### Great Lakes Environmental Science (GLES) M.S. Internship Profiles

GLES M.S. students have completed their required GLC 688 Internships working on a number of environmental science projects at different agencies and organizations. A summary of their experiences can be found below.



# **Buffalo Niagara Waterkeeper**

Worked on a variety of riparian restoration projects, including Living Shorelines project monitoring and assessment, as well as community outreach and GIS mapping.

# **US Fish and Wildlife Service, Lower Great Lakes office**Internship addressed aquatic invasive species field and laboratory work including identification of fish, invertebrates, and aquatic plants.

### **US Department of Agriculture**

Worked within the Animal and Plant Health Inspection Service (APIS) Plant Protection and Quarantine (PPQ) on the European Cherry Fruit Fly program, which included tasks related to trapping and survey, control and treatment, mapping and data management, and community outreach.

### Institute of Technology, Sligo, Ireland

Assisted in field work and sampling for the Centre of Environmental Research and Sustainability projects that focused on water quality and farmland management, as well as GIS mapping and community outreach.

# **Buffalo Niagara Waterkeeper**

Worked on and contributed to several on-going stream restoration initiatives, including a satisfaction survey of residents using one completed restoration site and working on planning, design, and construction oversight of two other sites.

# **Buffalo Niagara Waterkeeper**

Served as an educational programs intern helping prepare and contribute to Water Academy coursework, educational tours, and the Young Environmental Leaders Program (YELP).





Used FEMA's HAZUS data and toolsets and GIS to model and estimate potential losses from flooding in Erie County, NY and along the New York State Lake Erie Shoreline.

### **Great Lakes Center**

Compiled wet-to-dry weight ratios of Great Lakes benthic organisms for long-term monitoring efforts.

### Center for Health and Social Research

Developed a web site and smartphone application to collect geospatial data on air quality parameters



# WNY Partnership for Regional Invasive Species Management (PRISM)

Researched slender false brome (*Brachypodium sylvaticum*), an invasive grass species, and developed a GIS-based model for habitat suitability.

## **Buffalo Niagara Riverkeeper**

Conducted field data collection and laboratory analysis for the Regional Lake Erie/Niagara River Watershed Management Plan – Phase 2.

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New York State Department of Agriculture and Markets

Studied plum pox virus and the Plum Pox Virus Eradication Program for the New York State Department of Agriculture and Markets Plant Industry.



### **Tifft Nature Preserve**

Designed a restoration project to improve fish habitat in Lake Kirsty, with final goals of ecosystem restoration, enhanced fish and wildlife habitat and improved public fishing.

### **Great Lakes Center**

Studied the effect of *Dreissena* on the organic matter, and Oligochaeta vertical distribution and abundance in the Great Lakes.

### **Great Lakes Center**

Historical investigation of the spatial and temporal variation of the benthic macroinvertebrate community of the Niagara River.

## **Buffalo Niagara Riverkeeper**

Conducted research on invasive plant species and Living Shorelines restoration projects in the Niagara River watershed.

## **Ecology and Environment, Inc.**

Monitored water quality parameters during construction of an offshore natural gas pipeline in an area with known threatened and endangered marine species (Atlantic Sturgeon and Right Whale).

## **Buffalo Niagara Riverkeeper**

Qualitatively assessed baseline stream conditions throughout the Niagara River Greenway to inform future watershed management decisions.