

# U.S. Geological Survey Great Lakes Science Forum

Jon Hortness *Great Lakes Program Coordinator U.S. Geological Survey February 16, 2022* 

U.S. Department of the Interior U.S. Geological Survey



# Background

## **USGS Congressional Appropriations Language**

"... The Committee Encourages the Survey to host a collaborative forum with Federal, State, and Tribal partners, academia, and other interested stakeholders to share current science, identify data gaps and areas of concern, and to prioritize next steps and identify resources needed for a Great Lakes integrated science plan..."

#### Goals:

- Identify data gaps and areas of concern
- Prioritize next steps
- Identify resources needed for Great Lakes integrated science plan



## Process

#### Collaboration with Stakeholders

- Academic scientists --- 18
- Correspondence with Tribal Nations --- 42
- Tribal Consortiums
  - Chippewa Ottawa Resource Authority
  - Great Lakes Indian Fish and Wildlife Commission
  - 1854 Treaty Authority
- International Joint Commission (IJC)
- Great Lakes Commission (GLC)
- Great Lakes Fishery Commission (GLFC)
- Healing Our Waters Coalition (HOW)
- Conference of Great Lakes and St. Lawrence Governors and Premiers
- U.S. Environmental Protection Agency (EPA)
- National Oceanic and Atmospheric Administration (NOAA)



## Reports

### **Report to Congress**

- Committee document for internal use only
- Submitted July 2021

#### **USGS Open File Report**

- Public report developed at the request of House Subcommittee
  - Resulting from "significant stakeholder interest"
- Released October 2021
  - Carl, L.M., Hortness, J.E., and Strach, R.M., 2021, U.S. Geological Survey Great Lakes Science Forum—Summary of remaining data and science needs and next steps: U.S. Geological Survey Open-File Report 2021–1096, 4 p., https://doi.org/ 10.3133/ ofr20211096.



# Major Findings/Needs

- Creation of new science including the exploration of advanced technologies
  - Next-generation sensors
  - Deployment of autonomous technologies
  - High-performance computing capabilities
  - Initiation of critical science activities for under-ice conditions
- Address fundamental deficiencies
  - Expanded data collection
  - Early detection, early warning, rapid response
  - Expansion of public health assessments



## Major Findings/Needs

- Develop and test enhanced and/or new models
  - Conceptual frameworks or models to help delineate full ecosystem structure and function
  - Support resource management decision making at the basin scale
- Structured coordination
  - More structured coordination is needed across all science and monitoring entities (Federal, State, Local, University, Tribal, etc...)
  - Enhance the ability to inform current and future management decisions



## Next Steps

- Participate in and support the IJC effort
- Wait for additional guidance from Congress
- Continue to work with partners and stakeholders to identify and fulfill Great Lakes science needs

