Lake Plains In-Lieu Fee Program

Prospectus

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I. INTRODUCTION

This prospectus for the proposed Lake Plains In-Lieu Fee Program (ILFP) has been developed by New York Green, a non-profit organization headquartered in Batavia, to facilitate development of an aquatic resource compensatory mitigation option in the lake plains region of western and central New York.

The proposed ILFP is located within the Eastern Great Lakes and Hudson Lowlands Ecoregion. This Ecoregion is bordered by hills and lakes and consists of irregular plains. Water bodies and rivers are dominant landscape features. There are six components of the Ecoregion, and the ILFP focuses more specifically on two of them: the Erie/Ontario Lake Plain and the Ontario Lowlands. The Erie/Ontario Lake Plain comprises narrow lakeshores that are bounded by the Great Lakes and by inland beach ridges. The Ontario Lowlands is bounded by the extent of Glacial Lake Iroquois. Both areas were historically beech and sugar maple dominated forests and are now largely cultivated for specialty agricultural crops. ***Please refer to Figure 1.***

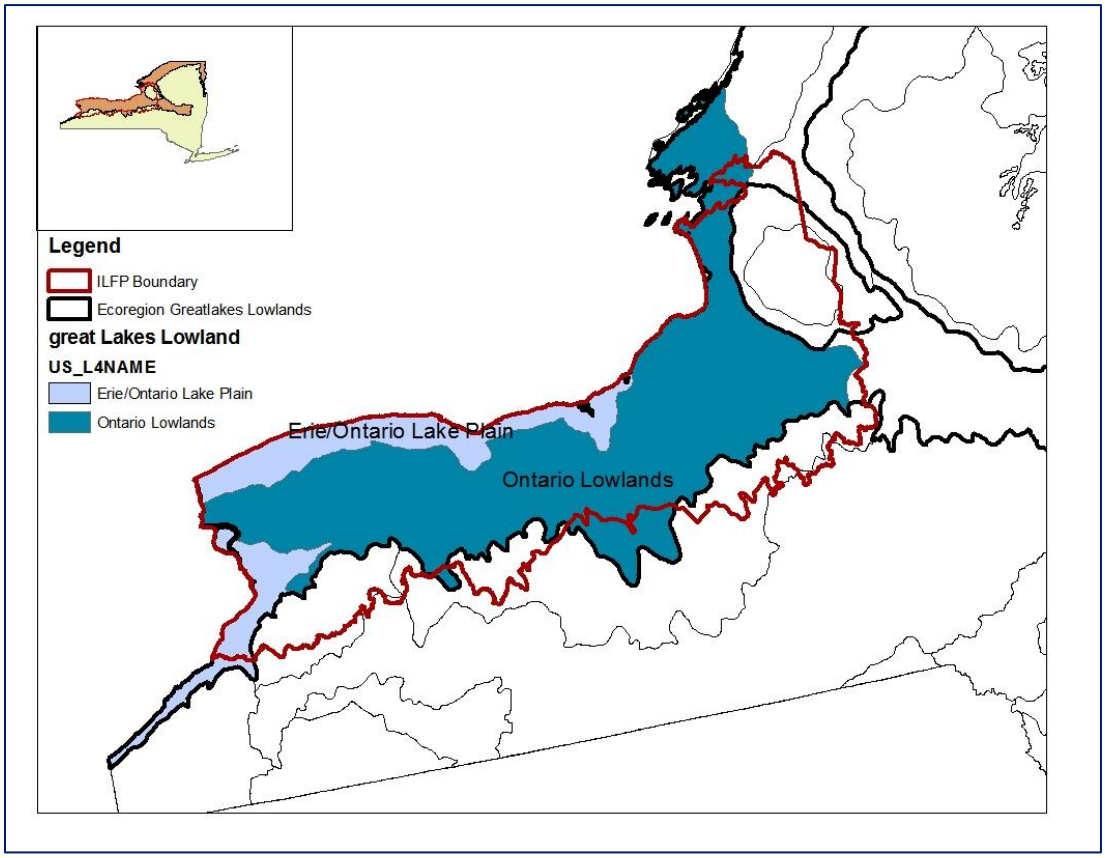

Figure 1. ILFP and Ecoregion Focus Areas

The proposed ILFP includes part of five state-designated watersheds[1]: the Lake Ontario and Minor Tributaries Watershed, the Niagara River/Lake Erie Watershed, the Genesee River Watershed, the Finger Lakes Watershed, and the Black River Watershed. These watersheds are described in later sections. ***Please refer to Figure 2.***

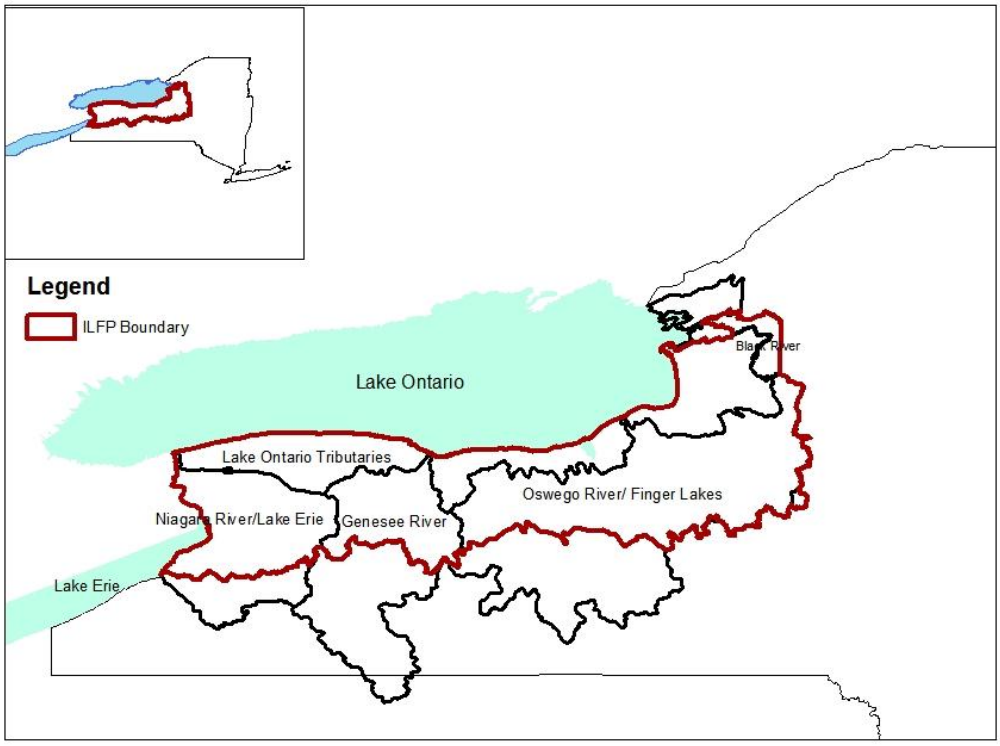

Figure 2. ILFP and State-Designated Watersheds

It is a future goal of the proposed ILFP to expand into other areas within the Ecoregion, including the St. Lawrence Lowlands and Upper St. Lawrence Valley. Any proposed future expansion of the ILFP would be subject to applicable regulations.

II. PROGRAM OBJECTIVES

The overall program objective of the Lake Plains ILFP is to support the conservation of aquatic resources in watersheds throughout the lake plains region of western and central NY by providing replacement of

[1] Watersheds are defined according to the NYSDEC system, which groups together adjacent 8-digit Hydrologic Unit Areas to form a total of 17 watersheds in New York State.

aquatic resource (wetland and stream) functions and services lost to permitted, unavoidable impacts in multiple service areas.

Additional program objectives include provision of high quality mitigation options supported by a comprehensive planning framework that is based on existing and developing watershed plans throughout the ILFP service areas, as well as other applicable plans such as the New York State Open Space Plan and local sustainability plans such as Cleaner, Greener Communities Regional Sustainability Plans; and integration of an assessment protocol to improve tracking of functional loss at impact sites, ensure proper design of compensatory mitigation, and verify replacement of functions and services at mitigation sites within service areas.

Specific goals and objectives for watersheds and service areas are provided later in this document.

III. PROGRAM ESTABLISHMENT AND OPERATIONS

New York Green will be the program sponsor overseeing all aspects of the ILFP operations, including:

- Development of instrument
- Accounting, reports, general administration, and credit tracking
- Identification and approval of ILFP mitigation sites
- Development of mitigation plans
- Implementation of mitigation actions, including management of subcontracts
- Coordination of permanent protection and long-term stewardship

New York Green will collaborate with The Wetlands Trust for planning, design, project construction, stewardship and conservation easements providing long term protection and management of ILFP mitigation sites.

IV. PROPOSED SERVICE AREAS

The geographic service area for the Lake Plains ILFP is proposed as the 8-digit Hydrologic Unit Area, referred to hereafter as the HUA-8, with two exceptions: only the north portion of the Seneca watershed will be included in the ILFP, and only a small northeast portion of the Black River watershed will be included. The division of the Seneca watershed was developed along watershed lines, using the 12-digit Hydrologic Unit Areas. The Black River watershed was divided using a political boundary: the Adirondack Park is excluded from the ILFP. Additionally, a small portion of the Black River watershed located outside the Park to the southeast of the Park, which is not contiguous with the ILFP, is also excluded.

There are ten service areas: (1) Buffalo – Eighteenmile, (2) Niagara, (3) Oak Orchard – Twelvemile, (4) Lower Genesee, (5) Irondequoit – Ninemile, (6) Seneca, (7) Oswego, (8) Oneida, (9) Salmon – Sandy, and (10) Black River. ***Please refer to Figure 3.***

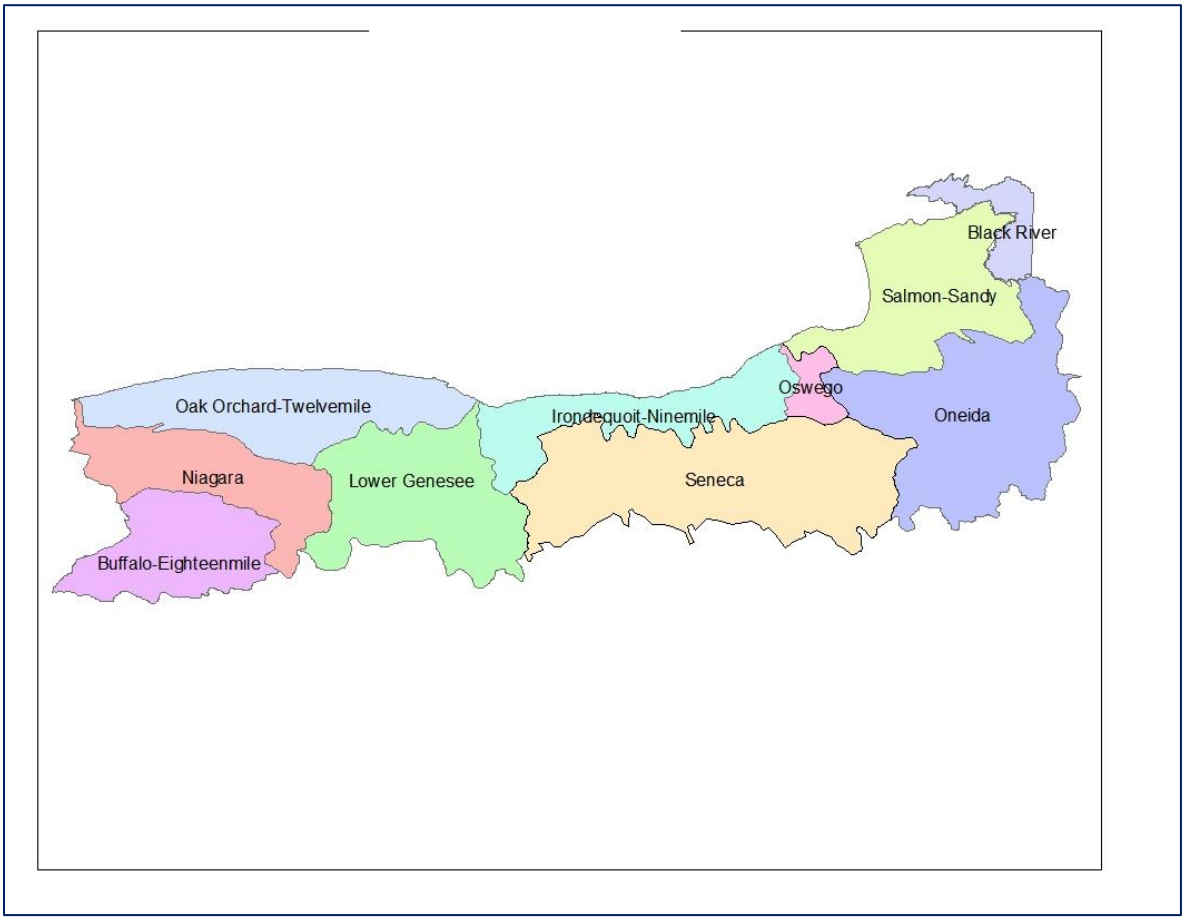

Figure 3. Proposed Service Areas

New York Green will provide compensatory mitigation for permitted impacts within the same geographic service area in which the impacts occur unless the district engineer has agreed to an exemption. Because such a small portion of the Black River watershed is included in this ILFP, it is proposed that the Salmon-Sandy service area may serve as a secondary option for meeting mitigation needs in the Black River service area, if no adequate mitigation is available within the Black River service area.

V. NEED AND TECHNICAL FEASIBILITY

Watershed-based, comprehensive mitigation programs such as mitigation banks and in-lieu fee programs have been proven to provide more consistent and successful aquatic resource mitigation than permittee-responsible strategies; therefore, the final rule identified a mitigation hierarchy which prioritized mitigation banks first, followed by in-lieu fee programs, with permittee-responsible as the

least preferred form of compensatory mitigation. New York Green is aware of two approved private commercial mitigation banks[2] and potential or pending in-lieu fee programs with service areas included within or overlapping those proposed for this ILFP.

Within this Ecoregion, aquatic resource impacts have been relatively minor for decades; the USGS identified a 0.1% loss of wetlands from 1973 to 2000. Another analysis that evaluated permits issued between January 2006 and July 2008 identified a cumulative total of approximately 81 acres of permitted wetland impacts per year in Buffalo, Rochester, and Syracuse, requiring a cumulative total of approximately 340 acres per year of mitigation. While aquatic resources continue to be vulnerable to impacts from development, New York Green anticipates that successful avoidance and minimization of impacts, developed through permitting processes, is likely to continue to keep impacts relatively low for the foreseeable future.

However, many of the problems that the region is facing in regards to aquatic ecosystem health and services exist because of actions taken long before data about impacts were recorded. The drainage and fill of our wetlands for agriculture and other development; industrial and agricultural pollution of our streams and rivers; channelization and burial of our streams, particularly through urban areas; development of combined sanitary and storm sewer systems in our urban areas; and infill and contamination of the wetlands along our Great Lakes coastlines are a few examples of past actions that continue to affect our aquatic systems today. New York Green believes that the relatively low demand for compensatory mitigation strengthens the need to direct any mitigation resources effectively and efficiently toward priority projects that have been identified and vetted by experts through agency and public input processes. This ILFP is proposed as a tool to help facilitate that goal.

The Lake Plains ILFP will provide a mitigation option that is developed according to watershed priorities, reduces temporal loss of wetland and stream functions, and provides a clear assessment of aquatic resource impacts and the functions and services replaced with mitigation actions.

The opportunities for successful aquatic resource mitigation on the landscape in the lake plains region are abundant. There is no shortage of streams and wetlands in need of restoration, enhancement, and preservation. Establishment of aquatic resources is also very feasible due to suitable soils, topography, and hydrologic conditions. In addition, there are numerous financial, technical, and human resources already focused on conserving, protecting, and restoring aquatic resources in this area; mitigation projects undertaken through this ILFP will be enhanced by these ongoing efforts, and vice-versa.

VI. OWNERSHIP ARRANGMENTS AND LONG TERM MANAGEMENT

Mitigation sites developed under the Lake Plains ILFP would be protected by permanent easements or title held by New York Green or a third party conservation entity. Ownership of mitigation sites would be determined on a case-by-case basis. New York Green has a working partnership with The Wetlands

[2] These mitigation banks are located in Amherst and Rochester, respectively.

Trust to provide long term protection and management of mitigation sites. Other formal partnerships may be pursued as needed with local land trusts and other conservation organizations such as the Western New York Land Conservancy, Genesee Valley Conservancy, Finger Lakes Land Trust, Tug Hill Tomorrow Land Trust, or others. New York Green will work closely with its conservation partners to develop legal agreements that will facilitate successful long-term outcomes.

New York Green will be responsible for each mitigation site through the IRT's approval of the final monitoring report identifying that a site has met all of its success criteria, that all credits can be or have been released from said site, and that no further annual monitoring/reporting is needed. Endowment funds will be established as part of the credit cost for long-term management and stewardship of mitigation sites, as specified by plans and agreements developed for each site.

VII. QUALIFICATIONS OF SPONSOR

New York Green is a nonprofit organization established in New York State in 2010. The mission of New York Green is to facilitate informed and creative land use decisions to stimulate sustainable economic vitality and protect our natural environment. New York Green was founded upon a vision in which natural resources are protected and natural energies are engaged to achieve sustainable economic growth, clean air and water, abundant green space, and a high quality of life throughout western NY. Board members, founders, and staff of New York Green provide expertise in land use planning, soil and water conservation, agriculture, aquatic resource ecology, restoration and mitigation, and sustainable community and economic development strategies. Board members include George Squires, Genesee County Soil and Water Conservation District; Steve Hyde, Genesee County Economic Development Center; and Gregory Post, Town of Batavia. The Executive Director of New York Green is Sheila Hess. A brief summary of the experience and qualifications of the Executive Director and Board members can be found in Appendix A.

The Wetland Trust is a nonprofit Corporation established in New York in 2008 and meeting all requirements of Section 501(c)(3) under IRS rules as of September 2009. As mentioned previously, The Wetland Trust will be the collaborating partner of New York Green for this ILFP. The Wetland Trust's mission is to restore, conserve and protect wetlands through the following activities: development of funds from sustainable endowments, grant proposals, partnerships, donations, wetland banking projects and in lieu fees; restoration activities that increase wetland acres; acquiring properties that are of high quality or can be restored to such, with an emphasis on wetland complexes having sufficient size and complexity to function under a variety of climatic conditions; partnering with academia to study the requirements for sustainable protection/conservation strategies and restoration/construction techniques to ensure high quality functional wetlands; establishment of a Wetland Center on a major TWT wetland property to house and promote outreach, education and research that will increase the quantity and quality of wetland restoration and protection efforts; and education and outreach to develop a public wetland ethic.

VIII. COMPENSATION PLANNING FRAMEWORK

The compensation planning framework establishes the basis for all mitigation projects to be undertaken by the ILFP. Any projects selected by the Lake Plains ILFP must be consistent with the compensation planning framework; any modifications to the framework must be approved by the district engineer following consultation with the IRT.

The ten elements included in the compensation planning framework are listed below and discussed in the following sections. The IRT may also request additional information to ensure effective compensation planning. ***Please refer to Table 1.***

Table 1 **Elements of Compensation Planning Framework**
1. Geographic service area(s), including a watershed based rationale for the delineation of each service area
2. A description of the threats to aquatic resources in the service areas, including how the ILFP will help offset impacts resulting from those threats
3. An analysis of historic aquatic resource loss in the service areas
4. An analysis of current aquatic resource conditions in the service areas, supported by field documentation
5. A statement of aquatic resource goals and objectives for each service area, including a description of the general amounts, types, and locations of aquatic resources the program will seek to provide
6. A prioritization strategy for selecting and implementing compensatory mitigation activities
7. An explanation of how any preservation objectives identified satisfy the criteria for use of preservation
8. A description of any public and private stakeholder involvement in plan development and implementation, including coordination with federal, state, tribal, and local aquatic resource management and regulatory authorities
9. A description of the long term protection and management strategies for activities conducted by the ILFP sponsor
10. A strategy for the periodic evaluation and reporting on the progress of the program in achieving the goals and objectives, including a process for revising the planning framework as necessary

A. Geographic Service Areas

As discussed previously, there are nine proposed service areas within the ILFP. Service areas are defined by the HUA-8, with the exception of the Seneca watershed, for which only the north half would be included in the ILFP and the Black River watershed, for which only a small portion would be included. The division of the Seneca watershed is along HUA-12 watershed lines. The Black River watershed excludes all areas within the Adirondack Park as well as the portion located to the southeast of the Park, which is isolated from the rest of the ILFP. ***Please refer to Figure 3.***

B. Threats to Existing Resources

Aquatic resources within the ILFP are subject to numerous threats, including energy development; high tech manufacturing/economic development projects; urban, suburban, and exurban development; agriculture; transportation, utilities, and other infrastructure; and increased use resulting from global water shortages. These threats are discussed briefly below.

Energy Development

Aquatic resources within the ILFP are potentially threatened by development of new energy facilities as well as upgrades and maintenance of existing facilities. This discussion focuses on energy transmission as well as energy generation via wind and shale gas resources.

Transmission

In his 2012 State of the State address, New York State Governor Andrew Cuomo called for a new Energy Highway, a public-private initiative to upgrade and modernize New York State's electric power system. Experts have identified that approximately 4,700 miles, or nearly 40%, of the State's existing transmission facilities will need to be replaced within the next 30 years. Insufficient transmission capacity has been cited as a reason for inconsistent electricity pricing for consumers throughout New York State and as a limiting factor in the growth of renewable energy generation. In addition to transmission facilities, the Energy Highway initiative is expected to improve aging power plants and build a diverse new mix of power plants. Approximately $2 billion in private investment is being sought by the Governor to help finance Energy Highway projects.

Wind

Wind power development typically includes both a wind farm site and associated electrical transmission corridor(s). As described in the New York Independent System Operator's *Wind Generation Study* dated August 2010, the New York State Public Service Commission has established a Renewable Portfolio Standard that requires 30% of New York State's electricity needs to be supplied by renewable resources by 2015. The New York State DEC website identifies 18 existing and proposed wind projects in the Counties included in the ILFP(current as of November 2011), including six in Wyoming County, four in both Madison and Jefferson Counties, two in Lewis County, and one each in Erie and Genesee Counties.

Shale Gas

Shale gas development typically includes drilling sites as well as pipeline corridors to transport the resource; facilities to transport clean water to the site and treat or transport produced water from the site; roadway networks; and electrical facilities. The geographic extent of the Marcellus shale has limited overlap with the lake plains region; however, the Utica formation lies beneath the entire ILFP coverage area. The potential for drilling the Utica shale in the ILFP area is speculative until specific proposals are rendered. However, it is reasonable to assume that exploration and production will occur where potential commercially recoverable oil and gas resources are identified. Such activity, if and when it occurs, would likely result in unavoidable aquatic impacts requiring compensatory mitigation.

High Technology Manufacturing/Economic Development Projects

New York State has made significant investments in high-tech sectors in recent years. The Albany Nanotech Campus and the Luther Forest Project in Saratoga County are visible, tangible examples of New York State's investment in high technology manufacturing. The State has invested approximately $500 million, and private companies have invested more than $3.5 billion, into these high tech projects. Similar projects are developing in Central and Western New York to establish high technology campuses that accommodate over 6 million square feet of advanced technology manufacturing and related uses in a sustainable development campus setting. These projects typically require more than 1,000 acres of green field development and related infrastructure such as new roads, water, sewer, gas, electric, and telecommunications infrastructure.

Urban, Suburban, Exurban Development: Sprawl Without Growth

Urban, suburban and exurban development threaten aquatic ecosystems in the lake plains region. A 2003 Brookings Institution report identified *sprawl without growth* as a problem faced by the broader region of upstate New York (it was noted that western New York was sprawling less than central New York). This study identified a 30% increase in land development, accompanied by a mere 2.6% population increase, from 1982 to 1997. The Comprehensive Plans for both Syracuse and Buffalo also identified sprawl without growth as a problem facing their cities.

Agriculture

According to the USGS Land Cover Trends data, approximately 38.5% of the land use within the Ecoregion is agricultural. As discussed in more detail in the next section (*Historic Aquatic Resource Loss*), agriculture poses direct threats to aquatic resources including draining and filling wetlands, streams, and other aquatic resources. Agriculture also poses indirect threats to aquatic resources due to runoff of excess nutrients and other pollutants, which contaminate lakes, ponds, rivers, and other aquatic resources.

Transportation, Utilities, and Other Infrastructure

The development and maintenance of transportation networks, utilities, and other infrastructure create potential threats to aquatic ecosystems in the lake plains region. Linear transportation facilities including roads, bridges, railways, and canals; telecommunication lines; sanitary and storm water facilities and other infrastructure exist throughout the ILFP and require routine maintenance and periodic expansion, replacement, or new development.

Combined sanitary and storm water facilities exist in both Buffalo and Syracuse (located within the Niagara River/Lake Erie Watershed and the Finger Lakes Watershed, respectively). These systems pose water quality threats to aquatic resources through contamination of waste water during high rain events. Ongoing efforts to minimize or remove this problem exist in both cities; the city of Syracuse has taken the opportunity to incorporate green infrastructure to minimize storm water runoff into the combined system.

Airports pose another potential threat to aquatic ecosystems within the lake plains region. In the ILFP area, there are three commercial service airports and well over a dozen general aviation airports on the State Aviation System Plan. FAA's Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants on or near Airports,* defines wetlands and open water to be among the "hazardous wildlife attractants" that should be minimized or reduced within 5,000 feet or 10,000 feet of a commercial service airport, depending on the types of planes each airport serves. Additionally, if there are any hazardous wildlife attractants located within 5 miles of an airport that could cause wildlife to cross the approach or departure surfaces used by aircraft, the FAA recommends analysis to determine if there is a way to minimize the impact of that hazard. The FAA is currently updating its guidance pertaining to wildlife hazards. While not finalized, some preliminary information indicates that under the new guidance, all airports that receive federal funding – not just commercial airports – may be expected to complete some sort of wildlife hazard identification and analysis to determine what, if any, measures should be taken to reduce hazards on their property.

Global Water Shortages

Global water shortages pose potential threats to aquatic resources in the lake plains region. The Great Lakes – St. Lawrence River Basin Water Resource Compact, which was signed into law in 2008 by the eight U.S. States and two Canadian provinces adjoining the Great Lakes, prohibits Great Lakes water from being diverted from the Great Lakes basin and requires water conservation programs to be implemented within the basin. This compact is intended to help protect the Great Lakes water from pressure as global freshwater resources become increasingly scarce. While this legislation does provide important protections, implementation has been, and is expected to be, problematic. Further, freshwater resources in the lake plains region will continue to be threatened by global water shortages as demand continues to grow.

ILFP Role in Offsetting Impacts Resulting from Threats

The proposed ILFP will help offset impacts resulting from the threats described above. As mentioned previously, protection of our natural resources is part of the mission of New York Green. Board members, founders, and staff of New York Green provide expertise in land use planning, soil and water conservation, agriculture, aquatic resource ecology, restoration and mitigation, and sustainable community and economic development strategies.

New York Green will work with public and private clients to avoid and minimize aquatic resource impacts to the fullest extent possible. This ILFP will be a tool to help guide development away from high quality, ecologically important wetland and stream areas and to develop mitigation strategies for unavoidable impacts that focus on high quality, connected systems at the watershed scale.

C. Historic Aquatic Resource Loss

Lands within the Eastern Great Lakes and Hudson Lowlands Ecoregion were historically forested, with large lakes, rivers, and streams dominant features of the landscape. Specifically within the Erie/Ontario Lake Plain and Ontario Lowlands components of the Ecoregion, forests were dominated by beech and

sugar maple, with American chestnut, white oak, basswood, elm, and white ash contributing to the forest richness. Once entirely forested, much of the landscape within this ILFP area has been altered for agricultural production of specialty crops and for urban and suburban development.

Land use and land cover within the Ecoregion are currently predominated by forest and agriculture in roughly equal measure; these two uses comprise nearly 80% of the lands. Developed land accounts for nearly 12% of the lands, with water and wetlands each representing less than 5%.

As noted in the DEC's *New York State Wetlands Assessment*, the USFWS estimates that nearly 50% of the State's wetlands have been lost since colonization. Smaller scale sub-watershed and site resource assessment reports that New York Green has reviewed indicate varying amounts of historic aquatic resource loss throughout the lake plains region.

Agriculture has been a primary factor in landscape-level ecosystem changes throughout the Ecoregion; it has been an impetus for removal of forests and wetlands. Drainage ditches have been used extensively in some areas to remove wetlands and create more arable lands, and it was within this Ecoregion (in Geneva, NY) that the drain tile was first imported to the United States in 1835. Used to drain wetlands for agricultural production, the drain tile became widely used throughout the region and beyond. As noted by Ann Vileisis in Discovering the Unknown Landscape: A History of America's Wetlands:

> *As farmers buried thousands of the clay tiles, drainage progressed rapidly. By 1864, they had laid 6,060 miles of tiles in addition to building nearly 13,000 miles of stone drains and 7,460 miles of open ditches. In New York State alone, farmers constructed enough drainage ditches to encircle the earth…*
>
> *Once a tile drainage system was buried and began to work, the hydrology and ecology of the wetlands changed. Instead of pooling in soggy soils, water was conveyed to ditches and then to outlets in streams and rivers. Areas that had grown sedges and rushes dried out, were cultivated, and began to look just like the other farmland. In a matter of generations, farmers would even forget where the tiles were laid unless they kept their grandfather's drainage plans in a desk drawer or unless an obvious problem revealed itself.*

As mentioned previously, much of the historic aquatic resource loss in the Ecoregion occurred prior to passage of the Clean Water Act; in recent decades, loss of aquatic resources has been gradual. Land use and land cover changed very little during the nearly three decade period surveyed by the USGS, from 1973-2000. The most prominent changes included a 2.5% increase in developed land and a corresponding 2.4% decrease in agricultural land. Wetlands decreased by approximately 54 km^2, or 0.1%, to represent 3.9% of the lands in the Ecoregion by the year 2000. ***Please refer to Table 2.***

Table 2 Land Cover Trends in Eastern Great Lakes and Hudson Lowlands Ecoregion 1973-2000												
Land Use/ Cover	**1973**		**1980**		**1986**		**1992**		**2000**		**Net Change**	
	km²	**%**	**km²**	**%**	**km²**	**%**	**km²**	**%**	**km²**	**%**	**km²**	**%**
Water	2501	4.2	2508	4.3	2531	4.3	2558	4.3	2567	4.4	66	0.1
Developed	5574	9.5	5767	9.8	6068	10.3	6515	11.1	7022	11.9	1448	2.5
Mechanically Disturbed	15	0.0	74	0.1	47	0.1	110	0.2	63	0.1	48	0.1
Mining	233	0.4	249	0.4	253	0.4	259	0.4	267	0.5	34	0.1
Barren	1	0.0	1	0.0	1	0.0	1	0.0	1	0.0	0	0.0
Forest	23824	40.4	23730	40.3	23593	40.0	23599	40.0	23558	40.0	-266	-0.5
Grassland/ Shrubland	310	0.5	322	0.5	382	0.6	454	0.8	452	0.8	141	0.2
Agriculture	24112	40.9	23921	40.6	23714	40.2	23113	39.2	22694	38.5	-1418	-2.4
Wetland	2374	4.0	2369	4.0	2353	4.0	2334	4.0	2319	3.9	-54	-0.1

The DEC identified in its *New York State Wetlands Assessment* that during the period from 1985 to 1995, there was a 15,000 acre net gain in the quantity of freshwater wetlands in the state. This was due to an increase in 37,000 acres of wetlands statewide, balanced by a 22,000 acre loss. The DEC noted that gains were primarily in the lake plains region of upstate NY on lands that naturally reverted to wetlands when abandoned from agricultural uses and/or were flooded due to runoff.

The status of these wetland gains from 1995 to the present is not currently known, and it is worth noting that the USGS Land Cover Trends data did not identify any increases in wetlands within the Ecoregion during any year measured. However, New York Green will coordinate with the DEC during the development of the ILFP instrument to review available data to help confirm trends and guide mitigation planning. At this time, New York Green believes it is a reasonable assumption that a significant percentage of the wetland acres gained were unprotected and therefore susceptible to being lost again to renewed agricultural or other development.

Historically, streams and riparian corridors in the ILFP area have been also been impacted via channelization and burial through urban areas as well as through contamination caused by agricultural, industrial, and municipal sources. It should be noted that impacts to streams have not been regulated or well documented for most of our recent history, including many decades where they were subject to severe degradation. There is little available data about the loss of streams or of functions and services provided by streams in the lake plains region however impacts, particularly in headwater areas, are ongoing. Stream protection and restoration are critical to watershed function.

D. Current Aquatic Resource Conditions

Current aquatic resource conditions within the proposed ILFP vary within each watershed. A review of the NWI data identifies a majority of wetlands within the ILFP area as freshwater forested/shrub, with substantial freshwater emergent, freshwater pond, lake, and riverine components throughout the

landscape. The New York State Natural Heritage Inventory identified 87 freshwater nontidal wetlands communities with varying state and global conservation ranks within the ILFP area, including bogs, forests, swamps, marshes, fens, and vernal pools. The Natural Heritage Inventory also identified hundreds of flora and fauna records within the ILFP area, suggesting high biodiversity, including rare plant and animal species and significant natural communities. Numerous sites within the proposed ILFP area are identified as Important Bird Areas[3] with state or global significance by the Audubon Society. Important Bird Areas provide essential habitat for one or more species of bird.

The lake plains ILFP area also includes two national wildlife refuges and numerous state wildlife management areas that total over 30,000 acres and focus primarily on the protection and management of wetland complexes for the benefit of fish and wildlife.

Lake Erie and Lake Ontario shorelines comprise much of the western and northern boundaries of the ILFP area. These Great Lakes are home to legacy industrial pollutants and have been the subject of intensive research, cleanup, restoration, and management efforts for decades. Remediation of these lakes is ongoing.

The ILFP includes urban, suburban, and rural areas; each settlement density impacts aquatic resources in different ways.

Urban areas in the ILFP are prone to industrial pollution and runoff, combined sanitary and storm sewer systems, streams that have been channelized and buried, wetlands that have been filled and paved over. There is a growing interest in restoring aquatic resources in urban areas as a way of improving numerous aspects of city life, including recreation, aesthetics, water quality, and flood management; this is reflected in ongoing efforts to restore and enhance Scajaquada Creek in Buffalo and Onondaga Creek in Syracuse.

Suburban areas create additional linear impacts to aquatic resources along which transportation and utility corridors are extended. Wetlands and streams are generally impacted along these corridors as well as within areas developed for residential, commercial, civic, and other uses.

The rural areas within the ILFP area are predominantly in agricultural use, where agricultural pollutants and runoff are key issues for aquatic resources. Fragmentation and loss of ecosystem (and watershed) components, services, and functions are prevalent throughout the ILFP landscape.

Field data have not been collected at this stage, but would be collected as needed during the instrument stage as well as in the development of mitigation plans. It is anticipated that field verification consisting

[3] In order to qualify as an Important Bird Area, a site must support species of conservation concern (threatened or endangered); restricted range species (species vulnerable because they are not widely distributed); species that are vulnerable because their populations are concentrated in one general habitat type or biome; and/or species or groups of similar species (such as waterfowl or shorebirds) that are vulnerable because they occur at high densities due to their congregatory behavior.

of rapid assessments at randomly selected sites in each service area would be used to finalize the instrument.

Lake Ontario and Minor Tributaries Watershed

The Lake Ontario and Minor Tributaries Watershed is located in Northwestern NY, in a narrow band along the Lake Ontario shoreline (Figure 4). The watershed is bounded by the lakeshore to the north and beach ridges to the south. Numerous tributaries empty into the Lake. According to DEC data, this Watershed is 2,460 mi² in size and contains 5,891 miles of rivers[4] and streams; 60 significant[5] lakes, ponds, and reservoirs totaling 18,042 acres; and 326 miles of Lake Ontario shoreline.

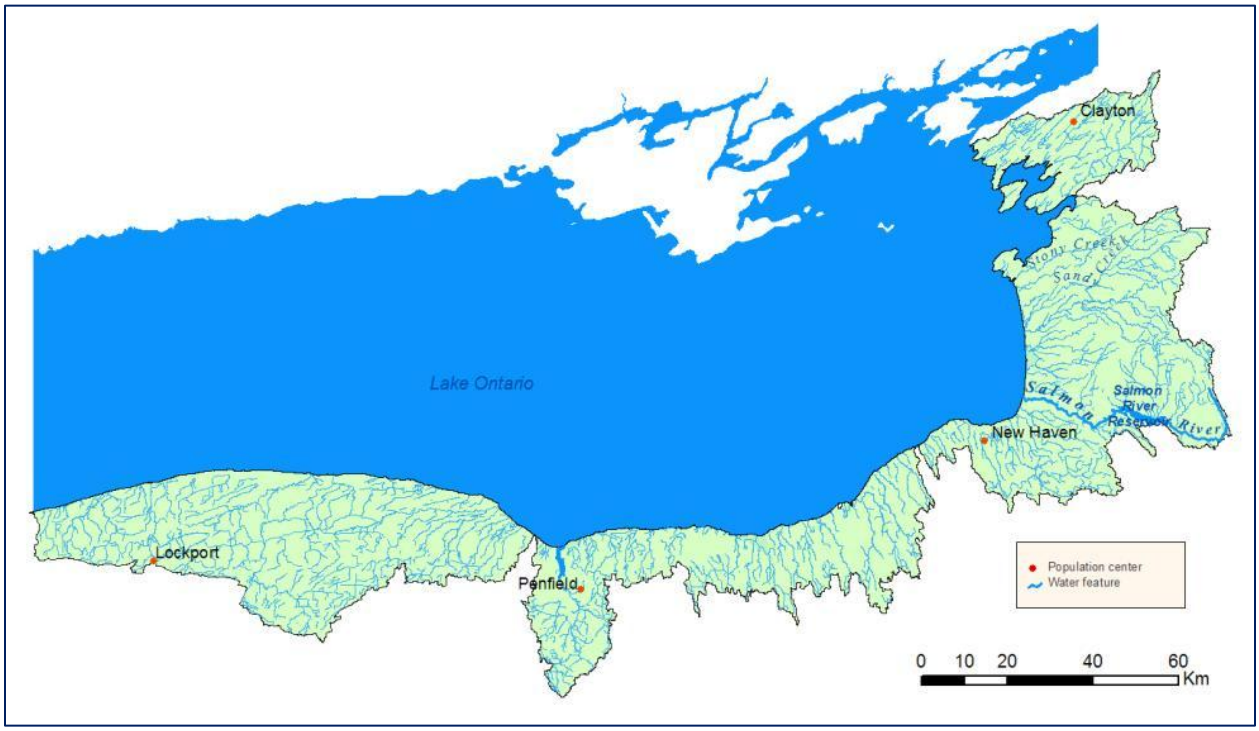

Figure 4. Lake Ontario and Minor Tributaries Watershed, figure from NYSDEC public domain

Water quality within the Lake Ontario and Minor Tributaries Watershed has been assessed by the DEC for 53% of its river/stream miles, 66% of lake, pond, and reservoir acres; and 100% of Great Lakes shoreline. Forty-eight percent of the rivers have good or satisfactory water quality, while 23% of the lakes have satisfactory water quality (0% good), and water quality along the Lake Ontario shore is entirely poor. ***See Figure 5.*** Major water quality concerns identified by the DEC for this Watershed include invasive plants and other aquatic flora that discourage recreational uses and legacy industrial discharges in specific areas of concern, which are currently being remediated. Great Lakes Management Plans are being implemented with the goal of restoring uses in Lake Ontario.

[4] The Niagara, Genesee, Oswego, and Black Rivers are excluded; these are addressed as separate watersheds.
[5] "Significant" is defined by acreage: lakes of 6.4 acres or more are included in this total.

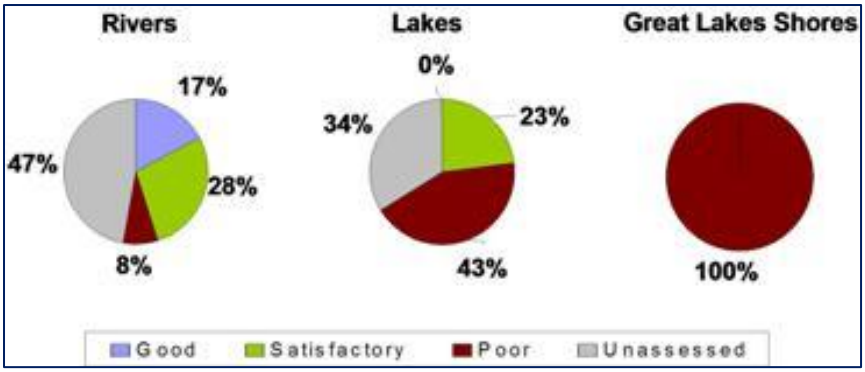

Figure 5. Water Quality in Lake Ontario Watershed, from NYSDEC public domain

The Lake Ontario and Minor Tributaries Watershed comprises four 8-digit HUA's. Three of these 8-digit HUA's are within the proposed ILFP coverage area; as discussed previously, these are the service areas. The service areas include part of ten counties. ***Refer to Table 3.***

Table 3
Lake Ontario and Minor Tributaries Watershed
Service Areas and Counties Included in ILFP

Service Area	8-Digit HUA	Counties Partially or Fully within Service Area
Oak Orchard-Twelvemile	04130001	Orleans, Niagara, Genesee, Monroe
Irondequoit-Ninemile	04140101	Monroe, Oswego, Wayne, Cayuga, Ontario
Salmon-Sandy	04140102	Jefferson, Oswego, Lewis

National Wetlands Inventory data identifying wetland types and quantities for each of the three service areas within this Watershed are identified on ***Table 4.***

Table 4 Lake Ontario and Minor Tributaries Watershed Wetland Types and Quantities by Service Area		
Wetland Type	**Acreage**	**% of Total**
Oak Orchard – Twelvemile (04130001)		
Freshwater Emergent	9,783	10.0
Freshwater Forested/Shrub	69,984	71.7
Freshwater Pond	3,551	3.6
Lake[6]	8,687	8.9
Other	4,463	4.6
Riverine	1,137	1.2
Total	**97,605**	**100**
Irondequoit – Ninemile (04140101)		
Freshwater Emergent	4,917	8.9
Freshwater Forested/Shrub	37,283	67.3
Freshwater Pond	1,741	3.1
Lake	10,991	19.8
Other	74	0.1
Riverine	391	0.7
Total	**55,397**	**100**
Salmon – Sandy (04140102)		
Freshwater Emergent	7,549	8.9
Freshwater Forested/Shrub	63,802	74.9
Freshwater Pond	2,616	3.1
Lake	10,062	11.8
Other	27	0.0
Riverine	1,086	1.3
Total	**85,142**	**100**

[6] Lake Ontario acreages are excluded from this table.

Niagara River/Lake Erie Watershed

The Niagara River/Lake Erie Watershed is located in Western NY. This Watershed is 2,280 mi² in size and contains 4,086 miles of rivers and streams; 24 significant lakes, ponds, and reservoirs totaling 1,098 acres; and 92 miles of Lake Erie shoreline.

Figure 6. Niagara River/Lake Erie Watershed 1, figure from NYSDEC public domain

Water quality within the Niagara River/Lake Erie Watershed has been assessed by the DEC for 58% of its river/stream miles, 44% of lake, pond, and reservoir acres; and 100% of Great Lakes shoreline. Forty-one percent of the rivers have good or satisfactory water quality, while 39% of the lakes have good or satisfactory water quality, and the water quality along the Lake Erie shore is entirely poor. The DEC has identified major water quality concerns in the Watershed: legacy industrial discharges in the Buffalo/ Niagara Falls area which are currently being remediated; urban stormwater and combined sanitary/ stormwater overflows in urban areas; agricultural pollutants and other non-point sources of nutrients. Great Lakes Management Plans are being implemented with the goal of restoring uses in Lake Erie.

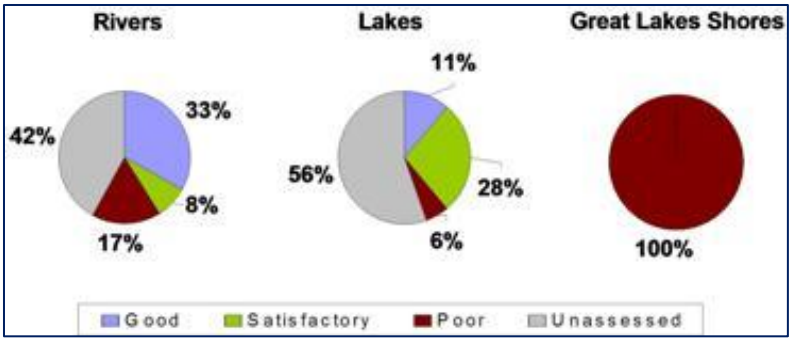

Figure 7. Water Quality in Niagara River/Lake Erie Watershed, figure from NYSDEC public domain

The Niagara River/Lake Erie Watershed is composed of four 8-digit HUA's. Two of these 8-digit HUA's are within the proposed ILFP coverage area; these are the service areas. The service areas span four counties. ***Refer to Table 5.***

Table 5 Niagara River/Lake Erie Watershed Service Areas and Counties Included in ILFP		
Service Area	**8-Digit HUA**	**Counties Partially or Fully within Service Area**
Niagara	03120104	Niagara, Erie, Genesee, Wyoming
Buffalo – Eighteenmile	04120103	Erie, Wyoming

NWI data for the two service areas in this Watershed are shown on ***Table 6.***

Table 6 Niagara River/Lake Erie Watershed Wetland Types and Quantities by Service Area		
Wetland Type	**Acreage**	**% of Total**
Niagara (03120104)		
Freshwater Emergent	7,557	8.8
Freshwater Forested/Shrub	59,288	69.3
Freshwater Pond	3,404	4.0
Lake[7]	4,549	5.3
Other	599	0.7
Riverine	10,173	11.9
Total	**85,570**	**100**
Buffalo – Eighteenmile (04120103)		
Freshwater Emergent	2,701	7.1
Freshwater Forested/Shrub	23,510	61.7
Freshwater Pond	2,854	7.5
Lake	7,246	19.0
Other	41	0.1
Riverine	1,738	4.7
Total	**38,090**	**100**

[7] Lake Erie acreages are excluded from this table.

Genesee River Watershed

The Genesee River Watershed is located in Western NY. This Watershed is 2,373 mi² in size within New York State and contains 5,048 miles of rivers and streams; and 31 significant lakes, ponds, and reservoirs totaling 13,288 acres.

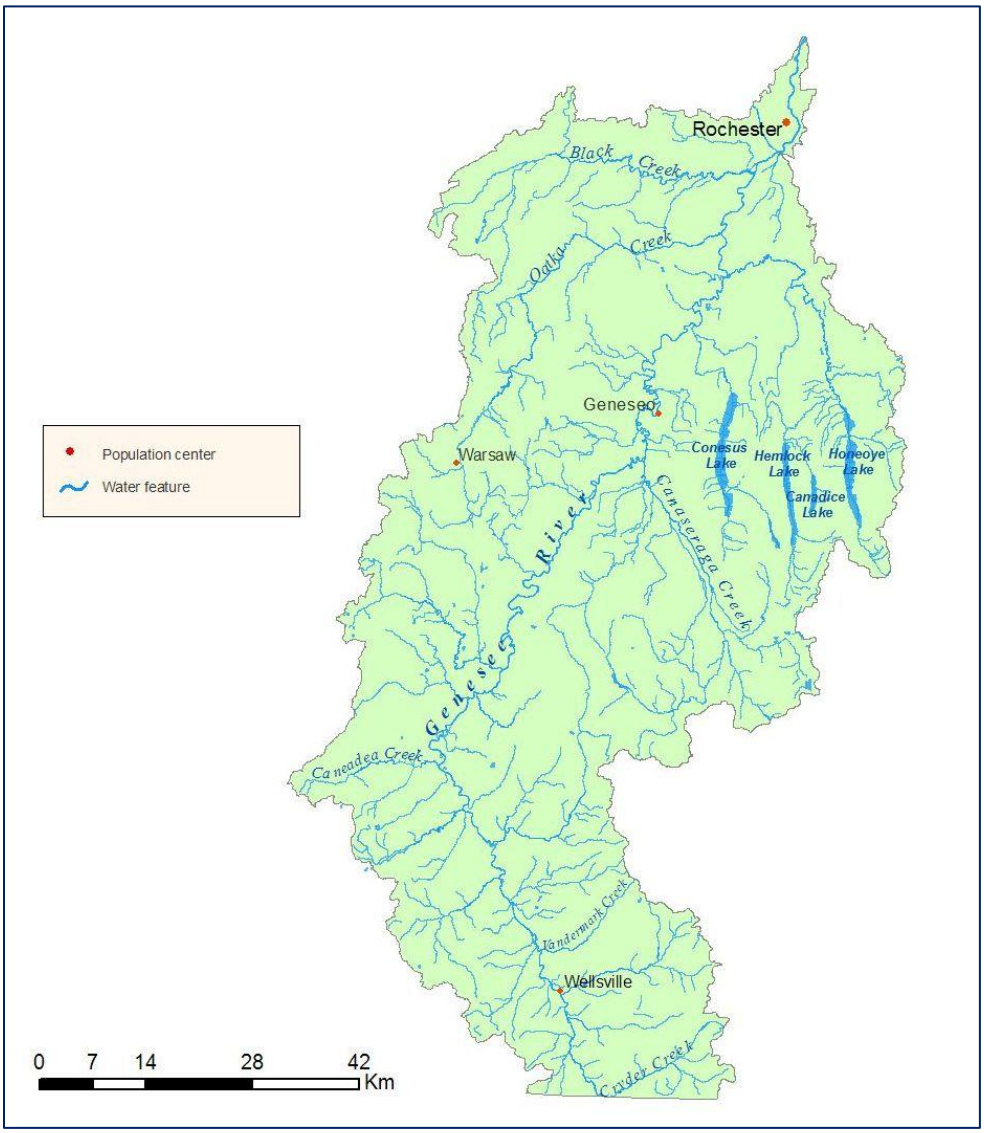

Figure 8. Genesee River Watershed, figure from NYSDEC public domain

Water quality within this Watershed has been assessed by the DEC for 55% of its river/stream miles, 79% of lake, pond, and reservoir acres. Forty-seven percent of the rivers have good or satisfactory water quality, while 19% of the lakes have satisfactory water quality (0% good). Major water quality concerns in the Watershed, identified by the DEC, include urban stormwater and industrial runoff in the Rochester area; agricultural and other nonpoint sources of nutrients and various other pollutants; and protection of the municipal water supply in the Hemlock Lake watershed.

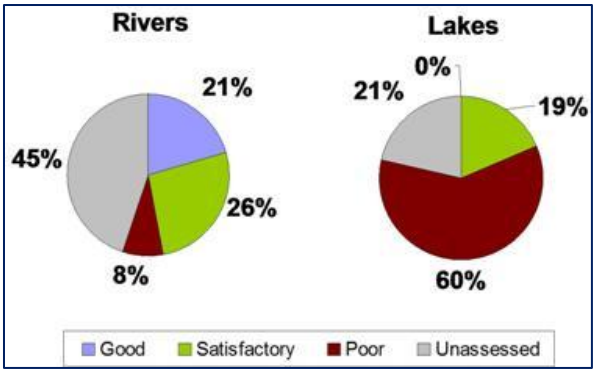

Figure 9. Water Quality in Genesee River Watershed, figure from NYSDEC public domain

The Genesee River Basin Action Strategy Report, prepared by the Genesee/Finger Lakes Regional Planning Council, also identifies sources of impairment within priority segments of rivers and streams as well as priority lakes, ponds, and reservoirs within the watershed. Agricultural activities and streambank erosion were key concerns identified in this report.

The Genesee River Watershed is composed of two smaller watersheds designated by 8-digit HUA's. One of these 8-digit HUA's is within the proposed ILFP coverage area: the Lower Genesee service area. The Lower Genesee Service area includes parts of five counties. ***Refer to Table 7.***

Table 7 Genesee River Watershed Service Areas and Counties Included in ILFP		
Service Area	**8-Digit HUA**	**Counties Partially or Fully within Service Area**
Lower Genesee	04130003	Monroe, Genesee, Ontario, Livingston, Wyoming

National Wetlands Inventory data identifying wetland types and quantities for the service area within this Watershed are identified on ***Table 8.***

Table 8 Genesee River Watershed Wetland Types and Quantities by Service Area		
Wetland Type	**Acreage**	**% of Total**
Lower Genesee (04130003)		
Freshwater Emergent	8,610	12.1
Freshwater Forested/Shrub	42,268	59.5
Freshwater Pond	2,968	4.2
Lake	13,442	18.9
Other	1,464	2.1
Riverine	2,244	3.2
Total	**70,996**	**100**

Finger Lakes Watershed

The Finger Lakes Watershed is located in Central NY. According to DEC data, this Watershed is 5,070 mi² in size and contains 8,896 miles of rivers and streams; and 76 significant lakes, ponds, and reservoirs totaling 189,722 acres.

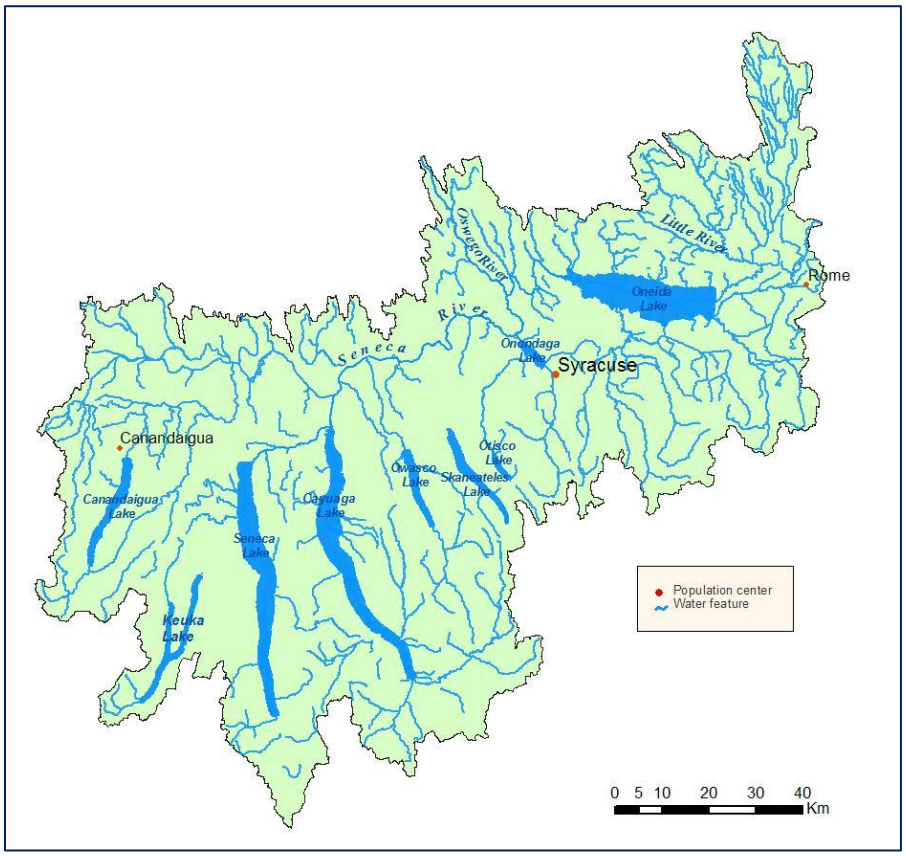

Figure 10. Finger Lakes Watershed, figure from NYSDEC public domain

Water quality within the Finger Lakes Watershed has been assessed by the DEC for 43% of its river/stream miles, 97% of lake, pond, and reservoir acres. Thirty-eight percent of the rivers have good or satisfactory water quality, while 85% of the lakes have satisfactory water quality. The DEC has identified major water quality concerns in the Finger Lakes Watershed. These include legacy industrial discharges in the Syracuse/Onondaga Lake area, which are currently being remediated; municipal wastewater and combined sanitary and storm water overflows in Syracuse and other urban areas; agricultural and other nonpoint sources of nutrients and other pollutants; and protection of Finger Lakes Resources, including drinking water and recreational uses.

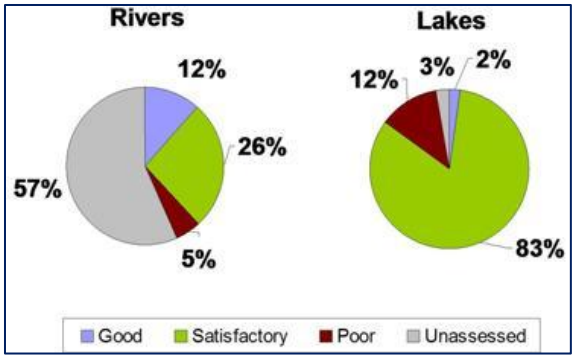

Figure 11. Water Quality in Finger Lakes Watershed, figure from NYSDEC public domain

The Finger Lakes Watershed includes three smaller watersheds designated by 8-digit HUA's. All three of these 8-digit HUA's are within the proposed ILFP coverage area; however, the Seneca service area includes only the northern portion of the 8-digit HUA[8]. ***Refer to Table 9.***

Table 9 Finger Lakes Watershed Service Areas and Counties Included in ILFP		
Service Area	**8-Digit HUA**	**Counties Partially or Fully within Service Area**
Seneca	04140201	Ontario, Wayne, Seneca, Cayuga, Onondaga
Oneida	04140202	Oswego, Lewis, Onondaga, Oneida, Madison
Oswego	04140203	Oswego, Onondaga

National Wetlands Inventory data identifying wetland types and quantities for each of the three service areas within this Watershed are identified on ***Table 10.***

[8] The Seneca watershed was divided along watershed lines, using 12-digit HUA boundaries. A complete list of the 52 12-digit HUA's included in the Seneca service area is included in Appendix B.

Table 10 Finger Lakes Watershed Wetland Types and Quantities by Service Area		
Wetland Type	**Acreage**	**% of Total**
Seneca (04140201[9])		
Freshwater Emergent	12,477	8.9
Freshwater Forested/Shrub	73,243	52.2
Freshwater Pond	3,134	2.2
Lake	46,795	33.3
Other	327	0.2
Riverine	4,354	3.1
Total	**140,330**	**100**
Oneida (04140202)		
Freshwater Emergent	3,348	5.9
Freshwater Forested/Shrub	38,133	67.0
Freshwater Pond	952	1.7
Lake	12,961	22.8
Other	7	0.0
Riverine	1,544	2.7
Total	**56,945**	**100**
Oswego (04140203)		
Freshwater Emergent	64,134	4.6
Freshwater Forested/Shrub	431,008	31.0
Freshwater Pond	23,940	1.7
Lake	842,398	60.5
Other	9,268	0.7
Riverine	21,813	1.6
Total	**1,392,561**	**100**

Black River Watershed

The Black River Watershed is located in North-Central NY. According to DEC data, this Watershed is 1,920 mi² in size and contains 3,910 miles of rivers and streams; and 179 significant lakes and reservoirs totaling 33,500 acres.

[9] These acreages reflect only the portion of the Seneca watershed included in this ILFP.

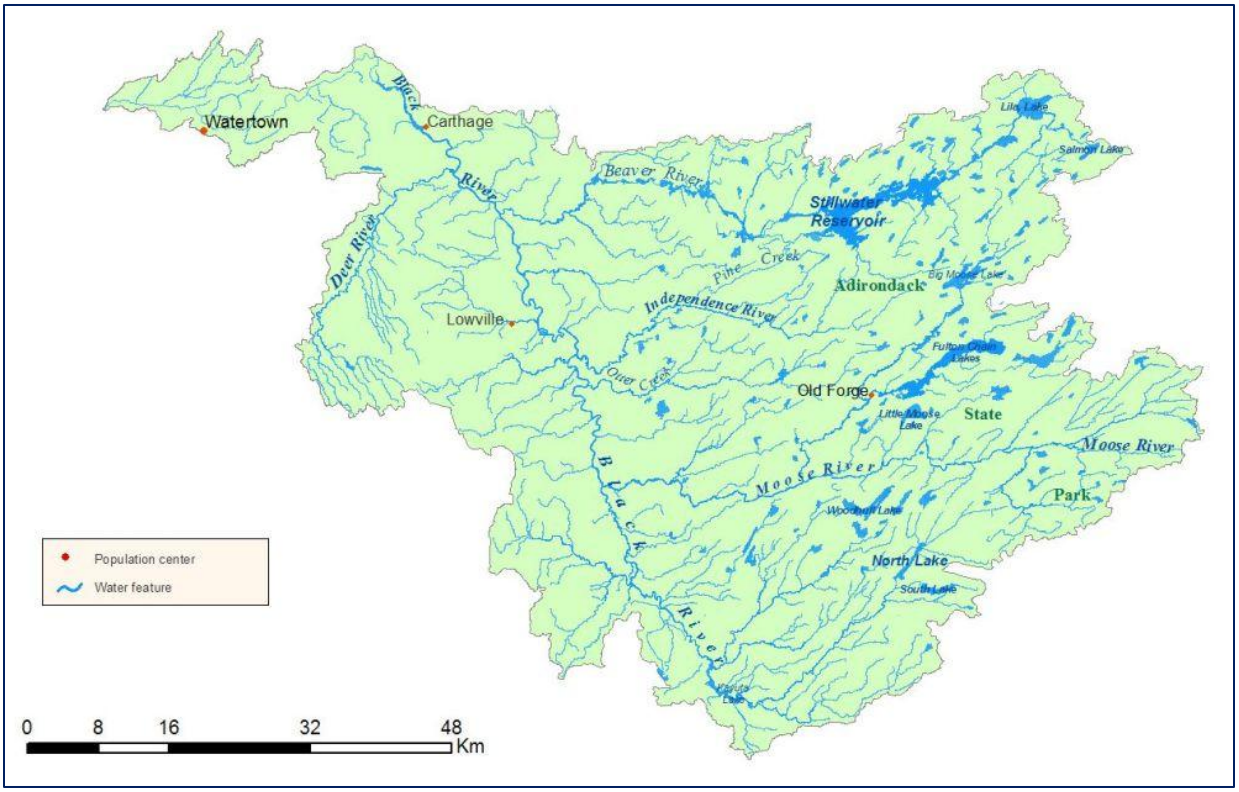

Figure 11. Black River Watershed, figure from NYSDEC public domain

Water quality within the Black River Watershed has been assessed by the DEC for 66% of its river/stream miles and 58% of lake, pond, and reservoir acres. Sixty percent of the rivers have good or satisfactory water quality, while only 3% of the lakes have good or satisfactory water quality. The DEC has identified major water quality concerns in the Black River Watershed. Atmospheric deposition is the primary influence on water quality in this watershed; acid rain has impaired many of the waters, and atmospheric mercury deposition is responsible for restrictions on fish consumption in many of the lakes. Agricultural activities have also been identified as a widespread, albeit less severe, water quality concern, as has on-site septic and rural community wastewater treatment in areas lacking sewer systems.

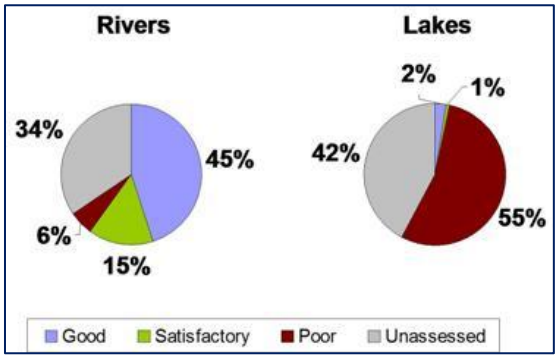

Figure 12. Water Quality in Black River Watershed, figure from NYSDEC public domain

The Black River Watershed consists of one 8-digit HUA (Black). Only a small portion of this 8-digit HUA is included within the proposed ILFP coverage area. The majority of this watershed is located within the Adirondack State Park, which is excluded from this ILFP. One small portion of the watershed, located outside of the Adirondack Park to the southeast of the Park is not contiguous with the ILFP coverage area and is therefore also excluded. ***Refer to Table 11.*** Because much of the watershed is not included in the ILFP service area, it is proposed that mitigation needs within this service area may be met in the adjacent Salmon-Sandy service area if acceptable mitigation options are not available in the Black River service area.

Table 11
Black River Watershed
Service Areas and Counties Included in ILFP

Service Area	8-Digit HUA	Counties Partially or Fully within Service Area
Black	14150101	Jefferson, Lewis[10]

National Wetlands Inventory data identifying wetland types and quantities for the service area within this Watershed are identified on ***Table 12.*** Please note that these data reflect only the portion of the Watershed that is within the ILFP service area, not the Watershed as a whole.

Table 12
Black River Watershed Service Area
Wetland Types and Quantities

Wetland Type	Acreage	% of Total
Freshwater Forested/Shrub	10,259	74.0
Freshwater Pond	317	2.3
Lake	694	5.0
Riverine	1,180	8.5
Total	**13,858**	**100**

E. Goals and Objectives

Preliminary aquatic goals and objectives have been identified for each resource type (wetlands and streams) addressed by the ILFP. General amounts, types, and locations of aquatic resources the program will seek to provide are currently being developed for each service area and will be described in more detail in the draft and final instrument documents.

General goals and objectives for streams include:

- Focus on areas where stream restoration can solve multiple pressing problems (CSO, flooding, water quality, bringing life back into cities, aesthetics, urban habitat)

[10] Note that the Black River Watershed also encompasses parts of Herkimer, Hamilton, and Oneida Counties; however, these areas are outside of the ILFP service area.

- Use restoration, enhancement, and preservation activities for compensation (not establishment or re-establishment)

General goals and objectives for wetlands include:

- Focus mitigation efforts on high quality, priority wetland systems and areas whenever possible
- Emphasize and develop additional techniques to support natural wetland gains in the lake plains area through management activities (primarily enhancement and preservation; supported by adjacent establishment and restoration to create larger complexes)
- Develop improved techniques to restore forested wetlands including the development of planting plans that take into account historical species richness and distribution as well as projected climate change
- Target small wetlands that are currently unprotected and areas that would support threatened, endangered, or rare species

As mentioned previously, a program objective of this ILFP is to use existing and developing watershed plans and other applicable plans throughout the ILFP service areas to guide mitigation planning. An example of this is the New York State Open Space Plan, which identifies important sites and priority projects involving aquatic resource conservation, including restoration and protection activities, in each of the four watersheds and 7 of the 9 service areas covered by this ILFP. These priorities will help inform ILFP goals and objectives. Priority sites/projects identified in the Open Space Plan are shown below in ***Table 13.***

Table 13 Potential Locations and Activity Types for Mitigation Projects		
Service Area	**Location**	**Activity Types Needed**
Oak Orchard – Twelvemile	None presently identified	N/A
Irondequoit – Ninemile	Westbury Bog	Preservation
Salmon – Sandy	Inman Gulf	Preservation
	Salmon River Corridor	Preservation
Niagara	Tonawanda Creek & Tributaries	Restoration, Enhancement, Preservation
	Ecological Corridors	Preservation
	Urban Wetlands	Preservation
Buffalo – Eighteenmile	Buffalo River & Tributaries	Restoration, Enhancement, Preservation
	Cattaraugus Creek & Tributaries	Preservation
Lower Genesee	Genesee River Corridor	Enhancement, Preservation
Seneca	Camillus Valley / Nine Mile Creek	Enhancement, Preservation
	Carpenter Falls / Bear Swamp Creek Corridor	Preservation
Oneida	Rome Sand Plains	Restoration, Preservation
	Camillus Valley / Nine Mile Creek	Preservation
	Nelson Swamp	Preservation
	North Shore of Oneida Lake	Enhancement, Preservation
	Onondaga Escarpment	Preservation, likely other activities needed outside and upstream from Clark Reservation State Park
	Peter Scott Swamp	Preservation
Oswego	None presently identified	N/A
Black River	None presently identified (in part of watershed included in service area)	N/A

F. Prioritization Strategy

New York Green will prioritize potential mitigation sites by using a phased evaluation for each site under consideration, from initial site identification through desktop review and site evaluation to conceptual mitigation design options. The evaluations will be documented for ILFP files and reports. A comprehensive review of all sites in the queue will be conducted annually, as part of the annual review. The annual review will serve as an opportunity to look both backward and forward to identify trends, successes, areas for improvement, and priorities for the following year. Annual program and site reports will be prepared at this time; identification of priorities for the next year will directly follow. Additionally, New York Green may elect to review and prioritize available sites on a quarterly basis or, in certain circumstances, as opportunities arise.

The first phase in developing priority sites and projects is currently ongoing. This consists of a review of applicable watershed plans and projects, as well as other relevant plans such as the New York State Open Space Plan. New York Green will use the priorities identified in these other plans to inform its priorities.

Another strategy to be employed is use of the computer modeling program, “MaxEnt,” which has been successfully used by SUNY-ESF to assist The Wetlands Trust and Upper Susquehanna Coalition with

prioritization for their ILFP. MaxEnt will be used to provide an initial landscape-level screening to predict unmapped wetland locations, locations with rare wetland types, and locations of former wetlands. This will provide another macro-level analysis of focus areas within the ILFP.

Once potential sites have been identified, New York Green will refine its priorities through an ecological screening consistent with the final rule. The following conditions will be reviewed to establish the ecological suitability of each site under consideration:

1) Hydrological conditions, soil characteristics, and other physical and chemical characteristics;
2) Watershed-scale features, such as aquatic habitat diversity, habitat connectivity, and other landscape scale functions;
3) The size and location of the compensatory mitigation site relative to hydrologic sources (including the availability of water rights) and other ecological features;
4) Compatibility with adjacent land uses and watershed management plans;
5) Reasonably foreseeable effects the compensatory mitigation projects will have on ecologically important aquatic or terrestrial resources (e.g. shallow sub-tidal habitat, mature forests), cultural sites, or habitat for federally or state listed threatened and endangered species;
6) Other relevant factors including, but not limited to, development trends, anticipated land use changes, habitat status and trends, the relative locations of the impact and mitigation sites in the stream network, local or regional goals for the restoration or protection of particular habitat types or functions (e.g. reestablishment of habitat corridors or habitat for species of concern), water quality goals, floodplain management goals, and the relative potential for chemical contamination of the aquatic resources.

Finally, sites will be assessed qualitatively based on how well they align with the overall ILFP program objectives as well as the specific mitigation needs, goals, and objectives identified for the applicable service area(s). Other factors, including whether additional resources are available for the action being contemplated and the potential value added by ILFP involvement, will be considered.

G. Preservation Justification

Preservation has been defined by the final rule for compensatory mitigation as “the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource areas or functions.”

Preservation is expected to be used only under limited circumstances after meeting five established criteria, with IRT approval. These criteria are: (1) the resources to be preserved provide important physical, chemical, or biological functions for the watershed; (2) the resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available; (3) preservation is determined by the district engineer to be appropriate and practicable; (4) the resources are under threat of destruction or

adverse modifications; and (5) the preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g. easement, title transfer to state resource agency or land trust). Preservation should also be used in conjunction with aquatic resource restoration, establishment, and/or enhancement activities to the extent appropriate and practicable.

New York Green believes that while there are ample opportunities for restoration, enhancement, and establishment techniques to be used for mitigation projects, there will also be cases where preservation alone is the top priority. For example, there are numerous exceptional aquatic resources, specified by location and described in the New York State Open Space Plan and other reports currently under review by New York Green, for which preservation has been identified as the most critical objective. Sites that meet the criteria specified above will be proposed for preservation.

H. Description of Stakeholder Involvement

There are a number of public, private, and non-governmental entities involved in managing, studying, planning for, restoring, permitting, conserving, educating about, and otherwise working on behalf of aquatic ecosystems within the lake plains region. Abundant data are available regarding baseline conditions as well as goals, objectives, strategies, and priorities for the management and conservation of aquatic resources within the region. New York Green believes that through this ILFP, it can lend support and coordination to these efforts in a way that enhances coordination among stakeholders and addresses multiple conservation agendas.

New York Green will utilize a stakeholder process for the development and operation of this ILFP; included in this draft are the outlines of such process.

In the prospectus stage, New York Green has identified key stakeholders and reviewed available data for each watershed or service area, including goals, objectives, and priorities established in watershed plans. Stakeholders include members of the IRT; representatives from city and county governments, tribal agencies with a presence in the ILFP area, water resource boards, water quality coordinating committees, soil and water conservation districts, planning councils, land trusts, and academia; entities likely to impact aquatic resources requiring compensatory mitigation; landowners of potential mitigation sites; and the general public.

Concurrent with development of the draft instrument, New York Green will begin a coordination process by sending an informational mailing package to key stakeholders. This package will include a letter, map(s) identifying watersheds and service areas, and a request for pertinent information. New York Green also plans to identify different levels of stakeholder involvement (e.g. partnership level, coordinating level, participating level, informational level) and issue formal requests to stakeholders to agree to participate on a specific level. The levels of involvement would be based on several criteria including, but not limited to, whether the entity is actively working with aquatic resources on the landscape, whether the entity would provide specific resources to comprehensive planning and mitigation projects, and other factors.

During the time between New York Green's receipt of IRT comments on the draft instrument and submittal of the final instrument for IRT review and approval, New York Green will hold a series of stakeholder meetings, with a minimum of one meeting held in each service area.

Individual mitigation projects will be coordinated directly with applicable stakeholders within each service area.

Meetings will be held periodically and as needed after the ILFP has been established with representatives from each service area to discuss progress, changes in goals or priorities, etc.

I. Long-Term Protection and Management Strategies

The instrument prepared for this ILFP will identify the parties responsible for ownership and long-term management of the compensatory mitigation projects within each watershed and/or service area, describe long-term management needs, including annual cost estimates for those needs, and identify the funding mechanisms that will be used to meet those needs. The instrument will also specify long-term financing mechanisms that will be used.

J. Strategy for Periodic Evaluation and Reporting

New York Green will periodically evaluate and report on the goals and objectives of the program, as well as parts of the entire framework. A big-picture review of the program is proposed to occur every fifth year[11]. This frequency is expected to be adequate, as significant landscape-level changes have not occurred within the ILFP area for the recent past and development trends are expected to continue at relatively stable rates.

This review will include a repeat of the original stakeholder process, with opportunities for stakeholders to provide New York Green with new information about progress made toward goals, changes in priorities, or other relevant topics that may guide ILFP program updates. New York Green would also review its own assessment data, collected for each mitigation project pre-and post-mitigation, to identify any trends that would shape the overall program goals, objectives, or framework. New York Green reserves the right to conduct a comprehensive review inside of the scheduled five-year period if unanticipated, landscape level changes occur with land use or development (such as drilling of the Utica shale); or if unexpected changes occur to aquatic resources (such as an oil spill), which may redirect program efforts and priorities.

IX. PROGRAM ACCOUNTING

New York Green shall establish and maintain a system for tracking the production of credits, credit transactions, and financial transactions between New York Green and permittees. Credit production,

[11] Please note that annual programmatic and individual reports will be prepared to track ILFP progress.

credit transactions, and financial transactions will be tracked on a programmatic basis and separately for each individual project. This information will be provided to the IRT annually via an ILFP report ledger and individual ledgers. The programmatic account will document the number of credits available for the entire program and the total amount of funds accepted and expended by the program; the programmatic account will also provide this information by service area. The individual accounts will be provided for each project and will document the number of credits generated for each individual project and the amount of funds accepted and expended for each individual project.

The Lake Plains ILFP will have a checking account established at the Castile Bank in Batavia, NY, a member of the FDIC. The account will be named "Lake Plains In-Lieu Fee Program." A second account will be established at the same bank to house endowment and contingency funds.

New York Green will develop reporting protocols for the following:

- Annual reports including all income, disbursements, and interest
- Permits received including permit number, service area, impact, mitigation actions, funds to program, and date received
- Balance of advanced and released credits
- Other information as requested by the IRT.

More detailed information regarding accounting procedures for the Lake Plains ILFP will be included in the draft and final instruments.

X. REFERENCES

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APPENDIX A

Sponsor Qualifications:

New York Green Executive Director and Board Member Biographies

New York Green Executive Director: Sheila Hess

Sheila Hess has over seventeen years of experience in natural resource conservation including wetland ecology, wildlife biology and aquatic resource restoration and mitigation. She worked with a non-profit conservation organization for twelve years, focusing on landscape-level planning and restoration of wetland systems in eighteen states across the Great Lakes and Atlantic Region. She has coordinated several watershed-based planning efforts and has worked extensively with conservation organizations, watershed groups, and regulatory staff to develop wetland avoidance, minimization, and compensation strategies for individuals, agencies, and corporations.

Sheila owns and manages an environmental consulting firm called Conservation Connects, where her current efforts include developing local and landscape-level strategies to achieve and sustain a high quality of life through sustainable economic development and green infrastructure assessments and planning.

New York Green Board Members

George Squires

George Squires serves as the Conservation District Senior Field Manager for the Genesee County Soil and Water Conservation District in Batavia, New York; a position he has held since 1993. He was a Conservation District Technician for the District from 1980-1993. Prior to joining the District, George worked as a Civil Engineering Technician and a Survey Technician for the U.S. Army Corps of Engineers, Buffalo District. George coordinates and participates with several water quality and watershed planning boards in western NY.

George holds a B.S. in Environmental Technology from Cornell University and an A.A.S. in Pre-Professional Forestry from Paul Smith's College.

Steve Hyde

Steve Hyde is the President and CEO of the Genesee County Economic Development Center (GCEDC), a county-wide economic development/industrial development agency located in the "Batavia Micropolitan" community of Genesee County in Upstate New York. The community has a population of 60,000 residents which interconnects both the Buffalo Niagara and Rochester Finger Lakes regions of Upstate NY. Steve has had extensive private sector experience in sales, marketing, business development, finance and management focused on building and growing enterprises in the Life Sciences/Medical Technology and Information Technology arenas. Notable positions include Vice President of Business and Technology Development for ResMed Corporation (a publicly traded Medical Device Manufacturer), Executive Vice President of Business Development for NetSetGo (an I.T. Services firm) as well as several management positions in Sales, Marketing, Strategy, Finance and Mergers & Acquisitions at Xerox, IBM and NCR. Steve has leveraged his private sector experiences, along with his highly capable team, and focused his energies on driving significant economic development growth for

his community and region by following a tech based economic development approach to the market. Steve earned his Associates degree in business from Genesee Community College; holds his Bachelors degree in applied economics and business management from Cornell University and earned his MBA, with a concentration in finance, from the Rochester Institute of Technology. He sits on several boards including serving as a Vice Chairman of the New York State Economic Development Council (NYSEDC).

Gregory Post

Greg Post is a lifelong resident of Genesee County. Greg attended school in Batavia, Pavilion and Pembroke and continued at Paul Smith's College starting out as an arborist in the private sector. Greg began his governmental career working for the City of Batavia in the DPW, he then moved on to the Town of Batavia Highway Department, eventually moving into the Landfill project, park, and then to the Water/Wastewater Department where he was promoted to Supervisor of the Water/Wastewater Department. After leaving public service he began his own family business, Greg Post General Services, Inc. serving the region in subsurface infrastructure solutions and drainage mitigation with his family members and his business still thrives today. In November of 2005 Greg was elected as the Town of Batavia Supervisor. In this position Greg has built relationships to share knowledge, ability, and resources. He is a champion of challenging past practices and very supportive of effective, efficient local government.

APPENDIX B

12-Digit Hydrologic Unit Areas Included in Seneca Service Area

12-Digit Hydrologic Unit Areas Included in Seneca Service Area

1. 041402010101
2. 041402010102
3. 041402010103
4. 041402010204
5. 041402010205
6. 041402010303
7. 041402010401
8. 041402010402
9. 041402010403
10. 041402010404
11. 041402010501
12. 041402010502
13. 041402010503
14. 041402010504
15. 041402010904
16. 041402010905
17. 041402010906
18. 041402011203
19. 041402011204
20. 041402011205
21. 041402011304
22. 041402011305
23. 041402011306
24. 041402011401
25. 041402011402
26. 041402011403
27. 041402011404
28. 041402011405
29. 041402011406
30. 041402011407
31. 041402011408
32. 041402011409
33. 041402011501
34. 041402011502
35. 041402011503
36. 041402011504
37. 041402011505
38. 041402011506
39. 041402011507
40. 041402011508
41. 041402011509
42. 041402011601
43. 041402011602
44. 041402011603
45. 041402011604
46. 041402011605
47. 041402011606
48. 041402011607
49. 041402011608
50. 041402011609
51. 041402011610
52. 041402011611