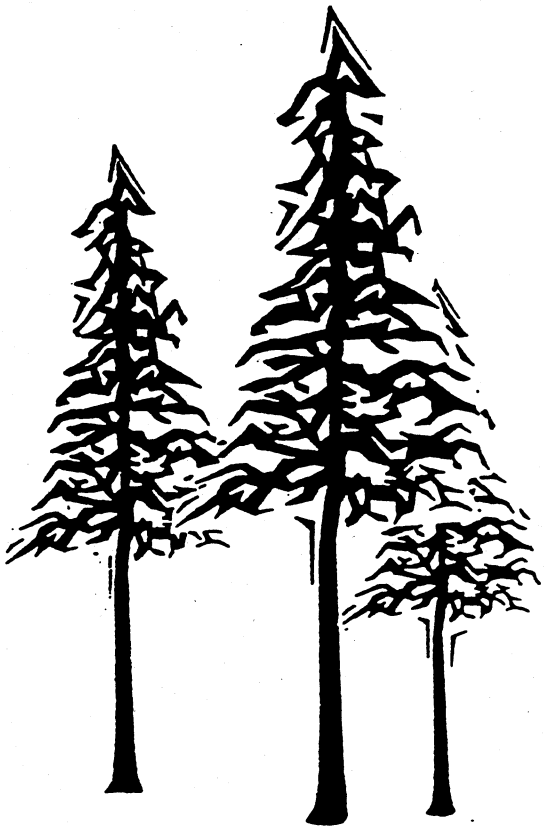
Preservation of Environmentally Sensitive Areas in Monroe County



prepared by the
Monroe County
Environmental Management Council
Preservation of Environmentally Sensitive Areas Committee

April 1996

This report has been made possible by the Monroe County Environmental Management Council (EMC) Preservation of Environmentally Sensitive Areas (PESA) committee. The EMC would like to thank the following committee members and volunteers who contributed many hours working in the field, organizing information, and editing this report.

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I. Executive Summary

The Monroe County Environmental Management Council's (EMC) Preservation of Environmentally Sensitive Areas (PESA) committee was formed in 1991 in order to determine which areas in Monroe County are environmentally sensitive and should be targeted for preservation. This study was done to pinpoint areas of environmental importance and through their preservation, maintain the quality of life in Monroe County.

The study consisted of the following:

- a determination of criteria to be used to evaluate environmentally sensitive sites;
- solicitation of input;
- field work; and
- prioritization of these environmentally sensitive sites according to their urgency for preservation.

The PESA committee requested assistance from municipal conservation boards and environmental organizations in Monroe County. Each was asked to complete a form to submit sites that they believed to be environmentally sensitive (see Appendix A). Using the criteria scoring system (Appendix B), the PESA committee evaluated each submitted site and then began numerous field trips to the sites which fell within the scope of the study. From 1993 to 1995 over fifty field trips were made to these sites with assistance from birders, botanists, and wetland specialists. The initial rankings were then adjusted as appropriate. A subjective evaluation of each site was also prepared.

In undertaking this process, the committee listed certain sites under specific ecosystem headings because they are part of a larger ecosystem. In order to protect the environmental assets of individual sites as well as the entire ecosystem, it is essential to preserve as much of the ecosystem as possible. Therefore, the PESA committee would like to emphasize the importance of preserving sites that enhance these ecosystems.

The recommendations of the PESA committee are as follows:

1. Sites on the priority list, in any category, should be recommended for preservation if the opportunity arises.

2. The EMC should form another committee to implement the following recommendations.

3. The implementation committee should:

    - work with property owners, residents of Monroe County, the county legislature, local conservation boards, the State of New York, and interested environmental organizations to preserve these properties;

    - develop an education program to help make the public aware of the importance of preserving these sites;

    - seek to refine the scoring system contained in this report. This

could result in a valuable tool for evaluating the environmental sensitivity of additional sites within Monroe County, as well as elsewhere; and

- update this report periodically to monitor the recommended sites and to include any additional environmentally sensitive sites in Monroe County.

4. Sites should be continually submitted to the EMC for ranking and investigation.

The following is a listing of the sites by priority. A general location map of the environmentally sensitive sites in Monroe County can be found on page 24 of this report. All of the sites listed below are recommended for preservation. Listing in the Highest Priority category indicates that these sites exhibit a greater sense of urgency in terms of protection than those listed in the other two categories. There is no significance to the order of the listings within each category.

Sites Recommended for Preservation

Highest Priority	Very High Priority	High Priority
Irondequoit Bay Ecosystem	Rita Shaw Estate	Nine Mile Point
Braddock Bay Ecosystem	Industry-Genesee River Site	Whitebrook Wetlands
Lake Ontario Wetlands Ecosystem	Sweden 7 Wetland	Thayer Bluhm Victor
Great Bend	Pittsford Site # 1	Peninsula
Corbett's Glen		Clarkson 20
Quinn/Rush Oak Openings		HO-9
Round Pond-Island Cottage Complex		Pinnacle Hill

It is important to note that the absence of a particular site from this study does not necessarily imply that it is not environmentally sensitive. It is intended that this study continue in order to provide a framework for evaluating other sites.

II. Introduction

The Environmental Management Council (EMC) informs and advises the county government on environmental issues and on ways to protect and use the county's environmental resources. As part of that responsibility, the Preservation of Environmentally Sensitive Areas committee (PESA) was formed in 1991. The committee is "responsible for developing an inventory of environmentally sensitive areas, criteria by which to evaluate these areas, a priority listing for the county, and a discussion of preservation techniques."(1)

Focus of this Report

This report focuses only on the sites in Monroe County identified by conservation boards and area environmental groups as environmentally sensitive. It describes the results of the committee's field investigations and discusses strategies for the preservation of these sites.

Definition of An Environmentally Sensitive Area

After researching definitions of an environmentally sensitive area, a decision was made to use the definition found in Performance Controls for Sensitive Lands published in June 1975 by the American Society of Planning Officials.

> "Environmentally sensitive areas are land areas whose destruction or disturbance will immediately affect the eco-system by either:
>
> a. Creating hazards such as flooding and landslides; or
> b. Destroying important public non-renewable resources such as but not limited to water supplies and the water quality of lakes, rivers, or unique habitats and mature woodlots; or
> c. Wasting important productive lands and renewable resources." (2)

The PESA committee's emphasis was primarily on the description in b. above.

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III. Strategy Used for Determining Environmentally Sensitive Areas

Assistance of Municipalities and Environmental Groups

In May 1992, letters were sent to municipal conservation boards and environmental organizations in Monroe County explaining the study and requesting sites be submitted. This was followed by an informational meeting in June. Each was asked to submit sites that they believed to be environmentally sensitive. Information packets were sent to the conservation boards and environmental organizations that were not able to attend this meeting. Description forms and maps locating the proposed sites were filled out by the participants and returned to the committee (see Appendix A). In August 1992, the committee sent letters to the conservation boards and environmental organizations that had not responded with environmentally sensitive sites. Numerous phone calls were then made to encourage maximum participation.

The following conservation boards responded with proposed sites, maps, and description forms: Brighton, Clarkson, Chili, Gates, Greece, Hamlin, Henrietta, Honeoye Falls, Irondequoit, Mendon, Ogden, Parma, Penfield, Perinton, Pittsford, Riga, Rochester, Rush, Sweden, Webster, and Wheatland.

The following organizations were invited to participate in the study: Adirondack Mountain Club - Genesee Valley Chapter, Bergen Swamp Preservation Society Inc., Braddock Bay Raptor Research Project, Burroughs Audubon Nature Club, Center for Environmental Information, Ducks Unlimited, Federation of Monroe County Environmentalists, Friends of the Genesee, Garden Club of Rochester, Genesee Conservation League, Genesee Land Trust, Genesee Ornithological Society, Genesee West Audubon Society, The Humane Society, League of Women Voters, Metro-Act, Monroe County Conservation Council, Monroe County Fishery Advisory Board, The Nature Conservancy, Peace and Justice Education Center, People for Parks, Rochester Academy of Science, Rochester Area Mycological Association, Rochester Birding Association, Rochester Committee for Scientific Information, Rochester Engineering Society, Rochester Museum and Science Center, Sierra Club (Rochester), Soil and Water Conservation District, and Trout Unlimited. Some of these organizations chose not to participate. The information provided by the responding organizations and the Natural Heritage Program was considered. The Natural Heritage Program is a nationwide program co-sponsored by the New York State Department of Environmental Conservation and The Nature Conservancy. Together these organizations inventory and provide information on geographic locations of exemplary natural communities, as well as rare, threatened, or endangered species and colonial nesting sites of birds. The committee sincerely appreciates the input received from all participating organizations.

During the next three years, the PESA committee met regularly to evaluate the proposed sites using the criteria scoring system (Appendix B), to make field visits to the sites, to draft the Preservation of Environmentally Sensitive Areas in Monroe County report, and to create a slide show of sites included in the study.

In August 1995, representatives from the PESA committee met with County Executive Doyle to discuss the PESA study. In this meeting committee members explained the process and objectives of this study and were able to address the questions and concerns of the County Executive.

At the EMC monthly meeting in September 1995, the PESA committee presented the slide show of environmentally sensitive sites to council members and announced that the preliminary

draft report was nearing completion.

The draft report was completed in October 1995 and mailed to conservation board chairs, environmental organizations, EMC members, and the Monroe County Legislature. Town supervisors and town planning boards were notified that the draft report was available for review. In November 1995, the PESA committee held a meeting to solicit comments from these groups and other interested individuals. This meeting was publicized in the Democrat and Chronicle and the Times Union. After the meeting was publicized many interested residents requested a copy of the draft report.

At the beginning of January 1996, members of the PESA committee met with the Monroe County Legislature's Environment and Public Works Committee to present the details of the study and to answer any questions legislators had after receiving the draft report.

After delineating the boundaries of the environmentally sensitive sites, property owners and adjacent property owners were invited to attend an informational meeting in mid-January. The purpose of this meeting was to receive comments about the draft report and to inform property owners and adjacent property owners about the study process and its conclusions.

The PESA committee appreciates the comments that were received from interested Monroe County residents including the following: AHSKWA Sanctuary Coalition, F-E-S Associates, Federation of Monroe County Environmentalists, The Irondequoit Land Use Coalition, Monroe County People for Parks, Inc., The Nature Conservancy, neighbors of the Shore Acres area, New York State Department of Environmental Conservation (NYSDEC), Seth Green Chapter of Trout Unlimited, Sierra Club (Rochester), Town of Hamlin Conservation Board, and Town of Parma Conservation Board.

Criteria Used to Evaluate Environmentally Sensitive Areas

Before the PESA committee considered any of the sites submitted by the conservation boards and environmental organizations, the committee members decided that a system for preliminary ranking of the sites must be developed. Using a variety of sources and the definition of environmentally sensitive areas, the committee decided on appropriate criteria, tailored the criteria to Monroe County, and created a system to initially prioritize the sites.

Each site was evaluated "on paper" and ranked before the committee visited the site. The scores of each site were calculated with and without vulnerability. These results were intended only as a preliminary assessment tool.

Field Work

After the initial scoring was complete, the committee formed four field teams to visit the sites. Each site was then rescored. During these field trips, experts such as wetland specialists, botanists and birders joined the teams so that additional features could be noted. Some sites were visited several times so that the site could be observed at different seasons, slides taken, and data points checked. From 1993 to 1995 over fifty field trips were made to the various sites. The initial rankings were adjusted as appropriate.

Notes and Exceptions

The committee created the scoring system as a useful tool for preliminary evaluation but it

was too coarse to be used in a final ranking of the sites. The entire committee, therefore, visited all the sites and then added a subjective component to each evaluation. Any personal observations that would not be encompassed by the scoring system such as diversity or rarity of habitat is a subjective component.

In undertaking this process, the committee attempted to be cognizant of the rights of the property owners. In most cases the owners were contacted before site inspections occurred. Individual property owners have been notified of the inclusion of their property in this study.

There are several sites in this study that have been combined because they are part of a larger ecosystem. For example, seven sites from the Irondequoit Bay Ecosystem were included in this study. The individual site descriptions are listed within this ecosystem. This approach was chosen because it is essential that as much of these ecosystems as possible be preserved in order to protect the environmental assets of individual sites and the entire ecosystem. Many sites within these ecosystems have not been formally evaluated as part of this study. Should such sites become available, they should be considered for preservation based upon an evaluation of their environmental sensitivity.

Throughout the study, the PESA committee remained focused on the goal of recommending environmentally sensitive areas for preservation. This was difficult in some cases as certain sites appear to have sensitive qualities but investigation shows that these sites are more appropriately categorized as open space. Open space or undeveloped land, in and of itself, did not qualify a site to be included in this study. Therefore, these sites were deleted from the study as they did not satisfy the definition of an environmentally sensitive area.

Any historical or archaeological significant features that existed on proposed sites were not acknowledged by the committee when they scored the sites. These features were not included in the criteria scoring system that was used to determine the sensitivity of proposed sites.

There were some proposed sites that overlapped municipal boundaries. In these cases, the sites are considered one site, regardless of municipal boundaries.

The PESA committee believes that Monroe County is fortunate to have excellent land resources with many environmentally sensitive areas. Parklands, areas protected by The Nature Conservancy such as Thousand Acre Swamp, and any other areas with similar protection have been eliminated from this study. However, the committee realizes that stewardship of these areas is of utmost importance. If for any reason the preservation of these environmentally sensitive lands is jeopardized then they will be added to the list of sites needing protection.

This committee also believes that all Class A, B, C, and D streams and their banks should be protected and maintained in such a way as to preserve biological habitat and diversity to the greatest extent possible e.g., Genesee River, Irondequoit Creek, Black Creek, Oatka Creek, Northrup Creek, and Honeoye Creek.

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IV. Site Descriptions

Each site in this study has an individual description included in this section. A map showing the general location of each site is included in the Conclusions section. Maps of each site are available at the EMC office.

As previously explained, there are some sites that have been combined because they are part of a larger ecosystem. The PESA committee would like to emphasize the importance of preserving adjacent sites that enhance these ecosystems and are currently not listed in this study. For example, there are seven sites identified as part of the Irondequoit Bay Ecosystem but the sensitivity of this system is not limited to these specific sites. A recent report by the New York State Department of Environmental Conservation (NYSDEC) listed Irondequoit Bay as one of the highest priority projects in New York State for natural resource conservation and preservation needs.(3) Although seven specific sites were submitted to the committee, actions should be taken to preserve additional areas within the Irondequoit Bay ecosystem.

Irondequoit Bay Ecosystem

Each of the sites along the bay received a significant geological feature score for a river gorge. This is due to the fact that before the last glacial period, it is believed that the Genesee River flowed where the Irondequoit Bay is presently located.

The Central Western Office of The Nature Conservancy recently confirmed in a regional migratory bird survey that habitat within a half mile of Lake Ontario is crucial for songbirds during spring migration. The sites described below serve as an important migratory corridor for songbirds.

Irondequoit Bay's Northeast Shoreline - Webster

The northeastern shoreline of Irondequoit Bay contains steep slopes which meet the shoreline. These sandy ravines are held in place by a canopy of maple, oak, pine, birch, beech, cottonwood, poplar, cherry, and sassafras trees. Some of these trees are at least one hundred years old. The understory consists of barberries, raspberries, honeysuckles, may apples, ferns, buttercups, and pokeweeds. These plants also helps to limit erosion. The tops of the ravines provide a suitable habitat for many mammals and songbirds, as well as an outstanding view of the bay and Lake Ontario. The NYSDEC Class I wetland at the base of the slopes is an ideal feeding and nesting ground for waterfowl. The town of Webster has approved a residential development of approximately 50 acres in this northeast section of the bay. The Bluffs Subdivision is currently being constructed and will include 10.4 acres that will be left untouched protecting the steep slopes, ravines, and wetlands. This protected area will be owned and controlled by the subdivision homeowner's association.

Webster Wellfield - Webster

Webster Wellfield is also located adjacent to Irondequoit Bay. A NYSDEC Class I wetland is located on this site along the bay's shoreline. The soils are primarily sandy and the extremely steep slopes leading to the bay are heavily wooded. The woodland consists of dense stands of black oaks, some over one-hundred years old. In addition to the black oaks there are maple, cottonwood, shagbark hickory, sassafras, wild grapes, and pitch pine. There is an oak opening within the site, which is a rare plant community that is characteristic of the prairies that covered this

region following the last glacial period. The site provides habitat for birds and many mammals, especially deer, fox, and turkey. The site also possesses the ancient Lake Iroquois shoreline. Its bluff provides a viewing distance of greater than five miles to the west. There is an extensive network of trails throughout the site that show damage caused by motorized vehicles. Currently, the village of Webster pumps water from the wellfields for drinking water. It is unclear what would be done with the site if the village were to stop using the area as a drinking water source.

Devil's Cove - Webster

Devil's Cove is an inlet of Irondequoit Bay and is one of many environmentally sensitive sites on the bay. The location of Devil's Cove protects it from bay currents. This may cause it to be prone to degradation because of the accumulation of pollution and sediment deposits caused by erosion. The steep, unstable sandy slopes of the cove are held in place by American chestnut, black walnut, red oak, white oak, sugar maple, and witch hazel trees. Flowering dogwood, buckthorn, bidens, Solomon's seal and various ferns make up the understory. From the top of the slopes there is an excellent view of the bay. The shoreline of the cove is a NYSDEC Class I wetland. Any development on this site would be environmentally unsound due to the highly erodible slopes and the potential harmful effects on the water quality of the cove.

Irondequoit Bay Southeast Slopes - Penfield

The southeastern section of Irondequoit Bay consists of a climax hardwood forest growing in the steep glens that run down to meet the bay shoreline. These ravines consist of mostly sand and are extremely erodible. The hardwoods and herbaceous understory which includes bittersweet and sassafras are critical in holding this loose sandy soil in place. The bank is continuously being undercut by the bay. Light foot traffic in the area contributes to the erosion problem. This 272 acre site which is largely undisturbed, provides a diverse wildlife habitat, as well as a scenic view of and access to the bay. At the southern end of the site there is a small freshwater marsh. The wetlands along the bay's shoreline are NYSDEC Class I and support many birds and mammals, as well as contribute to the beauty of the site. These wetlands and wooded ravines protect the water quality of the bay and, in turn, must be protected because of their extreme vulnerability.

Empire Boulevard Mud Flats - Irondequoit/Penfield

This site is part of the southern shore of Irondequoit Bay. It is a partially developed shoreline and mud flat that is an essential migratory route and habitat for many shorebirds and waterfowl such as grebes, geese, coot, and ducks including bufflehead, merganser, canvasback and redhead. Ecologically, these seasonal mud flats are unique in Monroe County and their presence depends on the water level. Dredging for docks, dumping, and extensive boat use could threaten the site's existence.

Irondequoit Bay Southwest Slopes - Irondequoit

This site is approximately sixty acres and is located south of Empire Boulevard. It overlooks the extensive freshwater marsh areas of Irondequoit Creek and the southern end of Irondequoit Bay. This setting provides many scenic vistas. The site is composed of steep slopes of mature oaks, maples, and tulip trees with an understory consisting of many shrubs and ferns. In the southern section of the site the steep slopes level out into a NYSDEC Class I wetland. The woodlands and adjacent wetlands provide valuable habitats for the many mammals, marsh birds, and songbirds that feed and nest in the area. The site is frequently used by dirt bikes which cause erosion, create pathways, and destroy plants. There is also evidence of past logging on the site.

Irondequoit Creek Area - Brighton/Penfield

The Irondequoit Creek Area is a parcel of over one hundred acres of marshland in the Irondequoit Creek Valley. At the section of the creek in Brighton, there are very steep slopes on either side of the creek. These are held in place by a canopy of black walnut, box elder, sugar maple, poplar, American elm, and shagbark hickory. Songbirds, deer, and small mammals are common in this gorge. The wetlands on site are NYSDEC Class I. This site links Ellison Park and the wetland area south of Irondequoit Bay, creating a valuable wildlife corridor.

Braddock Bay Ecosystem

As in the Irondequoit Bay ecosystem, the sites described in this ecosystem also provide crucial habitat for migrating songbirds.

Salmon Creek - Greece

The Salmon Creek site is a wetland area containing both freshwater marshes and woodland swamps and is part of the Braddock Bay complex. It is a relatively flat site with a gentle slope beginning at Manitou Beach Road and ending at Salmon Creek. The wetlands on this site are NYSDEC Class I. This is a constantly fluctuating system where seasonal flooding is common. The vegetation includes mature willows, evergreens, red osier dogwood, tussock sedge, iris and cattail. The Salmon Creek area hosts species such as great blue heron, beaver, and recently, an unusual sighting of a sandhill crane was confirmed. It also supports many waterfowl, songbirds, and other common mammals. This site possesses exceptional views of Rochester's skyline and of the Rush highlands. Currently, this site is used for agriculture and dairy farming.

Braddock Bay West Spit - Greece

Braddock Bay West Spit is located between Lake Ontario State Parkway and Lake Ontario in the town of Greece. This site is nationally recognized as a migration corridor for raptors and songbirds. The wetlands are NYSDEC Class I wetlands. Both the bayshore and lakeshore of this site are used for educational purposes by the community. The wetland vegetation and open water of the bay are crucial habitat for waterfowl, songbirds, raptors, amphibians, and fish as a breeding and resting ground. There are groves of poplar trees that are fifty to sixty years old, as well as black willow and the uncommon flowering rush (Butomus umbellatus) that are found on the edges of the marshes. In addition to its ecological and educational significance, this site provides scenic vistas of Lake Ontario and the Edgemere Drive shoreline.

Lake Ontario Wetlands Ecosystem

The Lake Ontario Wetlands ecosystem includes the following areas: Near Shore Isolated Wetlands, Brush Creek Wetland, Bogus Point Wetlands and Parma Site #1. These sites consist of freshwater marshes, swamps, and ponds along the Lake Ontario shoreline. All of the sites contain a diversity of environmental features including open water bodies, woodlands, and wetlands. Together they provide a critical nursery habitat for a variety of wildlife, especially ducks, fish, amphibians and shore birds. These sites, within a half mile of the lakeshore, serve as an important migratory corridor for songbirds as noted in the recent survey completed by the Central and Western Chapter of The Nature Conservancy. In addition, each of the sites provides scenic views of the lake. Note: If other similar sites in this ecosystem are identified then they should also be considered for preservation.

Near Shore Isolated Wetlands - Hamlin

This site consists of three small wetlands along the Lake Ontario shoreline in Hamlin. Sandwiched between housing tracts, they represent some of the last remaining undeveloped areas along the lakeshore. The easternmost wetland is a NYSDEC Class I. The wet woods on-site consist of ash, sugar maple, hop hornbeam, basswood, and black cherry. A few ferns make up the understory of these wet woods. A pebble beach serves as a buffer between the woods and lake but in some areas the trees are being undermined by wave action from Lake Ontario. The middle wetland is a smaller wetland that has a cattail marsh on the lakeshore. The westernmost wetland is also a NYSDEC Class I wetland with cattails and buttonbush present.

Brush Creek Wetland - Hamlin/Parma

Brush Creek Wetland is heavily developed with many cottages and houses encroaching on the ponds which have extensive cattail marshes. The year-round stream, Brush Creek, that runs through Hamlin and Parma and eventually empties into Lake Ontario, flows through this site. The wetlands on this site are NYSDEC Class I. Many common mammals and water birds including herons and ducks are found at this site. There are signs of carp spawning along the shore. This area is threatened by illegal dumping and housing development.

Parma Site #1 - Parma

Parma Site #1 is a strip of shoreline and hardwood forest that is bordered by Lake Ontario Parkway to the south and Lake Ontario to the north. It is one of the few remaining undeveloped areas along the lake and is a fairly flat site that supports mainly mature silver maples and ash, some of which are seventy-five to one-hundred years old. The wetlands on-site are less than 12.4 acres and are therefore not protected by NYSDEC. Several types of plant communities exist on this site including a shrub field, a small swamp, a freshwater marsh, and a conifer plot. The diversity of these communities provides valuable habitat for resident and migrating birds, many mammals, and amphibians.

Bogus Point Wetlands - Parma

Bogus Point Wetlands are located east of Lighthouse Road and north of the Lake Ontario State Parkway. This is an area where extensive development possibilities remain. Currently, a portion of this site is used as a boat launch by the Hobie Cats of Rochester. It is a sandy, natural barrier beach and creek/marsh complex with NYSDEC Class I wetlands. It has the most attractive views of Lake Ontario out of the four sites listed as part of the Lake Ontario Wetlands Ecosystem. This site supports many birds and waterfowl such as Canada geese, green backed herons, great blue herons, wood ducks, black ducks, and mallards. The vegetation consists of a variety of plants including yellow iris and water lilies. Improvements made to this site include a metal break wall and shore wall to preserve the beach.

Individual sites

Nine Mile Point - Webster

Nine Mile Point is part of Lake Ontario's shoreline and is bordered on the south by Lake Road in Webster. Four Mile Creek runs through the center of the site and empties into the lake. The woodland which also runs through the center of the site is primarily a second growth forest with some mature trees and an understory of scrub vegetation. This wooded brushland near open water provides excellent habitat for songbirds as well as many mammals. The topography varies with steeper slopes along the northern section near the lake and more gentle slopes on the other areas of the site. Nine Mile Point is the last undeveloped site on the eastern lakeshore in Monroe County and currently is threatened by the possible development of a marina and a residential subdivision.

Corbett's Glen - Brighton

Corbett's Glen is one of the few remaining undeveloped sites in an otherwise urban / suburban area. It is presently threatened by proposed development. This unique, natural glen is an important site because of the diversity of its features. The oval sunken valley is bordered on one side by Allen's Creek. This creek falls over a dolomite limestone outcropping creating a small, picturesque waterfall. A portion of Corbett's Glen is in the creek's 100-year floodplain which contributes to the existence of the small marshes found on-site. These marshes are not protected by the NYSDEC because they do not meet the 12.4 acre requirement, but they are included in the United States Fish and Wildlife Service (USFWS) National Wetland Inventory. The steep, sandy slopes of the glen are extremely erodible, but are presently held in place by many mature red oaks, white oaks, and maples. There are several impressive trees existing on this site including a ninety-foot white pine. In addition, unusual plants such as cardinal flower, round-lobed hepatica, and bittersweet are members of the plant community in Corbett's Glen. The open meadows, woodlands, and wetlands create an excellent habitat for raptors, migratory songbirds, and other wildlife such as red fox, opposum, and deer. Brown trout, rainbow trout, and salmon also contribute to the ecosystem in Corbett's Glen. This site is visited by local school groups for geological field trips and has great potential for educational, historic, archaeological, and passive recreational uses.

Corbett's Glen is bordered by the proposed Linden Tech Park and the Farash-Fallone property which protect the environmental quality of the glen. Neither the proposed Linden Tech Park nor the Farash-Fallone property score high enough to make the inventory separately. However, both of these protect the Corbett's Glen site in terms of providing a larger habitat area for the many animals and plants found in the glen. Without the proposed Linden Tech Park and the Farash-Fallone property, it is believed that Corbett's Glen alone might exceed its carrying capacity and lose some of its diversity. Presently, both sites are disturbed and are considered for development. If these sites are not protected, then Corbett's Glen will become more susceptible to disturbance and degradation.

Pinnacle Hill - Brighton/Rochester

Approximately thirty acres of Pinnacle Hill is included in this site. It abuts Highland Avenue, Clinton Avenue, and Field Street, crossing over the boundary between the city of Rochester and the town of Brighton. Its mature deciduous woodlands and habitat represent a rare piece of wild terrain in an urban setting. This site is a kame left over from the last glacial period and is part of the Pinnacle Range which includes Cobb's Hill, Highland Park, and Mount Hope

Cemetery. Pinnacle Hill has one of the highest elevations in the city of Rochester and the highest elevation in the town of Brighton. From the top of this very steep and erodible hill, there are excellent views to the south. Urban and suburban development are possible threats to the site's current natural state.

Whitebrook Wetlands - Perinton

Whitebrook Wetlands is a 1,400 acre site that is the premier wetland in Perinton. It generally borders on Aldrich Road, Victor Road, Wilkinson Road, Pannel Road, and the Erie Canal. There is a diversity of topography such as steep slopes, valleys, streams, and ponds. The site is used for agricultural and passive recreational use such as hiking. The wetlands provide a variety of niches that are ideal for the reproduction of many fish, amphibians, reptiles, mammals, birds and waterfowl. The wetlands are NYSDEC Class I and much of the northern portion of the site is protected under Perinton's open space program. However, a large portion of the marsh is still unprotected. A small percentage of the site has mature oak, silver maple, and willow trees, some of which are fifty to one hundred and twenty years old. There is a rich diversity of wetland vegetation such as viburnum, red osier dogwood, and skunk cabbage found on the site. The marl beds, which are created by a high concentration of fossils in the soil, are a significant geologic feature and provide an unusual white tint to the brook. There are three ponds on the site, all of which were former gravel pits. There is a heron rookery with twenty-five to thirty active nests. Many other marsh birds including rails are also found at this site.

Thayer Bluhm Victor - Perinton

Thayer Bluhm Victor is an approximately 360 acre site that is bordered by Victor Road, Thayer Road, Bluhm Road, and the Ontario County Line. The present land use surrounding this site includes a combination of housing and agriculture, however, much of the site is currently either wooded or open land. The wooded portion is primarily mature hardwoods with some softwoods present. Most of the open land is pasture and open meadow which adds to the beauty of the site. The majority of the site is sloped and includes one of the highest points in Monroe County, Baker Hill. The tops of the slopes provide scenic vistas of the surrounding areas. There are drumlins and at least one intermittent stream that flows near Keck Road. This stream is a tributary to White Brook, Thomas Creek, and Irondequoit Creek. The site is visited by many songbirds, hawks, and butterflies. There are a few landowners in this area that have opted to put conservation easements on their parcels. The recent installation of the Empire State pipeline which transects the property caused temporary disturbance to the site but no long-term effects are expected. There are electrical transmission lines which detract from the aesthetics of the site and disturbance caused by off-road vehicles.

Pittsford Site #1 - Pittsford

The Pittsford Site #1 is located west of Route 65 and north of the New York State Thruway. It is contiguous to Isaac Gordon Park and has a hilly terrain. The site consists of woodlands, agricultural land, and wetlands which are listed on the USFWS National Wetland Inventory. A secluded cattail marsh provides excellent habitat for wildlife, including a wide variety of songbirds, amphibians, and mammals. There are also many wildflowers found on the site. From the eastern boundary of the site the viewing distance extends for several miles providing an outstanding view. This area is highly vulnerable to development. "For Sale" signs have been observed on the property.

Great Bend - Mendon

Great Bend is bordered on the north and east by a Lehigh Valley railroad bed right-of-way and on the west by the Totiakton site, a national historic landmark. Honeoye Creek runs through the middle of Great Bend providing a valuable corridor for wildlife. There are NYSDEC Class II wetlands located on the site. Great Bend has a diversity of environmental features ranging from dense woodlands, some of which are on steep slopes, to open meadows that are found along the railroad bed. The combination of these features provides excellent habitats for plants and animals. Songbirds, redtailed hawks, turkey vultures, wood ducks, and red-bellied woodpeckers have been observed on this site. A variety of herbaceous plants such as wild geranium, virginia bluebells, and jack-in-the-pulpit can also be found. There are portions of this site that are relatively undisturbed bottomland. The drumlin at the southeast corner of Route 15A and Plains Road is also included in this site. It covers approximately two acres and is 75 to 100 feet high at its west end. It has steep slopes on three sides. At the base of the moderate slope on the east side is farmland and residential development. The sides and top of the drumlin are covered with scrub vegetation. Mature trees are absent from this portion of the site. The view from the top is up to five miles.

Currently, the most significant disturbance is the use of motorcycles and ATVs on the site. Development has also been proposed. There is the potential for Great Bend to be used for a wide variety of passive recreational and educational purposes. Ideally, the PESA committee recommends that the boundaries of this site be extended, continuing the wildlife corridor along the Lehigh Valley right-of-way to Monroe Street in the village of Honeoye Falls.

Peninsula - Village of Honeoye Falls

This 10 acre peninsula is surrounded on three sides by an oxbow of Honeoye Creek. A substantial portion of the site is a field of asters, thistles, and grasses. This field has previously been used for agriculture and may be used for this purpose in the future. The peninsula has mature willows and many creeping vines. The most northern portion is wooded with a dense understory of various shrubs. The site is used during migration by numerous songbird species. Several species of wildflowers grow on this site, including a large stand of virginia bluebells. Lizard tail, floating pondweed, swamp milkweed, and joe pye weed thrive along the edges of the creek .

Quinn/Rush Oak Openings - Rush

The Quinn/Rush Oak Openings area is important because it is one of three oak openings which remain in New York State. The oak opening habitat has a unique plant community which has diminished in central and western New York due to human activity and natural ecological succession. There are three properties owned by different entities within this site: New York State, The Nature Conservancy, and a private owner. Currently the NYSDEC and The Nature Conservancy are working cooperatively with willing sellers to protect additional land in this area. This site is approximately 168 acres and is located between Honeoye Falls Five Points Road (Route 80) to the north and east and Route 15 to the west. There is a NYSDEC Class III wetland on-site. This prairie-like opening is located on a thin layer of soil on top of the Onondaga limestone escarpment. Characteristic vegetation of oak openings is found at this site and consists of Indian grass and bluestem surrounded by a sparse canopy of chestnut (chinkapin) oak, red oak, black oak, pignut hickory, shagbark hickory, and black cherry. It is also significant because it is representative of a fire community.(4) This plant community relies on fire to remove invasive species not adapted to fire and prevents succession from grassland to forested land.

Industry-Genesee River Site - Rush

This site is approximately 950 acres in size and lies in the Genesee River Valley between the Genesee River and East River Road in the town of Rush. There are two NYSDEC Class II wetlands and one NYSDEC Class I wetland on site. The Genesee River borders the site on the west and is fed by numerous tributaries on the site. The Lehigh Valley Trail runs through the site dividing it into northern and southern sections.

The land uses on and adjacent to the northern section of this site are multi-purpose and include two museums, the State School at Industry, an abandoned landfill, wildlife trails, and areas for horseback riding. The abandoned landfill which has obvious leaching problems may have an adverse impact on any future land use.

The southern section of the site is primarily low land except for a few steep areas. The southern section also contains the confluence of Honeoye Creek and the Genesee River, as well as an oxbow of Honeoye Creek. Together, the confluence and oxbow provide a very important sensitive ecosystem which, combined with the size of the site, provide a valuable environmental corridor.

Sweden 7 Wetland - Sweden

The Sweden 7 Wetland site is a NYSDEC Class II scrub, shrub deciduous wetland of approximately 800 acres that is located between Swamp Road and Beadle Road. The site contains the headwaters of Salmon Creek and numerous mature cattail marshes. Although the wooded area is immature due to recent logging, there are some large tree specimens scattered throughout the wetland, particularly near the marshes. American elm, red maple, silver maple, red ash, green ash, white oak, and beech are among the various tree species found on this site. The herbaceous layer of the plant community includes species such as jack-in-the-pulpit, iris, trout lily, and yellow lady's slipper orchids. This site is a prolific wildlife habitat with an extremely diverse and abundant bird population including an active great blue heron nesting colony that has existed for over forty years. Other nesting birds include the red-tailed hawk, and the blue-winged and golden-winged warbler. The potential use of herbicides under transmission lines, which transect the site, is a major concern with regard to contamination of the wetland. The indiscriminate dumping of old cars, fifty-five gallon drums, refrigerators, the adjacent Chapman site (a New York State Superfund site), and an adjacent quarry's discharge may disturb this wetland site.

H0-9 - Sweden

H0-9 is a 450 acre complex of four contiguous wetlands along the north branch of Black Creek in Sweden with additional acreage extending into Orleans County. Each wetland has distinctive dominant species which help form an extensive ecosystem capable of supporting many wildlife species. The wetlands are seasonally-flooded NYSDEC Class II. The site is primarily flat. The diversity of woodlands range from a mature boggy-yellow birch and white birch woodland to a young woodland of hardwoods and red maple. There are other areas that have been logged and planted with pine and other softwoods. The dominant species found on the site are red maple, silver maple, red ash, white ash, red osier dogwood, American elm, willow, hornbeam, and spicebush. Past and present logging has carved extensive dirt roads into the forest of one of the areas; two other areas have been drained and farmed. There are also power lines transecting the site. Potential development and the draining of wetland soils pose a threat to this site.

Clarkson 20 - Clarkson

Clarkson 20 is a scrub, shrub deciduous-forested NYSDEC Class II wetland of approximately 500 acres. Otis Creek and Brockport Creek flow along the east and west sides of the site, respectively. A mature red oak possessing a six-foot diameter at breast height and an extensive jack-in-the-pulpit population are unusual features of this site. The area is a valuable wildlife habitat with a large population of deer, turkey, and coyote. This site is vulnerable due to the evidence of recent logging and the encroaching development which threatens its existence.

Round Pond - Island Cottage Complex - Greece

The Round Pond - Island Cottage Complex is a wetland system between Island Cottage Road and Dewey Avenue. It is bordered on the south by the Lake Ontario State Parkway and is adjacent to Buck Pond and Lake Ontario. This site is a combination of the following three adjacent areas: the Atkins property; Island Cottage woods; and the songbird area south of Edgemere Drive. The site is fairly flat and has marshes and a pond with an extensive cattail stand in the center. The invasion of purple loosestrife on the site is minimal. There are NYSDEC Class I designated wetlands on the site and the vegetation found on the edge of the wet areas includes green ash, wild grape, red osier dogwood, nannyberry, sweet clover and grasses. There are at least three different species of goldenrod on the site and honeysuckle grows on the banks of the pond. This entire site is a significant migratory corridor for songbirds and provides crucial habitat for waterfowl and many common mammals. The Atkins property has a large building on-site that was previously used for building ships. The area around the building is littered with old drums and other debris. A good portion of this property is privately owned contributing to its potential vulnerability.

Rita Shaw Estate - Irondequoit

The Rita Shaw Estate is approximately 29 acres and is one of the last large wooded tracts in Irondequoit. This site has a very high potential for development. There are three steep-sloped ridges, one of which is an esker, two large valleys and two winding streams on the estate. The oak-hickory climax woodland has oaks that are an estimated 200 to 250 years old. Some oaks have a thirteen to fourteen foot circumference. Other trees found on-site include tulip poplar, maple, beech, pine, aspen, ash, and cottonwood. The understory consists of dogwood, spice bush, arrowwood, honeysuckle, barberry, and sumac. In addition, there are protected ferns and fields of wildflowers that make this an attractive site.

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V. Methods of Preserving Environmentally Sensitive Areas

There are a number of strategies for preserving environmentally sensitive areas. These range from actual purchase of land by some level of government or non-profit group to partnerships between interested parties. Other methods include incentives with respect to tax relief to preserve these areas.(5)

There is no single ideal strategy for preserving all environmentally sensitive areas. The preservation method chosen often depends on the property's characteristics, location, local municipal laws, the owner of the property, the type of development requested, the amount of money available for preservation, and many other factors. Determining an effective preservation strategy is difficult, but understanding the preservation options makes the decision much easier.

Purchase Strategies

1. *Fee Simple Acquisition:* This method is the most direct, but most costly method of acquiring land for preservation. Fee simple acquisition provides ownership and development rights to the purchaser of a parcel of land. This strategy is mainly used when the area is severely threatened and there is no other viable alternative. The major advantage of this approach is that it offers the greatest certainty of preservation. The major disadvantages of a purchasing strategy are that purchasing land is expensive and ownership of the land by the county or other municipality reduces the tax base.(6)

2. *Gifts and Wills:* Another way that a municipality obtains ownership of land for preservation is when an individual donates or leaves it in a will. It is similar to the fee simple acquisition because the municipality owns the land.(7)

Tax Strategies

1. *Conservation Easements:* An easement is a legal interest in land owned by another that entitles its owner to a specific limited use of the land. Section 247 of the New York State General Municipal Law allows municipalities to acquire easements in real property for the preservation of open spaces. In this case, the landowner retains ownership of the land but is subject to easement restrictions, such as prohibition of structural development, mining or logging of the land. In return, the landowner receives a tax break directly related to the duration of the easement. After the limited time has elapsed, the owner is free to develop the land as he or she sees fit.(8)

A major problem with conservation easements is that some owners will break the easement since the penalties incurred may often be much less than the profit made through development. The town of Perinton has developed a way to turn this into a positive situation for the town. If a developer breaks the conservation easement, back taxes are assessed. The revenue from these taxes is put into a fund reserved for purchasing properties considered important as open space. Although it was not the original intent of the plan, penalties and back taxes assessed from breached easement agreements allow Perinton to accumulate enough money to purchase some environmentally sensitive areas.(9)

2. *Permanent Easements:* Permanent easements have no time limits and cannot be removed by the property owner. The party that is granted the permanent easement can release the property owner from the easement. In addition to providing municipalities with a useful tool for preserving environmentally sensitive areas, they are also helpful to the landowner. "Since the value of the property under easement is generally reduced, the landowner may claim this loss as a

charitable deduction on federal income taxes. Only permanent easements qualify for federal tax abatement."(10)

3. *Environmentally Sensitive Areas Tax Program:* Although New York State's open space tax program already gives tax breaks for the conservation of forests near Adirondack Park, it has been expanded so that local governments receive property tax revenues from the state government to preserve land indicated as an environmentally sensitive area. In the long run, local governments benefit from preserving the land instead of developing it. Since maintenance of the land is minimal, and local governments receive money for its preservation, this strategy is financially advantageous.(11) Section 480-a of the New York State real property tax law provides tax relief on forested lands providing a management plan is approved and implemented.(12)

Zoning Strategies

1. *Protective Zoning:* "Zoning is a method of development control whereby a municipality partitions lands into regions or zones reserved for specific uses and governed by appropriate building regulations."(13)

2. *Environmental Protection Overlay District (EPOD) Zoning:* An EPOD is an area of land which contains a number of environmentally sensitive features. For example, an EPOD could be determined by taking a base map of a municipality and overlaying maps indicating steep slopes, wetlands, and other features onto the base. From these maps the municipality could decide that an area should be designated an EPOD, setting restrictions on the number of homes or other developments in that area. Constraints on roads and utility construction through these areas would also be established.(14)

3. *Cluster Zoning:* A municipality's planning board has the legal right in New York State to modify the town's zoning ordinance in order to create lot sizes smaller than zoning requires, provided the overall density remains constant. This allows houses to be clustered into sections of the subdivision, leaving undeveloped and potentially environmentally sensitive areas preserved. This is usually an attractive option for the developers because they don't have to expend as many resources for roads, electric lines, sewer lines, etc., if the houses are clustered together. The areas designated as open space can then either be donated to the municipality, maintained by a neighborhood association, or kept as larger lots with a restrictive covenant (see Other Strategies section for information on restrictive covenants). Cluster zoning may be opposed by residents who fear that cluster development will lower neighborhood property values. (15)

4. Large Lot Zoning: "A municipality may use large lot zoning (for example, requiring five acres per one house) to reduce residential density, preserve open space, and protect environmental attributes of the land." (16) Large lot zoning may endanger the very land that it tries to protect because it may increase the amount of land in private ownership, decrease opportunities for public access, and reduce areas with natural vegetation. Suburban land devoted to lawn space may also increase chemical use as some home owners try to create "manicured, weed-free lawns." (17)

5. Incentive Zoning: Section 261-b of New York State Town Law allows municipalities to designate districts in which adjustments to existing zoning requirements would be allowed, as long as the adjustments provide benefits to the community. " 'Incentives or bonuses' shall mean adjustments to the permissible population density, area, height, open space, use, or other provisions of a zoning ordinance or local law for a specific purpose authorized by the town board."(18) Those benefits may include preservation and enhancement of natural features or open

space.

6. *Critical Environmental Area (CEA) Designation:* "Under Article 6 of New York's Codes, Rules, and Regulations, a municipality may designate specific geographic areas as Critical Environmental Areas (CEAs) if these areas have exceptional or unique characteristics that make them environmentally important.(19) This designation does not actually "preserve" a tract of land, but it does alert the community and developers that it is an important environmental area.

Land Trusts

1. *Land Trusts:* "A land trust is a charitable organization, independent of government, that holds land (usually environmentally valuable parcels) for preservation and/or conservation purposes."(20) A land trust may receive monetary or property gifts, sell and buy property, or simply hold land for future government purchase.(21) The Nature Conservancy and the Trust for Public Land are two of the better-known land trust organizations. The Genesee Land Trust is a local example that was formed in the late 1980s. A difficulty with this approach is that organizations are dependent upon donations of money and land.

Development Rights

1. *Transfer of Development Rights (TDR):* Development rights (rights to construct buildings, roads, and other structures) can be transferred or sold. Even after the landowner sells the development rights he or she still retains the title and all other rights to his or her land. "These other rights permit farming, forestry, some recreational uses, and other nonintensive uses."(22) The transfer of development rights allows the shift of density potential from one tract of land to a different, noncontiguous parcel. In more simple terms, "the development rights are sold to a landowner whose property can support greater densities."(23) Since the cost of preserving the open space is absorbed by the purchaser of the development rights, TDR is often an attractive preservation method. The trouble however, lies in actually getting landowners to participate in this voluntary preservation strategy.(24)

2. *Purchase of Development Rights:* Development rights can also be purchased by a municipality, instead of simply being transferred from one parcel to another. Outright purchase of the development rights has many of the same advantages as fee simple acquisition, but since the purchaser would not be purchasing all the rights to the land this preservation method is less expensive than fee simple acquisition. Purchasing development rights can still be a relatively expensive preservation method, especially where real estate values are high. Even though purchasing the development rights often secures long term protection, it does not guarantee it.(25)

Other Strategies

1. *Homeowner's Association Agreements:* These agreements are usually set up by the developer, and are written agreements that may include stipulations about how the land, set aside for preservation, will be utilized. The homeowners most often are required to pay a fee at purchase time and annually thereafter for the maintenance and recreational use of the area.(26)

2. *Restrictive Covenants:* A restrictive covenant may be written into the deed of the property. The covenant places restrictions on certain activities which may harm environmentally sensitive areas. Although the restrictions can vary greatly, this strategy is often permanent since the deed to the land will always contain the covenant agreement, even if ownership changes hands. Its advantage is that any future owners will be aware of the environmental sensitivity of the land

and be bound by the terms of the deed.(27)

3. *Special Park Districts:* "When nearby residents have an intense interest in the preservation of a parcel of land, they may petition the municipality for a Special Park District, which includes the open space and nearby residences. The open space is owned by the residents of the district and maintained by the municipality."(28) The municipality pays for maintenance by taxing the residents of the district for upkeep and/or for correction of problems which arise.(29)

4. *Landmark Designation:* Designating a piece of property as having historical or architectural significance for the municipality can also help preserve adjacent property. However, many of these areas already have buildings on them. Within crowded urban areas, this may be a more useful strategy.(30)

5. *The Nature Conservancy's Natural Areas Registry:* This registry is a "voluntary protection partnership between the Conservancy and the owners of those lands that shelter New York's rarest species and habitats".(31) The landowners consent to protect their property and to inform The Nature Conservancy of any potential changes in land use or ownership. In return, the Conservancy provides information to the landowner and assists, if needed, with land management issues.(32)

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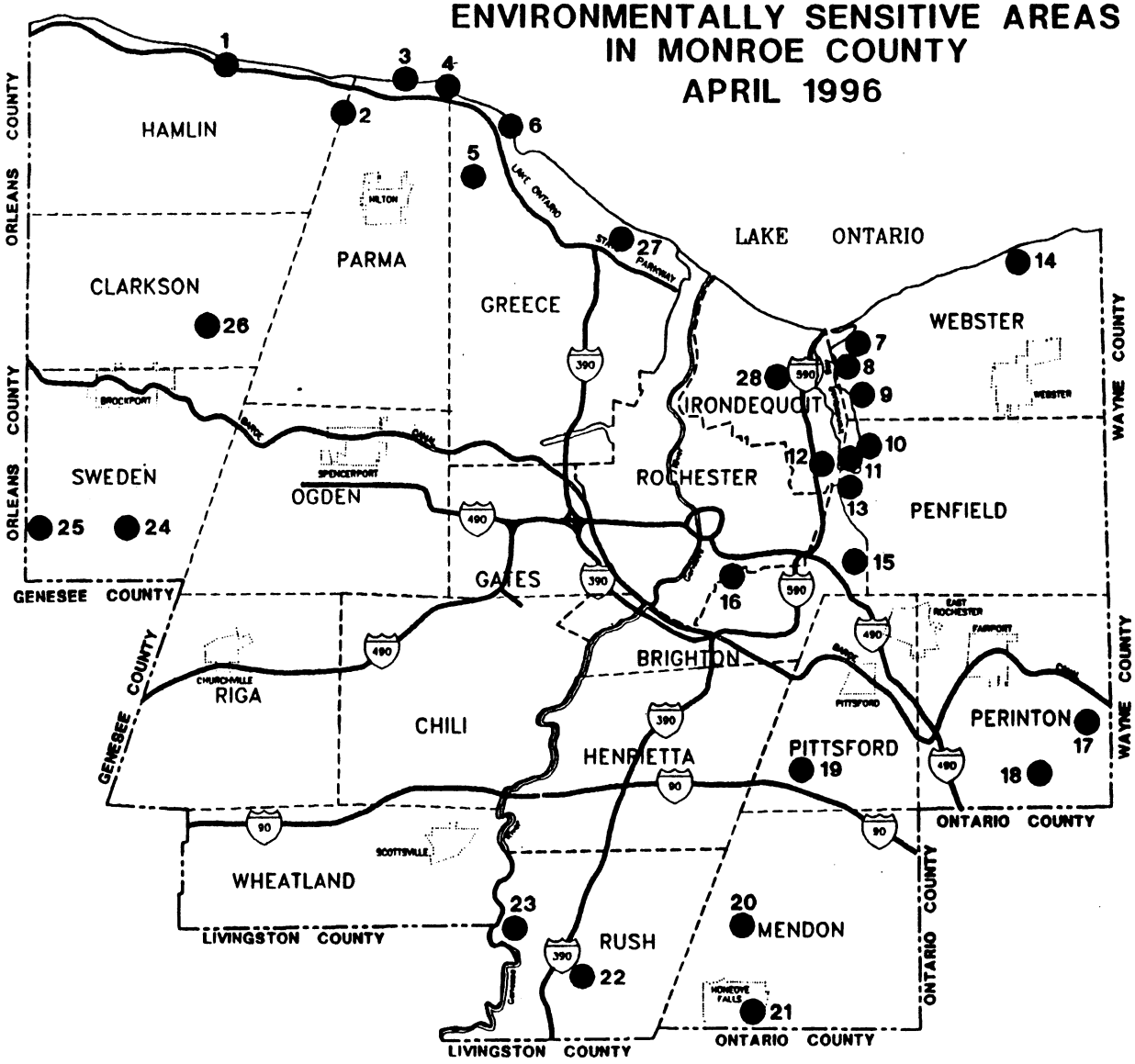
GENERAL LOCATION MAP OF ENVIRONMENTALLY SENSITIVE AREAS IN MONROE COUNTY APRIL 1996



Environmentally Sensitive Sites

LAKE ONTARIO WETLANDS ECOSYSTEM
1 – Near Shore Isolated Wetlands
2 – Brush Creek Wetland
3 – Parma Site #1
4 – Bogus Point Wetlands

BRADDOCK BAY ECOSYSTEM
5 – Salmon Creek
6 – Braddock Bay West Spit

IRONDEQUOIT BAY ECOSYSTEM
7 – Irondequoit Bay's Northeast Shoreline
8 – Webster Wellfield
9 – Devil's Cove
10 – Irondequoit Bay Southeast Slopes
11 – Empire Boulevard Mud Flats
12 – Irondequoit Bay Southwest Slopes
13 – Irondequoit Creek Area

INDIVIDUAL SITES
14 – Nine Mile Point
15 – Corbett's Glen
16 – Pinnacle Hill
17 – Whitebrook Wetlands
18 – Thayer Bluhm Victor
19 – Pittsford Site #1
20 – Great Bend
21 – Peninsula
22 – Quinn/Rush Oak Openings
23 – Industry–Genesee River Site
24 – Sweden 7 Wetland
25 – HQ–9
26 – Clarkson 20
27 – Round Pond–Island Cottage Complex
28 – Rita Shaw Estate

VI. Conclusions

The following is a listing of the sites by priority. **All of the sites listed below are recommended for preservation. Listing in the Highest Priority category indicates that these sites exhibit a greater sense of urgency in terms of protection than those listed in the other two categories. There is no significance to the order of the listings within each category.**

Sites Recommended for Preservation

Highest Priority	Very High Priority	High Priority
Lake Ontario Wetlands Ecosystem (1-4)	Rita Shaw Estate (28)	Nine Mile Point (14)
Braddock Bay Ecosystem (5-6)	Industry-Genesee River Site (23)	Whitebrook Wetlands (17)
Irondequoit Bay Ecosystem (7-13)	Sweden 7 Wetland (24)	Thayer Bluhm Victor (18)
Great Bend (20)	Pittsford Site #1 (19)	Peninsula (21)
Corbett's Glen (15)		Clarkson 20 (26)
Quinn/Rush Oak Openings (22)		HO-9 (25)
Round Pond-Island Cottage Complex (27)		Pinnacle Hill (16)

NOTE: The numbers following the site names correspond to the numbers on the general location map which is included on the previous page.

It is important to note that the absence of a particular site from this study **does not necessarily imply that it is not environmentally sensitive.** The present study will provide a framework for evaluating other sites.

The rights of property owners should be respected by anyone attempting to preserve the environmentally sensitive sites listed in this report as well as those not listed.

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VII. Recommendations

It is difficult to rank each of the sites presented in this report. The PESA committee continually tried to focus on the value of each site to Monroe County. There are sites that were nominated that did not score high enough to make the final list. Some of these, however, may have great value for preservation to the local community and should be pursued for preservation. The committee encourages the local conservation boards to pursue preservation of sites that may not be listed in this report.

The recommendations of the PESA committee are as follows:

1. Sites on the priority list, in any category, should be recommended for preservation if the opportunity arises.

2. The PESA committee suggests that the EMC form a committee to implement the recommendations in this report.

3. The implementation committee should:

    - work with property owners, residents of Monroe County, the county legislature, local conservation boards, the State of New York, and interested environmental organizations to preserve these properties;

    - develop an education program to help make the public aware of the importance of preserving these sites;

    - seek to refine the scoring system contained in this report. This could result in a valuable tool for evaluating the environmental sensitivity of additional sites within Monroe County, as well as elsewhere; and

    - update this report periodically to monitor the recommended sites and to include any additional environmentally sensitive sites in Monroe County.

4. Sites should be continually submitted to the EMC for ranking and investigation.

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Appendices

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Appendix A

Monroe County Environmentally Sensitive Area
Municipal Recommendation

Return form by August 24, 1992 to:
Monroe County Environmental Management Council
47 South Fitzhugh Street, Suite 201
Rochester, NY 14614

Municipality: _____

TYPES OF FEATURES PRESENT: (Please check each appropriate feature.)

____ Prime/Unique Soils
____ Water Bodies
____ Unique Geologic Features
____ Wetlands
____ Steep Slopes
____ Aesthetic Beauty
____ Woodlots/Trees
____ Important Plant or Animal Habitats

____ Other _____

Your name and title: _____ Phone: _____

Site name: _____ Tax Account Number: _____

Location of site (indicate on attached Monroe County Environmental Atlas base map)

Access to site: _____

Site size (acreage) : _____ Owner: _____

Owner's address and phone number: _____
_____

General site description and current land use: _____
_____
_____
_____

Significance: _____
_____
_____
_____
_____

PHYSICAL CHARACTERISTICS OF SITE

Topographic features (hilltop, slope, valley): _____

Geologic features (rock outcrops, glacial features, river or stream gorge, etc.): _____

Soils (if significant): _____

WATER BODIES ON OR ADJACENT TO SITE

Name(s): _____

VEGETATION AND WILDLIFE

Describe what is known of the vegetation at the site (communities, significant or unusual features, species, age, structure, presence of unusually old or large trees): _____

If rare or scarce (locally uncommon) species are present, please attach a list.

Wildlife significance (if known): _____

AESTHETIC CHARACTERISTICS (for example, wildflower displays or scenic vistas): _____

STATUS

Current zoning and master plan designation: _____

Protected status (conservation easement, etc.) ?_____

Has site ever been considered for public acquisition?_____

Floodway/100-year floodplain present ? _____

NYS DEC designated wetlands present ? _____

USFWS National Wetland Inventory wetlands present ? _____

CONSERVATION

Disturbance to site: _____

_____

Adjacent land use: _____

_____

Threats to site: _____

_____

Vulnerability of site to damage from use by the public: _____

_____

Special conservation/preservation/management needs: _____

_____

Any questions, call Susanne Quarterman at 428-2126. Please return by August 24, 1992. Thank you for your cooperation and assistance.

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Appendix B

Criteria Scoring System

Note - 20 points is the highest score for any one site in each of the following categories except for the vulnerability category

Prime and Unique Soil Areas

- 75-100% prime or unique soil areas	20.00 points
- 25-74% prime or unique soil areas	10.00 points
- less than 25% prime or unique soil areas	5.00 points

* Note - a ten acre minimum is necessary for farmland

Wetlands

- Listed on the DEC Classification Map or USFWS National Wetland Inventory

- DEC Class I	20.00 points
- DEC Class II	15.00 points
- DEC Class III	10.00 points
- Listed on the USFWS National Wetland Inventory but not included on DEC maps	6.00 points

The following indicators will be used if a wetland does not appear on either the DEC or National Wetland Maps

- Hydric Soils

- 75-100% hydric soils	6.00 points
- 25-74% hydric soils	4.00 points
- less than 25% hydric soils	2.00 points

- Vegetation/Hydrology

- emergent herbaceous cover types, consisting of emergent and/or wet meadow vegetation constituting at least 25% of the area of the wetland; or	4.00 points
- woody cover types, consisting of deciduous swamp, coniferous swamp, and/or shrub swamp constituting at least 25% of the area of the wetland; or	4.00 points
- water cover types, consisting of submergent vegetation, floating vegetation, and/or wetland open water constituting at least 15% of the area of the wetland; or	4.00 points

- Headwater Source

- headwater source of any year round stream	2.00 points

* Note - wetlands down to one acre in size were considered

Woodlands and Trees

- Woodlands

- over 100 years old	20.00 points
- average trunk diameter at breast height over 10 inches	10.00 points

- Trees

- listed on state or federal big tree inventory	20.00 points
- impressive old tree not in woodland	2.00 points

Water Bodies

- Lake Ontario coastal zone lake and bay areas	20.00 points
- Genesee River	16.00 points
- Erie Canal	16.00 points
- streams classified under NYSDEC classification primary contact recreation B(t), or (ts); secondary contact recreation B(t) or (ts).	16.00 points

Steep Slopes

- over 15% slope	20.00 points

Habitats for Rare, Endangered, or Threatened Plant or Animal Species, Communities of Special Concern, or Other Important Habitats

- listed in the U.S. Fish and Wildlife Service, Endangered Species Program	20.00 points
- listed in the New York State Endangered Species Program	20.00 points
- listed in the New York State Natural Habitat Program; or the New York State Significant Habitat Program; or as a New York State Coastal Fish and Wildlife Habitat	20.00 points
- listed in the Atlas of Breeding Birds of New York State	10.00 points
- migratory bird and animal corridors (e.g. three miles inland along the entire shore of Lake Ontario)	10.00 points
- outstanding example of native natural communities i.e. beaver habitats and hemlock woods, complete ecological communities	10.00 points

Significant Geological Features

- drumlin, kettle, kame, escarpment, fossil collection area, dune, bluff, cliff, ancient shoreline, sink hole and other	5.00 points per feature

- river gorges — 15.00 points

Areas of Aesthetic Beauty

- Scenic vista

  - viewing distance greater than five miles — 10.00 points
  - viewing distance of 1/4 to 5 miles — 5.00 points
  - viewing distance of less than 1/4 of a mile — 3.00 points

  * Note that the score for scenic vista is cumulative

- Wildflower display — 2.00 points

Vulnerability

Vulnerability is the measure of the degree of urgency for protection in order to preserve the resource. Vulnerability is expressed as either 50, 30, or 10 points for each site that has been determined to meet minimum eligibility requirements based on the reasonable expectation of substantial, adverse impacts to the resource and the immediacy of such impact if the site is not protected.

- substantial, adverse impact is expected to occur within two years — 50.00 points
- substantial, adverse impact is expected to occur within five years but not before two years — 30.00 points
- substantial, adverse impact is expected to occur within ten years but not before five years — 10.00 points

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Appendix C

Site Scores

	Site	Municipality	Soils	Wetlands	Woodlands	Water Bodies	Steep Slopes	Habitats
	Lake Ontario Wetlands Ecosystem							
1	Near Shore Isolated Wetlands	Hamlin	20	20	10	20	0	20
2	Brush Creek Wetland	Hamlin/Parma	0	20	0	20	0	20
3	Parma Site #1	Parma	0	20	10	20	0	20
4	Bogus Point Wetlands	Parma	0	20	0	20	0	20
	Braddock Bay Ecosystem							
5	Salmon Creek	Greece	20	20	10	16	0	20
6	Braddock Bay West Spit	Greece	0	20	20	20	0	20
	Irondequoit Bay Ecosytem							
7	Irondequoit Bay's NE Shoreline	Webster	0	20	20	20	20	10
8	Webster Wellfield	Webster	0	20	20	20	20	20
9	Devil's Cove	Webster	0	20	20	20	20	10
10	Irondequoit Bay SE Slopes	Penfield	0	20	10	20	20	20
11	Empire Boulevard Mud Flats	Penfield/Irond.	0	20	0	20	0	20
12	Irondequoit Bay SW Slopes	Irondequoit	0	20	10	20	20	20
13	Irondequoit Creek Area	Brighton/Penfield	0	20	20	20	20	20
	Individual Sites							
14	Nine Mile Point	Webster	0	0	10	20	20	10
15	Corbett's Glen	Brighton	0	6	10	16	20	10
16	Pinnacle Hill	Brighton/Roch.	0	0	20	0	20	20
17	Whitebrook Wetlands	Perinton	5	20	20	16	20	20
18	Thayer Bluhm Victor	Perinton	5	0	20	16	20	20
19	Pittsford Site #1	Pittsford	20	6	10	0	20	10
20	Great Bend	Mendon	20	20	20	16	10	20
21	Peninsula	Honeoye Falls	20	0	10	16	0	10
22	Quinn/Rush Oak Openings	Rush	5	15	0	0	0	20
23	Industry-Genesee River Site	Rush	20	15	0	16	0	10
24	Sweden 7 Wetland	Sweden	5	17	12	16	20	20
25	HO-9	Sweden	5	15	10	16	0	20
26	Clarkson 20	Clarkson	0	15	10	16	0	10
27	Round Pond - Island Cottage Complex	Greece	0	20	20	20	0	20
28	Rita Shaw Estate	Irondequoit	0	0	20	20	20	20

Site Scores

	Site	Significant Geological Features	Aesthetic Beauty	Vulnerability	Score (WV) Max. = 210	Score (WOV) Max. = 160
	L. Ontario Wetlands Ecosystem					
1	Near Shore Isolated Wetlands	0	20	50	160	110
2	Brush Creek Wetland	0	20	50	130	80
3	Parma Site #1	10	20	50	150	100
4	Bogus Point Wetlands	5	20	50	135	85
	Braddock Bay Ecosystem					
5	Salmon Creek	5	20	50	161	111
6	Braddock Bay West Spit	5	20	50	155	105
	Irondequoit Bay Ecosytem					
7	Irondequoit Bay's NE Shoreline	5	20	50	165	115
8	Webster Wellfield	10	20	50	180	130
9	Devil's Cove	5	10	50	155	105
10	Irondequoit Bay SE Slopes	5	20	50	165	115
11	Empire Boulevard Mud Flats	20	20	50	150	100
12	Irondequoit Bay SW Slopes	20	20	50	180	130
13	Irondequoit Creek Area	15	5	10	130	120
	Individual Sites					
14	Nine Mile Point	0	20	50	130	80
15	Corbett's Glen	20	10	50	142	92
16	Pinnacle Hill	5	20	50	135	85
17	Whitebrook Wetlands	5	10	10	126	116
18	Thayer Bluhm Victor	5	20	10	116	106
19	Pittsford Site #1	0	7	50	123	73
20	Great Bend	0	10	30	146	116
21	Peninsula	0	5	50	111	61
22	Quinn/Rush Oak Openings	0	10	50	100	50
23	Industry-Genesee River Site	15	5	30	111	81
24	Sweden 7 Wetland	0	10	50	150	100
25	HO-9	0	10	30	106	76
26	Clarkson 20	0	5	50	106	56
27	Round Pond - Island Cottage	0	20	10	110	100
28	Rita Shaw Estate	10	5	50	145	95

KEY WV - With Vulnerability
WOV - Without Vulnerability

NOTE: Maximum score for all categories except vulnerability is 20 points. Maximum score for vulnerability is 50 points. See Criteria Scoring System in Appendix B for details.

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Endnotes

1 Quoted from the Monroe County Environmental Management Council, Preservation of Environmentally Sensitive Areas Committee Updated Workplan, July 1992.

2 Charles Thurow, William Toner, and Duncan Erley, Performance Controls for Sensitive Lands (Chicago, Illinois: Planning Advisory Service, 1975) pp. 3-4.

3 New York State Department of Environmental Conservation and the New York State Office of Parks, Recreation and Historic Preservation, Conserving Open Space in New York State A Summary of the Plan, (Albany, New York: 1995) p. 28.

4 Luaan Streiff, "Rush Oak Openings," Western New York Nature Conservancy News Letter, Vol. 19, #2, Summer 1990, pp. 4-5.

5 Christine S.Fredette and Douglas G. Stinson, Methods of Open Space Preservation (Rochester, New York: Rochester Committee for Scientific Information Bulletin #306, 1990), pp. 3-8.

6 Fredette and Stinson, p. 3.

7 Fredette and Stinson, p. 4.

8 Ibid

9 Town of Perinton Conservation Board, Open Space for Perinton: The Conservation Easement, (Perinton, New York: Town of Perinton, 1990).

10 Fredette and Stinson, p. 4.

11 New York State Department of Environmental Conservation and the New York State Office of Parks, Recreation and Historic Preservation, Conserving Open Space in New York State Draft Plan and Draft Environmental Impact Statement, (Albany, New York: 1991) p. 158.

12 New York State Department of Environmental Conservation, Division of Lands and Forests, Information Concerning the Forest Tax Law, (Albany, New York: 1987).

13 Fredette and Stinson, p. 4.

14 Fredette and Stinson, p. 5.

15 Ibid

16 Ibid

17 Fredette and Stinson, p. 6.

18 State of New York, Section 261-b Incentive zoning: definitions, purpose, conditions, procedures, (Local Government Technical Series: Guide to Planning and Zoning Laws of New York State, Albany, New York: Department of State, 1992) p. 31.

19 State of New York, Part 617.1 Definitions, (Official Compilation Codes, Rules, and Regulations of the State of New York, Article 6, Vol A-3, 1995) p. 8734.

20 Fredette and Stinson, p. 7.

21 Ibid

22 Fredette, and Stinson, p. 6.

23 Ibid

24 Ibid

25 Ibid

26 Fredette and Stinson, p. 7.

27 Ibid

28 Fredette and Stinson, p. 8.

29 Ibid

30 Carr, Dorraine, Open Space Inventory Draft, (Rochester, New York: City of Rochester Office of Planning and Rochester Environmental Commission, 1991).

31 The Nature Conservancy Central & Western Chapter, "Additional Landowners Enroll in Registry," (The Nature Conservancy Magazine Winter 1994, Vol. 1, #2).

32 Ibid

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Glossary

ancient shoreline	a shoreline of the geological past.
bluff	a steep bank having an upright, broad flattened front.
bottomland	low-lying grassland along a watercourse.
canopy	the uppermost layer in a forest, formed by the crowns of trees.
cliff	a high, steep or overhanging face of rock.
climax	a stage in ecological development when a population of organisms is stable and capable of perpetuating itself.
confluence	a flowing together of two or more streams.
coniferous	trees whose reproductive parts are borne in cones, usually with evergreen needle-like leaves.
deciduous	trees that shed their leaves annually.
drumlin	an elongated asymmetrical hill composed of glacial till; the steep side faces the direction from which the ice advanced.
endangered species	a species whose existence is threatened.
ecosystem	a system of mutual relationships between organisms and their environment.
escarpment	a long cliff or steep slope resulting from erosion or faulting.
esker	a sinuous ridge composed largely of sand and gravel deposited by glacial activity.
hardwoods	usually refers to deciduous trees which grow more slowly and produce harder, denser wood than evergreen conifers.
headwater	the waters at or near the source of a stream or river.
herbaceous	non-woody plants.
hydric	characterized by, relating to, or requiring an abundance of moisture e.g. a hydric habitat, a hydric plant
kame	a steep-sided hill composed of gravel and sand of glacial origin.
marsh	a treeless form of wetland, often developing in ponds or depressions or along river margins. Prominent vegetation includes cattails, grasses, and sedges.

100 yr. floodplain	an area which would be inundated by water, on average, once every 100 years.
oxbow	a U-shaped bend in a river or stream.
plant community	all the plants in a given habitat bound together by interrelations.
prime and unique	soils that are highly productive for agriculture.
rookery	the nests or breeding place of a colony of birds.
sink hole	a depression produced in a region where soluble rock has been removed by groundwater.
softwoods	evergreen coniferous trees that produce less dense, softer wood than most deciduous trees.
swamp	a wetland characterized by moss and shrubs or trees.
understory	the layer of shrubs and trees in a forest growing under the canopy.
wetland	transitional lands containing vegetation which has a competitive advantage when growing in water or wet soils.
Class I wetlands	provide the most critical of the State's wetland benefits, reduction of which is acceptable only in the most unusual circumstances.
Class II wetlands	provide important wetland benefits, the loss of which is acceptable only in very limited circumstances.

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Monroe County Executive

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President
Monroe County Legislature