Niagara Relicensing Ecological Standing Committee
Habitat Enhancement and Restoration Fund (HERF) Projects Approved

	Project Name & Description	Amount Approved	Sponsor
1.	Expansion of 2010 Nesting Improvements for Common Tern on the Buffalo Harbor Breakwaters This project involved the extension of one of the common tern nesting sites to extend the length of NYPA's nesting improvements on Old Breakwater – North, approximately 128 feet beyond that which NYPA had planned to improve.	$ 62,455.00	New York State Department of Environmental Conservation
2.	Study: Evaluation of Nearshore Fish Assemblages, Habitat, and the Effects of Herbivorous Rudd (*Scardinius erythrophthalmus*): Determining the Efficacy of Fish Habitat Restoration Efforts in the Buffalo Harbor and Niagara River This study was performed to acquire information that promotes successful habitat restoration efforts in the Buffalo Harbor and Niagara River through: 1) surveys of nearshore fish assemblages and aquatic vegetation near restoration and reference sites, 2) an assessment of the seasonal progression of submerged aquatic vegetation, 3) field surveys and laboratory experiments investigating the influence of herbivory by rudd on nearshore aquatic habitat, and, 4) a study determining which aquatic vegetation and physical conditions are associated with muskellunge spawning sites.	$ 519,246.00	SUNY College of Environmental Science and Forestry
3.	Niagara River Fish Attraction Structures - Phase II This project provided four additional structures in the Niagara River that were constructed based on existing engineered designs from an earlier NYPA prototype habitat improvement project. The project entailed placement of rock and woody debris and equipment via barge to the pre-determined project locations in the river, so as to break up river currents to provide shelter for adult fish and areas for young fish to escape predation.	$ 199,495.00	New York State Department of Environmental Conservation, Niagara Musky Associati
4.	Tuscarora Grassland Restoration The purpose of this project is to restore and maintain 200 acres of grasslands in the upland portions of Tuscarora territory. The project also will include, where feasible, a more limited area of riparian buffers along wetlands, streams and open water on the territory. Cayuga, Gill, and Fish Creeks are Niagara River tributaries that originate from headwaters located on the Nation.	$ 596,499.60	Haudenosaunee Environmental Task Force
5.	Study: Defining Habitat Use and Behavior of the Common Map and Eastern Spiny Softshell Turtles in the Upper Niagara River This project involved the collection of information on habitat use and behavior which is critical for protecting and enhancing map and softshell turtles and their required habitats on the Niagara River. This information was collected through trapping, tagging and the use of radio and sonic telemetry.	$ 351,166.81	Buffalo State College and New York State Department of Environmental Conservatior
6.	Study: Status of Longear Sunfish (*Lepomis megalotis*) in Lower Tonawanda Creek, Niagara Basin The goal of this study was to intensively electrofish and assess a specific study area (lower Tonawanda Creek) in the Niagara Basin over two years to determine the population status of native longear sunfish, a threatened species in New York State.	$ 43,391.00	SUNY - the College at Brockport

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7.	Land Acquisition: Stella Niagara Preserve Partially through ESC funding, the Western New York Land Conservancy purchased 29 acres of property located on the shores of the Niagara River. The objective of the acquisition was to open the property to public access, develop a walking trail system, provide new fishing, canoe and kayak access, place an entry kiosk, wayfinding and interpretive signage, restore 18 acres of grassland habitat, hold events and hikes there, and continue stewardship of the property.	$ 1,843,487.00	Western New York Land Conservancy
8.	Wetland Plantings and Management at Tifft Nature Preserve This project included extensive planting of wetland species over two years in three former stands of Phragmites totaling three acres of restoration, as well as infrastructure improvements consisting of a new weather station and water pump servicing.	$ 94,000.00	Buffalo Museum of Science
9.	Study: Has the Northern Sunfish (*Lepomis peltastes*) Hybridized with other Lepomis Species in the Niagara River Watershed? This follow-up study was conducted to determine whether northern sunfish in the Niagara Basin have hybridized with pumpkinseed or green sunfish or whether some of the "hybrids" sampled are actually northern sunfish that have evolved morphologies adapted to conditions in lower Tonawanda Creek or other tributaries of the Niagara River.	$ 23,603.00	SUNY - the College at Brockport
10.	Control of *Phragmites australis* in Reinstein Woods Wetlands This project was conducted to address Common reed (*Phragmites australis)* where it poses the greatest threat to a critical habitat at Reinstein Woods: the cattail marshes in the southern drainage system, and involved treating 30 stands of Common reed with herbicide, followed by mowing to increase the effectiveness of the treatment.	$ 54,000.00	Friends of Reinstein Woods
11.	Enhancement of the Map Turtle Population in the Upper Niagara River through Translocation and the Development of Anthropogenic Nesting Sites This study involved collection of information on habitat use and behavior of both introduced and resident turtles which is critical for protecting and enhancing map turtles and their required habitats on the Niagara River. This information was collected through trapping, tagging, and the use of radio and sonic telemetry.	$ 325,056.25	Buffalo State College and New York State Department of Environmental Conservatior
12.	Beneficial Use of Dredged Material for Ecosystem Restoration at the North Pond Adjacent to Black Rock Lock This project was implemented to create additional riverine wetland habitat in the Niagara River, and includes the creation of approximately 3.7 acres of emergent and submerged wetland, and enhancement of 1 acre of the existing pond habitat. Dredged material from the Buffalo River was placed after analysis in the deepest portion of the pond (north end) and to create 1.8 acres of emergent wetlands and then transition to submergent wetlands (1.9 acres) toward the south.	$ 1,037,907.00	City of Buffalo and U.S. Army Corps of Engineers

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13.	Upper Niagara River/Buffalo Harbor Muskellunge Acoustic Telemetry Study The objective of this project is to collect data over five to seven years on muskellunge movement as part of a future muskellunge habitat restoration.	$ 52,000.00	Niagara Musky Association
14.	Tern Island Construction This project involves the construction of a new tern nesting island in the Niagara River to provide nesting habitat that would be ideal for Common Terns. The primary feature of the island will be significant expansion of gravel-covered terrain and vegetation that will provide appropriate shelter for nesting pairs and their chicks.	$ 1,749,680.00	Buffalo Audubon Society
15.	Shoreline and Coastal Wetland Habitat Improvement along Little Beaver Island The purpose of this project is to create and restore riparian and nearshore habitats along a portion of shoreline within Beaver Island State Park. The project uses bioengineering and/or hybrid restoration techniques to establish riverine and coastal wetland habitats and restore degraded shoreline areas to create healthy ecological conditions that will benefit a diverse community of species.	$ 1,917,814.00	Buffalo Niagara Waterkeeper
16.	Buckhorn Island Marsh Habitat Enhancement This project aims to achieve multiple ecological goals within Buckhorn Island Marsh: 1) Reduce the cover and dominance of invasive vegetation and facilitate re-growth of native emergent vegetation species; 2) increase hydrologic connectivity for fish passage and access to spawning habitat while simultaneously improving water flow and water quality; 3) establish a water level management plan that will maximize habitat for a diversity of native fish and wildlife, while providing improved recreational opportunities.	$ 405,198.00	Ducks Unlimited, Inc.