

Year-Round and Winter Observing Request for Proposals

Project Overview

The Great Lakes provide drinking water, transportation corridors, fisheries, recreation opportunities, and ecosystem services that support millions of people throughout the region. Understanding and predicting changes in Great Lakes ecosystems requires observations that extend throughout the year. However, the existing Great Lakes observing network collects limited over-winter data because many observing platforms are seasonally operated. As a result, critical information is lacking during late fall, winter, and early spring, reducing our ability to support commercial shipping and fisheries, understand ice processes and seasonal ecosystem dynamics, evaluate climate-driven changes, and develop and validate forecasting tools.

To address these challenges, the Great Lakes Observing System (GLOS) is soliciting proposals to support the development, deployment, and operation of technologies and observing approaches that improve year-round monitoring of the ecological health of the Great Lakes. GLOS seeks projects that advance observations during winter and shoulder seasons, generate data and tools that are made publicly available through the GLOS Seagull platform, and improve understanding of year-round physical, ecological, and biogeochemical processes throughout the Great Lakes basin.

Successful projects will contribute to a more resilient and sustainable Great Lakes observing system by expanding observational coverage, supporting forecasting capabilities, informing management decisions, and improving understanding of changing ecosystem conditions. The projects should support impacted communities including, but not limited to, shipping industry partners, municipal water utilities, Indigenous communities, and coastal managers.

GLOS will oversee the execution of the successful projects, with data being shared through Seagull for service delivery to benefit the broader community. GLOS does not guarantee ongoing operational support but may consider assets for inclusion in future funding opportunities where appropriate.

Award recipients will be asked to participate in the Great Lakes Winter Network, a regional year-round/winter science community of practice. The intent is to foster collaboration among award recipients, community partners, researchers, and stakeholders. Virtual meetings will be held throughout the project period to share lessons learned, discuss challenges, and coordinate regional observing efforts.

Project Goals

- Develop, test, and deploy innovative technologies that improve observations during winter and shoulder seasons.
- Improve understanding of winter limnology, ice dynamics, watershed-lake interactions, and seasonal ecosystem processes.

- Advance year-round monitoring of Great Lakes ecological, physical, and biogeochemical conditions.
- Support the development, validation, and improvement of ice forecasting and ecological forecasting tools
- Increase public availability and accessibility of observations, models, and decision-support tools through the GLOS Seagull platform.
- Engage local and regional stakeholders in identifying information needs, evaluating observing approaches, and planning for long-term sustainability of observing assets.

Topics of Interest

GLOS is soliciting proposals that address one or more of the following areas of interest:

- Year-round Observing Technologies:
 - Development, adaptation, testing, or deployment of innovative technologies that improve year-round monitoring of Great Lakes conditions
 - Expansion of observing capacity during late fall, winter, and early spring
 - Autonomous, remote, low-power, ice-capable, or otherwise novel observing systems that reduce operational barriers to winter monitoring.
- Winter Limnology and Ecosystem Processes
 - Studies that improve understanding of winter ecological, biogeochemical, and physical processes within the Great Lakes.
 - Projects that examine spatial and temporal variability through repeated sampling and observations at multiple locations.
 - Research investigating drivers of winter ecosystem variability and impacts on subsequent spring and summer conditions.
 - Integration of in situ observations, remote sensing, and/or modeling approaches.
- Watershed-Lake Linkages During Winter
 - Observations and analyses that improve understanding of winter watershed processes and their influence on Great Lakes ecosystems.
 - Studies examining nutrient, sediment, contaminant, carbon, or freshwater transport during winter conditions.
 - Investigation of how changing winter conditions alter watershed-lake interactions and ecological responses.

Eligibility and Additional Considerations

GLOS can support funding of governmental agencies, non-profit organizations, academic institutions, and for-profit organizations based in the United States. Applicants must certify that the proposed project is not receiving, nor has received, funding from any other source for the same scope of work.

Proposals can be submitted by one or more applicants, but at least one of the applicants must be a permanent employee of the organization that will receive the award.

Awardee Responsibilities:

- Collaborate with GLOS team members to ensure adequate transfer to GLOS of any data, outcomes, tools, and/or other pertinent information produced with the support of the award,
- Allow access throughout the project to pertinent information and data, and
- Disclose in writing equipment purchases of more than \$10,000.

GLOS will consider projects up to two years in length.

Cost-sharing and/or in-kind contributions are highly encouraged but not required. GLOS reserves the right to request additional information from applicants prior to making an award. GLOS reserves the right to negotiate the budget of successful projects. Proposals should not exceed \$250,000 and should adhere to U.S. Government Cost Principles outlined in [2 CFR Part 200](#). This budget cap applies per individual award.

Proposal Evaluation Criteria

Proposals will be reviewed based on the following review criteria:

- Feasibility, clarity, and scientific soundness of the proposed plan, including long-term sustainability of projects where applicable.
- Meeting strategic objectives in improving year-round and winter observing capacity in the region.
- Project teams' engagement of adequate organizations, stakeholders, and resources to accomplish the proposed outcomes.
- Budget appropriateness and cost efficiency.

Proposal Format

Proposals must include the following sections, and they should adhere to the page limits indicated below for each section. Use a 12-point font, and 1" margins throughout.

Project Statement of Work and Budget document (Maximum 6 pages total)

- Project Description
 - Summary (<200 words; to be published on the GLOS website)
 - Project Background, Purpose, and Objectives
 - Project Approach, Methods, Deliverables, and Outcomes
 - Timeframe
- Personnel
 - Include a brief description of the role of each applicant
 - In multi-organizational proposal include an explanation of the nature of the collaboration
- Budget justification

- Justify clearly and in detail applicants' requests for salaries, fees, travel, and any equipment procurement.
 - Explain any cost-sharing, and detail any in-kind contributions.
- Budget ([budget template](#); will automatically download. This is NOT included as part of 6 pages, but should be included in proposal packet)

Supporting materials

- Personnel CV(s)
 - Include up to two-page CV(s) for each applicant
- Letter(s) of support
 - Required if applicant(s) proposes to make use of facilities, personnel, or other resources external to their organizations (otherwise, optional).

Proposal Submission

Proposal submittal should be sent electronically as a single PDF attachment to proposals@glos.org. Proposals are due on August 10, 2026 at 5 pm ET.

Reporting Requirements

Successful applicants will be required to submit progress reports at six-month intervals after the start of the project, and a final report at the end of the project. Selected award recipients will also be asked to present their findings in a GLOS-led webinar(s), as well as at a workshop to be held at the conclusion of the project.

Review Timing and Expected Awards

Proposals will be reviewed after the deadline, with notifications of successful awards given within 4-5 weeks. Project start dates should be no earlier than October 1, 2026 and project end dates should be no later than June 30, 2029.

GLOS expects to fund 3 projects.

Contact Information

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