

# GESC MEETING

DATE/TIME: 2 March 2016/10 AM

LOCATION: Reinstein Woods Preserve, 93 Honorine Drive, Depew, NY 14043

ATTENDEES: Steve Schoenwiesner (NYPA); Jeff Gerlach (NYPA), Timothy DePriest (NYSDEC); Dave Frazier (Gomez and Sullivan Engineers); Erin Redding (Gomez and Sullivan Engineers); Kerrie Gallo (Buffalo Niagara Riverkeeper); Scott Schlueter (USFWS); Paul McKeown (USFWS); Clint Farnham (Tuscarora-Seneca Nation); Lyuba Burlakova (Great Lakes Center); Eric Bruestle (Great Lakes Center); Knut Mehler (Buffalo State); Alicia Pérez-Fuentetaja (Buffalo State); Mark Clapsadl (Buffalo State); Stephanie Crockatt (Buffalo Olmsted Parks); Greg Robinson (Buffalo Olmsted Parks); Brian Dold (Buffalo Olmsted Parks); Loren Smith (Buffalo Audubon Society); Meaghan Boice-Green (NYSDEC)

I. Welcome - Tim DePriest

II. Project Updates

**A. Buffalo State – *Investigating Lake Sturgeon Habitat Use, Feeding Ecology, and Benthic Resource Availability in the Lower Niagara River.***

Knut Mehler and Eric Bruestle presented a progress report for 2015 and early 2016.

- i. Objective 1: Create benthic habitat maps and assess diversity and community structure of benthic invertebrates.

Benthic substrate maps were revised based on underwater videos. Bathymetric and flow velocity figures were generated to show abiotic variable affecting the benthic community. Benthic sampling was completed, and samples are continually being processed. The researchers related biological data to physical habitat through statistical analysis and habitat modelling. The result of this work is a sturgeon spawning habitat map for the Lower Niagara River.

- ii. Objective 2: Document habitat use, movements, and diet.

The research team captured 181 lake sturgeon and implanted 30 acoustic tags during the 2015 season. Diet was inferred from the contents of sturgeon's stomachs.

- iii. Mehler and Bruestle combined their work to map feeding grounds for lake sturgeon and other high trophic level fish.

**B. Buffalo State – *Emerald Shiner Habitat Conservation and Restoration Study in the Upper Niagara River***

Alicia Pérez-Fuentetaja presented the progress made by her research team.

Progress during the following research topics were made during 2015 and early 2016:

- i. Population Comparisons – Catch per Unit Effort comparisons showed that the 2015 population was 1/4<sup>th</sup> of the 2014 population. Reductions in part due to disease.
- ii. Habitat Use – showed locations where emerald shiners first appeared. Relationships between vegetation and larval fish presence is being researched.
- iii. Reproductive Success – The reproducing population is mostly 1-year-old fish.
- iv. Year-Class Formation – Most emerald shiners die in their first year. 26% of shiners reach 1 year old, and only 5% reach 2 years old.
- v. River-Lake Movements – hardened shorelines, such as the Broderick Park seawall, do not allow for breaks in the Niagara River current. The presence of hardened shorelines near the start of the Niagara River results in a velocity barrier to emerald shiner movement from the back into Lake Erie. Based on laboratory shiner swimming experiments, it impossible for the fish to swim against the current for long enough to reach the lake. Pérez-Fuentetaja presented water velocity model outputs that displayed the location of velocity barriers.
- vi. Importance of Shiners in Predator Diets – emerald shiners were found in the stomachs of numerous prey fish. They are an essential part of the Niagara River food web.

**C. Buffalo Audubon Society - *Black Alder Removal at Buckhorn Island State Park***

Loren Smith presented a progress report for 2015 and early 2016.

- i. The goal of this project is to sensitive sedge meadow habitat at Buckhorn Island State Park
- ii. The objective is to remove invasive European black alder. Originally there were about 1.3 acres of alder mapped. In 2015, 0.6 acres additional acres were identified. Loren showed maps of the infestation areas. In 2015, 20.65 tons of alder biomass were removed from the marsh. In 2016, 31.51 tons were removed as of February 19, 2016. Removal is still in progress, but is challenged by warm weather conditions.

III. New Proposal Presentation

**A. Buffalo Olmsted Parks Conservancy, US Army Corps of Engineers, City of Buffalo - *South Park Lake Ecosystem Restoration***

Brian Dold,presented this application for funding.

- i. This project is being conducted under the authority of Section 2016 of the Water Resources Development Act of 1996. It has been underway for a number of years, but needs more funding in order to complete study development.

- ii. To date, Buffalo Olmstead Parks Conservancy has spent \$342,671.00 on the study for this project. They are requesting an additional \$82,500.00 from GESC. The draft study report, written based on the work done so far, was mentioned but not supplied to GESC. The committee requested this draft report be sent to Tim DePriest.
- iii. Future funding, not being requested at this time, will be required for construction. This cost is estimated at \$3,200,000.00.

IV. ESC Proposal Modification Request *This item was added to the agenda during the meeting.*

**A. Friends of Reinstein Nature Preserve – Control of *Phragmites australis* in Reinstein Woods**

Meaghan Boice-Green, the Executive Director of Reinstein Woods Preserve, presented a status update for this ESC/HERF-funded project.

- i. The goal of this project is to project the cattail marsh in the sanctuary at Reinstein Woods. This is being carried out by killing invasive *Phragmites* from. Removal began in 2015. Due to low contractor costs, money remains in the budget and Boice-Green would like to use it toward treating *Phragmites* in a different part of the preserve.

V. Land Acquisition Workshop

Nancy Smith and Jajeane Rose-Burney of the Western New York Land Conservancy presented the process that the conservancy and similar organizations go through when they are interested in protecting a property through conservation easements or purchase.

VI. Re-Evaluation of Greenway/HERF Funding Criteria

Kerri Gallo will be stepping into the Vice-Chair position for the GESC. This additional responsibility is made possible by funding from the Niagara Relicensing Environmental Coalition.

Gallo led an internal discussion on GESC and ESC/HERF Funding Criteria. The goal is to establish clearer standards for committee meetings and project review.

VII. Consensus Discussion on New Proposal and Other Items

**A. South Park Lake Ecosystem Restoration**

The Committee reached consensus not to fund this project.

**B. Control of *Phragmites australis* in Reinstein Woods**

The Committee will wait to receive a status report and written request for change in budget and treatment area from Meaghan Boice-Green.