

# INDIANA WATER RESOURCES RESEACH CENTER ANNUAL RESEARCH GRANTS PROGRAM REQUEST FOR PROPOSALS FY2025

The Indiana Water Resources Research Center (IWRRC) invites faculty and affiliates from *Indiana's colleges and universities* to submit water related proposals for possible funding. The IWRRC grant program is supported via an annual base grant from the U.S. Department of Interior, U.S. Geological Survey, as part of the federal Water Resources Research Act of 1964 (Program 104b). This program provides a base of support for Indiana's water resource research needs.

#### **Research Areas**

The IWRRC grant program supports research in all areas of water research, especially identified Indiana water priorities which include (in alphabetical order) contaminants of emerging concern, downstream impacts of excess water extraction and water quality after water withdrawal, effects of Best Management Practices, emerging regional community threats, greenhouse gas emissions from built

aquatic infrastructure, green infrastructure, Harmful Algal Blooms, hydrologic alteration in a changing climate, industrial capacity demand, invasive species, nutrient loading, water availability for economic development, and water reuse for data centers and industrial applications.

Project Title and Reviewers due to IWRRC Wednesday, January 22, 2025 by 5PM Eastern

Full Proposal Due to IWRRC Wednesday, January 29, 2025 by 5PM Eastern

For FY2025, the IWRRC is collaborating with the Indiana Water Resources Association and their focus on drinking water infrastructure and water demand changes. Therefore, the IWRRC anticipates funding at least one proposal focused on research related to water infrastructure and demand changes.

Projects that also incorporate concepts of water equity, including environmental justice and socioeconomic drivers related to water, such as identifying causes and impacts of water-related disparities, developing or evaluating tools or strategies to improve water quality or evaluate environmental justice, or providing scientific information to benefit underserved communities are also sought.

## **Funding Information:**

We anticipate funding 3-4 research projects this year (each up to \$30,000), depending on the level of monetary requests. Each project will be subject to the following stipulations:

- Funds will be administered through the Indiana Water Resources Research Center
- All awards will be subject to the availability of federal funds. We have not received official
  notification for the levels of federal support in the 2025 program. As a result, the loss of the entire
  program, reductions in funding levels, and funding delays are possible.

Applicants must provide a **1:1 match in non-federal funds**. All indirect funds (F&A) must be waived but may be counted as match. Salaries, benefits, and other project-related expenses covered by other state or private sources may also be counted as match.



#### **Project Period:**

Grants will support one-year projects (Note that project extensions are not allowed by USGS for this program). The project year typically extends from September 1, 2025 to August 31, 2026. However, the start date has varied in recent years due to delays in funding from the U.S. Department of Interior.

#### **Eligibility:**

Researchers at any institution of higher education in Indiana are eligible for this annual grant competition.

The IWRRC highly encourages proposals from principal investigators who are from underrepresented or underserved groups in STEM, and from institutions that serve majority minority populations. Additionally, proposals are encouraged that enhance diversity, equity, inclusion, and justice at the intersection of water research and resources. Proposals that address issues in historically marginalized or underserved communities are highly encouraged.

#### **Proposal Selection Criteria:**

Research proposals will be competitively reviewed using an external peer review process. The reviewers will use the following criteria in assigning a final rank:

- 1) Technical merit, proposal quality, and feasibility (50%);
- 2) Applicability to Indiana's needs (15%);
- 3) Involvement of students (undergraduate/graduate) in research (20%); and
- 4) Capability of the PI(s) (15%).

Highly valued research projects will also include activities to disseminate information and results to the public.

# **Reporting Requirements:**

All outputs of your 104b supported research must acknowledge both the USGS and IWRRC for the 104b grant opportunity. The IWRRC will provide you with the appropriate logos, upon request. Please use the following language to acknowledge IWRRC as a funding source:

This research was funded under the provisions of section 104 of the Water Resources Research Act annual base grants (104b) program through the United States Geological Survey and distributed through the Indiana Water Resources Research Center, <a href="www.iwrrc.org">www.iwrrc.org</a>.

Grant recipients are expected to contribute towards a fact sheet detailing their study findings and participate in the annual Indiana Water Resources Association Symposium. Grant recipients may also be asked to give a presentation during an IWRRC sponsored webinar.



At the completion of the project, grant recipients will be required to provide:

- A final abstract (around 250 words) summarizing major findings and implications/impact of the project.
- Name, major, degree program, and date of graduation of all students working on the project.
- One or more publication quality photo(s) of project-related work (and/or student(s) performing such work).
- List of research products (i.e., publications, conference proceedings, patents, fact sheets, and other products resulting from the project).
- List of training sessions, information transfer, and notable achievements and awards.

Follow-up reporting will be requested to report on publications and other outcomes that result from this project in subsequent years.

#### **Proposal Format Guidelines:**

Each proposal must contain the information outlined in the Proposal Narrative and Attachments 1, 2, 3, 4, and 5. Please note page number, font and margin limits in the Proposal Narrative. All research proposals must have each section identified in the Proposal Narrative and be in the same order. Any research proposal that is not formatted correctly will not be eligible for funding. All other Attachments should be included.

## **Submission Requirements:**

Title and Reviewers: For research proposals, please send your project title and a list of names and email addresses for four reviewers within your field of expertise to **Ms. Laura Esman** (lesman@purdue.edu) **no later than 5:00PM Eastern on Wednesday, January 22, 2025.** Your four reviewers should include: (1) out of state academic, (2) in state academic, and (3) two reviewers of your choice. Please include their title (e.g., Dr., Mr., Ms., etc.).

# **Proposal Submission:**

Please send an electronic copy of the completed research proposal (MS-Word document only, not in PDF format) to **Dr. Keith Cherkauer** (<a href="mailto:cherkaue@purdue.edu">cherkaue@purdue.edu</a>) and Ms. Laura Esman (<a href="mailto:lesman@purdue.edu">lesman@purdue.edu</a>) no later than 5:00PM Eastern on Wednesday, January 29, 2025. (Indicate the PI's NAME- IWRRC 2025 proposal in the header.) We will respond with an email once we receive your submission. If you do not receive a confirmation email within 24 hours of your submission, please contact Laura Esman (email or phone) to let her know.

**More information:** 

IWRRC: https://iwrrc.org/

USGS: <a href="https://water.usgs.gov/wrri/index.php">https://water.usgs.gov/wrri/index.php</a>

**Ouestions:** 

Laura Esman, Managing Director lesman@purdue.edu; 765.496.3135



#### PROPOSAL NARRATIVE

Each proposal must fit on no more than 5 pages including figures and graphs, but not including references. Use 1-inch margins all around and 12 pt font. The proposal narrative must include (please also include the heading for each section):

**Title:** Concise but descriptive

**Principal Investigator(s):** Provide name(s) and university of any PI(s)

Project Title: IN\_2025\_enter last name of PI

Project Type: (Choose one) Research, Information Transfer, Education, Other (please

specify).

**Congressional District:** The district of the university where the work is to be conducted

**WRRI Science Priorities:** Choose from the following the <u>one category</u> that most closely applies - Water Scarcity and Availability, Water Hazards and Climate Variability, Water Quality, Water Policy, Planning, and Socioeconomics, Watershed and Ecosystem Function, Water Technology and Innovation, or Workforce Development and Water Literacy.

#### **USGS Cross-Discipline Landscape and Science Descriptors:**

Landscapes (choose one): Great Lakes, Upper Mississippi Basin, None.

Science Topic (choose one): Climate, Energy, HABs, Indiana Water Rights, Natural Hazards, Oceans/Coastal/Great Lakes, STEM, Water Challenges, Other.

**Keywords:** Choose a maximum of three focus categories from Attachment 1.

**Training Potential:** Estimate the number of graduate and undergraduate students, by degree level, who are expected to receive training from this project.

**Principal Investigator(s):** Provide name, academic rank, university, email address, and phone number of the principal investigator(s).

Project Start Date: September 1, 2025

**Project End Date:** August 31, 2026

**Abstract:** Provide a brief (300 word) description of the problem, methods, and objectives.

**Plain Language Summary:** Provide a brief (150 word) description of the study that is understandable to the public.

**Statement of regional or state water problem:** Include explanation of the need for the project, wo wants it, and why.

**Statement of results or benefits:** Specify the type of information that is to be gained and how it will be used.



#### PROPOSAL NARRATIVE (CONTINUED)

Nature, scope, and objectives of the project, including a timeline of activities.

**Methods, procedures, and facilities:** Provide enough information to permit evaluation of the technical adequacy of the approach to satisfy the objectives.

**Related research:** (*Research projects only*) Provide context for the proposed work in terms of previous and ongoing research, including citations.

Expected deliverables: Include information dissemination plan.

**Past IWRRC funding:** If you have received IWRRC funds in the past, how have you leveraged the projects/funds that were supported by IWRRC and what were your accomplishments?

# ADDITIONAL DOCUMENTATION REQUIRED: (not included in 5 page limit)

#### References cited.

**Investigator's qualifications:** Include short (no more than 2 pages) biographical sketches of the principal investigator(s).

**Budget Summary**—Attachment 2

**Budget Justification**—Attachment 3 (Example of well detailed budget justification)

Data Management Plan—Attachment 4

Required Statements and copy of your institution's rate agreement—Attachment 5

Documentation of institutional approval of the proposal

Matching fund commitment letter signed by authorized institutional official

SF-424

**FISCAL GUIDELINES**. The proposal budgets must reflect a \$1 non-federal match for each federal dollar requested. Please contact your college pre-award details but the match may include actual contributions, in-kind contributions and overhead costs. (Indirect costs may not be charged on the *federal* funding request in this program, although the match may include the indirect costs forgiven on the federal dollars.)