



US Army Corps  
of Engineers®

# Unity Island Aquatic Plant Control, Buffalo, NY

## Section 104 of the River and Harbor Act of 1958



**Project Location:** Unity Island (formerly Squaw Island) is located along the Niagara River, within the Niagara River AOC, and has been identified as the specific location for a demonstration

**Description of Problem:** Unity Island in Buffalo, Erie County, NY was once a natural, riverine island in the Niagara River. From 1938 through 1979, the island was modified and expanded with fill to create an incinerator plant, which ceased operations in the late 1990s. The property was then redeveloped as a natural recreational area owned and maintained by the city of Buffalo as Squaw Island Park. To support the existing wildlife habitat and future planned wetland enhancements, the proposed project will remove and control aquatic and riparian invasive species that have degraded the habitat areas of the park. This project is planning, designing, and implementing full-scale efforts to demonstrate means of AIS removal and replacement with beneficial native plants by adaptive monitoring and management techniques. A particular area of focus is control of the non-native Phragmites, tree of heaven, mugwort, and purple loosestrife.



**Proposed Project:** This Project has been developed as part of the efforts associated with the delisting of Great Lakes Areas of Concern (AOCs), specifically the Niagara River AOC, and to support ecosystem restoration projects where invasive species are of significant concern. This Project implements Aquatic Invasive Species control and management, constructs habitat restoration, and expands passage for fish and other aquatic species between the Niagara River and the inland waters of Unity Island. The Project targets four areas across the northern portion of Unity Island for AIS

management and restoration and enhancement activities (see Figure 1). The Project has been specifically designed to increase area of native habitat and expand ecological functionality and

values. On a broader scale, this Project will further the Beneficial Use Impairment (BUI) delisting process within the Niagara River AOC.

**Partners and Collaboration:** City of Buffalo

**Project Benefits:** This project is applying and demonstrating management strategies aimed at improving wetland quality and function by reducing coverage and spread of AIS, coupled with active restoration of native wetland plants, increasing native plant and animal biodiversity, and minimizing impacts to threatened and endangered wetland species. The project supports the delisting of the Niagara River AOC by treating (over 3 years) 6 acres of AIS acres, and planting of native species to help maintain a high level of vegetative diversity. Other benefits include: 1,800 feet of fish passage restoration, 3.3 acres of expanded fish access to inland aquatic habitat, 0.60 acres of emergent and aquatic habitat enhancement and aquatic habitat enhancement, and 0.90 acres of expanded riparian Buffer.

Measure of Progress	Project Output
2.2.1 - Number of aquatic/terrestrial acres controlled by GLRI-funded projects	10 acres
2.3.1 - Number of technologies and methods field tested by GLRI-funded projects	3 on over 10 acres
4.1.3 - Number of acres of Great Lakes coastal wetlands protected, restored and enhanced by GLRI-funded projects	10 acres

**Project Status:** FY15 funds were used to award a three year contract to complete chemical and physical treatment of invasive species; monitoring and adaptive management; and construction of physical features. Construction, including installation of permanent electrical conduit to support physical features, will be completed in the fall of 2019. Monitoring and adaptive management will continue through September 2020.

Estimated Project Costs	
Federal	\$1,650,000
Non-Federal	\$0
Total	\$1,650,000

Project Budget	
FY 2018	\$135,000
FY 2019	\$137,000
FY 2020	\$58,000

Project Milestones	
Complete Electrical Conduit Installation	May 2019
Complete Monitoring	Dec 2019
Monitoring & Adaptive Mgmt	Sep 2020

Point of Contact
Michael Draganac (716) 879-4370 <a href="mailto:Miacael.G.Draganac@usace.army.mil">Miacael.G.Draganac@usace.army.mil</a>

