

# Osprey Nesting Platform and Migrator Habitat Enhancement Project

Buffalo State College Great Lakes Center

Project Registration Number \_\_\_\_\_

**Niagara River Greenway Commission**

**Consultation and Review Form**

**Type of Review Required:** Mandatory Consultation

**PROJECT SPONSOR INFORMATION**

**Name:** Research Foundation for SUNY-Buffalo State

**Mailing Address:** 1300 Elmwood Ave., Buffalo

**State:** New York, 14222

**Federal Id# 14-1368361 Charities Registration # N/A**

**Check all that apply:**  Environmental  Cultural/Heritage  Land or Water Public Access

Cultural  Trail  Educational/Interpretive

Waterfront or Land Based Development  Signage

Recreational  Other

Funding Committee request: Unsure at this time

Amount requested: \$ 74, 613

Matching Funds Available: \$ 24,334

## **Project Information**

Project Name: Osprey Nesting Platform and Migrator Habitat Enhancement Project

Location: Buffalo State College Great Lakes Center Field Station

Site Address: 5 Porter Avenue, Buffalo

State: New York      Zip Code: 14222

Minor Civil Division(s):

County: Erie

Project Proponent Property Interest (own, lease, easement or other): NY State College

## **Project Point of Contact**

### Principle Investigator

**Mark Clapsadl**, Research Scientist/Field Station Manager

Buffalo State College Great Lakes Center

1300 Elmwood Ave, 321 SAMC

14222

(716) 878-5625

[Clapsamd@buffalostate.edu](mailto:Clapsamd@buffalostate.edu)

### Co-Principle Investigators

**Brian Haas** Research Technician Buffalo State College, Great Lakes Center.

**Katherine Hastings** Research Technician Buffalo State College, Great Lakes Center.

### Collaborators

**Connie Adams**, Region 9, NYS Department of Environmental Conservation (DEC).

**Sarah Kubiak Chapman**, CNLP Horticulture Supervisor SUNY Buffalo State College.

**Timothy DePriest**, Region 9, NYS Department of Environmental Conservation (DEC).

**Steven Sypniewski**, CNLP, ISA Certified Arborist Grounds & Arboretum Manager SUNY Buffalo State College.

## **Project Narrative**

The Great Lakes present a natural barrier to wildlife making migration flights north from southern wintering grounds in the spring and back again in the fall. Because many of these animals choose routes that take them across the lake barriers at narrow points it is critically important that such places meet the habitat needs of migrating wildlife. The Niagara River is not only one of the most important crossing places for migrators, but it is also important because it serves as a final destination point for a variety of migrating and resident wildlife. Key to the continued success and health of migrants and residents alike is the availability of sufficient food and sheltering places and nesting habitat.

Unfortunately, extensive development of the shoreline has eliminated much of the plant community along the shores of the Niagara River that support both resident and migrating wildlife. Birds such as the Osprey (*Pandion haliaetus*) that historically had nested along the Niagara River in natural sites, such as large trees and snags, now find the availability of acceptable natural nest sites to be quite limited and often choose man-made structures for nesting. Other migrants, upon crossing the Niagara River or just prior to crossing if moving north, are likely to encounter developed shorelines that offer little in the way of food or shelter because the once rich communities of native plants have been replaced by lawns and other forms of development. The grounds of Buffalo State College Great Lakes Center Field Station (GLCFS), located on approximately 8 acres along the Black Rock Channel/Niagara River waterfront is an example of such a site. The portions of the property that are not devoted to buildings or parking are currently maintained as lawn, which offers comparatively little in the way of food or shelter for most wildlife.

This project aims to create multiple types of habitat improvements for resident and migrating wildlife within the Niagara River corridor and to incorporate these habitat improvement actions into our education and outreach efforts at the GLCFS.

Specifically, the goals of this project are to:

1) Install a nest pole/platform for Osprey on the Buffalo State Great Lakes Field Station Grounds adjacent to the Black Rock Channel/Niagara River, including a web camera (nest-cam) for public viewing.

2) Create stopover habitat on the Field Station grounds for migrating wildlife (birds and butterflies) as well as resident wildlife by installing multiple plantings of native shrubs and trees selected for their high wildlife value for providing shelter, resting/nesting sites, fruit, pollen and vegetation attractive to insects that are themselves valuable as food to migrators. This project proposes to install plantings on three separate sites within the field station grounds encompassing an area of more than 8,000 square feet with an estimated 300+ native shrubs, trees and grasses.

3) Provide nesting houses for Purple Martins (*Progne subis*).

4) Finally, to use all of the habitat enhancements above to create experiential learning opportunities for local high school students as well as to provide outreach opportunities to the general community. These activities will be enhanced by infrastructure already in place at the GLCFS such as the Outdoor Classroom, and recently renovated dock and launch facilities.

### **Nesting Platform and Nest Boxes**

The first phase of this project will be construction and installation of an Osprey (*Pandion haliaetus*) nest platform equipped with a web camera for public viewing on the grounds of the Buffalo State College Great Lakes Center Field Station (Figure 1). The web camera will provide real time viewing opportunity of any Osprey nesting activity to the general public. The platform will also be viewable from the Black Rock Channel as well as the Bird Island Pier.

Purple Martin (*Progne subis*) have become totally dependent upon human provided nesting sites. In addition to the osprey platform the project will also install one or more Purple Martin nesting boxes on the grounds of the GLCFS.

### **Migration stopover plantings**

The extensive development along the Niagara River shoreline has greatly reduced or eliminated the native plants that serve as sources of food and cover for migrating and local birds. The second feature of this project is the installation of multiple plantings of native plants selected for their value in providing food (in the form of fruit and insects) and cover to wildlife migrating through the region. This project proposes to install plantings on three separate sites within the field station grounds encompassing an area of more than 8,000 square feet with an estimated 300+ native shrubs, trees and grasses.

### **Outreach and education**

In addition, this project is geared towards creating educational outreach activities through partnerships with local schools programs, such as the Riverside Academy Blue Economy program. We will provide students with the opportunity to learn about natural ecological systems, participate in management and propagation through activities such as planting and winter pruning and provide opportunities for learning about and viewing local wildlife with a focus on the plants and animals of the Niagara region as well as local history.

## **Advancement of the Niagara Greenway Vision**

The Osprey Nesting Platform and Migrator Habitat Enhancement Project shares the overall philosophy of the Niagara River Greenway vision and will advance that vision by following the guiding principles, criteria and goals described in the Niagara River Greenway Plan as follows:

### **Principles**

**Excellence** – The Buffalo State College Great Lakes Center has a long and distinguished history of providing excellence in research and education. We have a long history in implementing complex field research projects. This project is well within the scope of the expertise at the GLC, from educators to researchers and certified arborists to skilled heavy-equipment operators, all available at Buffalo State College. The project will contribute to the goal of the Niagara Greenway in meeting world-class standards.

**Sustainability** – This project will promote ecological, and physical sustainability for long-term viability by creating sustainable habitat improvements for resident and migratory animals in the portion of the Niagara Greenway encompassed by the grounds of the Great Lakes Center Field Station. The project will also contribute to economic sustainability and long-term viability by increasing the opportunity for students to learn, grow and appreciate the vibrant natural history of the region, thus improving their outlook and attitudes toward living in the Buffalo area.

**Accessibility** – Through the web camera, class visits and other access along the Black Rock Channel this project will provide and increase physical and visual access to the waterfront and related resources for everyone.

**Ecological Integrity** – The central theme of this project is to maintain and improve the health, vitality and natural integrity of wildlife and the ecosystems they depend on by utilizing the grounds of the Buffalo State College Field Station through direct habitat improvements by planting native vegetation and providing vital nesting habitat beneficial to a variety of wildlife.

**Public Well-Being** – This project will promote physical and emotional wellness through the experiences that it will offer to the public, these experiences range from the joy of seeing wildlife thrive in this urban environment to the opportunity for students to go beyond classroom learning.

**Connectivity** – This project provides one more point in the network of spaces, water access and connection to resources that the Greenway is trying to create.

**Restoration** – The Osprey nesting platform and migrator enhancement project is an excellent example of ecological resource restoration which is solidly located within an urban center. Projects such as this add vitality, value and beauty to a highly developed landscape.

**Authenticity** – This project, by creating spaces filled with native plants that encourage the return of wildlife to the area will create a sense of “place” that reflects the traditional spirit and heritage of the area.

**Celebration** – The Osprey Nesting Platform and Migrator Habitat Enhancement Project will directly support educational opportunities by providing a space where students can learn about our rich natural history and engage in activities that will lead to the appreciation of this history.

**Partnerships** – This project further enhances the partnership of Buffalo State College with Riverside Academy as well as providing opportunity for other school groups to participate in and learn about the efforts to enhance wildlife habitat in the Greenway

**Community Based** – This project is located in the heart of the Buffalo community, and aspects of the project such as the nest-cam and the educational opportunities we have described will further strengthen the community ties to the water and to our rich natural resources.

## **Goals**

**Improve Access** – This project will improve access by providing opportunity for students to see and interact on the Field Station grounds, and to learn the value of different types of native plants for insects and birds. In addition, a web camera will be installed to provide a real time link to the activities on the Osprey nesting platform.

**Make Connections** – The participation of local High Schools in this project will provide a direct experience for the students in our community to learn about the natural history of the region.

**Protect and Restore Environmental Systems** –The osprey nesting platform will serve as a “destination” for visitors, both for those accessing the site via web cam and for those that can view the site either from the canal, from the Broderick Park break-wall or as part of a group visiting the Field Station grounds. The project will also attempt to “reclaim” portions of the Field Station grounds to a more natural state. The proposed changes will dramatically increase the wildlife value of these grounds for both resident and migrant wildlife.

**Spark Revitalization and Renewal** – The addition of features such as an osprey nesting platform will help to change the way resident and visitors view the natural resources of the Niagara Greenway, bolstering tourism and the quality of life for residents.

**Promote Long-Term Sustainability** – This project will promote ecological, and physical sustainability for long-term viability by creating sustainable habitat improvements for resident and migratory animals to that portion of the Greenway encompassed on the Grounds of the Great Lakes Center. The project will also contribute to economic sustainability and long-term viability by increasing the opportunity for students to learn, grow and appreciate the vibrant natural history of the region, thus improving their outlook and attitudes toward living in the Buffalo area.

**Extend Olmsted's Legacy** – The site location for this project directly adjacent to Black Rock Channel and the Upper Niagara River fits precisely into the vision of Frederick Law Olmsted in achieving a necklace of parks and open spaces along the length of the River and extending this legacy for future generations.

## **Criteria**

As indicated above, this project is Consistent with the Principles for the Greenway, it fits as a Priority Status in that it improves access to a waterfront area, focuses on restoration of a portion of the Niagara River ecosystem with an emphasis on education and revitalization of a portion of our urban center. The project takes place within the Focus Area and is directly adjacent to the Black Rock Channel and Niagara River. All aspects of the project meet the criteria of Environmental Soundness, the emphasis is to “reclaim” some portion of a highly impacted section of the Niagara River shoreline by restoring native plants to portions of the GLCFS grounds. The project is Implementable by virtue of being realistic both in terms of initial costs and in terms of management. The project is Economically Viable as Buffalo State College has staff with expertise in the form of certified arborists, heavy equipment operators and technical staff onsite that can offer continued maintenance. Buffalo State College has an existing Partnership with Riverside Academy, this project will provide increased opportunity to expand and develop the curriculum of the Academy particularly as it relates to the “Blue Economy”.

Buffalo State College is providing project Match by performing the installation and construction of the osprey nest platform as well as maintenance of the web camera. Personnel time from

two Certified Arborists, two Research Technician's as well as grounds keepers and heavy equipment operators during the installation phase of the plantings will represent additional Match from Buffalo State College. This project proposes to produce outcomes that are of Clear Benefit to the Niagara River Greenway. The project focuses on improving habitat for migrating and local wildlife and then using these habitat enhancements as a teaching tool as well as a source of inspiration to the people of the Niagara region.

### **Estimate of Project Cost and Funding Requested**

**Project Duration:** Two years (2018-2019).

Cost sharing contribution by SUNY Buffalo State includes salaries, use of trucks, tractor, and other heavy equipment as well as waived indirect costs. In total, approx. \$24,334 (estimate), the Buffalo State Great Lakes Center Field Station along the Niagara River can provide at no-cost to this project: personnel time (certified Arborists and Landscape Planners). In addition Buffalo State offers facilities for educational purposes (outdoor classroom, laboratories)

### **Proposed Budget:**

Construction (installation of plant beds) \$20,000

Acquisition Osprey platform, plants, soil, supplies \$35,107

Administration (Indirect costs, 3 yrs.) \$14,300

Operation/Year (only requested amounts) Y1: \$ 94,768 Y2 \$2,000

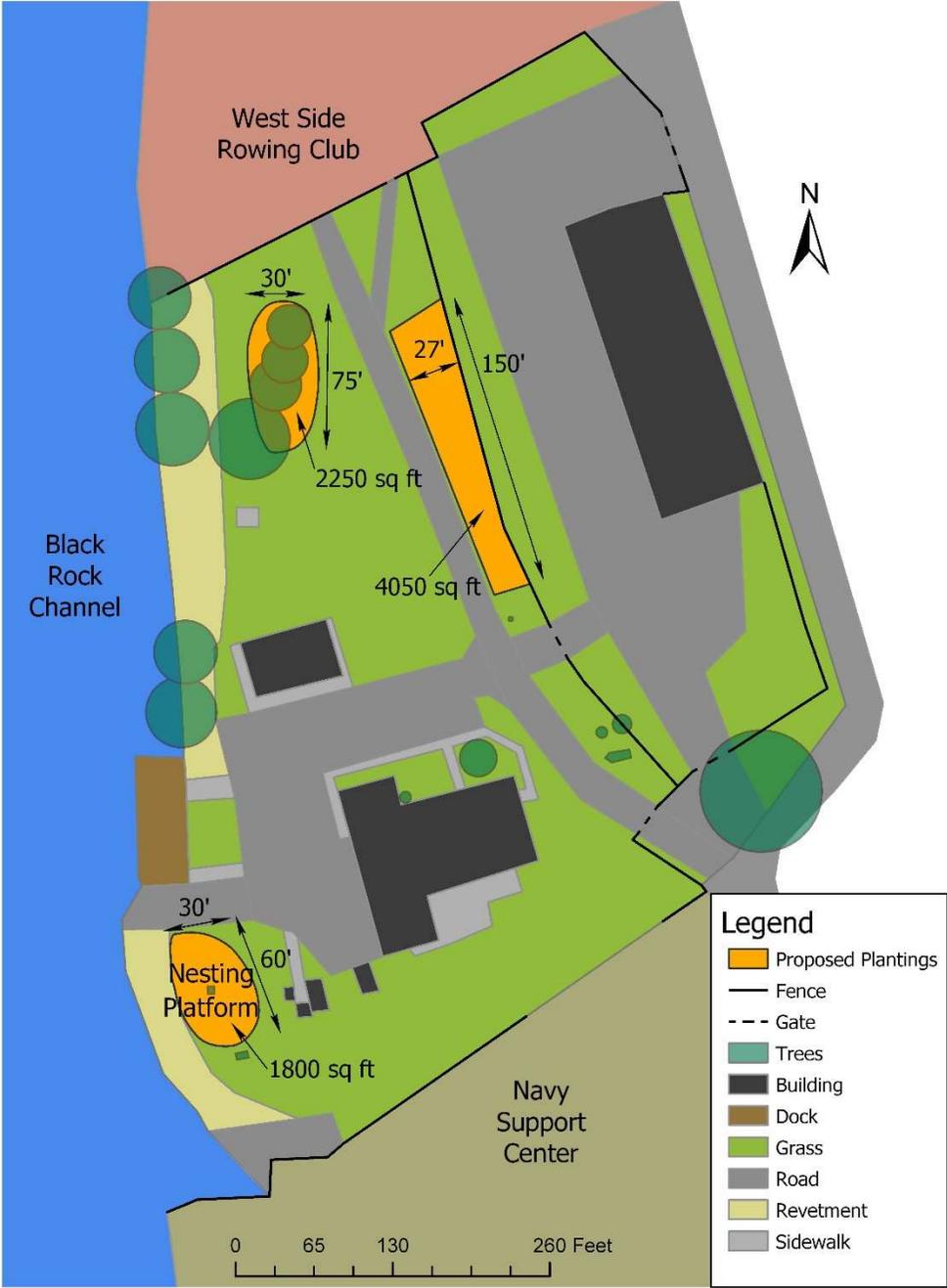
BSC Match \$24,334

TOTAL PROJECT COST \$98,947

TOTAL PROJECT REQUESTED \$74, 613

The GLCFS grounds are not classified as wetlands, or significant upland or aquatic habitat. There are no records of plant or animal species that are classified as rare, threatened, or endangered on the project site. The proposed work is not in conflict with any aspect of the State Environmental Quality Review Act (SEQRA).

# Proposed Nesting Platform and Habitat Enhancements at the Great Lakes Center Field Station



## Great Lakes Center Field Station Grounds



0 65 130 260 Feet

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

Region 9 Sub-office  
182 East Union Street, Suite 3, Allegany, NY 14706-1328  
P: (716) 372-0645 | F: (716) 372-2113  
[www.dec.ny.gov](http://www.dec.ny.gov)

5 January 2018

Mr. Greg Stevens  
Chairman, Niagara River Greenway Commission  
PO Box 1132  
Niagara Falls, NY 14303

Dear Chairman Stevens;

I am writing to you to express support for the project proposal by Buffalo State College's Great Lakes Center; "Osprey Nesting Platform and Migrator Habitat Enhancement Project".

This project will provide beneficial wildlife habitat in the Niagara River corridor through the construction of an Osprey nesting platform, installation of native plants to benefit migratory birds and butterflies and installation of a Purple Martin nesting structure. These improvements to wildlife habitat support DEC's core conservation mission to advance the sustainable management of our native wildlife populations. The additional project components of a nest camera and participation of local high school students from the newly established Riverside Academy are well aligned with the DEC's priority to connect New York's citizens with Nature.

By supporting and working with our partners at Buffalo State College in conservation we can more effectively manage and protect New York's natural resources and help fulfil the vision of the Niagara River Greenway Plan.

Sincerely,

Paul McKeown,  
Supervisor of Natural Resources  
NYS DEC Region 9

cc., Tim DePriest, DEC Niagara River Ecologist