

2022 Ohio Department of Higher Education Harmful Algal Bloom Research Initiative

On behalf of the Chancellor of the Ohio Department of Higher Education (ODHE), the Ohio Sea Grant College Program and the University of Toledo, are requesting Harmful Algal Bloom Research Initiative (HABRI) pre-proposals for one- to two-year research projects from Ohio colleges and universities that provide: (1) strategies and tools to evaluate or mitigate HABs; (2) research assistance to guide wetland restoration projects to reduce nutrient and sediments; (3) research on manure, agricultural drainage practices and nutrient application methods; (4) evaluation of climate change effects on nutrient runoff; (5) watershed studies; (6) cost effectiveness analysis of agricultural nutrient reduction practices; (7) assessment of occurrence of cyanotoxins and health effects; and (8) evaluation of treatment technologies for water treatment systems.

Ultimately, this request for proposals is seeking research and innovation that will aid the management efforts of state agencies and will support Governor Mike DeWine's H2Ohio Initiative. We anticipate approximately \$5 million in funding to be available for this competition. Proposed project budgets will be evaluated/assessed based on the scope of work; there is no predetermined minimum or maximum funding amount per projects. ODHE HABRI encourages both large, multi-investigator, interdisciplinary proposals as well as smaller more targeted proposals. Projects do require at least \$1 of matching support for every \$1 of ODHE HABRI support requested and indirect costs are not allowable. Project funding will begin on 1 August 2022 and will end on 31 December 2024.

PRE-PROPOSAL DEADLINE: Ohio Sea Grant must receive a PDF version on its web page (ohioseagrant.osu.edu/research/submit) by 5:00 p.m. Thursday, 31 March 2022.

FULL PROPOSAL DEADLINE: Ohio Sea Grant must receive a PDF version on its web page (ohioseagrant.osu.edu/research/submit) by 5:00 p.m. Thursday, 2 June 2022.

RESEARCH PRIORITIES: Specific research priorities have been provided by the Ohio Department of Agriculture, Ohio Department of Health, Ohio Department of Natural Resources, Ohio Environmental Protection Agency, and the Ohio Lake Erie Commission. Research that addresses these priorities will help agencies manage HABs and help guide the efforts supported by Governor Mike DeWine's H2Ohio Initiative. Detailed priorities can be found online at: go.osu.edu/habripriorities.

Note, the HABRI Agency Advisory Board welcomes novel research concepts and has occasionally recommended funding proposals that do not directly address a priority/issue highlighted by agencies. That said, if any investigator(s) plan to propose projects that are not listed priorities, they are encouraged to consult with Ohio Sea Grant (Drs. Chris Winslow and Kristen Fussell) prior to submission of their proposal.

Due to the nature of this funding, successful proposals MUST include research and/or development in support of Ohio industry, commerce, and business (e.g., water treatment plants, agricultural producers, health care providers, etc.). Research and/or product innovation, development, and commercialization must include consultation with Ohio business and industry, state and local public entities and agencies, or collaboration with public and private education

institutions, research organizations or institutions.

Please keep in mind that the application and use of research results, as well as the societal and economic impacts, are also important considerations for this funding opportunity. More detail is highlighted in pre-proposal instruction below.

DEADLINES AND PLANNED SCHEDULE:

Thursday, 31 March 2022 by 5 p.m. - Applicants should submit a single PDF pre-proposal by accessing ohioseagrant.osu.edu/research/submit and uploading files.

Friday, 22 April 2022 - Researchers will be notified of the status of their pre-proposals (encouraged or discouraged from submitting a full proposal).

Thursday, 2 June 2022 by 5 p.m. - Applicants should submit a PDF version of their full proposals by accessing ohioseagrant.osu.edu/research/submit and uploading files.

Friday, 24 June 2022 - Researchers will be notified as to whether their proposal will be included in the proposal submitted to the Chancellor of the Ohio Department of Higher Education.

PRE-PROPOSALS: The pre-proposal process allows investigators to outline projects and receive feedback without spending the time required to prepare a full proposal. Successfully completing the pre-proposal process (i.e., being asked to submit a full proposal) does not, however, guarantee funding.

A PDF version of the pre-proposal (with all pieces of the pre-proposal in one PDF document) must be submitted to Ohio Sea Grant by 5 p.m. on Thursday, 31 March 2022. Detailed instructions on budget requirements can be found online at go.osu.edu/habriproposal.

Applicants must submit by accessing ohioseagrant.osu.edu/research/submit and uploading one PDF document. This pre-proposals document must include:

1. **Cover page** that includes the project title, and the name, affiliation, address, telephone numbers, and email address of each investigator.
2. **Summary narrative** (Maximum of four pages) explaining the objectives, rationale, and methodology of the proposed project (11 or 12 point, Times New Roman font preferred).

Objectives:

- Should state what the investigator(s) intends to do and/or produce:
- Measurable objectives are preferred.
- Quantifiable and hypothesis-based objectives are well received.
- Make a connection with the outcome of the proposed research and agencies or stakeholders. Specifically, how might this work support of Ohio industry, commerce, and business (e.g., water treatment plants, agricultural producers, health care providers, etc.).
- How will application/use of research results have societal and/or economic impacts?

Rationale:

- Focus more on need, not historical background surrounding the HABs issue. Proposal reviewers are intimately aware of the many nuances of the issue (e.g., history of occurrence, nutrient sources, toxin impacts, etc.).
- Highlight the novelty of the proposed project.
- Highlight the need/importance of your product/project.

Methodology:

- Should outline the steps and approaches to be taken.
- Should be detailed enough to answer questions that an interested person would ask—on what basis was method selected, how many sites/replicates, how will data be collected, in consultation with who, what kind of model, project location, etc.?
- Should be specific enough to allow peer reviewers, primarily senior state agency staff and scientists, to accurately evaluate your proposal but not too technical such that only your academic peers could understand
- Research and/or product innovation, development, and commercialization should include consultation with Ohio business and industry or state and local public entities and agencies.
- If applicable, show evidence of relationship with stakeholders/end-users referenced within the summary narrative

3. **Literature cited** (not counted toward four-page limit)
4. **Budget** (not counted toward four-page limit): budget form for each year of the project, each subcontract, and a summary budget combining both years and all subcontracts; required budget form and instructions for the budget are available on our website at ohioseagrant.osu.edu/research/funding.
5. **Detailed budget justification** (not counted toward four-page limit)
6. **Vita** (not counted toward four-page limit): Two-page vita for each PI and Co-PI

FULL PROPOSALS: Full proposals will be due by 5:00 p.m. on Thursday, 2 June 2022. Guidelines for writing the full proposal will be released after the pre-proposal results are released and will require the following sections:

- Cover page that includes the project title, and the name, affiliation, address, telephone numbers, and email address of each investigator.
- Proposal (8 pages max): Rationale, objectives, methodology, timeline/project schedule, role of personnel, deliverables, education/outreach component, how research supports Ohio industry, commerce, and business.
- Literature cited (not included in proposal length guidance);
- Budget forms and budget justification.
- Two-page vita for each investigator/project member.

REVIEW PROCESS: A panel composed primarily of the members of our agency advisory committee (representatives from the Ohio Lake Erie Commission, Ohio Environmental Protection Agency, Ohio Department of Natural Resources, Ohio Department of Agriculture, and Ohio Department of Health) will review and rank pre-proposals to determine which projects will move forward to the full proposal stage. It is possible that requests to modify projects and even combine projects will occur at this step. The first investigator listed on each pre-proposal will be contacted with the results of the review by Friday, 22 April 2022. Pre-proposal panel members will evaluate full proposals, but we also anticipate asking additional content experts to the full proposal review stage.