

Overview

- **Purpose:** To foster connections between local decision-makers, residents, and climate adaptation professionals to share knowledge of ravine issues and help incorporate science into land management decisions.
- **Partner:** Alliance for the Great Lakes
- **People:** More than 200 stakeholders at the two-day 2016 “Revitalizing Our Ravines” community workshop and planning charrette
- **Impact:** Creation of two new groups, the Regional Ravine Network and the Glencoe Ravine Alliance, fostered ongoing cooperation among leaders and decision-makers. Two stakeholder-recommended projects have been funded: the Illinois Lake Michigan Watershed Management Plan and a research project to update ravine data and assess fish habitat in ravine streams.

Thanks to networking, engagement, and collaboration facilitated by GLISA, Illinois leaders have the science *and* the relationships they need to keep their ravines preserved.

In northeast Illinois and southeast Wisconsin on the shores of Lake Michigan, steep-sided ravines offer distinct microclimates and habitats. The ravines support native plants, threatened and endangered species, migratory and wetland birds, and fish nurseries. They also help drain and clean rainwater as it flows into Lake Michigan.

However, coastal development and more frequent and intense precipitation events linked to climate change have increased runoff in the ravines, leading to high rates of erosion. This erosion threatens over \$7 million in investments made by the federal Great Lakes Restoration Initiative. In Illinois, the response to these challenges has been hampered by the limited capacity of small local governments and the lack of coordination among the private landowners who manage the majority of ravine land.

In 2014, the Alliance for the Great Lakes and the Great Lakes Integrated Sciences & Assessments (GLISA) partnered through a 2014 GLISA small grant to tackle ravine management by facilitating an extended network-building and adaptation planning process.

To jumpstart local and regional engagement, the Alliance convened community groups and a regional advisory group whose members were identified through a social network analysis led by GLISA. This process helped ensure that key leaders and sub-groups in the broader ravine community could forge connections and share information with one another.

Highland Park's Rosewood Ravine. Image: Lloyd Degrane.



Over 200 stakeholders—including residents, elected officials, consultants, municipal workers, and specialists in stormwater, erosion, restoration, native and invasive species, fish habitat, and climate change—joined a two-day workshop and planning charrette called **Revitalizing Our Ravines: Community Workshop 2016**. The event focused on education and collaboration to cocreate solutions that would improve ravine health.

As a result, key leaders and sub-groups are now linked through a strong regional ravine network. The Alliance intends to leverage this network to disseminate climate adaptation knowledge, including adaptation training for leaders through a partnership with GLISA, Sea Grant, and the National Oceanic and Atmospheric Administration (NOAA).

The Alliance used this work to win an additional \$272,000 from foundations to continue to support ravine management. They also plan to engage with ravine communities in northern Ohio, Minnesota, and to connect experts and stakeholders across the Great Lakes.



June 2016 planning charette. Image: Kenneth Frank, MSU.

“The Alliance coordinated the development of a nascent Ravine Alliance group in the Village of Glencoe, where residents on Ravine 2C are combining their efforts to understand and potentially manage their shared ravine together... In the workshop, ravine stakeholders and experts voted on the top priorities that the ravine region needed. All three are underway.”

– Senior Community Planning Manager, Alliance for the Great Lakes

About GLISA Advancing Climate Knowledge for Adaptation and Resilience with Great Lakes Communities

Established in 2010, GLISA is a collaboration between the University of Michigan and Michigan State University, supported by the National Oceanic and Atmospheric Administration (NOAA). As one of 11 NOAA Regional Integrated Sciences and Assessments (RISA) teams, GLISA works at the boundary between climate science and decision-makers, striving to enhance Great Lakes communities’ capacity to understand, plan for, and respond to climate impacts now and in the future. Our team of social and physical scientists collaborates to:

- Develop usable climate information tailored to stakeholder needs;
- Develop, implement, and evaluate resources and tools to apply climate information to decision-making;
- Facilitate collaborative activities, education, and training and support stakeholder networks; and,
- Investigate emerging climate issues and synthesize findings for practitioners.



Great Lakes Integrated Sciences + Assessments (GLISA)

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Example of GLISA's boundary chain model of stakeholder engagement for the Great Lakes Climate Adaptation Network (GLCAN). Climate information is tailored and moves through different boundary organizations (links in the chain) to connect science to users. Adapted from Lemos et al. 2014.