



Name in a Changing Climate

Research partnership informs Tribal stewardship of name

In response to concerns from Tribal leadership in the Midwest region, a Midwest Climate Adaptation Science Center (MW CASC) and Great Lakes Indian Fish and Wildlife Commission (GLIFWC) team explored how climate change may affect name. This project investigated potential impacts and what can be done to help name adapt to a changing climate.

Language Guide

Name (*nuh-may*; Ojibwe)
Nmè (Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians)
Nama'ō (Menominee)
Lake Sturgeon (English)

Research Path

Foundation - Relationships and Cultural Context

The project team's approach to relationship building:

1. **Building a core internal team to develop processes and ensure success**
2. **Recognizing and supporting data and knowledge sovereignty**
3. **Communicating the research process and how information will be used with participants, including offering multiple checkpoints for feedback**
4. **Building time and flexibility into the process to meet participant capacity**

Many Tribes have strong subsistence, cultural, and spiritual relationships with name. Understanding that there is much sensitive and cultural knowledge that folks are not able to share, the team focused this research project on the ecological aspects and rehabilitation of name.

Identifying Needs

Informed by conversations with representatives from Tribal Nations and organizations, the research team identified three key outcomes for this research project:

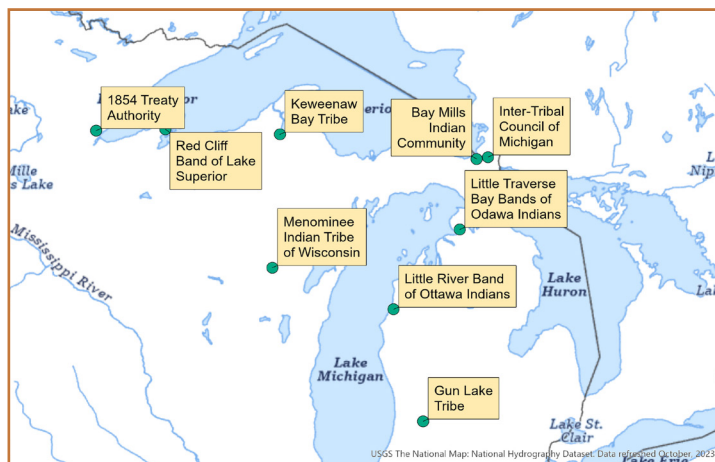
1. **A synthesis of current and projected climate impacts for name**
2. **Potential climate adaptation options for name**
3. **Future research priorities and areas of collaboration between the MW CASC and Tribal partners**



Performing Research

To determine how name is impacted by climate change, researchers:

1. Held conversations with biologists, natural resource directors, historic preservation officers, and managers from Tribal nations and organizations across the region
2. Performed a literature synthesis of climate drivers and model projections



Sharing Results - What Will Impact Name?



increasing precipitation



increasing temperatures



decreasing ice cover



decreasing snow melt

1. Fast-Flowing Streams/Rivers

Who? Adults, Eggs
When? Spring (April-June)
What? Spawning



2. Nearshore Lakes/Rivers

Who? Juveniles, Larvae
When? All Seasons
What? Nursery Habitat



3. Deeper Lakes/Rivers

Who? Adults, Juveniles
When? All Seasons
What? Feeding, Growth



Sharing Results - How Could We Help Name Adapt?

- Nearshore, spawning, and wetland habitat restoration
- Reconnecting floodplain habitat
- Reducing non-climate stressors
- Reducing or modifying dams
- Targeted water flow management

Next Steps

- Climate adaptation strategies could be incorporated into name stewardship plans and activities.
- This project's partnership-driven research process could be expanded to other beings and initiatives.



Data Sovereignty

The MW CASC observes principles for responsible and ethical conduct of research. We respect data sovereignty and recognize the importance of clear, transparent communication related to knowledge sharing by and with collaborators, partners, and participants.

For MW CASC consortium members (College of Menominee Nation, Great Lakes Indian Fish and Wildlife Commission), data collected on reservations and ceded territories will be considered "Tribal data," subject to the laws and codes of the Tribal government. The Tribe maintains sole ownership and control of all Tribal data. Such data shall not be shared with third parties without the express written permission of the Tribe.

The U.S. Geological Survey (USGS) must obtain Free Prior and Informed Consent from Indigenous Peoples before receiving and including Indigenous Knowledge in scientific research. Tribal data shared with the USGS are not subject to the Fundamental Science Practices data release requirements; however, Tribal data shared with the USGS may be subject to release under the Freedom of Information Act. Prior to project commencement, joint decisions about data sharing, collection, and protection will be outlined in an agreement.

Throughout this project, the research team emphasized how they intended to use participants' information, including to generate a peer-reviewed summary of these findings in collaboration with all interested participants. Every participant was invited to act as a co-author on the work and provide feedback as the summary was developed.

About the Midwest CASC

The MW CASC is a consortium of research-focused academic, Tribal, and non-profit partners working collaboratively with the USGS. We team scientists with natural and cultural resource managers to deliver science to help fish, wildlife, water, land, and people adapt to a changing climate. mwcasc.umn.edu



Tribal Climate Resilience Liaisons

The MW CASC has two Tribal Climate Resilience Liaisons who work to facilitate stronger relationships between Tribes, climate researchers, state and federal organizations, academic institutions, and the MW CASC. In addition, they work with Tribes to build capacity and provide support by assisting with climate resilience efforts.

Get in Touch

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