2022 Call for Proposals

Great Lakes Research Consortium
Small Grants Program

Offered by:

Great Lakes Research Consortium, NYS Department of Environmental Conservation and the New York Great Lakes Basin Advisory Council

General Information

2022 RFP Highlights

- *RFP Proposals are due* ***August 1, 2022. This request for proposals is targeted towards the information needs of the upcoming 2023 Cooperative Science Monitoring Initiative (CSMI) on Lake Ontario****.*
- *Funding period will be January 1, 2023 through December 31, 2023. This time frame coincides with the CSMI 2023 project period. Applicants should complete all field work and expenses within this timeframe.*
- *A budget template is included for your convenience.*
- Total Budget should not exceed $25,000. Indirect costs are now allowed but limited to 13% of the Total Direct Costs. Budget supplements of up to $5,000 are available to support student participation in the project.
- A Data Assurance Plan is now required for all water quality monitoring projects.
- Outcomes and deliverables must now be presented in table format.
- Matching funds are not required and should not be included in the budget.

Program Goals: This grant program provides seed funding for new, cooperative projects that improve our understanding of, and/or management of Lake Ontario. New this year, projects are limited to projects that will address participation and needs of the 2023 CSMI on Lake Ontario. Routine monitoring outside of the needs of CSMI 2023 and one-time site-specific infrastructure projects are not appropriate topics for this RFP.

Money Available: The maximum amount for an individual grant is $25,000. However, projects asking for less than the maximum are encouraged. In addition, a budget supplement of up to $5,000 is available to support student participation in the CSMI program. Funding for this program comes from the New York State Environmental Protection Fund's (NYSEPF) Ocean-Great Lakes Ecosystem Conservation Act (OGLECA) programs. These are New York State-appropriated funds subject to all applicable state rules and regulations. Eligible organizations include profit and non-profit entities, organizations or institutions located within New York State. In-direct costs are limited to 13% of the total direct costs. We expect to fund up to 4 projects through this solicitation. Award decisions will be announced in late summer 2022 with funds available for a January 1, 2023 through December 31, 2023 award period. Travel support is also available to attend CSMI planning meetings prior to January 2023.

Proposal Submission: Proposal submissions should be sent electronically **as a single PDF file** attachment to GLRC@esf.edu. Documents should be checked for viruses or malware prior to sending and any documents that fail the campus security screening will be deleted without opening. *Electronic versions of the proposals should be received no later than midnight on* ***August 1, 2022****. Prior to funding, all successful recipients will be*

asked to submit an original signed copy of the proposal to: Great Lakes Research Consortium, SUNY College of Environmental Science & Forestry, 253 Baker Lab, Syracuse, NY 13210. Questions may be addressed to Greg Boyer, Director of the GLRC, at GLRC@esf.edu or by phone at 315-470-6825.

Funding Criteria: The intent of the Great Lakes Research Consortium (GLRC) small grants program is to promote research that contributes to the protection and restoration of the health of the Great Lakes and contributes to ecosystem-based management of the basin's natural resources and environmental quality. Projects funded by this small grant program must meet one or more of the priority goals listed in the Great Lakes Action Agenda (GLAA), and must satisfy the following criteria*:*

- **Appropriate:** Project must be consistent with the goals and purposes of the New York's Great Lakes Basin: Interim Action Agenda as described in the GLAA. Applicants are also strongly encouraged to review US-EPA's Summary of the 2023 Field Year Priorities and address those research needs (see below).
- **Collaborative:** Project must foster communication and cooperative action between New York's colleges and universities, state and local government, business and industry, and environmental or conservation organizations.
- **Effective:** Proposals must demonstrate how the project will (a) promote ecosystem-based management or science-informed decision-making, (b) lead to measurable progress in achieving the goals and priorities of the GLAA or CSMI and (c) assure the likelihood of accomplishing intended outcomes.
- **Productive:** The project must have defined qualitative or quantitative outcomes. Projects should identify the potential to grow into larger projects consistent with the GLAA goals and purposes. These outcomes now need to be presented in table format (see template).
- **Relevant:** In addition to addressing the needs of CSMI 2023, Projects should describe why their projects are relevant to New York State Great Lakes Action Agenda (https://www.dec.ny.gov/lands/91881.html). This agenda describes existing environmental, social and economic goals previously identified for New York's Great Lakes region, with emphasis on using an ecosystem-based management approach. Priorities include: (a) virtually eliminate discharges of persistent toxic substances, (b) control sediment, nutrient and pathogen releases, (c) accelerate the delisting of New York's Areas of Concern, (d) combat invasive species, (e) conserve and restore fish and wildlife, (f) conserve Great Lakes water supplies, (g) enhance coastal resiliency and ecosystem integrity, (h) promote smart growth, redevelopment and adaptive reuse, (i) enhance recreation and tourism opportunities and (j) plan for future energy development. In addition, the GLAA includes four cross-cutting priorities to (k) support and promote partnerships among stakeholders, (l) coordinate monitoring and information management, (m) support environmental education and outreach, and to work towards (n) climate change adaptation and mitigation.

New this year, this round of small grants is specifically to encourage participation in the upcoming 2023 Cooperative Science Monitoring Initiative on Lake Ontario. Prior to submission, applications are should review the description and draft science needs for the CSMI program available at https://greatlakescsmi.org/ontario/ and EPA's summary of 2023 Lake Ontario CSMI priorities available at https://www.epa.gov/great-lakes-monitoring/cooperative-science-and-monitoring-initiative-csmi. Projects from new faculty members at the GLRC member campuses are highly encouraged. Applicants should look also at the respective websites for the NYGLPF (https://www.dec.ny.gov/lands/25582.html) and the Great Lakes action agenda described above for guidance on how their project can further these goals. Projects should not duplicate existing programs, nor be used for base program support of ongoing monitoring and infrastructure projects. GLRC small grant funds cannot be used for land acquisition or capital construction costs.

Proposal Review: The Great Lakes Research Consortium will establish a review panel to evaluate proposals

based on technical merit. This technical review will evaluate how well each proposal furthers the goals and objectives of the GLAA and the relationship to the upcoming CSMI research needs. Based on this review and technical ranking, projects selected for funding forwarded to the Department of Environmental Conservation for final approval.

Proposal Format:

A. Cover Sheet:

1. Project Title
2. Principal Investigator (Name, Affiliation, Address, City, State, Zip, Phone, Fax, Email)
3. Collaborator(s) (Name, Affiliation, Address, City, State, Zip, Phone, Fax, Email)
4. Amount Requested
5. Priority Category (Identify the primary NYGLPF and GLAA category addressed)
6. Institutional Signatures

B. Proposal: The text of the proposal should be no more than 5 pages, excluding Cover Sheet, Expected Objectives and Outcomes Table, Personnel and Collaboration Materials, Data Assurance Plan, Budget and Budget Justification, References, and other supporting documents. It must include the following elements:

1. **Nontechnical Abstract:** Briefly (no more than ***one*** paragraph, <300 words) summarize the project's focus and goal, scope of work, nature of collaboration, and significance to the priorities of the GLAA. This abstract will be used for distribution on the GLRC website and should be written so that the general public and understand the project importance.

2. **Statement of the Project's Focus:** State the issues, hypotheses and assumptions that are to be addressed by the project and in a clear and concise manner how the project relates to the objectives and priorities identified in the CSMI 2023 Field year priorities

3. **Scope of Work**: Describe the purpose and scope of work to be accomplished. Include the following: purpose of the project and specific objectives to be achieved; scientific methodology employed; public benefits and implications for ecosystem-based decision- making or policy development; end-products of the project including how these products will be used to further promote the project and goals of the GLAA and CSMI; and an Outreach Plan to share the project's outputs/outcomes with appropriate stakeholders or the general public.

4. **Timeframe:** Provide a timeframe for completion of objectives and major milestones of the work. Please note that the timeframe must be consistent with the funding period.

C. Expected Objectives, Activities, Outputs, Outcomes, and Deliverables: This needs to be done in Table format (see template) with column 1 being objectives, column 2 being activities and outputs for that objective, column 3 being the deliverables or tangible products for that objective, and column 4 being the outcomes (impacts) for that objective. **This table is not included within the 5-page limit** but you may want to identify two or three objectives that highlight what you expect to accomplish with this funding as part of your Outreach Plan that is included within your five pages limit.

D. Personnel and Collaboration: Describe the personnel to be assigned to this project. **Include 1-2 page resumes for all lead personnel**. Additionally, clearly identify and describe the role of your collaborators. Clearly indicate if a student or intern is involved in the project and you are requesting a $5,000 student supplement. You should list their major advisor, describe how the intern/student will be recruited, and detail how their participation in the project will benefit their education. This information is not included in the 5-page proposal total.

E. Data Assurance Plan: The intent of the Great Lakes Research Consortium small grants program is to support basic or applied research projects that meet the research needs of the Great Lakes Action Agenda. It is not intended to support projects whose end goal is for regulatory use. Starting in 2018, all Water Quality Assessment and Monitoring projects, as defined in NYS Public Health Law Section 502 (http://codes.findlaw.com/ny/public-health-law/pbh-sect-502.html) and funded by NYS DEC, must have a Data Assurance Plan. Those examinations conducted in the field or laboratory for the purposes of public or personal health protection or the protection of the environment or natural resources need to be:

- Performed in accordance with an effective quality control system for the planning and assessing of environmental measurements, and for conducting required quality assurance and quality control procedures to promote and maintain the accuracy and reliability of environmental measurements and test results.
- Performed by a laboratory certified by the New York State Department of Health (NYSDOH) under the Environmental Laboratory Approval Program (ELAP) if ELAP has issued a certificate for the specific parameter.
- Performed in a manner that ensures all requisite quality control and calibration requirements of the method are met including field testing, sample collection, preservation, and record keeping. When the method does not detail requirements for any or all of these items, the basic quality assurance and quality control requirements defined in 40 CFR Part 136.7 shall be followed.

If your project does NOT involve the assessment or monitoring of water quality, you must include a statement that indicates that your project does not fall under these requirements and indicate why. Failure to address these concerns may result in the project being disqualified without review.

F. Budget and Budget Justification: The detailed budget and budget justification should start on a separate page entitled "Budget and Budget Justification" and is not included in the 5-page proposal total. A budget template is attached and all expenses must be described in detail in the justification.

1. Total funds requested.
2. Salary for all personnel being paid by the grant in terms of person-months.
3. Fringe benefits. Appropriate fringe benefits must be budgeted for all personnel paid through this project.
4. Permanent equipment. This is defined as items having a life of one or more years and/or a cost of $5,000 or more. For items fitting this description, you should explain why this equipment cannot be obtained through loan or rental and detail what will happen with this equipment after the end of the project.
5. Supplies and non-permanent equipment. Indicate what consumable supplies will be required to complete this work.
6. Travel. Indicate all travel required for the project. If travel to a scientific meeting is required – you must explain why that meeting is essential for the completion of the project. All travel must comply with NYS allowable per diem allocations. Travel outside of NYS must be approved by GLRC in advance.
7. Indirect costs. Indirect costs are limited to 13% Total Direct Costs.

G. Access to Research Vessels: CSMI projects at offshore locations may require access to large research vessels such as the *Lake Guardian* or CCGS *Limnos*. While we cannot guarantee access to these ships, such projects should clearly identify the number of participants requiring access, required facilities, preferred timing and other important considerations on a separate page. GLRC will try to facilitate that access.

H. Notification and Reporting requirements: Successful projects will receive written notification and a separate list of reporting requirements. These requirements include both mid-way and end-of-project reports, as well as additional details as how the successful applicant will achieve their outreach reporting requirements. Send correspondence to:

Great Lakes Research Consortium
320 Jahn Laboratory
SUNY College of Environmental Science and Forestry
1 Forestry Drive
Syracuse, New York 13210
Email: glrc@esf.edu

Attachments (3)

Objectives, Activities, Outputs, Outcomes, and Deliverables Template

Objectives (actions taken towards your goal(s))	**Activities and Outputs (what you will do)**	**Deliverables (actual, tangible products and results)**	**Outcomes (knowledge transferred, impacts, and importance)**
Example: **Objective 1.** Determine the phosphorus loading by the Oswego River into Lake Ontario	a. Collect weekly samples at the Port of Oswego for determination of total phosphorus and soluble reactive phosphorus b. Obtain the weekly flow data from the USGS gauging station in Oswego NY.	Prepare a time series of phosphorus concentration with time. This information along with the USGS flow data will be used to calculate the seasonal loading of total phosphorus to Lake Ontario from the Oswego River.	Loadings from the Oswego River will enable water quality managers to better estimate the impact of best management practices in the Oswego River water on primary productivity in the nearshore region of lake Ontario. These loadings are also an important driver in the near shore nutrient models currently being developed for Lake Ontario and an important consideration in the IJC reconsideration of the nutrient targets for Lake Ontario.
Objective 2……. **Repeat for each objective.**			

Proposed Budget Submitted to
Great Lakes Research Consortium Small Grants Program 2021

TITLE:
May 1, 2021 - June 30, 2022

CATEGORY	5/1/21 - 4/30/22	5/1/22 - 6/30/22	Total
A. Senior Personnel:			
PI:	0	0	0
Summer Salary	0	0	0
CoPI:	0	0	0
CoPI:	0	0	0
CoPI:	0	0	0
Total Senior Personnel	0	0	0
Other Personnel:			
Graduate Student	0	0	0
Undergraduate Student, hourly	0	0	0
Total Salaries and Wages	0	0	0
B. Benefits (@ insert fringe benefit rate)	0	0	0
Regular Employees @	0	0	0
Summer Salary @	0	0	0
Graduate Student @	0	0	0
Undergraduate Student @	0	0	0
Total Benefits	0	0	0
Total S, W and B	0	0	0
C. Permanent Equipment (please list):	0	0	0
	0	0	0
Total Equipment	0	0	0
D. Materials and Supplies	0	0	0
E. Travel:			
1. Domestic	0	0	0
2. Foreign	0	0	0
Total Travel	0	0	0
F. Other Direct Costs (please list):			
	0	0	0
	0	0	0
	0	0	0
Total Other Direct Costs	0	0	0
G. Total Direct Costs	0	0	0

note: Indirect costs are not allowed on these projects.

Great Lakes Research Consortium 2022 Small Grants Program

Title
January 1, 2023 - December 31, 2023

CATEGORY	1/1/23 - 12/31/23 **12 months**	TOTAL
A. Senior Personnel:		
PI:	0	0
Summer Salary	0	0
CoPi:	0	0
CoPi:	0	0
CoPi:	0	0
Total Senior Personnel	0	0
Other Personnel:		
Grad Student	0	0
Undergrad Student, hourly	0	0
Total Salaries and Wages	0	0
B. Benefits @ (insert fringe benefit rate)	0	0
Regular Employees @	0	0
Summer Salary @	0	0
Graduate Students @	0	0
Undergraduate Students @	0	0
Total Benefits	0	0
Total S, W and B	0	0
C. Permanent Equipment:	0	0
Total Equipment	0	0
D. Materials and Supplies	0	0
E. Travel:		
1. Domestic	0	0
2. Foreign	0	0
Total Travel	0	0
F. Other Direct Costs (please list)		
	0	0
	0	0
	0	0
	0	0
	0	0
Total Other Direct Costs	0	0
G. Total Direct Costs	0	0
H. Indirect costs	0	0
Total Project Costs (sum of G and H)	0	0

Lake Ontario CSMI
Summary: 2023 Field Year Priorities

This summary of priorities for the CSMI 2023 Lake Ontario field year was prepared by the Annex 10 CSMI Task Team, based on the Annex 2 CSMI Priorities Memo provided to Annex 10.

In addition to the below priorities, a priority was identified for the 2023 CSMI projects to be inclusive of indigenous communities and traditional ecological knowledge. Indigenous Nations, traditional knowledge holders, and the indigenous science community is encouraged to identify projects according to traditional teachings and cultural views of the Lake Ontario basin and connecting channels, and in surrounding indigenous territories to protect water quality, indigenous cultural species, and ecosystem sustainability in Lake Ontario.

Chemical Contaminants (CC)

1. Characterize critical and emerging pollutants, with a focus on chemicals with potential for trophic transfer in nearshore and offshore.
2. How do shifts in the Lake Ontario food web and invasive species affect contaminant transfer?
3. What are the impacts of climate change on contaminant bioavailability, cycling and movement?
4. What is the abundance and distribution of microplastics in Lake Ontario and are microplastics significant vectors for inter/intra basin transport of chemical contaminants and bioaccumulation?

Nutrient and Bacterial Pollution (NB)

1. Improve whole-lake phosphorus load and productivity estimates.
2. Increase understanding of spatial and temporal patterns of microbial, heterotrophic, and primary production.
3. Establish a coupled hydrodynamic ecosystem model that includes phosphorus inputs, transport, fate, and effects in the Lake.
4. Integrate new innovative approaches and technologies for measuring/monitoring primary production (including the benthic alga Cladophora).

Habitat and Species (HS)

1. Increase understanding of the physical drivers of fish habitat and impacts on fish recruitment and production.
2. Survey and map lake bottom substrates in targeted locations in Lake Ontario.
3. What are the impacts of lake level fluctuations on habitat and wetland health and ecology.
4. Improve and enhance winter limnology research and understanding the impacts of a changing winter season (due to climate change) on Lake and wetland ecosystems.
5. Understand changing species dynamics, food web structure and energy transfer in Lake Ontario, including benthos, zooplankton, and fishes.

Invasive Species (IS)

1. Dreissenid mussel population dynamics (including fecundity/recruitment and predation by Round Goby) and ecosystem impacts.
2. Impacts of invasive species on wetlands, especially invasive plant species and the question of whether road salt is driving increases in invasive aquatic plants.