Great Lakes Climate Adaptation Network (GLCAN)

Mission Statement

GLCAN is a regional network of local government staff and partners that actively work together to identify and act on the unique climate adaptation challenges of the Great Lakes region.

GLCAN priorities:

- Share strategies for local government climate adaptation planning and implementation
- Improve the accessibility and integration of climate information into decision-making processes
- Strengthen relationships among municipalities and key institutional, non-profit, and business community partners in developing climate-resilient programs and strategies
- Increase the capacity of adaptation professionals working in the Great Lakes region
- Increase the capacity of regional adaptation planning
- Collaborate on initiatives that enhance the resilience of the Great Lakes region to climate-related impacts

GLISA
A NOAA RISA TEAM

USDN urban sustainability directors network

GLCAN at a Glance

Why We Exist: The purpose of this network is to build capacity for community resilience efforts by focusing on sharing information on and finding solutions to the unique challenges faced by the Great Lakes region.

What We Do: Building upon a core network of member cities and counties, GLCAN explores partnerships with other organizations that are working on Great Lakes climate challenges. GLCAN also seeks to promote connections among cities, counties, nonprofits, foundations, and universities.

Who We Are: Formed in 2015 as a partner network of the Urban Sustainability Directors Network (USDN), GLCAN is a member-driven peer network that integrates leading cities and counties across the Great Lakes region to address issues of community sustainability.

How We Work Together: GLCAN seeks to establish network connections and identify network priorities through bimonthly conference calls and annual meetings. GLCAN members share resources and updates through a variety of online methods.

Map of GLCAN Member Governments



Last updated November 2026

Success Stories

Resources and tools developed through GLCAN collaboration

Vulnerability Assessment Template

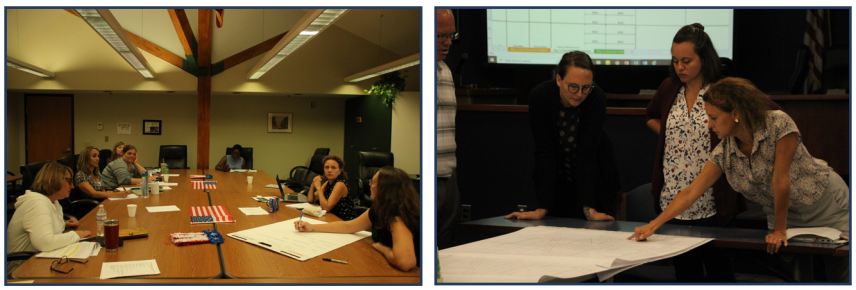
- 17 vulnerability assessments for cities with customized climate and socioeconomic information and a focus on stormwater adaptation
- In the process of scaling up to serve more local governments around the nation

Local Climatologies

- Over 240 Station Climatologies with localized climate information developed by GLISA Climatologists
- All Climatologies available at: http://glisa.umich.edu/climate-stations

Neighborhoods at Risk

- A mapping tool developed by Headwaters Economics that integrates socioeconomic and climate risk data to evaluate vulnerabilities
- Available at: https://headwaterseconomics.org/apps/neighborhoods-at-risk/



Photos: July 2019 workshop trainings for the Vulnerability Assessment Template with GLCAN member cities Toledo (left) and Ferndale (right). Photos by Kim Channell, GLISA

GLCAN Membership

Membership Eligibility

- Network membership is limited to local government staff and partners in the Great Lakes region.
- Members are committed to action through cross department and community-wide collaboration.

Membership Benefits

- Connect with a peer network of sustainability professionals in the Great Lakes region.
- Access to GLISA including local climatology resources, vulnerability assessment templates, and funding opportunities related to adaptation efforts being taken across the Great Lakes region. Potential early access to ongoing applied research projects with GLISA.
- Access to USDN.org and potential access to funding from USDN and other sources.

Climate Impacts in the Great Lakes Region

Urban areas in the Great Lakes region face several climate threats and impacts. GLCAN's key priority is to improve the capacity of GLCAN member cities to address these climate impacts, which include:

- Public health risks due to extended heat waves, reduced air and water quality, and increased range of vector-borne diseases
- Property and infrastructure damage due to increasing frequency and magnitude of major storms and accompanying flooding
- Damage to transportation infrastructure due to extreme weather variability (e.g., longer heat waves in the summer, increased freeze-thaw cycles in the winter, etc.)

Questions? Interested in Joining? Contact the GLCAN Coordinators:

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- Matthew Naud, GLISA Practitioner in Residence, GLCAN Network Support, mnaud@recycle.com

About GLISA

GLCAN is supported by GLISA, the Great Lakes Integrated Sciences and Assessments team. GLISA is one of the nation's RISA (Regional Integrated Sciences and Assessments) teams supported by the NOAA Climate Program Office. GLISA works at the boundary between physical science and decision makers, striving to enhance Great Lakes communities' capacity to understand, plan for, and respond to weather and climate hazards now and in the future. Since 2010, GLISA's team of physical and social scientists has served all eight U.S. states that border the Great Lakes.

Cover photo: Belle Isle. Photo by B.J. Baule, GLISA

GLISA
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