

Assessing Climate-Driven Migration in the Great Lakes

Climate change impacts coastal communities through flooding, storm surge, extreme weather (including drought), and sea level rise. These hazards may lead communities to relocate away from the coasts. Conversely, researchers have identified some areas of the United States as receiving areas for potential climate migrants. Despite increased reference to the link between climate change and human mobility (displacement, migration, planned relocation), there is a dearth of knowledge on how shifts in population patterns intersect with underlying socioeconomic, cultural, political, and environmental processes. Programs to empower communities to make decisions on relocation are lacking and there is a need to identify the resources that enable or constrain the ability of communities to relocate.

New York Sea Grant (NYSG) and other Sea Grant programs received funding from the National Science Foundation to develop a Research Coordination Network focused on climate-driven migration. The project named People on the Move in a Changing Climate (PEMOCC) is providing the scientific infrastructure that is required to conduct place-based, use-inspired collaborative research on climate-induced human mobility and regionally-tailored engagement strategies.

In June 2022, NYSG hosted and co-facilitated a PEMOCC workshop for the Great Lakes region in Buffalo, NY. The workshop featured the current state of knowledge on climate-induced human mobility, provided local/regional case studies, and addressed the unique needs of underserved and underrepresented coastal communities. Fifty participants from across the Great Lakes Basin states attended.

A "Great Lakes and Climate-Induced Human Migration" factsheet is now publicly available, prompting consideration of how climate change influence on human migration, displacement, and planned relocation may impact the Great Lakes region. A related presentation was made to the Erie County Climate Task Force.

Workshop outcomes that will help communities in the Great Lakes Basin and elsewhere move forward in their efforts to address climate-driven migration challenges and opportunities include:

- 1) data and research gap analyses,
- 2) a framework for conducting use-inspired research,
- 3) education and engagement needs for building community resilience and climate adaptation, and
- 4) a network of interdisciplinary and diverse researchers engaged in the study of climate-induced human mobility.

Partners:

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- **Funding:** National Science Foundation


The Great Lakes and Climate-Induced Human Migration


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Overview

Lake Superior, Michigan, Huron, Erie, and Ontario come together to form the Great Lakes, an invaluable freshwater resource that contains 95% of the United States' surface water supply.¹ More than 34 million people in the United States and Canada and 3,500 species of plants and animals live within the Great Lakes basin.² We depend on the Great Lakes and the social, environmental, cultural, and economic benefits that they provide. These services have created the preconditions for a thriving regional economy that directly supports more than 1.3 million jobs in coastal counties in the following sectors: "manufacturing; tourism and recreation; transportation and warehousing; and agriculture, fishing, and food production."³ However, unsustainable growth and development are exacerbating environmental degradation at the local level while contributing to rising temperatures across the globe.

Annually, more than 20 million people are displaced by extreme weather events, a number that is projected to exceed 140 million by 2050 without action to mitigate the impacts of climate change.⁴ After decades of population decline in manufacturing centers across the Great Lakes region in the latter half of the twentieth century, there is an opportunity to welcome those who have been displaced from other regions while supporting equitable growth and revitalization efforts. Climate migrants may find themselves attracted to the Great Lakes basin due to its northeastern and midwestern location, an abundance of freshwater resources, and room to accommodate growth. Even though the region is anticipated as a future climate destination, climate change will still impact the Great Lakes at the local level. Understanding the specific challenges that climate change will pose and how those challenges will likely induce human migration is critical to ensuring resilience in the Great Lakes moving forward.



PEMOCC is supported by the National Science Foundation under Grant No. 1940882. Any opinions, findings, and conclusions or recommendations expressed in this fact sheet are those of the authors and do not necessarily reflect the views of the National Science Foundation.

PEMOCC Great Lakes Regional Workshop
www.nyseagrant.org

2022 Great Lakes and Climate Migration Factsheet:
<https://www.nyseagrant.org/GLPeopleOnTheMove>

The Sea Grant Focus Area for this project is Resilient New York Communities and Economies.

New York Sea Grant is a joint program of Cornell University, the State University of New York, and NOAA.
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