Habitat: Emergent wetland habitat provides a source of food, water, and/or cover by various waterfowl and many of the upland species mentioned previously. These water bodies may also support small fishes (in this case, larger migratory fish from Lake Ontario pass through the park to upstream breeding sites), amphibians, and a diversity of insects and aquatic invertebrates. Emergent wetlands are preferred foraging areas for aerial insectivores, including songbirds and bats. In addition, these areas provide habitat for various wetland/aquatic wildlife species, including Canada goose, great blue heron, belted kingfisher, swallows, mallard, wood duck, and reptiles such as painted turtle, green frog, spring peepers, bullfrog, and American Toad. Cedar waxwings were observed in one of the emergent wetlands in the park. Mammals such as whitetail deer and beaver would be expected residents in these wetlands. A woodchuck, which can be considered a nuisance species, was observed in the park.

D. Ellison Wetlands

Park Character

Known as “Rochester’s Secret Wilderness,” the Ellison Wetlands are located at the south end of Irondequoit Bay between Empire Boulevard and Browncroft Boulevard. The 423-acre park is situated on a broad flat floodplain between steep slopes and valleys to the east and west. The park is comprised primarily of an emergent wetland ecological community, however, the park boundary encompasses a portion of steep ridges and valleys to the east. The Brighton town landfill is immediately adjacent to the Wetlands on the west side of the Irondequoit Valley and creates a “narrows” where the creek is confined against a glacially deposited hillside. The wetlands are fed by two main channels, the largest being Irondequoit Creek, which meanders along the upper wetlands, and along the eastern side of the lower area. An old mill race runs through part of the north side of Ellison Park and is a secondary feeder.

Facilities and Uses

The Ellison Wetlands are a popular destination for paddling and hiking. The wetland area of the park contains multiple open water channels that are frequented by canoeists and kayakers. BayCreek Paddling Center, a privately run paddling facility on Empire Boulevard at the north end of the park, rents canoes and kayaks, and offers paddling lessons to the general public. A weir is located at approximately midway through the wetland complex near a small monitoring station to the west, but this structure does not restrict access for personal watercraft along Irondequoit Creek. Bridges are located at the north and south end of the park. Despite frequent use, very little trash or debris can be observed along the open water corridors.

The steep slopes to the east of the flat wetland area contain a number of hiking trails in the area of the “Old Rifle Range.” The Old Rifle Range consists of the remains of the rifle range and a small military facility. The area contains the ruins of a few small buildings, a small gazebo in poor condition, and the concrete walls left from the range.

Access and Circulation

The Ellison Wetlands are bounded by Browncroft Boulevard to the south, and Empire Boulevard to the north. Tryon Park is located to the west. Public comment indicates that the park is primarily accessed from the official park entrance on Empire Boulevard, from the unofficial parking area on Old Browncroft Boulevard, from Parkview Drive, and from Tryon Park. The park is also accessed by water from Irondequoit Creek. Paddlers typically enter Irondequoit Creek, and eventually the wetlands from 1) the Paddling Center, 2) the LaSalle’s Landing boat launch on the north side of Empire Boulevard, 3) the canoe launch in Ellison Park, 4) Irondequoit Bay, 5) the canoe launch just north of Browncroft Boulevard, or 6) the unofficial parking area on Old Browncroft Boulevard.

Topography and Soils

Although there are some high elevations in the Ellison Wetlands, specifically in the “Old Rifle Range”, nearly 60% of the topography is flat. The slope of Irondequoit Creek is approximately 1 foot per mile. At the edges of Irondequoit Creek, the elevation is approximately 244 feet, and at the highest elevations in the “Old Rifle Range,” the topography reaches 404 feet. The topography in the park has the following slopes: 58.6% of the topography is between 0 and 5%; 5.5% is

between 5 and 10%; 8.7% is between 10 and 20%; 10.1% is between 20 and 30%; 9.3% is between 30 and 40%; 4.8% is between 40 and 50%; and the remaining 2.7% of the slopes are between 50 and 100%.

The Park is comprised of six soil types: Al, ArB, ArC, AtF3, Fw, and W. Al is Alluvial Land. ArB is classified as Arkport Very Fine Sandy Loam (0% to 6% slopes) and ArC is “Arkport Very Fine Sandy Loam (6% to 12% slopes). AtF3 is classified as Arkport, Dunkirk and Colonie soils at 20-60% slopes and highly erodible. Fw is Freshwater marsh, and W is water.

Ecological Character

The ecological character of the Ellison Wetlands can be summarized in three categories: existing cover type; rare, threatened and endangered species; and habitat assessment. The data contained in these categories comes from field visits by EDR’s ecological scientists.

1. Inventory of Existing Cover Type

Mature Rich Mesophytic Forest: The mature forest communities within the Ellison Wetlands are located primarily on the steep ridges and valley slopes of the eastern portions of the park. An extensive survey was not conducted in this area of the park since the focus was on the larger expansive wetland complex. Typical forest canopy species such as maple, red oak, and hickory are dominant. Due to the dense canopy of these overstory trees, limited shrub and herbaceous layer vegetation was noted within the mature forested areas. Where observed, the understory is comprised of maple and oak saplings. Fern species dominate the herbaceous layer.

Floodplain Forest: There are small areas of forested riparian wetland within the southern portion of the park. These areas are concentrated along Irondequoit Creek and other open water channels that meander through the cattail marsh. Canopy trees such as black willow and cottonwood are present. There is not a pronounced shrub layer. Reed canary grass, cattail and small amounts of purple loosestrife dominate the herbaceous layer.

Emergent Wetland: Emergent wetlands dominate most of the park. This large wetland expanse is heavily dominated by cattail except along open water channels where purple loosestrife and grape vine have started to colonize.

Invasive species: Purple loosestrife, an invasive plant species, is present along the open water corridors but is not yet problematic. Cattail, which is a native species but in certain circumstances can be considered invasive, dominates approximately 90% of the wetland complex.

2. Rare, Threatened, and Endangered Species

According to the NYSDEC database, nodding pogonia (*Triphora trianthophora*), giant pine-drops (*Pterospora andromedea*), twin-leaf (*Jeffersonia diphylla*), and sweet scented Indian plantain (*Hasteola suaveolens*) all listed plant species in New York State, have been identified in the vicinity of the Ellison Wetlands. Although it should be noted that the site visit was not made

at the optimal time of the growing season to look for certain rare, threatened, or endangered species, these species were not observed.

3. Habitat Assessment

Mature Forest and Forested Riparian Wetland Habitats: Results of the on-site survey indicate that forest areas within the park provide habitat for wildlife species that require forest interior conditions, such as wood thrush, warblers, orioles, red-eyed vireo, black-capped chickadee, and several woodpecker species such as the hairy, red breasted, flicker, and pileated woodpecker. The forested riparian wetlands along Irondequoit Creek provide habitat for waterfowl, including Canada goose, great blue heron and wood duck. Common mammals that utilize forested habitat likely include gray squirrel, red squirrel, eastern chipmunk, and whitetail deer. Signs of beaver and muskrat were observed along the edges of forested and emergent wetlands.

Emergent Wetland Habitat: The large areas of open water and emergent wetland habitat provide a source of food, water, and/or cover by various waterfowl and many of the upland species mentioned previously. These water bodies also may support small fishes (in this case larger migratory fish from Lake Ontario pass through the wetland to upstream breeding sites), amphibians, and a diversity of insects and aquatic invertebrates. Emergent wetlands are preferred foraging areas for aerial insectivores, including songbirds and bats. In addition, these areas provide habitat for various wetland/aquatic wildlife species, including Canada goose, mute swan, great blue heron, belted kingfisher, mallard, wood duck, bald eagle, and reptiles such as painted turtle, green frog, spring peepers, bullfrog, and American Toad. Mammals such as whitetail deer and beaver would be expected visitors in this wetland complex. A muskrat was observed on the banks of a channel in the middle of the wetland. Again, wildlife activity would be expected to be high along the water and forested edges of this wetland.

Overall the park provides excellent aquatic habitat and all the benefits of a well-established emergent wetland. Sightings of indicator species such as wood ducks, green winged teals and a bald eagle provide evidence that this wetland complex is healthy and balanced especially with strong suburban development pressures within the watershed.

E. Abraham Lincoln Park

Park Character

Abraham Lincoln Park is located along the southeastern shoreline of Irondequoit Bay on Smith Road off of Empire Boulevard. The 182-acre park is situated along 2,000 feet of bay shoreline on a west-facing slope amongst steep ridges and valleys. The park is comprised primarily of an upland forest ecological community; however, ravine bottoms and drainages from steep ridges provide forested, and in some areas, emergent wetlands. The shoreline is generally steep, falling directly into the bay, but there are small flat shoreline areas that provide access to the water. Overall, the park provides good mature forest cover along steep slopes and provides a vital buffer between suburban development pressures to the east and Irondequoit Bay.

Facilities and Uses

The park provides a network of hiking trails, as well as access to the bay with a car top boat launch. Man made structures include an off-line Town of Penfield sewage treatment building, and a quonset hut adjacent to the boating dock. The YMCA and the Rochester Rowing Club currently use the quonset hut for boat storage, and use the boat launch regularly for access to the water. The land to the east of Smith Road occupies a plateau area previously used as a County nursery. Public comment indicates that the park is difficult to locate due to poor signage.

Access and Circulation

Abraham Lincoln Park is located west of Empire Boulevard, adjacent to Smith Road and Bay Road. Public comments indicate that the park is primarily accessed from the YMCA parking lot, but some park users enter the park from Smith Road and 1559 Empire Boulevard. The main road servicing the park is paved and in decent condition to the former sewage treatment plant; past the plant, the road is surfaced with gravel and in poor condition.

Topography and Soils

Abraham Lincoln Park boasts the highest elevations of any of the Bay Area Parks. At the shoreline of Irondequoit Bay, the elevation is approximately 245 feet, and in the southeast corner of the park near Empire Boulevard, the topography reaches 431 feet. The topography in the park has the following slopes: 25% of the topography is between 0 and 5%; 11% is between 5 and 10%; 17% is between 10 and 20%; 19% is between 20 and 30%; 16% is between 30 and 40%; 8% is between 40 and 50%; and the remaining 5% of the slopes are between 50 and 100%.

The Park is comprised of seven soil types: Al, ArB, AtF3, CIA, HIB, HuB, and Mn. Al is Alluvial Land. ArB is classified as Arkport Very Fine Sandy Loam (0% to 6% slopes). AtF3 is classified as Arkport, Dunkirk and Colonie soils at 20-60% slopes and highly erodible. CIA is a Collamer Silt Loam (0% to 2+% slopes). HIB is classified as a Hilton Loam (3 to 8% slopes) and HuB is a Hudson Silt Loam (2% to 6% slopes). Mn is Minoa Very Fine Sandy Loam. The park soil is primarily composed of AtF3.

Ecological Character

The ecological character of Abraham Lincoln Park can be summarized in three categories: existing cover type; rare, threatened and endangered species; and habitat assessment. The data contained in these categories comes from field visits by EDR's ecological scientists.

1. Inventory of Existing Cover Type

Mature Beech-Maple Forest: The mature forest communities within Abraham Lincoln Park are located primarily within the southern half of the park. A very well structured forest canopy exists with some of the typical forest canopy species such as maple, red oak, beech, hickory, gray birch, black cherry, and white oak present. Again, due to the dense canopy of these overstory trees, limited shrub and herbaceous layer vegetation was noted within the mature forested areas. Where observed, the understory is comprised of maple and oak saplings, sassafras, and ironwood. The herbaceous layer is dominated by fern species within the forest interior. In addition, there are two different evergreen stands that make this park more unique. A significant stand of mature eastern hemlock is located in the central portion of the site. The terrain is marked by

steep elevation changes and abuts to a bottom wetland. Located in the southeastern corner of the park is a stand of Norway spruce. This stand has been logged in the recent past and a nearby stream is severely degraded from nearby suburban runoff. Overall, this mature forest community is an asset to the Irondequoit Bay watershed.

Successional Northern Hardwood Forest: Successional forest communities dominate the northern half of the park. There are small areas of mature hardwood stands, but for the most part it can be described as a mid to late successional forest. This area seems to have been disturbed at some time in the past 20 years. The overstory is less dense than the mature forest with eastern cottonwood and quaking aspen dominating. A more pronounced understory is comprised of species such as cottonwood saplings, honeysuckle, and buckthorn. Dominant herbaceous plant species found in this community include goldenrods, asters, daisy fleabane, and in some areas, mullen. Grape, Virginia creeper, and poison ivy define the vine layer.

Emergent Wetland: Emergent wetlands were also noted at the base of drainages and ravines. In most cases, the emergent wetlands are located where these drainage systems intersect with the bay shoreline. Stretches of shoreline also can be characterized as emergent wetlands. Cattail, common reed, blue joint reedgrass, jewelweed, sensitive fern, asters, goldenrods, soft rush, and horsetail along the edges and slopes dominate these wetland areas. In some cases, black willow and cottonwood trees are found along the shoreline or at the edges of these emergent wetlands.

Invasive species: Invasive plant species are not yet problematic. Several invasive species such as honeysuckle and buckthorn are concentrated heavily in several small, disturbed areas and within significant portions of the successional forest. Common reed was also observed as dominant within one of the emergent wetlands on a broad valley bottom in the southern area of the park.

2. Rare, Threatened, and Endangered Species

According to the NYSDEC database, hooker's orchid (*Platanthera hookeri*), golden puccoon (*Lithospermum carolinense*), and sideoats grama (*Bouteloua curtipendula*) all listed plant species in New York State, have been identified in the vicinity of Abraham Lincoln Park. Although it should be noted that the site visit was not made at the optimal time of the growing season to look for certain rare, threatened, or endangered species, these species were not observed.

3. Habitat Assessment

Mature Forest Habitat: Results of the on-site survey indicate that the forest within the park provides habitat for wildlife species that require forest interior conditions, such as wood thrush, warblers, red tail hawk, red-eyed vireo, black-capped chickadee, and several woodpecker species such as the hairy, red breasted, flicker, and pileated woodpecker. During the site visit, a local resident, who could be described as an amateur naturalist, stated that she has seen both orchard and northern orioles nesting in the mature forest in the southern half of the park. Common mammals that utilize forested habitat likely include gray squirrel, red squirrel, eastern chipmunk, and whitetail deer (numerous tracks observed). This mature forest is an important resource that provides excellent habitat and cover for migrating songbirds.

Successional Forest Habitats: Successional community types provide nesting and escape cover for a variety of wildlife species. Various songbirds, such as gray catbird, American goldfinch, indigo bunting, northern cardinal, sparrows, and yellow warblers, require low brushy vegetation for nesting and escape cover. Common mammals typically found in these types of brushy successional habitat include whitetail deer, grey squirrel, and eastern cottontail. In addition, some of the shrub species found in these areas produce berries, which provide a good wildlife food source.

Emergent Wetland Habitat: In combination with the small emergent wetlands on ravine bottoms and the bay shoreline, a significant wetland/aquatic habitat exists. These areas provide a source of food, water, and/or cover by various waterfowl and many of the upland species mentioned previously. These water bodies also may support small fishes, amphibians, and a diversity of insects and aquatic invertebrates. They are preferred foraging areas for aerial insectivores, including songbirds and bats. In addition, these areas provide habitat for various wetland/aquatic wildlife species, including Canada goose, great blue heron, belted kingfisher, mallard, wood duck, and reptiles such as painted turtle, green frog, spring peepers, bullfrog, and American toad. The local naturalist said she has seen nesting snapping turtles along the shoreline. Whitetail deer tracks were prevalent in and around the edge of these wetlands, which is evidence that well used migratory corridors link the different ecological communities within the park. Although not observed, beaver are common in wetlands as well.

F. Irondequoit Bay Park West

Park Character

Irondequoit Bay Park West is located along the southwestern shoreline of Irondequoit Bay between Bay Front Road South and I-590. The 142-acre park, similar to Abraham Lincoln Park, is situated along 2,000 feet of bay shoreline on an east-facing slope amongst steep ridges and valleys. In addition, a narrow strip of land approximately 2,300 feet long extends from Empire Boulevard to the main portion of the park. The park is comprised primarily of an upland forest ecological community; however, ravine bottoms and drainages from steep ridges provide forested, and even in some areas, emergent wetlands. An unnamed tributary to the Bay drains generally from west to east and discharges into the bay in the northern portion of the park. In addition, the park provides access to the bay with a small boat ramp.

Facilities and Uses

The land adjacent to the bay affords good access to the Bay; however, the level ground adjacent to the water is limited in width and rises steeply close to shore. Water is generally shallow along the shore, varying in depth from less than one meter to approximately two meters to the north. Manmade structures in the park include a small boat ramp, an abandoned portion of Bay Front Road South, abandoned sections of South Glen Road, the Irondequoit Fish and Game Club building, marinas, and parking areas. The boat ramp is located near the junction of Bay Front South Road and Orchard Park Boulevard. The ramp, which is in poor condition, has limited parking and maneuvering space for trailers. The County owns one house/structure in the park, which is inhabited under specified tenancy terms of occupation.

Access and Circulation

Access to the park is through residential areas via Orchard Park Boulevard and Bay South Road. Public comments indicate that the park is primarily entered from Orchard Park Boulevard. The access through residential areas results in a circuitous route into the park, causing the park to lack a sense of entrance and making the park somewhat difficult to find. Traffic to and from the park is a disruption to the residential areas. Bay Front Road South, a public road, runs parallel to the bay and is in acceptable condition. Some docks and small marinas are located along this road, in varying conditions. A secondary road, which turns into the abandoned trolley line, diagonally bisects the park. The road and trolley line have been abandoned and blocked off with large concrete blocks. The public has illegally used this road as a dumping area. A trail, in poor condition, leads from Empire Boulevard along the bay shore and into the main area of the park.

Topography and Soils

Irondequoit Bay Park West has significant topographic variation. At the shoreline of Irondequoit Bay, the elevation is approximately 245 feet, and at the highest elevation, the topography reaches 396 feet. The topography in the park has the following slopes: 11% of the topography is between 0 and 5%; 9% is between 5 and 10%; 24% is between 10 and 20%; 26% is between 20 and 30%; 18% is between 30 and 40%; 8% is between 40 and 50%; and the remaining 4% of the slopes are between 50 and 100%.

The Park is comprised of five soil types: Al, AtF3, CIA, Rb and Fw. Al is Alluvial Land. AtF3 is classified as Arkport, Dunkirk and Colonie soils at 20-60% slopes and highly erodible. CIA is a Collamer Silt Loam (0% to 2+% slopes). Rb is Rhinebeck Silt Loam, and Fw is Freshwater Marsh. The park soil is primarily composed of AtF3.

Ecological Character

The ecological character of Irondequoit Bay Park West can be summarized in three categories: existing cover type; rare, threatened and endangered species; and habitat assessment. The data contained in these categories comes from field visits by EDR's ecological scientists.

1. Inventory of Existing Cover Type

Mature Rich Mesophytic Forest: The mature forest communities within Irondequoit Bay Park West are located primarily within the southern and western parts of the park. A very well structured forest canopy exists with some of the typical forest canopy species such as maple, black walnut, red oak, beech, hickory, gray birch, yellow birch, and black cherry, are present. In addition, there are small evergreen (white pine and hemlock) stands within the western portion of the riparian corridor. Due to the dense canopy of the overstory trees, limited shrub and herbaceous vegetation was noted within the mature forested areas. Where observed, the understory is comprised of maple and oak saplings, spicebush, honeysuckle, Japanese barberry, and ironwood. Fern species, violets, and strawberry within the forest interior dominate the herbaceous layer. Overall, this mature forest community is an asset to the Irondequoit Bay watershed.

Floodplain Forest: A forested wetland was observed in the low broad floodplain of the unnamed tributary in the northeastern part of the park where it discharges into the Bay. Canopy trees such

as black willow, American elm, and eastern cottonwood comprise the overstory. Seedlings and saplings of the above-mentioned tree species, silky dogwood, honeysuckle, and multiflora rose dominate the understory/shrub layer; sensitive fern, asters, goldenrods, and reed canary grass dominate the herbaceous layer. In some cases, cattail and/or common reed persist within areas without a dense canopy.

Emergent Wetland: Emergent wetlands were also noted along the floodplain and near the Bay shoreline intermixed with the forested wetlands. Stretches of shoreline also can be characterized as emergent wetlands. Cattail, common reed, joe-pye weed, polygonum sp., jewelweed, asters and goldenrods dominate these wetland areas.

Invasive species: Invasive plant species seem to be a problem within the wetland areas and along the road near the shoreline. The most aggressive is common reed, which is heavily concentrated at the mouth of the unnamed tributary. Japanese barberry and honeysuckle were noted along the road and near disturbed areas.

2. Rare, Threatened, and Endangered Species

According to the NYSDEC database, giant pine-drops (*Pterospora andromedea*) and twin-leaf (*Jeffersonia diphylla*) both listed plant species in New York State, have been identified in the vicinity of Irondequoit Bay Park West. Although it should be noted that the site visit was not made at the optimal time of the growing season to look for certain rare, threatened, or endangered species, these species were not observed.

The Biological Study identified multiple locations within and in close proximity of the Bay Area Parks that have critical aquatic and terrestrial habitats. The southwestern corner of the Bay (near Irondequoit Bay Park West) is a critical priority for protection due to the high species diversity and the warmwater fishes. Irondequoit Bay Park West is a high priority for protection due to the high abundance and diversity of fish, especially in the spring spawning season.

3. Habitat Assessment

Upland Forest and Forested Wetland Habitats: Results of the on-site survey indicate that forest within the park provides habitat for wildlife species that require forest interior conditions, such as wood thrush, warblers, red tail hawk, nuthatch, black-capped chickadee, and several woodpecker species such as the hairy, red breasted, flicker, and pileated woodpecker. The forested wetlands along the bay shoreline provide habitat for waterbirds, including, great blue heron, belted kingfisher, and wood duck. Common mammals that utilize forested habitat likely include gray squirrel, red squirrel, eastern chipmunk, and whitetail deer (numerous tracks observed). Although not observed, beaver are common in forested wetlands as well.

Emergent Wetland Habitat: The emergent wetlands associated with the unnamed tributary and the wetlands along the bay shoreline offer significant wetland/aquatic habitat. These areas provide a source of food, water, and/or cover by various waterfowl and many of the upland species mentioned previously. These water bodies also may support small fishes, amphibians, and a diversity of insects and aquatic invertebrates. They are preferred foraging areas for aerial

insectivores, including songbirds and bats. In addition, these areas provide habitat for various wetland/aquatic wildlife species, including Canada goose, great blue heron, belted kingfisher, mute swan, mallard, wood duck, and reptiles such as painted turtle, green frog, spring peepers, bullfrog, and American toad. Whitetail deer tracks were prevalent in and around the edge of these wetlands, which is evidence that well used migratory corridors link the different ecological communities within the park.

G. Tryon Park

Park Character

Tryon Park is located on Tryon Park Road east of North Winton Road between Browncroft and Empire Boulevards in the southwestern corner of Irondequoit Bay. The 82-acre park is situated along an east-facing slope amongst steep ridges and valleys. The park is comprised primarily of upland forest ecological communities; however, the park boundary encompasses a small fringe of wetland community associated with the Ellison Wetlands, which border Tryon Park to the east. Tryon Park contains sewage infrastructure, both active and inactive, from the City of Rochester as well as Monroe County Pure Waters.

Facilities and Uses

Shared-use trails crisscross the park, and in some cases, even leave County property. The trails are primarily used for off-road cycling (off-road cycling), trail running, and hiking, although the park is also used for cross-country skiing, snowshoeing, paintball, birdwatching, and dog walking. Cyclists have developed two areas that contain bicycle jumps and stunts, and small footbridges have been erected over wet areas.

The park contains exposed inactive sewer pipes and foundations associated with the City's sewer system, as well as active facilities associated with Monroe County Pure Waters. A paved road runs northeast from the main entrance to the lower plateau. This road is in very poor condition. An elevated exposed sewage pipe runs across a deep gully over the road. A very large discharge facility was observed within the park, which seems to operate as an emergency overflow for the City's sewer system.

Access and Circulation

Tryon Park is adjacent to I-590, midway between Empire Boulevard and Browncroft Boulevard. Vehicular access to the park is from Tryon Park Road, a residential side street that dead-ends in the park. Tryon Park Road crosses over I-590 via a bridge. Park users frequently park on the south side of this bridge. Public comments indicate that the park is primarily accessed from Tryon Park Road, and the access road to the Brighton Landfill from Browncroft Boulevard.

Topography and Soils

The majority of the park is hilly with numerous steep slopes and gulleys. The eastern border falls off very steeply, allowing an excellent view of the wetlands below. At the extreme north end, the topography flattens and is wet in places. At the park boundary shared with the Ellison Wetlands, the elevation is approximately 250 feet, and at the highest elevation, the topography reaches 401 feet. The topography in the park has the following slopes: 26.7% of the topography is between 0 and 5%; 17.2% is between 5 and 10%; 20.5% is between 10 and 20%; 15.1% is between 20 and

30%; 8.5% is between 30 and 40%; 5.7% is between 40 and 50%; and the remaining 6.2% of the slopes are between 50 and 100%.

The Park is comprised of five soil types: ArC, AtF3, CIB, Pu, and Fw. ArC is Arkport Very Fine Sandy Loam (6% to 12% slopes). AtF3 is classified as Arkport, Dunkirk and Colonie soils at 20-60% slopes and highly erodible. CIB is a Collamer Silt Loam (2% to 6% slopes). Pu is Pits and Quarries, and Fw is Freshwater Marsh.

Ecological Character

The ecological character of Tryon Park can be summarized in three categories: existing cover type; rare, threatened and endangered species; and habitat assessment. The data contained in these categories comes from field visits by EDR's ecological scientists.

1. Inventory of Existing Cover Type

Mature Rich Mesophytic Forest: The mature forest communities within Tryon Park are located primarily on the steep ridges and valley slopes throughout the park except for those located in the northeastern and eastern portions of the park. Typical forest canopy species such as maple, red oak, tulip poplar, hickory and white oak are dominant. Due to the dense canopy of these overstory trees, limited shrub and herbaceous layer vegetation was noted within the mature forested areas. Where observed, the understory is comprised of maple and oak saplings, sassafras, and in some disturbed areas, tartarian honeysuckle and buckthorn. The herbaceous layer is dominated by fern species (i.e. wood, interrupted, etc.), goldenrods, asters, violets, and blackberry. Poison ivy and grape make up a limited vine layer.

Successional Northern Hardwood Forest: A small successional forest community is found in the northeastern portion of the site. This area seemed to have been disturbed at some time in the past 20 years, and represents a transitional zone between the cattail marsh to the east (off-site), and the mature forest to the west. Portions of this forest are associated with a small-unnamed tributary to Irondequoit Creek. The overstory is less dense than the mature forest with eastern cottonwood, quaking aspen, black walnut, box elder, staghorn sumac, black willow, and black locust all present. A more pronounced understory exists with species present such as sumac and cottonwood saplings, honeysuckle, buckthorn, and willow shrub species. Dominant herbaceous plant species found in this community include goldenrods, asters, Queen Anne's lace, field thistle, timothy grass, orchard grass, and soft rush (in wet areas near the stream).

Floodplain Forest: A small portion of the riparian wetland associated with Irondequoit Creek is located in the park. Canopy trees such as black willow and cottonwood comprise the overstory. Seedlings and saplings of the above-mentioned tree species dominate the understory/shrub layer, sensitive fern, soft rush, asters, goldenrods, and reed canary grass dominate the herbaceous layer.

Emergent Wetland: Emergent wetlands in the park are part of a large wetland complex to the west. Cattail dominates these areas within the park. These wetlands and their ecological significance are described in more detail in the section for the Ellison Wetlands.

It should be noted that along the east-facing ridge in the northern portion of the park are several groundwater seeps located at the head of small intermittent streams. Although these areas are located in an upland forested community, they are too small to have encouraged the growth of hydrophytic canopy tree species. At the time of the site visit, there were no prevalent hydrophytic herbaceous species present.

Invasive species: Invasive plant species are not prevalent throughout Tryon Park. Invasive species such as honeysuckle and buckthorn are concentrated in several small areas of prior disturbance in the center of the park, while Norway maple is present in the upland forested areas. Cattail, which are native, but can be invasive in some instances, are dominant within the shallow emergent wetland complex but only a very small percentage of this wetland is located within Tryon Park.

2. Rare, Threatened, and Endangered Species

According to the NYSDEC database, the American burying beetle (*Nicrophorus americanus*), an extirpated insect species in New York State, has been identified in the vicinity of Tryon Park. However, no observations of this species were made during the site visit.

3. Habitat Assessment

Mature Forest and Forested Wetland Habitats: Results of the on-site survey indicate that forest within the park provides habitat for wildlife species that require forest interior conditions, such as wood thrush, warblers, orioles, red-eyed vireo, black-capped chickadee, and several woodpecker species such as the hairy, red breasted, flicker, and pileated woodpecker. The small forested wetland along Irondequoit Creek provides habitat for waterfowl, including Canada goose, great blue heron and wood duck. Common mammals that utilize forested habitat likely include gray squirrel, red squirrel, eastern chipmunk, and whitetail deer. Although not observed, beaver is also common in forested wetlands.

Successional Forest Habitats: Successional community types provide nesting and escape cover for a variety of wildlife species. Various songbirds, such as gray catbird, American goldfinch, indigo bunting, northern cardinal, white-throated sparrow, and yellow warbler, require low brushy vegetation for nesting and escape cover. Common mammals typically found in these types of brushy successional habitat include whitetail deer and eastern cottontail. Raccoon and striped skunk are especially expected in this type of successional forest, due to its proximity to wetland/riparian areas. In addition, some of the shrub species found in these areas produce berries, which provide a good wildlife food source.

Emergent Wetland Habitat: Although no large areas of open water habitat, such as lakes, marshes, or mudflats, occur within the park boundary, the small amount of emergent wetland from the adjacent Ellison Wetlands still hosts wetland/aquatic species. These areas provide a source of food, water, and/or cover for various waterfowl and many of the upland species mentioned previously. These water bodies also may support small fishes, amphibians, and a diversity of insects and aquatic invertebrates. They are preferred foraging areas for aerial insectivores, including songbirds and bats. In addition, these areas provide habitat for various

wetland/aquatic wildlife species, including Canada goose, great blue heron, mallard, wood duck, and reptiles such as painted turtle, green frog, spring peepers, bullfrog, and American Toad. Whitetail deer and muskrat tracks were prevalent in and around the edge of this wetland, which is evidence that well used migratory corridors link the different ecological communities within the park.

The following summary describes issues and opportunities that were identified for the overall study area, as well as for each individual park. The summary of issues also includes a summary of the key issues and concerns raised by the general public.

A. Issues and Opportunities

1. Access and Community Connectivity

Many of the parks in the study are adjacent to residential areas, and some unofficial access points from these neighborhoods already exist. Additional connections to neighborhood areas and opportunities for further access could be considered.

2. Healthy Living to Address Preventable Health Problems

Open space plays a key role in a healthy lifestyle, and offers a tool for addressing preventable factors of various health problems. Opportunities to provide active lifestyle enhancements could be pursued in a way that might not have been considered in earlier studies.

3. Green Infrastructure

Due to their location around Irondequoit Bay, many of the parks provide important ecological functions. These functions include stormwater management, provision of wildlife habitat, and erosion control. These functions could be preserved and enhanced.

4. Shared Use of Trails

Both existing and proposed trails could consider providing access to multiple user groups. The community would benefit from the use, management, and infrastructure improvements that could be provided by a number of users. Official, sanctioned use of trails by bicyclists could be considered in order to control the impact of unofficial bicycle use in certain areas.

5. Waterfront Use and Access

Many of the parks have waterfront opportunities on both Irondequoit Bay and Irondequoit Creek. Kayakers, canoeists, and rowing enthusiasts are user groups that will benefit from this waterfront access. Additional waterfront access could be pursued for these boaters, as well as others wishing to enjoy the waterfront, if not the water itself. Possibilities include providing rowing facilities on either side of the Bay.

6. Dog Parks

Dog owners have become regular users of Ellison Park, and present a park user group that needs to be considered in park planning. Official, sanctioned dog facilities are a possibility that could be evaluated in order to control the impact of dogs on water resources, park quality, and the environment.

7. Sustainability

The operation and maintenance of the existing facilities, as well as the design and construction of any new park features, could utilize a sustainable approach. This will fit with the Green Building Initiative that Monroe County initiated in 2007. Possible strategies include: ecologically sensitive grounds maintenance, utilizing reclaimed or recycled materials, and using materials that can be reused or reconfigured in the future, if necessary.

B. Concerns from the Public

The general public has provided a significant level of input regarding the Ellison Park Area Master Plan Updates. Some of the key issues that have been identified are cause for much public discussion. The public was invited to attend two public meetings, and the following section summarizes the general input that was received.

Public Meeting #1

The first public meeting was held in Ellison Park on Thursday, June 19, 2008. Eighty-five people were in attendance. The meeting was organized as a drop-in session, with display boards and comment posters arranged around the inside of the park lodge. Meeting attendees were given multiple avenues for public input. Project planners were present at the public meeting to answer questions and record comments. Many people took the opportunity to speak with representatives from Monroe County and EDR.

Throughout the park lodge, large posters were spread on picnic tables, along with pencils and post-it notes. There was one poster for each one of the 6 parks. The posters had space for people to answer questions regarding the following topics: Existing Uses, Future Uses, Issues and Concerns, and Access Routes. The posters provided an effective method for soliciting large amounts of input.

There were also posters regarding emerging issues. Many of the issues that were identified by the community were related to the shared use of trails, off-road cycling, and the presence of dogs in county parks. A few comments were related to maintenance, sustainability, and facilities. In addition, meeting handouts contained a comment form with contact information for EDR representatives. A handful of people filled out the comment form, sent an email or fax, or in some way communicated their thoughts and concerns to EDR.

The following list identifies the main concepts that arose in relationship to each park:

- Devil's Cove Park – Keep the park as is
- Ellison Park – Dogs, dog owners, off-road cycling
- Ellison Wetlands – Off-road cycling, hiking, maintenance
- Abraham Lincoln Park – Off-road cycling, hiking, trail development, sustainability
- Irondequoit Bay Park West – Off-road cycling, hiking, multi-use trails
- Tryon Park – Off-road cycling, trail maintenance

Public Meeting #2

The second public meeting was held at the Penfield Town Hall on Tuesday, November 25, 2008. One hundred eighty-two people registered their attendance on the sign-in sheets, but more people may have been in the room. The meeting was organized as both a drop-in session and a public presentation. The first hour of the meeting provided time for attendees to review the display boards prepared by EDR, and time to provide comments on the blank flip charts. Project planners were present at the public meeting to answer questions.

SUMMARY OF PARK ISSUES

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The next 30 minutes of the meeting were devoted to a public presentation provided by Tom Robinson of EDR, during which he reviewed the planning process and discussed the draft recommendations. Following the presentation, MCPAC chairman Ken Zeller moderated a verbal comment period. Members of the public were allowed to make brief comments, and ask questions of EDR and Monroe County Parks Department staff. The comment session was organized around the key park issues (identified earlier in this section).

EDR staff transcribed the verbal comments, and collected all written comments from the flip charts. In addition, meeting handouts contained a comment form with contact information for EDR representatives. The public comment period lasted an additional month, during which time EDR and the Monroe County Parks Department received a number of emails, faxes, and letters. All of this public input was compiled into a document that is on file with the Monroe County Parks Department, and available for review by the public.

The public input collected from 18 comment sheets, 2 letters, 27 emails, 34 flip chart notations, and 55 verbal comments related to the key issues in the following way:

Issue	Number of Comments
Access and Community Connectivity	16
Healthy Living to Address Preventable Health Problems	17
Green Infrastructure	12
Waterfront Use and Access	3
Dog Parks	14
Sustainability	17
Shared Use of Trails	88

By far, the shared use of trails was the issue that received the most comments and input from the general public. The groups that were represented in the comment materials included: bird watchers, cross country skiers, dog walkers, equestrians, fishermen, hikers and walkers of various ability levels, off-road cyclists of various ability levels, on-road cyclists of various ability levels, paddlers (flat water and white water), snowshoers, and trail runners.

RECOMMENDATIONS



The recommendations section includes proposals that apply to all of the parks, and proposals that are specific to each park. The proposals include small programmatic changes up to larger, structural improvements. The recommendations are summarized in Chart 1.

A. Recommendations for All Parks

1. Invasive Species Control

Invasive species are a concern in all of the parks, and environmental enhancements to control these invasive species are recommended. The control method for invasive species removal depends on the plant. When a species requires hand removal (such as garlic mustard), community labor would be effective. The County could involve community residents by developing new or enhancing existing partnerships with community groups. Eradication of other types of invasive species will require a more aggressive approach that is better suited to the efforts of County employees.

2. Park Boundaries

Many of the Bay area parks are adjacent to other undeveloped areas, and park users find it difficult to know where a park begins and ends. Current public use impacts privately owned properties adjoining the parks. Park users in Tryon Park, for example, have established trails that traverse adjacent properties. There are five municipalities in which the parks reside (the City of Rochester, and the Towns of Brighton, Irondequoit, Penfield, and Webster). The solution is to re-survey and clearly delineate all park boundaries by a systematic process.

- Review and collate all available record information, including historic records from the parks, filed subdivision maps that adjoin the parks, state, county and local maps and whatever record information may be available.
- Establish a well-defined control network with ties to Monroe County Monumentation (using high accuracy GPS procedures) to which all boundary surveys will be tied.
- Established a coordinated means by which to work with a number of contracts for surveying services. Prepare a carefully constructed format for drawing all boundary surveys. Establish a protocol that unifies field and mapping procedures. Define materials for permanent corner monuments. Define materials and procedures to clearly mark intermediate points along park boundaries (property lines should be marked in a way that is unmistakable to the casual observer).
- All of the above work should be coordinated through one entity to act as the surrogate for the Monroe County Surveyor, with final review to be completed by the county surveyor.

3. Sustainable Trail Practices

In general, the Ellison Area parks are predominantly naturalized areas. (The notable exception being the developed areas of Ellison Park.) Formal and informal trails provide access opportunities to a wide array of natural resources. During the course of this study, 22.1 miles of mapped trails were identified. Field reconnaissance of the individual park areas indicated numerous informal trails that do not currently appear on park maps.

Within the Ellison Area Parks, natural surface trails are a predominant user feature. The trails traverse a wide range of topography. The trails receive varying levels of use by different user groups, and can be found in a variety of conditions. All park user groups impact the trails to

some degree. Impacts can include erosion, soil compaction, trail widening, loss of vegetation and compositional changes. Type of use, amount of use and user behavior combine with natural factors to determine trails impacts.

Slope, alignment angle, topographic position and the physical properties of the soils are all important factors in determining sustainability. The trail surfaces (treads) are constantly being changed by a complex set of human-caused and natural forces. Compaction, displacement and soil erosion from wind and water are constantly interacting with the trail materials. Some trails are significantly impacted by deer hooves. Natural surface trails are, in fact, dynamic systems that are continually being re-shaped.

One recommendation to allow for improved trail conditions is to establish sustainable trail practices for natural surface trails. Sustainable trails are defined by the US Forest Service as trails having a tread that will not be easily eroded by water and use, will not affect water quality or the natural ecosystem, meet the needs of the intended users and provide a positive user experience, and that do no harm to the natural environment.

A sustainable trails strategy must include a balance of the following elements: engineering, education, encouragement, and enforcement. Engineering includes the planning, design, construction and maintenance of the trails. (see appendix D for sustainable trail design guidelines). Education can include a wide variety of informational materials that cultivate appropriate use and behavior that will help minimize trail impacts. Encouragement invites appropriate use of the trails, and fosters a sense of ownership among park visitors. Enforcement includes practices that discourage undesirable, negative or damaging behavior. The “Four E’s” tend to reinforce each other, and are all essential for a sustainable trail system.

One part of the sustainable trail practices would be to designate "wet weather trails" that have gravel surfaces and low slope angles that can tolerate more use under wet conditions. During wet periods, confining high impact uses to trails with a gravel surface and low alignment angle will reduce damage. Trail users can be asked to stay on wet weather trails by indicating these trails on County park maps, posting weather advisories online, and developing educational signage. Engineering, Education, Encouragement and Enforcement could all contribute to successful usage of “wet weather trails”.

4. Inventory of Existing Trails

One recommendation that complements the idea of sustainable trail practices is to complete a thorough inventory and analysis of existing park trails. Using GPS technology, identify trail corridors and locate problem areas that are unsustainable (e.g. badly eroded, poorly drained) or dangerous. Accurate maps of existing trails are not available for some parks, and need to be updated for other parks. A trail inventory process would provide an opportunity to identify locations for establishing new sustainable shared-use trails where appropriate. The trail inventory process is another opportunity to partner with community groups.

5. Trail Monitoring Program

As a follow-up to the Trail Inventory, the County should consider establishing a trail-monitoring program to record trail use patterns and problem areas. The trail inventory effort would provide

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a baseline of existing conditions, and the trail monitoring effort would provide an ongoing strategy for monitoring and evaluating trail use and conditions. The trail monitoring program also provides an opportunity for the County to partner with existing community groups whose members regularly use County park trails.

6. Park Maps

Public comment indicated that more information is desired about park facilities and boundaries. The County should consider it a high-priority to develop illustrative, informative park maps to inform users of available facilities and to delineate park boundaries. When the trail inventory is complete, the maps are also a good place to communicate any important trail information regarding shared use trails and weather restrictions. When complete, the maps should be made available on the County website.

7. Utilize Internet and Web Tools

The County should expand their use of available social networking websites, and the Parks Department website. The website would be an excellent place to post park rules, hours, trail etiquette, park information, and facilities information. The web could be used to identify shared-use trails, as well as post and update trail conditions and user advisories. The Parks Department should consider the possibility of a partnership with the Monroe County Library System. Park advisories or event information could be circulated through a "print and post" email that is posted by library staff on a Park Bulletin Board or kiosk at each library.

8. Waterfront Paddling Destinations

The County has an opportunity to work with the paddling community to establish a linked circuit of waterfront destinations for paddlers around Irondequoit Bay and Irondequoit Creek. Existing public landing spots around the bay would benefit from better signage, and new landing spots could be developed. A map of landing spots and associated facilities (restrooms, picnic areas) that is associated with a coordinated signage system would better inform park users of the opportunities. Possible locations include Abraham Lincoln Park, Irondequoit Bay Park West, Devil's Cove Park, and Ellison Park. Developing a reputation as a paddling destination would attract visitors and in turn, would have economic benefits for Monroe County. See Figure G for more information.

B. Recommendations for Devil's Cove Park

1. Paddler access

In coordination with the recommendation to develop a circuit of waterfront paddling destinations, the County should provide a landing point for paddlers at Devil's Cove Park. The majority of public comments supported the continuation of Devil's Cove as a boat-access-only facility. Public comment suggests that paddling access would enhance the park for many users. The improvements necessary include signage, a boat landing area, and possibly picnic tables and benches, if appropriate.

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2. Trail access

The County should consider the possibility of providing walk-in trail access to the park from a small parking area off of Bay Road. Potential access arrangements and/or property acquisitions could be investigated. The majority of public comments supported the continuation of Devil's Cove as a boat-access-only facility. However, trail access would enhance the park for many users who do not have access to a boat.

3. Monitor water quality

According to the Irondequoit Bay Biological Study of 2002, Devil's Cove is a critical priority for aquatic habitat protection due to the high species diversity, important spawning and nursery habitat, and the presence of walleye. This study identified the need to protect the aquatic habitat located in Devil's Cove. The County should keep this in consideration when any changes to use or access to Devil's Cove Park are discussed. Monitoring the water quality in this area to ensure that the park and the cove maintain their ecological integrity should be considered, in partnership with New York State.

4. Environmental enhancements

The County should consider environmental enhancements to improve habitat value in Devil's Cove Park. These enhancements could be planting native species, addressing any shoreline deterioration, or providing wildlife habitat.

C. Recommendations for Ellison Park

1. Dog Park

Currently, Monroe County Parks Law requires that all pets in County Parks be on a leash. Running dogs off leash is a highly desirable practice for many dog owners. Resources are limited for the enforcement of existing leash laws, and as such, running dogs off-leash has become common, particularly in Ellison Park. Off-leash animals can cause environmental impacts and create safety issues. It is hoped that construction of a dog park in Ellison Park will reduce the number of uncontrolled off-leash dogs in the Park.

Discussions regarding designated off-leash areas (or 'dog parks') in County Parks have been ongoing for several years. A dog park committee was formalized in 2002, and worked with the Parks Department and the Monroe County Legislature to amend the parks law to allow for designated off-leash areas in select County Parks. Significant research was compiled on dog park design, and potential sites within Ellison Park were evaluated. The off-leash area will be constructed within County-owned Ellison Park property using privately raised non-County funds. Several potential locations within the park were assessed for their appropriateness.

Background information from the 2002 Dog Park Committee was compiled and amended with updated research and site analysis. Dog parks are popular in many parts of the country, and existing dog parks were visited and studied in Syracuse, NY; Austin, TX; San Diego, CA; Seattle, WA; and Vancouver, BC. Seven potential sites within Ellison Park were evaluated. Evaluation criteria included: acreage available, proximity to existing parking, flooding potential, amount of fencing required, existing soils and vegetation, potential conflicts with existing park uses, creek

access, and environmental impacts. Several preferred design elements were identified including 100% containment of dogs, and a separate area for small dog use.

Of the existing dog parks studied, one acre was the smallest dog park observed. For the Ellison Park off-leash area, approximately 2 acres is preferred. Easy access to existing parking is essential, as the majority of visitors arrive by car. Selection of a site with less flooding potential will enhance the utility and sustainability of the dog park. Natural features can provide some containment of pets, but most dog parks utilize fencing to achieve 100% containment. This helps insure the safety of both dogs and other park visitors. In addition, a separate area for small dogs was identified as an important feature. Well-established vegetation on drier upland soils will hold up better to impacts from concentrated use. Establishment of an off-leash area should not conflict or displace established park uses.

Creek access for dogs is desired by many dog owners, but does create significant issues related to water quality. Irondequoit Creek is classified by the NYSDEC as trout habitat and merits special protection. Concentrated dog access to the creek can impact water quality in two ways: degradation of stream banks (leading to erosion, loss of vegetation and sedimentation), and contamination from fecal matter.

There are design responses that can help reduce, but not eliminate, both categories of impacts. Proper collection and disposal of dog waste can alleviate concerns regarding water contamination. Stream bank stabilization and reinforcement can help reduce erosion and degradation, but will add significantly to the cost of the project. Because of cost concerns, and the fact that protection of natural systems is a prime objective of the Master Plan Updates, a dog park site was selected that is not adjacent to Irondequoit Creek.

2. Upgrade Pavilion Lodge

Making structural improvements at Pavilion Lodge is a high priority recommendation for the County. An architectural survey indicated that the following improvements are needed: stone chimney repointing, masonry chimney rebuild and repointing, exterior painting, basement stairs replacement, exterior stone stair and railing replacement, gutters and downspouts replacement.

3. Structural Improvements to Existing Buildings

In addition to Pavilion Lodge, there are a number of other structures in Ellison Park that are in need of improvements. These facilities include the canoe launch, restroom buildings, lodges, shelters, and Fort Schuyler. A detailed list of recommended improvements can be found in Chart 2.

4. Paddler Access

In coordination with the recommendation to develop a circuit of waterfront paddling destinations, the County should provide a landing point for paddlers on Irondequoit Creek. There is already one canoe launch, but paddlers would benefit from other locations to disembark and use park facilities. Paddler points along Irondequoit Creek would help to strengthen connections between Ellison Park and the Ellison Wetlands. Options for paddler access include stream bank steps, terracing, and boat tie-ups. One key issue to consider is how to address water level fluctuations. Paddler access points could provide access to picnic areas, rest rooms,

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parking, and playground equipment. Access to the facilities of Ellison Park would be a significant benefit to families with children who might need to exit the boat more than adults. The paddling community would be an appropriate partnership for the County in this endeavor.

5. Trail Improvements

Ellison Park receives a significant amount of use by the community, and the trails are in need of various improvements. The trails from the south entrance need to be upgraded to make them more sustainable. The trail surfacing on high-use trails, such as the Coyote Trail, would benefit from some enhancements. The equestrian trails would benefit from the application of gravel surfacing.

6. Re-open Park Road

In keeping with the original park plan, the County should re-open the existing park road from Landing Road down to the existing creek bridge and on to Pavilion Lodge. This will provide improved emergency vehicle access, improved patrol and enforcement from the Monroe County Sheriff, access to Irondequoit Creek, and the potential future addition of ADA compliant parking.

7. Stream Bank Stabilization

The County should continue stream bank stabilization strategies along Irondequoit Creek throughout Ellison Park. The heavy amount of use received by the park has impacted the stream bank in various locations. To prevent further degradation, it is recommended that the County investigate best management practices (BMPs) and consider both soil bioengineering and engineered solutions.

8. Stream Bank Restoration

The County should continue stream bank restoration strategies along Irondequoit Creek throughout Ellison Park. The heavy amount of use received by the park has impacted the stream bank in various locations. In particular, the County needs to address areas that have been damaged by frequent dog use. The "dog beach" is one such priority location. To restore degraded areas, it is recommended that the County investigate best management practices (BMPs) and consider both soil bioengineering and engineered solutions. The County should also evaluate the sources of stream bank impacts, and identify solutions to minimize continued degradation.

9. Habitat Enhancement

If the County wishes to enhance wildlife habitat in Ellison Park, the recommended approach would be to implement a planting plan designed to convert areas of maintained lawn to forest or shrub communities. There may only be select areas of the park where this strategy is appropriate.

D. Recommendations for the Ellison Wetlands

1. Construction of Empire Boulevard Access Point

The County should pursue construction of the new parking and access area and car-top boat launch for which design is already complete.

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2. Browncroft Boulevard Access and Parking

A new parking and access area is recommended for the north side of Browncroft Boulevard, at Landing Road. A parking area in this location would provide access to the Ellison Wetlands from the southeast, and would provide access to proposed shared-use trail loops. Traffic, access and safety issues need to be assessed.

3. Parking and Access Improvements

The County should consider making some minor parking and access improvements from Old Browncroft Boulevard into the Ellison Wetlands. This area is currently an unofficial access point for paddlers accessing the water, as well as trail users entering the Old Rifle Range trails. The recommended improvements would be comprised of new signage and stabilization of the road shoulder to allow for parking along the side of the road.

4. New Park Name

The County should consider re-naming the park in order to establish a unique identity, eliminate confusion with Ellison Park and increase public recognition. This should be coordinated with developing updated park maps.

5. Environmental Education and Conservation

The Ellison Wetlands are an appropriate location for the County to emphasize ecological conservation and environmental education. Ways in which this might occur are by organizing nature-oriented programs and events, using the Wetland Center for additional programs, and developing interpretive signage and programs.

6. Increase Use of Monroe County Wetland Center

The County should consider ways in which they can increase use of Monroe County Wetland Center for environmental and recreational functions. The Wetland Center is not a well-known public facility, and might receive more use if the purpose and potential availability were made better known. If public access is deemed to be appropriate, the existing dock can be used to provide access for paddlers. Additional facilities that could be considered include boat tie-ups and steps, picnic tables, and informational signage.

7. Habitat Enhancement

To provide additional wildlife habitat in the wetlands area of the park, the County should work with NYSDEC to install root wads in the shallow water corridors and mud flats to increase and improve the amount of diverse habitat for aquatic wildlife. Observations of natural fallen dead wood currently being used by wildlife such as painted turtles, herons, and other waterfowl were observed. This is a recommendation that might benefit from a partnership with a university program or a local environmental group.

E. Recommendations for Abraham Lincoln Park

1. Parking and Access at 1559 Empire Boulevard

The property at 1559 Empire Boulevard offers the County an opportunity to provide a fully accessible park area and an attractive park entrance to Abraham Lincoln Park. The existing

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structures require asbestos abatement, demolition, and removal. The County is encouraged to provide new access, parking, entry signage, an ADA-accessible nature trail and playground area, and a trailhead along Empire Boulevard. The County should adhere to the Monroe County Green Initiative and follow best practices for green building. See Figure K for more detail.

2. Park Entry Signage

Abraham Lincoln Park is difficult to find and access. The County is encouraged to provide additional park entry signage at Smith Road, 1559 Empire Boulevard, and in other locations appropriate to assist park visitors in wayfinding.

3. Repair Park Access Road

Provide surface repairs and improvements to park access road. Stabilize edges and road shoulder.

4. Interpretive Signage

Provide signage with trail maps and interpretive information on natural and historical resources within the park.

5. Additional Parking

The County is encouraged to investigate the potential of developing additional parking spots along the park access road. At the very least, these improvements should include stabilizing the road shoulder and providing new signage to identify preferred parking locations.

6. Playing Fields

In the future, the County should consider the possibility of developing playing fields on the plateau in the old nursery area. This was a 1985 Master Plan recommendation. The Old Lilac Nursery should be inventoried and protected prior to developing sports fields. This recommendation provides an opportunity for the County to enhance a partnership with surrounding Towns or local sporting groups.

7. Protect Old Lilac Nursery

The County should conduct an inventory in order to protect the horticultural resources of the Old Lilac Nursery. This inventory should be completed prior to the design and development of any new playing fields.

8. Construct New Waterfront Lodge

The County should consider the design and construction of a new waterfront lodge, dock, and parking area with multi-purpose functionality and enhanced waterfront recreational opportunities. The existing Quonset Hut would likely need to be removed or relocated. The lodge presents an opportunity to showcase green building construction techniques, and sustainable site design. Other green design possibilities include rain gardens, permeable paving, and recycled materials. See Figure L for more detail.

9. Maximize Partnerships

The County is encouraged to maximize partnerships with the Bay View YMCA, the Rochester Rowing Club, and other community groups who might have reason to use Abraham Lincoln Park and would have an interest in collaborating or sharing resources.

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10. New Park Name

The former park name, Irondequoit Bay Park East, was officially changed to Abraham Lincoln Park on February 12, 2009.

11. Stream Bank Stabilization and Restoration

The County should consider initiating stream bank stabilization strategies along the ravines draining to Irondequoit Bay. There are several opportunities for stream restoration in the upper drainage basins especially in the southeastern portion of the park. The stream reach associated with the Norway spruce stand is an especially good candidate for stream restoration. This reach is entrenched and eroding due to the suburban watershed, creating “flashy” storm events. To prevent further degradation, it is recommended that the County investigate best management practices (BMPs) and consider both soil bioengineering and engineered solutions.

12. Habitat Enhancements

If the County wishes to enhance wildlife habitat, the old field/early successional forest adjacent to Smith Road, and outside of the Old Lilac Nursery, could benefit from a vegetative management plan to help naturalize and stabilize this area. Non-native species could be removed while native shrubs and trees are planted to help transition this upland area to a mature forest. If needed, open areas can be maintained but with native plantings and reduction of the artificial balance that currently exists.

13. Native Planting Program

The County could consider implementing a native planting program by reducing non-native plants in all successional areas of the park. This will help to transition these areas back to a natural balance. Non-native plants include buckthorn, honeysuckle and swallowwort.

F. Recommendations for Irondequoit Bay Park West

1. Signage Improvements

Irondequoit Bay Park West is difficult to access and locate, and it is recommended that the County make improvements to entry signage and directional signage to assist park visitors with wayfinding.

2. Road Improvements

The County is encouraged to make improvements to the surface conditions of existing park roads. Provide surface repairs and improvements to park access road. Stabilize edges and road shoulder.

3. Existing Marina

The existing Marina is a public/private partnership between Monroe County and the marina owners. It is recommended that the existing arrangement be continued, as the marina provides needed boat access on Irondequoit Bay.

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4. Glen Haven Area

Located north of the Fish and Game Club, this is an area of New York State land that is managed by Monroe County as part of Irondequoit Bay Park West. It is recommended that this area be preserved in its natural state, with the possibility of adding access in the future for small boat launching.

5. Stormwater Management

The County is advised to address the abatement of existing drainage problems and address stormwater management issues. Existing drainage ways within the park may require bank and channel stabilization to reduce erosion and sedimentation.

6. Shared-Use Bicycle Trail

The County is encouraged to establish shared-use trails in Irondequoit Bay Park West that are suitable for intermediate cyclists. The trails should be designed and constructed according to sustainable trail guidelines. New shared-use trails that have been carefully constructed would provide an excellent test case for building and monitoring a new trail, and would work in tandem with the monitoring of Tryon Park's existing trails. Public comment indicated that this is something that is highly desired by the community. Irondequoit Bay Park West is not heavily used, and presents an appropriate location for additional shared-use trails.

7. Paddler Access

In coordination with the recommendation to develop a circuit of waterfront paddling destinations, the County should provide a landing point for paddlers on the west side of Irondequoit Bay. The County is encouraged to provide a landing point for paddlers at Irondequoit Bay Park West, on the narrow waterfront portion of the park, halfway between the main park and Empire Boulevard. This location is an excellent access point for paddlers. The site has a broad, flat grassy area with easy water access. The County should consider picnic tables in this location.

8. New Trail Connection

The County should consider utilizing the old railroad bed to provide a waterfront trail corridor from Empire Boulevard into the park. A trail corridor in this location would provide an interesting connection from parks on south side of Empire Boulevard (Ellison Wetlands and Tryon Park), and could be part of an interesting shared use trail system. Connections could be made to the planned La Salle's Landing boardwalks. To maximize a trail in this location would require the development of a safe crossing of Empire Boulevard.

9. Pedestrian Crossing of Empire Boulevard

The County is encouraged to provide support for the development of a safe pedestrian and bicycle crossing of Empire Boulevard. A crossing has been proposed in other relevant planning studies, and is likely to require a traffic study, gap analysis, and crossing facility design.

10. New Park Name

The County should consider re-naming the park in order to establish a unique identity and increase public recognition. This should be coordinated with developing updated park maps.

11. Stream Bank Stabilization

The County should consider initiating stream bank stabilization strategies along the ravines draining to Irondequoit Bay. There are several opportunities for stream restoration in the upper drainage basin in the western portion of the park. Several stream reaches are entrenched and eroding due to the suburban/urban watershed creating “flashy” storm events. To prevent further degradation, it is recommended that the County investigate best management practices (BMPs) and consider both soil bioengineering and engineered solutions.

G. Recommendations for Tryon Park

1. Access and Parking Improvements

In coordination with Monroe County Department of Environmental Services, the Parks Department should pursue additional access, parking, and trailhead opportunities. Figure N identifies one potential location for improved access, parking and a trailhead from the north side of Tryon Park Road near the old sewage building. Figure M outlines four locations that were analyzed for their appropriateness as a new location for parking and access.

2. Biking-Hiking Interface

The County should consider ways to address the biking-hiking interface by placing bicycle racks at appropriate locations. Public comment indicated that some park users are concerned about off-road cycling outside of legalized locations. This would be an effort that could be used to encourage trail riding in appropriate locations, and to discourage riding where inappropriate.

3. Tryon Park Expansion

The County is encouraged to investigate possible additional land acquisitions that could be used to expand Tryon Park.

4. New Signage System

The County should develop a new signage system that includes entry signage, regulatory signage, interpretive signage, and wayfinding signage. The signage in Tryon Park, similar to many of the other Bay area parks, is inadequate for park visitors who wish to find their way to, and within, the park. Tryon Park, in particular, requires new signage to accommodate the proposed changes in legal trail riding.

5. Upgrade Road/Trail

The County should improve and upgrade the condition of the deteriorating paved access road located in the center of the park, accessed from Tryon Park Road. Upgrades should include removing the pavement and transforming the corridor into a sustainable, shared-use trail.

6. Off-Road Cycling

The County should open natural surface trails in Tryon Park to off-road cycling. Public comment has indicated that there is significant public interest and support for this change in park use. This change in use should be coordinated with trail inventory, trail monitoring, and an evaluation period.

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7. Off-Road Cycling Workshops

The County should partner with the off-road cycling community to establish educational programs and workshops to encourage safe and responsible off-road cycling. The effort should apply lessons learned from the successful shared-use trails in the area and the region.

8. Evaluation Period

The County should establish an 18-month evaluation period to monitor the impacts of policy changes on park use, facilities, and users. The evaluation period needs to occur in tandem with a trail inventory effort and a trail monitoring program. The County should consider what the next steps will be as a result of the evaluation period.

9. Develop Partnerships

The Monroe County Parks Department is encouraged to develop partnerships with community trail user groups to encourage their assistance in appropriate trail development and maintenance. Some partnerships already exist, but there are additional opportunities for more partnerships. Possibilities that would be appropriate for Tryon Park include cooperation and coordination with local off-road cycling groups.

10. Ecological Enhancements

If ecological enhancements were desired, the County could consider enhancing the small clearing where the deteriorating access road terminates in the center of the park. One possibility would be to maintain this small, disturbed area as an open area with native herbaceous plant species and shrub plantings. This area is located in an important transition zone between the successional and mature forest, but has a higher percentage of invasive species and lacks the natural ecological balance that provides optimal habitat.

11. Stream Restoration

The County should consider initiating stream restoration strategies along the stream that empties into Irondequoit Creek and the Ellison Wetlands. There are opportunities for stream restoration in the lower areas of the primary stream corridor that flows through the park, especially on the lower reaches before the confluence with Irondequoit Creek. This reach is entrenched and eroding due to the urban watershed creating “flashy” storm events.

The Implementation section includes a discussion of the proposed phasing and implementation of various recommendations, stewardship and community participation opportunities, operation and maintenance issues, and the need for SEQRA documentation.

A. Phasing and Implementation

The Recommendations section proposes more than 60 different recommended projects. Chart 1 summarizes all of these proposed projects, and their associated priority, time frame, and where available, estimated cost. Each project varies in priority and in proposed time frame based on the number of people served by the project, the construction feasibility, and the way in which the project addresses multiple key issues.

Priority:

- High – Highly beneficial projects that are urgent, immediately feasible, or will have the most impact and should therefore be addressed first
- Medium – Very beneficial projects that will have a significant impact and should be addressed next
- Low – Beneficial projects that have a less critical time frame

Time Frame:

- Short-term – Project will commence and be completed in 0-18 months
- Mid-term – Project will commence and be completed in 1-5 years
- Long-term – Project will commence and be completed in 4-10 years
- Ongoing – Project will commence in 0-3 years and will continue indefinitely

B. Stewardship and Community Participation

The projects recommended for the Bay Area Parks encompass a wide number of issues, and vary significantly in cost, effort, and resources required for successful implementation. Monroe County has a finite amount of resources that can be applied to each project, and will not be able to address every recommendation immediately. Members of the community may feel that the County is not addressing projects that are of importance to them as quickly as they might like.

Some of the recommendations present opportunities for the average citizen to participate. In some cases, community groups are already involved in trail maintenance, invasive species removal, and other parks-related work. These groups not only contribute a valuable service to the community, but by assisting with parks and trails, community members also develop a sense of ownership. Whether this volunteer community participation is with the Adirondack Mountain Club, the Boy Scouts, the Genesee Regional Off-Road Cyclists, or the Sierra Club (among many other groups), a sense of stewardship is imparted to participants.

Stewardship is the careful and responsible management of something entrusted to one's care. The parks, while a responsibility of the County, are a resource for all County residents and would benefit from careful use. Many of the concerns voiced by the public have to do with reckless park use and subsequent impacts to natural resources. By formalizing old partnerships and cultivating new ones, the County will enhance the sense of stewardship community residents possess. It is important to note that not all projects are appropriate for volunteers, and will need to involve the

County. In addition, a community group needs to make a firm commitment. If a group makes a commitment, the County will rely upon the groups' responsibility for following through.

C. Recommended General Operations and Maintenance Policies

The following maintenance and operations guidelines can be used to help insure that the Ellison Area Parks continues to meet the goals and objectives of the Master Plan Updates over the long term. The emphasis is on providing parks that are both cost-efficient and ecologically sustainable.

Management of Wooded Areas

- In woodland or other natural areas, landscape conditions caused by natural phenomena should not be modified unless required for public safety in connection with the reconstruction of trails or the development of new trails. No harvesting of plant life should be allowed in any area of the park, except as necessary for approved research and monitoring programs.
- Control of fungi, insects, rodents and other species of concern (possibly including deer) should be limited to where required to conserve and protect rare, threatened or endangered plant species, to manage a human health hazard, or to prevent outbreaks of the pest from spreading to the larger vegetative populations within or outside the park. Otherwise, these populations should be allowed to function unimpeded. The concept of holding pests to tolerable populations in contrast to complete elimination is a key component of Integrated Pest Management (IPM). IPM advocates the use of a variety and combination of controls, including chemical, manual and biological to control pests. Achieving an effective balance among the controls helps to reduce the hazardous side effects. IPM is recommended for all necessary pest management and invasive plant control programs undertaken in the Ellison Area Parks.

Exotic Plant Species Management

Invasive species are non-native species that can cause harm to the environment or to human health. As a threat to biodiversity, they have been judged second only to habitat loss. Exotic invasive plant species are a serious issue in the Ellison Area Parks. Invasive species alter and degrade natural habitat by crowding out native plants. Some of the invasive species found in the Parks are Japanese Knotweed, Garlic Mustard, Black Swallowwort and Purple Loosestrife. Black Swallowwort, for example, was observed in numerous locations. It is troublesome in open areas and along edges and banks where it grows over other vegetation, blocking light and creating tangled thickets. Giant Hogweed, which occurs in Monroe County, poses a serious health risk to park visitors. Control of invasive plant species is critical to maintaining biodiversity and high-quality wildlife habitat.

- Undertake a comprehensive survey to identify areas of the park with significant concentration of invasive exotic plant species and develop a detailed plan for ecological management of the site and control of invasive species.

- Initiate pilot projects to evaluate the feasibility of various control techniques on each of the invasive plant species found in the park. For each species, the following techniques should be evaluated on a trial basis:
 - o Cutting or pulling by hand.
 - o Selective herbicide application.
 - o Any biological controls that may be available.
- Develop a park-wide integrated exotic plant control program based on the results of the pilot projects described above.
- All herbicides should be applied by state certified applicators in accordance with label restrictions. These chemicals should not be used in any areas with documented rare plants.
- In general, do not mow areas with invasive plant infestations as this method fails to remove the roots/rhizomes and can serve to spread seeds.
- Concentrate initial control efforts on areas with light infestations or where invasive species are just becoming established as such areas are easiest to control.
- Do not spread soil or compost within the park that may be contaminated with the roots, rhizomes or seeds of invasive plant species.

Wildlife Management and Habitat

- Deer management options: Monitor indications of deer overpopulation based on evidence of overbrowsing, deer-vehicle collisions, complaints of landscape damage by neighbors, etc. If overpopulation is indicated, work in concert with NYSDEC to develop an approach to population control/vegetation protection.
- Removal of individual nuisance or disease transmitting animals by park personnel or Animal Control Officers should be allowed when such removal is necessary to the health, safety and welfare of staff and visitors to the park or to the preservation of threatened plant life.
- A comprehensive plan to maintain and enhance the diversity and quality of wildlife habitat in the park should be developed.
- Preserve large mast-producing trees (cherry, beech, oak, hickory and mulberry) that provide food for wildlife.
- Where possible, preserve trees with active dens, nests or cavities.
- When selecting plant material, give preference to shrubs that provide food and cover for wildlife. Planting food and cover producing shrubs (especially under existing stands of

mature trees) will enhance the habitat value of the park for a variety of wildlife species, especially songbirds. However, only native species of plants should be used.

- In landscape designs, encourage structural diversity; plantings should provide a multi-layered effect, as this is attractive to songbirds for cover, feeding and nesting.
- Encourage botanical diversity. Consider planting more native vines, conifers and mast-producing trees (oak, hickory, beech).



- Plant badly eroded areas to enhance soil quality, improve populations of soil invertebrates, and decrease siltation of water bodies. In high traffic areas use defensive vegetation (thick, thorny vines and shrubs) to keep people out.
- Plant native trees and shrubs, as these are recognized as desirable by wildlife, and are well adapted to local climate and soils.
- Mow designated field areas on an annual basis to maintain open meadow (not lawn) habitat. This habitat is important to open country bird species and is becoming uncommon in western New York. Reducing the mowing regime can benefit the local ecology and reduce operations costs. Schedule mowing to minimize disruption to nesting and breeding cycles of grassland bird species.
- Encourage development of brushy irregular edges of lawn areas by allowing limited invasion (or planting) of food-producing shrubs and evergreens into openings. This can also be accomplished through the release of surrounding understory vegetation (by the limited removal or girdling of mature trees along the edge). Creation of an irregular brushy zone between forests and openings enlarges the transitional areas and increases the “edge effect” which increases both habitat value and visual interest.

- Consider planting species that are attractive to butterflies, such as butterfly bush, milkweed, joe-pye weed, butterfly weed and clover.
- Limit tree pruning as well as the clean up of fallen branches and trees. This material should be removed only when it presents a safety or circulation problem, as it provides cover and foraging areas for a variety of songbirds.
- When trees are cut, do not remove the fallen material. To provide cover for rabbits and songbirds, and to improve soil quality, the woody debris can be placed in small piles (large piles are often burned by park users), or lopped and scattered. Do not haul it away or reduce it to chips. Branches and tops can be placed in eroded areas to hold leaf litter and sediments, and to discourage human traffic.
- Any earth disturbing activities undertaken in the park should utilize “best management practices” to minimize potential erosion or sedimentation.
- The presence of unleashed dogs in the park shall be monitored on a continual basis. Existing pet control ordinances should be strictly enforced, and the County should take additional measures if it is determined that unleashed dogs pose a safety/security threat to park visitors and/or wildlife or if the presence of dog feces poses a health concern.

Noise Management

- The use of motorized vehicles should be minimized to the extent practicable by both Park staff and visitors, except to access appropriate parking facilities.
- Regulations concerning the use of radios, tape recorders and other noise-producing instruments should be strictly enforced, and modified as necessary, to assure a quiet and tranquil experience for park visitors, and to protect the wildlife.
- The construction of proposed park improvements may create additional noise for short periods of time. None of the proposed facilities require prolonged use of heavy equipment or noisy machinery. After construction, noise impacts should be restricted to vehicular traffic and noise associated with public use of the park (human voices, etc.).
- None of the noise impacts likely to occur during construction or operation of the proposed facilities will be of a decibel level or duration that could cause annoyance or interference with verbal communication for neighboring residences. Temporary construction noise and increased human activity could disturb park wildlife, but the type and level of noise associated with park use are not anticipated to be significantly different than that which currently exists. As is the case with existing noise sources, any noise impacts associated with the proposed project will be of limited duration, moderate decibel level, and will occur exclusively during daylight hours.

- Hours of construction operations will be restricted to 7:00a.m. - 7:00p.m. Monday through Saturday, with no work permitted on Sunday. Work on trails in sensitive areas of the park will not take place during the spring and fall migrations or the bird breeding season.
- All heavy construction equipment will comply with State Environmental Law, Subchapter E, Part 450 (Noise from Heavy Motor Vehicles).
- Vegetative buffers between the parks and adjacent land uses will be preserved wherever possible to reduce noise and visual impacts from the proposed project and to reduce disturbance to park users caused by adjacent uses.

Soils Management

- All construction activities within the parks should incorporate measures to minimize potential soil erosion. Measures to be applied should be consistent with good management practices developed by the NYSDEC.
- Detailed soils investigations should be completed prior to initiating any major construction to determine the suitability and limitations of the soil for the proposed development.
- If debris is encountered during construction activities, it shall be characterized and handled in accordance with an appropriate Soil Management Plan.
- Required clearing and grading will be kept to a minimum and accomplished as quickly as possible to minimize the amount of time soils are exposed to erosional forces (wind and rain).
- Erosion and sedimentation control are critical in the Irondequoit Bay watershed. All protective measures should meet or exceed NYSDEC regulations. Silt fence will be placed down-gradient of disturbed areas to protect undisturbed vegetation, wetlands, wildlife habitat and watercourses from potential erosion and sedimentation. In certain sensitive areas hay bale dikes or similar barriers may also be used. Hay bales will be set at least one inch below the ground surface and staked down to prevent wash-out or removal.
- Vegetative stabilization of disturbed areas will be performed as soon as possible, generally within one week after establishment of finished grades. Stabilization will generally be in the form of seeding and mulching. Outside of the growing season, grading and distribution of excavated soils will be followed by temporary mulching of the graded material.

D. SEQRA Documentation

Development activities to implement the recommendations found in the Monroe County Master Plan updates may involve short term and long term adverse impacts to water quality and significant habitats from construction activities. This plan is a framework to minimize such impacts.

The Ellison Park Area Master Plan Updates for Monroe County will be subject to review under the New York State Environmental Quality Review Act (SEQRA) because the proposed future actions within each park may affect the environment. Completion of the SEQRA process is necessary prior to the adoption and implementation of the Ellison Park Area Master Plan Updates by Monroe County. The following steps are recommended:

1. Consultant to complete a Long Environmental Assessment Form (EAF) on behalf of Monroe County and assist the County in establishing Lead Agency status for the SEQRA process. One long EAF would be prepared for the Plan as a whole rather than each park individually. Parts 1 & 2 of a long EAF will be prepared. Part 3 is not required for the adoption of a master plan update.
2. Determine the significance of the environmental impact within 20 days.
3. If a Negative Declaration is determined, the County as lead agency must:
 - Prepare, file, publish and distribute the Negative Declaration. Every Negative Declaration must: identify the relevant areas of concern; thoroughly analyze the relevant concerns; and document the determination in writing, describing the reasons why the environmental concerns that were identified and analyzed will not be significant.
 - Maintain the file for public access.
4. If a Positive Declaration is determined, the following must be completed:
 - The lead agency must file a notice of the Positive Declaration.
 - A scope of the environmental issues needs to be prepared. Scoping is completed to address the environmental issues, which may be done by the lead agency, by the applicant, or by a consultant. All involved agencies should participate in the scoping process. A draft scope should be given to anyone who has written to express project interest.
 - Per the DEC's suggestion, the draft scope should be available for public review for a minimum of a 20-day period.
 - A draft environmental impact statement (EIS) must be prepared. For this plan, the lead agency or a consultant can prepare the draft EIS.
 - The lead agency must determine acceptance of the draft EIS within 45 days. If adequate, the lead agency prepares, files, distributes and publishes a Notice of Completion.
 - Once the Notice of Completion of the draft EIS is filed, a public comment period begins for a minimum of 30 days.
 - A public hearing can be held. If a public hearing is held, the following must be done: a Notice of Public Hearing must be prepared and filed; a notice must be published in the newspaper in the area of the potential impacts at least 14 days before the hearing, and the public comment period must continue for ten days following the hearing.
 - A final EIS must be prepared within 45 calendar days after the close of any hearings or within 60 days after following the draft EIS, whichever occurs last. The lead agency is responsible for the adequacy and accuracy of the final EIS.
 - Notice of Completion of the Final EIS must be prepared, filed, distributed and published.

Detailed instructions for each step of the SEQRA review can be found at the New York State Department of Environmental Conservation's website under regulations, Chapter VI: 617: State Environmental Quality Review. An additional SEQRA review for each construction phase is not necessary.

Permit Process

Depending on the projects selected for implementation, the following permits and other review processes may be required prior to the physical construction of this plan:

1. Joint Application for Nationwide Permit (NWP) from the United States Army Corps of Engineers (Corps) and the New York Department of Environmental Conservation (DEC) including DEC Article 24 for the impacted State wetlands.
2. A possible review may be needed by the New York Department of State: Division of Coastal Resources per the guidelines of the Coastal Erosion Control Permit Program.
3. Review of the SPHINX database and a letter of project intent to the State Historic Preservation Office (SHPO) to confirm the absence or presence of known archeologically sensitive areas, listed sites and eligible sites within the project area.
4. A letter of project intent to the New York State Heritage Program to confirm that endangered and/or threatened wildlife and plant species and/or important ecological communities are or are not identified in the project area boundary.

Prior to any disturbances to Waters of the United States, wetland delineation will need to be conducted and a report prepared for the NWP, and a site visit from the regulatory agencies will be required.

E. Potential Funding Sources

According to the 2002 Statewide Comprehensive Outdoor Recreation Plan (SCORP), the federal and state governments are the primary funding sources of open space and recreation projects. In most cases, the State functions as the administering agent for federal funds. The need for funding generally exceeds the funds available. This is clearly demonstrated by the Environmental Protection Fund (EPF) and Clean Water/Clean Air Bond Act (Bond Act) grants, where in the 6-year period from 1996 to 2001, \$598 million in grant applications were received from municipalities for \$79.2 million in available funds. The EPF, Bond Act, Land and Water Conservation Fund (LWCF) and Recreation Trails Program have been the primary funding sources for recreation and open space projects. Significant strides have been made to protect open space and expand recreational opportunities. However, the overall resource base is decreasing, thereby increasing the need for conservation.

1. Federal Sources

Transportation Enhancements Program – This program is federally funded, but administered by the NYS Department of Transportation for transportation-related bicycle and pedestrian facilities. The program enables funding for transportation projects of cultural, aesthetic, historic and environmental significance. Eligible projects must fall into one or more of the twelve Federal Highway Administration (FHWA) categories. Additionally, the project must have a transportation relationship with the surface transportation system and must be available for

public access and use. Each project requires a minimum matching share of 20% of the total project cost. The Transportation bill expires in FFY 2009, and the continuation of this program is contingent on federal action. Additional information may be found at: <https://www.nysdot.gov/portal/page/portal/programs/tep>.

2. State Sources

Environmental Protection Fund (EPF) and/or Land & Water Conservation Fund (LWCF) – This is a 50% matching grant program for the acquisition or development of parks and recreational facilities for projects to preserve, rehabilitate or restore lands, waters or structures for park, recreation or conservation purposes administered by the New York State Office of Parks, Recreation and Historic Preservation. The Parks Development and/or Acquisition Application is to be used for projects to preserve, rehabilitate or restore lands, waters or structures for use by all segments of the population for park, recreation or conservation purposes, including such things as playgrounds, courts, rinks, community gardens and facilities for swimming, boating, picnicking, hunting, fishing, camping or other recreational activities. Funds may be awarded to municipalities or not-for-profits with an ownership interest, for indoor or outdoor projects and must reflect the priorities established in the NY Statewide Comprehensive Outdoor Recreation Plan (SCORP). Additional information may be found at: <http://nysparks.state.ny.us/grants/programs/parks.asp>.

Local Waterfront Revitalization Fund – This program is administered by the New York State Department of State, Division of Coastal Resources. Grants are awarded to communities through planning, preservation and redevelopment of important waterfront resources. Any municipality located on the State's coastal waters or on a designated inland waterway is eligible to receive funding for general program planning. Any municipality with an approved Local Waterfront Revitalization Program or with the relevant Local Waterfront Revitalization Program component substantially completed is eligible for construction projects. This program also requires a 50% match from the applicant. For more information, please go to <http://www.nyswaterfronts.com/request.html>.

Recreational Trails Program – The Recreational Trails Program is a State-administered, Federal assistance program to provide and maintain recreational trails for both motorized and non-motorized recreational trail use. This program is administered by the New York State Office of Parks, Recreation and Historic Preservation, but funds for the Recreational Trails Program are provided by SAFETEA-LU. The RTP legislation requires that States use 40% of their funds apportioned in a fiscal year for diverse recreational trail use, 30% for motorized recreation, and 30% for non-motorized recreation. This grant requires a 20% matching fund commitment from the applicant at the time of application. <http://nysparks.state.ny.us/grants/programs/recreation.asp>.

3. Local & Private Sources

Bonding – Bonds generate immediate financing and are appropriate for large-scale, permanent types of capital projects. General obligation bonds involve the taxing power of a municipality as it is pledged to pay the interest and principal to retire the debt.

Donations – Local clubs, interest groups, private developers and individuals should all be viewed as potential sources of money, services and labor for the development of new facilities and/or programs. The donor(s) determine what the funds would be used for. Property owners may also wish to donate land for public use/access for recreational purposes or for open space conservation.

Fees & Charges – The development, maintenance and operation of park facilities can be partially financed through revenues obtained through user fees and rental charges for the use of recreational facilities, such as picnic pavilions and athletic field reservations for special events.

Real Estate Taxes – The acquisition, development, operation and maintenance of land and facilities may be partially supported by real estate tax revenue. Local tax revenues are the primary sources of maintenance and operating funds.

Sales Tax – Sales tax revenue can be re-allocated or increased to generate general revenue for the acquisition and development of recreation areas. In most areas, a tax increase for this purpose would require a public referendum and voter approval. This increase could be short-term or permanent.

The Foundation Center – The Foundation Center is the primary source of information on private funding sources, with information on over 40,000 foundations offering private monies. Grant information is delineated by geography, types of support, affiliations to facilitate research. Corporate giving and government funding sources can also be researched through the Foundation Center. For more information, please go to <http://foundationcenter.org>.

Information on funding sources provided by Connie D. Miner & Co. Grant Consultants.

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 (Vol. 2)*. Academic Press, New York.

Bergmann Associates, 1999. ***Irondequoit Bay Hiking Trail Plan***. Prepared for Monroe County, and the Towns of Irondequoit, Penfield and Webster.

Brown, Brigit. ***Sustainable Trail Design – A Powerpoint Presentation***. Wisconsin Department of Natural Resources, State Trails Coordinator.

California Department of Education, April 2005. A Study of the Relationship Between Physical Fitness and Academic Achievement in California using 2004 Test Results; and Dwyer T., Sallis J.F., Blizzard L., et. al. Relation of academic performance to physical activity and fitness in children. *Pediatric Exercise Science* 2001; 13:225-237.

Democrat and Chronicle, 2007. ***Brooks Unveils New Green Building Initiative***

Dufresne-Henry, et al. 2003. ***Irondequoit Bay Harbor Management Plan***. Prepared for the Towns of Irondequoit, Penfield and Webster, Monroe County, Irondequoit Bay Coordinating Committee and the NYS Department of State.

Dwyer T., Blizzard L., Dean K. 1996. Physical activity and performance in children. ***Nutritional Review***; 54(4, pt II): S27-S31.; Kennedy E, Davis C. U.S. Department of Agriculture School Breakfast Program. *American Journal of Clinical Nutrition* 1998; 67(4):798S-803S; and Geier AB, et. al. The relationship between relative weight and school attendance.

Feldstein, Lisa, 2006. ***General Plans and Zoning: A Toolkit on Land Use and Health***. Public Health Law Program of the Public Health Institute.

Greater Rochester Health Foundation, 2007. ***Strategic Plan for The Prevention of Childhood Overweight and Obesity in Monroe County, NY 2007-2017***.

Haynes, J.M., Dilcher, R.C., Norment, C.J., Zollweg, J.A., and N.F. Parnell, December 2002. ***Biological Study of Irondequoit Bay***. SUNY College at Brockport, Environmental Science Program. Prepared for the Towns of Irondequoit, Penfield and Webster, Monroe County, and the NYS Department of State.

International Off-road cycling Association, 2004. ***Trail Solutions: IMBA's Guide to Building Sweet Singletrack***

International Off-road cycling Association, 2007. ***Managing Off-road cycling: IMBA's Guide to Providing Great Riding***

International Off-road cycling Association website, 2008. <http://www.imba.com>

Intze, Elaine and Hawley, Brooks, 2000. ***Recreation Demand Study for Penfield, New York***. SUNY College at Brockport, Recreation and Leisure Studies Department.

- Kotz and Associates, 2007. ***Town of Penfield Parks and Recreation Master Plan.***
- Kotz and Schneider, 1985. ***Ellison Park Comprehensive Master Plan.*** Prepared for Monroe County.
- Kowaleski, John. ***An “Eye for Dirt”: The Fundamentals of Trail Design - A Powerpoint Presentation.***
- Kowaleski, John. ***Building Sustainable Accessible Trails Using Crusher Fines - A Powerpoint Presentation.***
- LaBella Associates, May 1997. ***LaSalle’s Landing Development Plan.*** Prepared for the Towns of Irondequoit and Penfield, NY.
- Lathrop, Tom and Kurt Fox. 2008. ***Irondequoit Bay Birding Study.***
<http://home.eznet.net/~kfox/wny/sites/irondbay.htm>
- Marion, Jeffrey, and Nate Olive, 2006. ***Assessing and Understanding Trail Degradation: Results from Big South Fork National River and Recreational Area.*** National Park Service.
- Miner, Connie. November 2007. Funding Opportunities from Connie D. Miner & Co. Grant Consultants, 4818 Kraus Road, Clarence, New York, 14031, (716) 759-3336.
- Monroe County Environmental Management Council, April 1996. ***Preservation of Environmentally Sensitive Areas in Monroe County,*** MCEMC Publication Number 96-2.
- Monroe County Parks Department website, 2008-9.
<http://www.monroecounty.gov/parks-index.php>
- Monroe County Parks Law. Chapter 323. Adopted by the Legislature of the County of Monroe 5-5-81 as L.L. No. 4-1981.
- National Park Service website. ***National Park Service Organic Act.***
<http://www.nps.gov/legacy/organic-act.htm>
- NYSDEC waterbody inventory/priority waterbodies list (WI/PWL)
<http://www.dec.ny.gov/chemical/23852.html>
- NYS Office of Parks Recreation and Historic Preservation, 2003. Statewide Comprehensive Outdoor Recreation Plan (SCORP).
- Outdoor Industry Foundation, June 2006. Outdoor Recreation Participation Study: Trend Analysis for the United States for 2005.
- Sierra Club, 2008. Sierra Club Conservation Policies.
<http://www.sierraclub.org/utilities/printpage.asp?REF=/policy/conservation/mtnbike.asp>
- Town of Penfield Comprehensive Plan Committee, 2000. ***Town of Penfield Comprehensive Plan.***

- Town of Penfield Open Space Committee, 2001. *Town of Penfield Open Space Plan*.
- Town of Penfield Open Space Update Committee, 2006. *Town of Penfield Open Space Update – Final Committee Report*.
- Upstate New York, 2004. *Grade 3 Oral Health, Physical Activity and Nutrition Survey*.
- U.S. Census website, 2008-2009. <http://www.census.gov>
- U.S. Department of Agriculture, 2008. *Natural Resources Conservation Service, Soil Survey: GIS Clearinghouse: Monroe County, New York*
- U.S. Department of Agriculture, 2008. *Natural Resources Conservation Service, Web Soil Survey: Monroe County, New York* <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, July 2005. Fact Sheet: *Preventing Chronic Diseases: Investing Wisely in Health – Preventing Obesity and Chronic Diseases Through Good Nutrition and Physical Activity*. Retrieved from website in October 2007.
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (Publish date unknown). Fact Sheet: *Promoting Active Lifestyles Among Older Adults*. Retrieved from website in October 2007.
- U.S. Department of the Interior, National Park Service. 1997. *The Visitor Experience and Resource Protection (VERP) Framework: A Handbook for Planners and Managers*.
- U.S. Department of Transportation, Federal Highway Administration, 2007. *Trail Construction and Maintenance Notebook*.
- U.S. Fish and Wildlife Service. November 2008. Wetlands Geodatabase. <http://wetlandsfws.er.usgs.gov/NWI/index.html>
- U.S. Forestry Service, 2007. *USFS Trail Classes – Photo Examples*.
- U.S. Green Building Council, October 2005. *LEED for New Construction and Major Renovations (Version 2.2)*.
- U.S. Green Building Council, February 2007. *Pilot Version: LEED for Neighborhood Development Rating System*.
- Valley Mountain Bikers and Hikers, June 2007. *Trail Assessment Procedures For Trails in the Matanuska and Susitna Valleys*.
- Williams, Peter, July 1998. *A Manual for the Assessment of Backcountry Trails*. Utah State University College of Natural Resources: Institute of Outdoor Recreation and Tourism.