Request for Pre-Proposals

Fiscal Year 2017

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

Arkansas Water Resources Center
University of Arkansas | 203 Engineering Hall | Fayetteville, AR 72701
(479) 575-4403 | haggard@uark.edu

Pre-Proposals Due: September 2, 2016

Each year, the Arkansas Water Resources Center funds projects through the U.S. Geological Survey 104B program as instituted by the Water Resources Research Act of 1984. The application requirements for fiscal year 2017 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 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, the AWRC director and program manager.

Please contact the AWRC if you have any questions.

Brian E. Haggard
haggard@uark.edu
(479) 575-2879

Erin Scott
erins@uark.edu
(479) 575-2840
Arkansas Water Resources Center
Fiscal Year 2017 Request for Applications

The following information and instructions apply to the application process for the FY2017 Arkansas Water Resources Center competitive water research grants through the US Geological Survey 104B program. The project period for FY2017 is from March 1, 2017 through February 28, 2018.

The Government’s obligation under this program is contingent upon the availability of appropriated funds. However, this program is likely to be funded at the same level as FY 2016.

Pre-proposals are due September 2, 2016 by emailing the completed pre-proposal to erins@uark.edu. The AWRC and its Technical Advisory Committee will discuss and review each pre-proposal. If selected for funding, you will be required to address reviewer comments and or provide additional project information.

I. Eligibility
   • Any faculty member or affiliate at an institution of higher education in the State of Arkansas or by students with a faculty sponsor can apply.
   • Federal employees are NOT eligible as a principal investigator, but can participate as a co-investigator.

II. 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;
   • Train the next generation of water scientists and engineers
   • Support early career faculty in water research and preliminary data;
   • Support senior faculty changing focus or addressing emerging water issues;
   • Transfer research results to stakeholders and the public
   • Publish 104b funded research in peer-reviewed scientific literature;
   • Cooperate with other colleges, universities and organizations in Arkansas to create a coordinated statewide effort to address state and regional water problems.

Revision

Researchers investigating the following topics are highly encouraged to apply:
   • Harmful Algal Blooms
   • Phosphorus sources and transport
   • Edge of field monitoring (especially a survey of existing data in Arkansas).

The National Institutes for Water Resources (NIWR) and the US Geological Survey are encouraging Centers that are located within the Mississippi River Basin to conduct complimentary research. The goal of this coordinated research effort is to develop a data or information base that can ultimately support a competitive regional water proposal at a much larger scale to address the largest water quality issues in our region.
The projects proposed should also further the U.S. Geological Survey’s national water mission and objectives. The broader, national focus of the U.S. Geological Survey includes:

- Increase our knowledge of water quality and quantity;
- Improve our understanding of water availability;
- Evaluate how climate, hydrology and landscape changes influence water resources;
- Create and deliver decision-making tools that support water management; and
- Improve the country’s response to water-related emergencies.

III. Types of Pre-proposals
We are soliciting two different types of project pre-proposals: (1) faculty research projects and (2) student research projects with a faculty advisor.

Student research proposals should be supplementary to an already existing and funded faculty project. Student pre-proposals should be written by the student under the direction of a faculty sponsor. If selected, the student proposal will be submitted with the faculty sponsor as the principal investigator.

We anticipate funding two faculty research projects budgeted for approximately $25,000 each and four student proposals budgeted for approximately $5,000 each.

IV. Matching Funds
- Each applicant must match each federal dollar provided with at least two dollars from non-federal sources. This means a request for federal funds of $25,000 through this application will result in matching funds of at least $50,000 and a total project cost of at least $75,000.
- The matching funds shall be obligated during the period of performance (March 1, 2016-February 28, 2017).
- Matching funds may include non-federal salaries, wages and benefits, other sources of non-federal monies obligated specifically to the proposed project, and indirect costs (IDCs) on the non-federal portion of the budget, as well as non-recovered IDCs on the federal funding request; IDCs cannot be charged on tuition or equipment.
- All indirect costs (F&A) must be waived, but may be counted as match.

V. Application Requirements
Each application package must include the following (incomplete applications will NOT be reviewed):

1. Cover letter. Must be on departmental letterhead, addressed to the AWRC and its Technical Advisory Committee and must not exceed 1 page. Include the following:
   - Brief abstract of proposed research
   - Number of undergraduate, MS, or PhD students and Post-docs anticipated to be involved.
   - If this proposal is a continuation of a previously funded project from the 104B program or from a different funding source, provide the project title, funding agency and year(s) funded.
   - If you intend to pursue follow up funding from a source other than 104B to continue this research, list the potential funding source.
   - The avenues of information transfer you anticipate pursuing. List the conferences and journal publications you anticipate attending and submitting research findings to.
2. **Project pre-proposal.** The project pre-proposal should contain the following sections and should not exceed five single-spaced pages, excluding references, investigators CVs and budget. **USE THE TEMPLATE ON PAGE 5.** Use 11-point Calibri font, with title and investigators centered and all other text fully justified.

   a. **Project title and investigators.** Include the affiliation for each investigator.
   b. **Introduction, including statement of water problem and why it’s important.** Include an explanation of the need for the project, who needs it, and why.
   c. **Statement of expected results and benefits.** Specify what kind of information will be gained and how it will be used. *Describe how this work will further the goals of the AWRC and the USGS,* as well as meet a need for the state of Arkansas.
   d. **Nature, scope and objectives.** Identify the objectives and hypotheses of the research project being proposed. Provide a timeline of activities in table format. *The project period for FY2017 is March 1, 2017 through February 28, 2018. No activities should occur outside of this time frame.*
   e. **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.
   f. **Related research.** Describe how the proposed project will support and or add to the current literature on the topic.
   g. **References.**

3. **Investigator(s) qualifications.** Include resume(s) of the principal investigator, co-investigators, and students if applicable. Each CV must not exceed one page.

4. **Budget.** See page 6 for the budget template.

Complete all four parts of the application package and email as a single pdf document to erins@uark.edu no later than 5:00 pm on September 2, 2016. **FAILURE TO COMPLY WITH FORMATTING AND CONTENT REQUIREMENTS MIGHT DISQUALIFY YOUR PRE-PROPOSAL FROM THE SELECTION PROCESS.** You will be notified regarding pre-proposal selections in October 2016.

**VI. Project Reporting Requirements**

If selected for funding, you will be required to complete a project summary due by **April 30, 2018.** The reporting program also tracks project influence based on categories such as research publications, conference proceedings, patents, student participation, training sessions, etc., and you will be required to provide this information in your project report. Additionally, when you are accepted for publication or other communications of research supported with 104B funds, you must acknowledge both the USGS and AWRC for the 104B grant opportunity, and include the project number assigned to your research.
Project Title

Principal Investigator\textsuperscript{1}, Co-investigator\textsuperscript{2}

\textsuperscript{1}Department, College or University, City, State
\textsuperscript{2}Department, College or University, City, State

Introduction, including statement of water problem and why it’s important:
Include an explanation of the need for the project, who needs it, and why.

Statement of Expected Results and Benefits:
Specify what kind of information will be gained and how it will be used. \textit{Describe how this work will further the goals of the AWRC and the USGS, as well as meet a need 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.

\textit{The project period for FY2017 is March 1, 2017 through February 28, 2018. No activities should occur outside of this time frame.}

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.

Related Research:
Describe how the proposed project will support and add to the current literature on the topic.

References
## Budget Breakdown Form

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Federal ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salaries and Wages</strong></td>
<td></td>
</tr>
<tr>
<td>PI (name)</td>
<td>$</td>
</tr>
<tr>
<td>Co-PI (name)</td>
<td>$</td>
</tr>
<tr>
<td>Student – (undergrad, MS or PhD, name)</td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Salaries and Wages</strong></td>
<td>sum</td>
</tr>
<tr>
<td><strong>Fringe Benefits</strong></td>
<td></td>
</tr>
<tr>
<td>PI (name)</td>
<td>$</td>
</tr>
<tr>
<td>Co-PI (name)</td>
<td>$</td>
</tr>
<tr>
<td>Student – (undergrad, MS or PhD, name)</td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Fringe Benefits</strong></td>
<td>sum</td>
</tr>
<tr>
<td><strong>Total Supplies</strong></td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Equipment</strong></td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Services or Consultants</strong></td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Travel</strong></td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Other Direct Costs</strong></td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Project Costs</strong></td>
<td>$</td>
</tr>
</tbody>
</table>