Summary of

Niagara Power Project

Relicensing Settlement Agreements



As planning meetings of the Niagara River Greenway Commission have moved forward, members of the public have raised questions about the funds offered by the New York Power Authority to advance the relicensing of the Niagara Power Project. The Niagara River Greenway Commission has compiled the following information from public sources in response to their questions. As part of its relicensing agreement for the Niagara Power Project, the New York Power Authority has included in settlement agreements reached with relicensing stakeholders \$9 million a year for 50 years for projects consistent with the Niagara River Greenway Plan. In relation to the Greenway, \$3 million a year is for Niagara County communities, \$3 million annually for State Parks in Niagara and Erie counties, \$2 million a year for communities in Erie County and \$1 million a year for ecological projects in Niagara and Erie counties. Readers should keep in mind that while the funding offered by the New York Power Authority is significant, other sources of funding are available for Greenway Related Projects. It should also be noted that funding available through the Niagara Project relicensing is <u>not</u> controlled by the Niagara River Greenway Commission. Projects using these funds will be approved by the "Standing Committee" as identified in the relicensing settlement agreements, those sources will be identified in the Niagara River Greenway Plan.

Erie County Greenway Fund

An Erie County Greenway Fund Standing Committee shall administer and oversee projects financed by the Erie County Greenway Fund. Projects may be proposed by Standing Committee members or by individuals and organizations with an interest in Erie County's section of the Niagara River Greenway. Each proposal must provide written documentation of consultation with the Niagara River Greenway Commission and municipal and State agencies. The Standing Committee shall have sole responsibility for selecting projects to be financed by the fund and shall ensure that the project is consistent with the Greenway Act and the Niagara River Greenway Plan. Other factors to be addressed include engineering feasibility, operation and maintenance feasibility and cost effectiveness.

Niagara River Greenway Ecological Fund

A Greenway Ecological Standing Committee shall, on a consensus basis, select projects to be funded from the Greenway Ecological Fund. Projects may be proposed by Standing Committee members or by individuals and organizations within the Buffalo – Niagara Region. Each proposal must provide written documentation of consultation with the Niagara River Greenway Commission and municipal and State agencies. The Standing Committee shall have sole responsibility for authorizing projects to be financed by the fund and shall ensure that the project is consistent with the Niagara River Greenway Plan. Other factors to be addressed include engineering feasibility, operation, biological effectiveness and maintenance feasibility and cost effectiveness.

State Parks Greenway Fund

A State Parks Standing Committee shall, oversee and administer projects to be funded from the Greenway Ecological Fund. Projects may be proposed by Standing Committee members or by individuals and organizations within the Buffalo – Niagara Region. Each proposal must provide written documentation of consultation with the Niagara River Greenway Commission and municipal and State agencies. The Standing Committee shall have sole responsibility for authorizing projects to be financed by the fund and shall ensure that the project is consistent with the Niagara River Greenway Plan. Other factors to be addressed include engineering feasibility, operation and maintenance feasibility and cost effectiveness.

Host Community (Niagara County) Greenway Fund

A Host Community Greenway Fund Standing Committee shall administer and oversee projects financed by the Host Community Greenway Fund. Projects may be proposed by Standing Committee members or by individuals and organizations with an interest in Niagara County's section of the Niagara River

Greenway. Each proposal must provide written documentation of consultation with the Niagara River Greenway Commission and municipal and State agencies. The Standing Committee shall have sole responsibility for selecting projects to be financed by the fund and shall ensure that the project is consistent with the Niagara River Greenway Plan. Other factors to be addressed include engineering feasibility, operation and maintenance feasibility and cost effectiveness.

Niagara Power Project Relicensing

Fund Distribution Summary July 2006

NIAGARA RIVER GREENWAY RELATED FUNDS

Total: \$9 million year / 50 years = \$450 million Net Present Value (NPV): \$145,916,802

Nearly one-half billion dollars has been committed by the New York Power Authority to support Niagara River Greenway related projects from Lake Ontario to Lake Erie.

Package	Terms	Standing Committee	FERC* Status
Niagara River Greenway Ecological Fund	\$1 million year/50years NPV: \$16,179,645	NYPA DEC USFWS Nations (3) NREC/ Riverkeeper NYS DOS	non-FERC
State Parks Greenway Fund	\$3 million year/50 years NPV: \$48,538,934	NYPA OPRHP	non-FERC
Niagara Power Coalition Greenway/ Recreation/Tourism Fund	\$3 million year/50 years NPV: \$48,638,934	NYPA/Niagara Power Coalition: City of Niagara Falls; Town of Niagara, Town of Lewiston, Niagara County; School Boards of NF, Lewiston/Porter, Niagara Wheatfield	non-FERC
Erie/Buffalo/Olmsted Greenway Fund	\$2 million year/50 years NPV: \$32,359,920	NYPA Buffalo Erie Co. Olmsted	non-FERC

Note: Tuscorara and Niagara University settlements not included

*There are two types of NYPA settlement pools: FERC, that is, those required by the Federal Energy Regulatory Commission, and non-FERC, those that do not fall within FERC's jurisdiction.

OTHER SETTLEMENT AGREEMENTS

Package	Terms	Standing Committee	FERC Status
Fish / Wildlife Habitat Enhancement and Restoration Fund	\$1 million year / 50 years NPV: \$16,179,645	NYPA DEC USFWS Nations (3) NREC/Riverkeeper NYRU NYS DOS	FERC
Habitat Improvement Projects (project description below)	8 Projects on Niagara River to be completed by 2015	NYPA NYS DEC USFWS Nations (3) NREC/Riverkeeper NYRU NYS DOS	FERC
Niagara Power Coalition: City of Niagara Falls; Towns of Niagara and Lewiston; Niagara County; School Boards of NF, Lewiston- Porter, Niagara-Wheatfield	 \$5 million year / 50 years tied to price of power (\$8 million onetime / upfront; 25 MW firm power) 		non FERC
Erie Canal Harbor Restoration Corporation	\$2.5 million year / 50 years(\$4 million up front)(Additional \$1 million year from ESD)		non FERC
NF Water Board Capital Improvement Fund (Falls Tunnel)	NPV: \$19,000,000		FERC
State Parks and Recreation Fund	NPV: \$9,260,000 Reservoir Park, Gorge, Art Park, TBD		FERC
Public Access Improvements (in Project Boundaries)	Within two years of license No dollar amount attached		FERC
Land Acquisition Fund (DEC)	\$1,000,000 within one year of license		non FERC
River Projects: Cayuga Creek Restoration and Gorge Plant Study	\$300,000		non FERC

NOTE: "NREC" shall mean the Niagara Relicensing Environmental Coalition, comprised of Adirondack Mountain Club, Buffalo Niagara Riverkeeper (formerly Friends of the Buffalo Niagara Rivers), Cattaraugus Creek Watershed Task Force, Citizens Campaign for the Environment, Citizens Environmental Coalition, Citizens Regional Transit Corporation, Town of Grand Island, Great Lakes United, League of Women Voters Buffalo/Niagara, Nature Conservancy Central and Western New York Chapter, New York Audubon, New York Rivers United, Niagara Frontier Wildlife Heritage Council, Niagara Musky Association, Niagara Waterfront Revitalization Task Force, Quality Quest, Sierra Club, Western New York Land Conservancy, Presbytery of Western New York.

HABITAT IMPROVEMENT PROJECTS

These eight Habitat Improvement Projects (HIPS) were selected as a result of a Niagara relicensing study of potential HIPS conducted during the FERC Alternative License Process. State and federal fish and wildlife agencies, the Niagara Relicensing Environmental Coalition, Indian Tribes and other stakeholders participated in the scoping of this study and the review of its results. The eight HIPS are included in the water quality certification issued by the New York State Department of Environmental Conservation; as such they will be included in the new federal License for the Niagara Project.

Construction of the eight HIPS will continue through 2015.

Strawberry Island Wetland Restoration

Strawberry Island is a relatively small island located in the upper Niagara River immediately upstream of the southern tip of Grand Island, approximately 15 miles upstream from the project intakes. It is owned by the State of New York and is part of Beaver Island State Park. The island contains upland and emergent marsh habitats not typically found in the upper River. The island was once mined for gravel, dramatically reducing its size. In addition, island size has been further reduced over the years due to erosion caused by severe storms. In 2001, the New York DEC implemented shoreline protection and wetland enhancement measures on the island. The southern tip of the island and both the east and west shorelines were armored with rip-rap, and wetland areas were created behind the rip-rap berms. The wetland areas were planted with appropriate wetland plants and protected from geese with exclusion barriers.

The proposed Strawberry Island HIP would extend protection measures to the remaining downstream shallow-water habitats of the island while at the same time creating complex marsh and high-energy wetland habitats for fish and wildlife. This project would increase the size and long-term stability of Strawberry Island using breakwaters along the newly created shoreline. Functionally valuable wetlands would be created behind the breakwaters through the placement of fill material to build elevations to optimal levels for target habitats. The primary target function created would be enhanced fish and wildlife habitat. However, other wetland functions, including recreational opportunity (*i.e.*, fishing, hunting, bird watching, *etc.*) and water quality (*i.e.*, sediment settling, nutrient retention, *etc.*) would be enhanced as well. The new breakwater structures would be installed just downstream of similar measures recently completed by the New York DEC. Breakwaters would be constructed primarily of riprap. Geotextile tubes would also be investigated as an alternative material for the more protected segments (*i.e.*, interior portions of breakwaters).

Motor Island Shoreline Protection

Motor Island, located near Strawberry Island approximately 15 miles upstream of the project intakes, is owned by the State of New York and managed by the New York DEC for the protection and enhancement of fish and wildlife. Shoreline erosion is currently occurring at the southern tip and along the western shoreline of Motor Island. Additionally, existing shoreline protection structures along the eastern shoreline are in various stages of disrepair. This side of the island is often subject to impacts

from boat wakes due to commercial and recreational boating traffic in the navigation channel.

The Motor Island HIP would be designed to minimize further damage to this important habitat feature of the upper Niagara River by providing shoreline protection measures along the western and eastern shorelines and at the southern tip of the island. Shoreline protection measures would incorporate bioengineering wherever possible to provide vegetation up to the water's edge and help stabilize erosion protection. In addition, anthropogenic structures such as the boat docking facilities along the western shoreline would be removed in an effort to restore the island shoreline to as natural an appearance as possible and to minimize future maintenance activities.

Also included in this HIP is a boat landing area on the northeast portion of the island. The boat landing would be used for landing construction equipment during the initial island improvements and later for monitoring activities that may be associated with this project and enhancements to the Motor Island Heron Rookery. Wooden pilings or similar structures would be incorporated for mooring work vessels.

Frog Island Restoration

Historically, a small group of islands could be found between Motor Island and Strawberry Island. Anecdotal data indicates that these islands were mined for gravel many decades ago leaving only relatively homogenous shallow water habitat that lacks complexity and structure. The Frog Island HIP would be designed to restore habitat complexity and create marsh and submerged coarse substrates for fish and wildlife in the area formerly occupied by the islands.

Beaver Island Wetland Restoration

The quantity and quality of habitat on Beaver Island and in the Beaver Island State Park is limited by a lack of emergent marsh and shallow pond habitat. Historic wetlands were dredged and filled in this area, and the resulting topography and hydrology do not optimize wetland structure and function. A crescent-shaped area of open water and wetlands on the inside of Beaver Island (known as Little Beaver Marsh) historically (before 1960) included hemi-marsh (marsh interspersed with shallow open water with irregular edges and in roughly even proportions) with excellent structural and vegetative diversity (New York OPRHP photograph files). Around 1960, this area was filled and the hemi-marsh was replaced with poor quality habitat such as mowed lawn. This project would restore hemi-marsh and shallow pools to the inside (northeast) shoreline of Beaver Island through removal of fill, site grading, plantings, and invasive species control.

This project would assess the approximate historical extent and structure of Beaver Island wetlands using aerial photographs, historic records, and site plans/engineering drawings (as available). The wetland restoration design would include a grading plan that would specify elevations and associated hydrologic regimes that would result in the development of a complex system of marsh emergent and shallow pond habitat. The grading plan would require some wetland fill removal (cut), but would not involve fill, *i.e.*, the fill would need to be removed from the site for an off-site application. Wetland planting plans would also be developed. These plans would emphasize diverse native species with high wildlife food and cover values and bank stabilization capacity. Lastly, due to the existence of common reed, purple loosestrife, and other exotic/invasive species in the subject area, the control of such species would be incorporated into the design, implementation, and monitoring and maintenance phases of this HIP.

Fish Habitat/Attractions Structures

This HIP would provide large-object cover which would function as fish attraction structures in deep water areas (i.e., >10 ft) where fish can seek shelter, forage, and otherwise maintain activities as expected in a lotic environment. The primary fish species that are intended to benefit from the HIP are muskellunge, northern pike, walleye, largemouth, and smallmouth bass. The proposed locations of these attraction structures include just downstream of the Peace Bridge, upstream of Strawberry Island, near the South Grand Island Bridge, and downstream of Tonawanda Creek. Other locations would be possible if the locations are deep enough to allow a minimum of 8 feet between the low-water surface elevation and the top of the structures.

Control of Invasive Species – Buckhorn and Tifft Marshes

Several exotic and invasive plants of concern occur in, and near, Buckhorn Marsh (Buckhorn) and Tifft Farm Nature Preserve (Tifft). Buckhorn is located at the downstream end of Grand Island and Tifft is located upstream of the Peace Bridge in Buffalo. The species of greatest concern in Buckhorn and Tifft, as well as in the Niagara River area in general, are purple loosestrife and common reed. These two wetland species occur primarily in palustrine emergent marsh habitat with little to no canopy cover (*e.g.*, wet meadows and marshes). This project would control exotic and invasive plant species and promote the growth of a diverse community of native wetland species to enhance and preserve wetland function.

The first task of this project includes surveying the existing extent of purple loosestrife, common reed, and other exotic/invasive species of concern in Buckhorn and Tifft marshes. This information would be used to create cover type maps showing the extent of native emergent communities (with few to no invasives) and the locations of wetlands dominated or co-dominated by various species of concern. Once the extent of the problem is fully known, an area-specific plan for minimizing further spread of these species into wetlands dominated by natives and controlling them in existing strongholds would be developed. Control techniques would include biological, chemical, and mechanical approaches.

Osprey Nesting

Osprey nest in trees along rivers and in wetlands. Osprey are present on the Niagara River during migration (New York DEC and New York OPRHP, 1995), but a local breeding population has not currently been established. This HIP would increase nest site availability for osprey by installing pole-mounted nesting platforms.

Common Tern Nesting

This HIP would provide nesting habitat for common terns and increase the local population of terns by creating or enhancing nesting sites and increasing tern breeding productivity. The locations of these nesting sites are to be identified in consultation with New York DEC staff. Potential locations for this project include current (e.g. Buffalo Harbor breakwalls) and historical (e.g. Buckhorn Island Tern Colony SCFWH) tern nesting sites.