Request for Pre-proposals

Illinois-Indiana Sea Grant College Program two-year research grants

The Illinois-Indiana Sea Grant College Program (IISG) is requesting pre-proposals for promising two-year research projects relevant to southern Lake Michigan and the surrounding communities in northeast Illinois and northwest Indiana. The funds will be competitively awarded following the guidelines in this RFP. We plan to fund successful projects at up to $200,000 ($100,000 per year) with a 50% non-federal matching requirement. There is some flexibility with the project timeline, but they should start no earlier than February 1, 2026 and end no later than January 31, 2028.

To see if this is the right opportunity for you, we encourage you to visit our database of previously funded projects, which contains descriptions of 30 years of IISG-funded research projects. The database is located at https://iiseagrant.org/research/research-projects/. If, after reading the RFP, you have any questions, please contact Stuart Carlton, IISG assistant director, at carltons@purdue.edu.

Research priorities

All projects should have a clear research question or questions and should demonstrate how they fit within IISG's 2024–27 Strategic Plan. The strategic plan is broad in scope: successful proposals tend to make specific connections to the plan's more general goals.

We have several priorities that we use to determine what research projects to fund. These include an overarching priority to fund projects that provide accessible science, several areas of specific interest, priorities related to aquaculture, and other types of projects. We describe these below.

Accessible science

IISG is committed to ensuring broad access to the latest science. We will prioritize funding projects with outcomes that demonstrate broad scientific accessibility, including benefitting veterans, rural populations, and/or other groups that face science-accessibility challenges. A *benefit* should be a demonstrable improvement to quality of life, job training or student opportunities, and/or increased access to helpful services or information.

A one-off workshop or webinar is not likely to be considered meaningful engagement. Instead, we are looking for activities such as seeking out key partners at organizations that support groups with science accessibility challenges or working with NGO, industry, or agency staff from the start of the project to implement research findings in ways that would most benefit these groups.

Specific priorities

There are several topics that we are particularly interested in funding this cycle, including:

- Helping communities or ecosystems adapt to changing lake levels in southern Lake Michigan.
- The development, deployment and/or analyses of novel sensors and resulting data for studying physicochemical and biotic dynamics of southern Lake Michigan
- Analyzing contaminant levels in fish or shellfish that are or can be used for food. These may include Lake Michigan or tributary fish caught for subsistence fishing and/or Illinois- or Indiana-farm raised fish and shellfish. We are particularly interested in the effects of legacy contaminants, contaminants of emerging concern, and toxic cyanobacteria from algal blooms in nearshore regions or in production ponds. NOTE: For this competition, IISG will not prioritize PFAS-related research.
- Addressing environmental justice concerns associated with restoration of degraded southern Lake Michigan coastal sites (e.g., decommissioned power plants, industrial parks).
- Analyzing contaminant input into southern Lake Michigan associated with roads, road traffic, and driving. Potential projects might assess status of or model future inputs and/or effects of automotive-related emerging or legacy contaminants, including rubbers, salts, or other automotive-related pollutants.
- Conducting human dimensions research on fisheries on Lake Michigan or its tributaries. Potential projects might include demographic analyses, fishery provisioning, or other essential human dimensions research

Aquaculture priorities

The National Sea Grant Office has tasked individual Sea Grant programs with funding appropriate aquaculture research projects. As a result, we will give aquaculture projects special priority in this competition. We developed our aquaculture priorities in collaboration with the Sea Grant Great Lakes Aquaculture Collaborative and they include:

- Exploring social, economic, or legal barriers to aquaculture production of Illinois- and/or Indiana-grown fish or shellfish (e.g., processing, permitting, or workforce challenges).
- Research projects to enhance aquaculture and/or aquaponics in K–12 education or in workforce development.
- Comparing contaminant levels in farm-raised and wild-caught fishes of the Great Lakes region.
- Economic analyses of the aquaculture industry within Illinois and Indiana or the Great Lakes region overall.

Other potential projects

We also may fund projects that fit within our strategic goals but do not fit within the specific priorities described above. Some examples may include broader aquaculture research or research on the spread and control of aquatic invasive species, community

climate readiness, fisheries, healthy waters and pollution prevention, recreation and tourism, stormwater and green infrastructure, shoreline erosion, sustainable community planning, water supply, and/or hazardous materials transport.

Types of research and the importance of end users

This RFP is for research projects, but we are flexible about what types of research we might fund. We anticipate that successful applications will use a variety of experimental or investigatory techniques, potentially including qualitative or quantitative social science methods, field or laboratory studies, computer or statistical modeling, economic analyses, policy analyses, etc. Applications may use a single technique or mixed methods if the proposed budget can support the work.

Regardless of how the research is conducted, we expect the funded research projects to potentially serve as a basis for future outreach, education, or extension programs. As such, we encourage applicants to identify end-users of the proposed research. These end users might be members of the public, specific user groups, scientists, resource managers, or any other potential end-users that applicants see as important. Regardless of end user, the most successful applications tend to be explicit in how the science might be used in the future and often demonstrate connections with existing user groups who would benefit from the research projects.

To facilitate making connections between PIs and potential end-users, applicants may, but are not required to, discuss their project ideas with IISG outreach and education staff members to review the potential for the proposed research to have maximal societal impact and/or identify potential user groups. Our website has a directory of staff members that includes contact information. Please note that IISG staff may neither be funded through IISG research competition funds nor serve as an investigator on a proposal to this RFP.

Geographic scope

The purpose of our RFP is to fund research that benefits southern Lake Michigan along the coasts of Illinois and Indiana, the two states that we serve. However, applicants may propose work outside of that specific region assuming they can make a compelling case that the work is relevant or beneficial to southern Lake Michigan or the surrounding communities. In addition, some of the specific priorities identified above may be best addressed with projects that take place outside of coastal Illinois and Indiana: applicants are welcome to propose such work, as well.

Funding amounts

Applicants can request up to $100,000 per year for up to two years. The total project budget cannot exceed $100,000 for either year of the project or $200,000 overall. We anticipate funding 4–5 projects via this call.

Matching requirements

All applicants must demonstrate at least 50% in non-federal match for the overall project: projects requesting $200,000 should provide at least $100,000 in match, for a total of $300,000. Match can be slightly higher than 50% in year 1 and lower in subsequent years so long as the project is matched at least 50% overall. For example, if a PI requests $100,000 in year 1 and $100,000 in year 2, they must provide a total match of at least $100,000. In year 1, the PI must provide at least $50,000 in match. If they provide more than $50,000 in year 1, then they can provide less than $50,000 in year 2 as long as the total matching funds is at least $100,000.

Examples of what can be used as match include academic year salary and volunteer time, but specifics of what can be claimed will vary by institution. Match can be complicated: applicants should work closely with the fiscal or business office at their home institution to determine what is allowable as match.

The project period will be for up to two years beginning February 1, 2026, or the date of the award, and projects should be completed by January 31, 2028. While we don't anticipate delays in project start dates, the federal budgeting process can be slow. If we receive our federal funding late, we may have to send funds to successful applicants late, as well. If there are delays, we will communicate with PIs so that they can adjust their workflows and timelines accordingly.

PI eligibility

IISG is committed to inclusive excellence, and we encourage individuals from all disciplines to apply to this RFP. We encourage submissions by early career scientists and/or people who have partnered with, or plan to mentor, early career scientists.

Investigators from educational or research institutions including universities, museums, and NGOs are eligible to serve as PI for these funds. Although we prioritize Illinois- and Indiana-based researchers, researchers from other states are welcome to apply assuming they can demonstrate how their proposed work will benefit the mission of IISG and/or meet research priorities as described above. Consulting companies can serve as co-investigators or project partners but should not receive more than 50% of the project funds. As discussed above, IISG staff members are not eligible for funding and should not be listed as co-investigators.

Pre-proposal submission process

Prospective PIs must submit a pre-proposal to be considered for funding. Preproposals should contain the following components:

1. Cover page that includes the Project Title, Principal Investigator and Affiliation, Associate Investigator(s) and Affiliation(s) (if applicable), Anticipated Partners, Topic Area(s) for your project, and Preliminary Budget Request.

2. Two-page project summary that outlines the Objectives, Methodology, Rationale, and anticipated results for your proposed project. Identify user groups that could apply outputs from the proposed work, the expected impact(s) that may be achieved, and how project partners will engage these users in applying results.
3. One-page preliminary budget. Provide a brief breakdown of anticipated costs. Pre-proposals do not need a fully executed budget. Match (cost share) does not need to be detailed in the pre-proposal budget, however, upon submission of a full proposal, PIs will need to demonstrate a 1:2 non-federal to federal dollar match. PIs should also plan to budget for the negotiated federal indirect costs rates for their home institutions.
4. Two-page CVs for PI and main project partners. PIs from educational or research institutions are eligible for these funds. Subcontracts to associate investigator institutions are possible.

The pre-proposal submission process will also include a voluntary demographics questionnaire, which IISG is required to administer on behalf of the National Oceanic and Atmospheric Administration (NOAA, home to the Sea Grant program). NOAA is interested in learning more about who applies to their funding opportunities. Questionnaire answers will not be included in materials provided to reviewers or otherwise influence the current competition. Additional details are included in the eSeaGrant submission portal for this opportunity. Questions can be directed to Stuart Carlton (carltons@purdue.edu).

Pre-proposal review and feedback

Pre-proposals will be reviewed by at least two people serving in IISG leadership roles. The reviewers may consult appropriate IISG specialists for information to help them with the review (e.g., aquaculture specialists for aquaculture projects, pollution prevention specialists for contaminant-related projects, etc.). The primary role of the reviews will be to determine whether the proposed research is responsive to either the priorities outlined or to the IISG 2024–27 Strategic Plan. However, the reviewers will also make preliminary judgments about the impact of the work, too.

Specifically, the reviewers will rate each proposal on the following criteria:

1. Does the work fit within the scope of the RFP and/or IISG's strategic plan (10 possible points)
2. Will the work fill important knowledge or data gaps (5 possible points)
3. Will the anticipated results lead to positive societal (5 possible points) impacts?

After the review process, we will make decisions on whether or not to encourage a full proposal based on a qualitative assessment of the reviewer comments and scores. When this process is complete, we will send each applicant an email that either encourages or does not encourage them to submit a full proposal. We will include comments from the pre-proposal reviews in our emails to each applicant. Regardless of the results of the pre-proposal review, any applicant who submits a preproposal on time is eligible to submit a full proposal. Please note that pre-proposals that are not encouraged typically have a low probability of success at the full proposal stage.

We recognize that developing full proposal applications can be a significant time investment and we want those who go to the trouble of developing a full proposal to have a good chance at success. As such, our decisions to encourage or not encourage a full proposal will be based on expected funding levels. Typically, we will encourage pre-proposal applicants such that we will ultimately have a 1-in-3 or 1-in-4 success rate at the full proposal stage (i.e., if we expect to fund three projects, we encourage up to 12 full proposals).

Pre-proposal submission deadline

Applicants should submit materials via https://esg.iiseagrant.org/ by 11:59 p.m. Eastern Time on March 5, 2025. Applications should be submitted to the "IL-IN SG 2025 2-Year Research Competition". Late applications will not be accepted unless the applicant has contacted IISG staff members before the deadline to make them aware of potential issues, (e.g., computer, power, or internet issues). IISG reserves the right to refuse late applications if the program determines that individual circumstances do not warrant an extension. IISG staff members will only be available to answer questions until 5:00 pm Eastern Time on March 5, 2025.

Full proposal submission process

Regardless of whether an applicant was encouraged to submit a full proposal, we strongly recommend that prospective PIs consider and address any comments as they craft their full proposal application. We will provide complete instructions for full proposal submission, including full proposal evaluation criteria, along with pre-proposal feedback.

Funding recommendations are based on external review but are ultimately made at the discretion of the IISG director. Provided that enough proposals are of sufficient quality and scientific rigor, we will give priority to projects that address one or more areas of special interest, as described above. Following this, if enough proposals of sufficient quality and scientific rigor remain, we will also prioritize funding research at different institutions, with a preference for Illinois- or Indiana-based PIs and spreading funds across the two states as is possible.

Proposal review timeline

March 5, 2025	Pre-proposals due in program office (with preliminary budgets)
Late March, 2025	Encouragement to submit full proposals
June 2, 2025	Full proposals due in program office
September 9, 2025	Notification of funding, accompanied by panel and peer reviews
September 22, 2025	Final adjusted proposals due in program office
February 1, 2026	Project initiation (subject to the availability of funds)

Questions regarding eligibility or submission requirements may be directed to Stuart Carlton at carltons@purdue.edu.

Thank you, and good luck with your submission.