Request for Pre-Proposals

Fiscal Year 2023

Under Section 104 of the Water Resources Research Act of 1984, as amended







Arkansas Water Resources Center

University of Arkansas | Don Tyson Center for Agricultural Sciences
1371 West Altheimer Drive | Fayetteville, AR 72704
(479) 387-5547 | haggard@uark.edu

Pre-Proposals Due: November 2, 2022 5:00 PM CST

Each year, the Arkansas Water Resources Center funds projects through the U.S. Geological Survey 104(b) program as instituted by the Water Resources Research Act of 1984. The application requirements for fiscal year 2023 are contained within this document.

We are soliciting two different types of pre-proposals: (1) faculty research proposals, and (2) student research proposals with a faculty advisor. The student proposal should be written and completed by the student with review and guidance from the advisor. If selected for funding, you may be asked to provide additional information or make modifications to the proposal, based on comments from the AWRC technical advisory committee, and the AWRC director and program manager.

Please contact the AWRC if you have any questions.

Brian E. Haggard haggard@uark.edu (479) 387-5547 Erin Grantz egrantz@uark.edu (479) 301-9121

Arkansas Water Resources Center USGS 104(b) Competitive Research Grants Program Request for Pre-Proposals FY2023

I. Eligibility

Any faculty member or affiliate at an institution of higher education in the State of Arkansas or students with a faculty sponsor can apply. Federal employees are NOT eligible as a principal investigator and cannot receive federal funding, but can participate as a co-investigator.

The Arkansas Water Resources Center highly encourages proposals from principal investigators who are from underrepresented or underserved groups in STEM, and from institutions that serve majority minority populations (e.g., Historically Black Colleges and Universities, Minority Serving Institutions, Tribal Colleges and Universities, Hispanic Serving Institutions, and community colleges). Additionally, proposals are encouraged that increase diversity, equity, inclusion, and justice, which intersect with water research and resources. Proposals that address issues in historically marginalized or underserved communities are highly encouraged.

II. Types of Pre-Proposals

We are soliciting two different types of research pre-proposals:

- (1) **faculty research**: funding requests can be up to \$35,000 (excluding match requirements)
- (2) **student research** with a faculty advisor: funding requests can be up to \$10,000 (excluding match requirements)

Student pre-proposals should be written by the student under the review and guidance of a faculty sponsor. If selected, the student proposal will be submitted with the faculty sponsor as the principal investigator.

III. Funding and Match Requirements (1:1)

Funding is contingent upon the availability of appropriated funds from the US Geological Survey. Funding may be adjusted based on federal appropriations. Each applicant must match each federal dollar provided with at least one dollar from non-federal sources. This means a request for federal funds of \$35,000 will result in matching funds of at least \$35,000 and a total project cost of at least \$70,000.

All funds shall be used during the project period (expected <u>September 1, 2023-August 31, 2024</u>). Extensions from the USGS will be rare, if at all.

Potential sources for matching funds include

- Non-federal salaries, wages and benefits
- Indirect costs on the non-federal matching funds
- Waived indirect costs on the federal funds request, except on equipment and tuition; indirect costs (F&A) are not allowable in the federal funds request.
- Other sources of non-federal monies obligated specifically to the proposed project may be allowable. If using matching fund sources not listed in the first three bullets, work directly with AWRC staff to ensure budget compliance with USGS requirements.

IV. AWRC 104b Program Objectives

Preference will be given to pre-proposals that align with the Center's objectives, including:

- Arrange for applied research that addresses water supply and water quality problems;
- Student training and support;
- Support early career faculty in water research and preliminary data;
- Support senior faculty changing focus or addressing emerging water issues;
- Publish results in peer-reviewed scientific literature and transfer information to stakeholders and the public;
- Cooperate with other colleges, universities, and organizations in Arkansas or regionally.

V. Research Area of Particular Interest

The Water Centers that are within the Mississippi River Basin are prioritizing research focusing on:

- Occurrence of harmful algal blooms and algal toxins in waters.
- Water equity research that examines the causes and impacts of water-related disparities, develops or evaluates tools or strategies to improve water equity, or provides scientific information to benefit underserved communities.

VI. Project Reporting Requirements

If selected for funding, you will be required to complete and provide the following:

- 1. An end-of-project year report. You might be asked to revise this report, as we publish USGS 104b project reports in the Arkansas Bulletin of Water Research (an AWRC publication) as part of our information transfer obligations.
- 2. An additional-information form
- 3. Pictures of you and your team in the field, lab, or other analysis activities
- 4. Acknowledgement to both the USGS and the AWRC when publishing or presenting material related to this 104b-funded project.

VII. Pre-Proposal Requirements

Populate all fields below and email as a pdf document to Erin Grantz at egrantz@uark.edu no later than 5:00 pm on **November 2, 2022**.

Pre-proposals should not exceed 5 single-spaced pages, excluding references, investigator's qualifications (CVs), and budget.

Prior to submitting your pre-proposal to the AWRC, please follow your institutional guidelines for internal approval and routing of pre-proposals.

FAILURE TO COMPLY WITH REQUIREMENTS MAY DISQUALIFY YOUR PRE-PROPOSAL FROM THE SELECTION PROCESS.

Pre-proposals are shared with our technical advisory committee, where members provide review and give guidance on pre-proposal selection.

If your pre-proposal is selected, you will be invited to submit a full proposal. This process may include adequately addressing questions or comments from the reviewers.

To submit a pre-proposal, please complete the sections and requirements shown on the next pages:

Project Title

Investigator's Names and Affiliations

Key Words

Abstract

Provide a brief description of the problem, methods, and objectives in 300 words or less.

Statement of State or Regional Water Problem

Describe the problem and why your research is important and needed. Why should the reviewers want to support your research agenda?

Expected Results and Benefits

Specify what kind of information will be gained, how it will be used, and by who. How is this research innovative? Describe how this work will further the goals of the AWRC and be useful for the State of Arkansas.

Nature, Scope, and Objectives

Identify the objectives and hypotheses of the research project being proposed. Provide a timeline of activities in table format. Your proposed project MUST be completed within the given project period.

Methods, Procedures, and Facilities

Provide detailed information about the methods and equipment you plan to use. Describe the study site location(s) and the laboratory facilities you plan to use. Include enough detail such that reviewers can understand and evaluate the ability of the team to satisfy the stated objectives. **Include description of statistical analyses you plan to use to test your hypotheses.**

Related Research

Briefly describe the current state of the literature regarding your topic, how you will provide the next level of understanding your topic. Describe the knowledge gap you will address.

References

Fitzgerald, E.J., M. Waters and N. Simone. Year published. Title of Article. Name of Journal. Volume (Issue): pp-pp.

Training Potential

List the number of undergraduate, Master's, and PhD level students who will work on this project.

Continuation Funding

Identify if the proposed research is a continuation of a previously funded 104b project.

Additional Funding Plans

List your plans for follow up funding from another source, if applicable

Information Transfer Plans

List the ways you plan to share this information with researchers, stakeholders, and the public, including anticipated conference attendance and journal submissions. Innovative ways of using social media are highly encouraged.

How Proposed Research Fits with Faculty Research (For Student Projects Only)

Describe how this research fits into the PIs larger research interest and the base funding for the student.

Investigator's Qualifications

Include investigators' CV, not to exceed 1 page each.

Budget

See next page for template.

Budget Breakdown Form

*Please detail items under supplies, equipment, services or consultants, travel, and other direct costs

Cost Category	Federal (\$)	Matching Funds (\$)
Salaries and Wages		
PI (name)	\$ \$ \$	\$ \$ \$
Co-PI (name)	\$	\$
Student – (undergrad, MS or	\$	\$
PhD, name)		
Total Salaries and Wages	sum	sum
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Fringe Benefits	ć	A
PI (name)	\$ \$ \$	\$ \$ \$
Co-PI (name)	\$	\$
Student – (undergrad, MS or	\$	\$
PhD, name)		
Total Fringe Benefits	sum	sum
Total Cumpling	\$	\$
Total Supplies	Ş	Ş
Total Equipment	\$	\$
Total Services or Consultants	\$	\$
Total Travel	\$	\$
Total Havel	Ş	Ş
Total Other Direct Costs	\$	\$
Total Project Costs	\$	\$