Michigan Sea Grant
Core Research Request for Proposals
Full Proposal Guidelines (2021)

Full proposals for Core Research projects to be conducted from 2022-2024 are due by 5 p.m. (EST) May 24, 2021. Any applicant that submitted a pre-proposal may submit a full proposal using these guidelines, however, Michigan Sea Grant (MISG) selects a set of pre-proposals that are encouraged to submit a Full Proposal based on impartial external reviews and MISG Management Team input. Note that encouraged proposals are not guaranteed funding and all full proposals will be reviewed by external reviewers and a review panel. Those pre-proposals that were not encouraged to submit full proposals are still eligible to apply, and all full proposals will be evaluated on their own merits, not pre-judged based on the pre-proposal reviews. Notification of final proposal funding decisions will occur in September 2021, and funded projects will be carried out from February 1, 2022 through January 31, 2024.

PROPOSAL PREPARATION

Deadline: Full proposals are due to Michigan Sea Grant on **Monday, May 24, 2021** via web form at: *Updated web link to be published when guidelines are released in April 2021*

Full Proposal Elements: Limit the proposal narrative to 10 pages, including elements 3-6 below. The title page, non-technical summary, list of potential peer reviewers, references, current and pending support, CVs, data management plan, budgets, and optional letters of support **do not count toward the page limit**. Please use 1-inch margins and 12-point Times New Roman font.

1. **Title Page:**
    a) **Project Title**
    b) **Principal Investigator** (primary contact for the project)
        i. Title/Position
        ii. Institution
        iii. Postal Mailing Address
        iv. E-mail Address
        v. Telephone Number
    c) **Co-investigators** - Name, institution, telephone, and e-mail.
    d) **Date of Submittal**
    e) **A non-technical summary:** Provide a 200-word summary that describes the proposed research and why it is important.

2. **Peer Reviewers:**
    Identify at least three (3) potential reviewers for the proposal from institutions outside the State of Michigan. Include name, institution, phone number, and email address. These reviewers will be included in the pool of experts that MISG will contact for reviews.

3. **Introduction:**
Provide a statement of the research problem or question and identify the purpose and significance of the research. Include background info that will: 1) clarify the research question; 2) identify what research has been done and what is needed and how that relates to this proposed research; and 3) explain how your research addresses current issues identified by state, regional, tribal or federal agencies for Michigan's Great Lakes as well as priorities outlined in the Michigan Sea Grant Strategic Plan.

4. **Project Description (Include Methods or Approach):**
Provide a comprehensive description of the research objectives and the research design/methods proposed to accomplish those objectives.
   a) If applicable, identify the hypothesis tested for each objective.
   b) Methodology — Provide a detailed technical overview of your proposed research design and methods. If your proposal relies on developing new methods, give the reviewers ample information about the starting point for those new methods and how they will evolve over the course of the project. Be sure to identify specific methods and tools (e.g., models, special analytical approaches, etc.) to be used. Make it clear how the proposed methods are appropriate for each objective and how they will succeed.
   c) Applicability — Describe how your research is relevant and will contribute to the body of knowledge in the topic area. Identify ways that your project benefits underserved communities, if applicable.

5. **Project Timeline:**
Provide a timeline of the research stages by project quarter. Identify project tasks, team leader, and support for each element.

6. **Overview of Research Team**:
Describe how the principal investigator's previous accomplishments are relevant to this specific project. Indicate why the research team is appropriate for this project and whether individuals, sub-units, or the entire team have worked (together or separately) on similar projects. Specify the roles and responsibilities of each team member, including who will be involved in day-to-day project activities. Identify steps taken to recruit a diverse team including students, staff, and Co-PIs from underrepresented racial and ethnic groups, individual with disabilities, or from disadvantaged backgrounds.

7. **References:**
Provide those cited in the proposal body.

8. **Qualifications:**
Supply curriculum vitae of principal investigator and co-investigators. Each CV should be no more than two (2) pages and should include relevant publications.

9. **Ongoing Support**:

List current and pending support of principal investigator and co-investigators. Indicate if any of those projects are complementary to the proposed Core Research project.

10. **Data Sharing Plan:**

If your project produces environmental data, it must conform to NOAA's Data Sharing Directive for Grants, Cooperative Agreements, and Contracts. Proposals submitted in response to this Announcement must include a Data Management Plan describing how these requirements will be satisfied. To comply with this requirement, the Principal Investigator must complete the Sea Grant Data Sharing form located at 2021 Request for Proposals and include information for all applicable datasets related to your project(s) explaining how the data and metadata will be provided. The NOAA data sharing policy requires:

   a) environmental data generated by a grant project must be made available after a reasonable period of exclusive use; and,
   b) the grant application must describe the plan to make the data available (Principal Investigators are expected to execute the plan). Even if your proposed activities do not generate any environmental data, you still must address the requirement. For example, include the statement: "this project will not generate any environmental data."

11. **NEPA Environmental Compliance Questionnaire**

All funded projects are required to complete the NEPA Environmental Compliance Questionnaire. This questionnaire is used by NOAA to collect information about proposed activities for NEPA and other environmental compliance requirements associated with the proposed project. All questions must be addressed - if the question is not applicable to your proposed activity, please explain why the requested information is not relevant. MISG is requesting that PIs submitting full proposals complete the NEPA forms and submit with their full proposal to facilitate approval of MISG research funding requests to the National Sea Grant Office. The NEPA form is located at 2021 Request for Proposals. Additional guidance can be provided upon request if needed.

Note: please attach the Data Management and NEPA forms as an addendum to your proposal and submit with the proposal package as one pdf.

12. **Supporting Documentation:**

Letters of support are optional; if included, submit no more than three (3) letters.

13. **NOAA Budget Form:**

Provide a detailed budget and budget justification using the 90-4 form available on the proposal submission web page. The Excel-based form includes tabs for annual expenses, a summary of expenses, and a budget justification. Submit the budget as a separate Excel file when submitting your application. The 90-4 budget form can be found here: *updated web link to be published when guidelines are released in May 2021.*

Proposals must include a 50% non-federal contribution in the budget, showing a match of at least $1 for every $2 of federal support requested. For example, if the PI requests $100,000 in a year, they must provide at least $50,000 in match for a total of $150,000 put toward the project in the first year. The

total budget amount must be distributed nearly equally over the two project years and should document the source of the project match.

PROPOSAL EVALUATION CRITERIA

Proposals must comply with all submission instructions and proposal guidelines in order to be considered for funding and must have submitted a pre-proposal. Each compliant, full proposal will be peer-reviewed by three experts in the field of the proposed project from outside the PI home state and a review panel of experts. One of these written reviews could include a member of the review panel of external experts. Reviewers will provide both written comments and a proposal rating using the criteria below

All written peer reviews will be provided to the expert panel, which will review the proposals and provide advice on funding priorities to the MISG management team. Review panelists will read all of the proposals and each reviewer will be prepared to lead discussion of one or more proposals depending on the total number of proposals reviewed. The panelists will discuss each proposal, evaluate the relevancy of the project to the MISG Strategic Plan and research goals, and assess if the project is fundable. The outcome of the panel review will be a final score for the project, an assessment of the fundability, and funding priority recommendations. Funding decisions are made by the MISG Management Team and incorporate all reviews and rankings as well as availability of funding, prior award performance of applicants, balance across institutions, focus areas, and applicant diversity, and programmatic needs, objectives, and priorities. As noted above, projects are encouraged that will benefit underserved communities and/or recruit team members from underrepresented racial and ethnic groups or educationally or economically disadvantaged backgrounds, and projects that address one of the topics identified in the RFP. All recommendations must be approved by NOAA National Sea Grant prior to a research grant being awarded.

Applicants should directly and explicitly address the following criteria somewhere within their proposal. Each submittal will be given an overall proposal rating (excellent, good, adequate, or questionable) as well as an assessment of merit and impacts. Applicants will be evaluated based on the quality and extent to which they address the criteria; failure to provide applicable information in the proposal will affect the score.

1. **Merit of Proposed Research – 60%**
   - *Team qualifications:* Do the researchers demonstrate adequate awareness of significant present or previous work? Is the research team qualified to perform the work? Does the team include members from underrepresented racial and ethnic groups or economically or educationally disadvantaged backgrounds?
   - *Research Design:* Are the research objectives clearly stated? Does the study logically relate to the stated objectives?
   - *Methods:* Are the methods appropriate and feasible? Are they innovative? Will the data be analyzed in an appropriate way?
   - *Feasibility:* Is the proposed time frame adequate to complete the project? Are facilities, management structure, and partnership arrangements sufficient to produce expected impacts? Are

appropriate levels of program resources (FTEs and budget) dedicated to achieve expected impacts? Is the budget reasonable?

2. **Impacts of Proposed Research – 40%**
   - *Relevance:* Is the problem to be addressed a valid and significant one? Does it bring together innovative research teams from Michigan universities, and where possible, leverage active research programs conducted by federal and state agencies? Does the research fulfill critical needs and priorities described in the Michigan Sea Grant Strategic Plan?
   - *Contribution:* Will the data generated by this project significantly advance the scientific body of knowledge? Does this research benefit underserved communities?
   - *Application:* Do the researchers clearly identify potential users of the information being developed in the project?
   - *Dissemination:* Do the researchers describe effective ways to communicate results of the project? Does the team's research plan ensure that the project is useful and relevant, and promotes application and implementation

Additional questions about these proposal guidelines can be submitted by May 3, 2021, to the Michigan Sea Grant Research Program by emailing MSG-RFPinfo@umich.edu. Answers will be publicly available at the Michigan Sea Grant research webpage by May 8, 2021.

About the Michigan Sea Grant Research Program
Michigan Sea Gran supports research that studies an array of issues affecting the Great Lakes and Michigan's coastal areas, including Integrated Assessments and basic research. The goals are to develop information, create tools, and build partnerships that will improve decision making for particularly challenging coastal issues in the state and to fulfill critical research needs for the Great Lakes and coastal systems. See: www.michiganseagrant.org/research

About Michigan Sea Grant
Michigan Sea Grant helps to foster economic growth and protect Michigan's coastal, Great Lakes resources through research, education and outreach. See: michiganseagrant.org