WATER RESOURCES RESEARCH ACT PROGRAM ANNUAL BASE GRANTS FY2023 PROGRAM ANNOUNCEMENT

Revised 2/9/23 - updates in orange text

The West Virginia Water Research Institute (WVWRI) requests proposals for research expected to be funded from September 1, 2023, through August 31, 2024.

Under this announcement, proposals must be submitted to the WVWRI in pdf format to wvwri@mail.wvu.edu by 5:00PM (ET) March 3, 2023.

The U.S. Geological Survey (USGS), Department of the Interior, will sponsor the research. Faculty from all West Virginia colleges and universities are encouraged to submit proposals.





Program Description

This Program Announcement is issued under the provisions of section 104 of the Water Resources Research Act of 1984 (Public Law 98-242), as amended by Public Laws 101-397, 104-147, 106-374, 109-471, and 117-58. Section 104 of the Water Resources Research Act directs the Secretary of the Interior to administer program grants to Institutes established under the provisions of section 104(a) of the Act.

Catalog of Federal Domestic Assistance (CFDA) Number 15.805

Background, Purpose, and Program Requirements

Water Resources Institutes or Centers have been established in each of the 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. The Institute in Guam also serves the Federated States of Micronesia and the Commonwealth of the Northern Mariana Islands. The Institute in Hawaii also serves American Samoa. Responsibility for administration of the State Water Resources Research Institute program has been delegated to the U.S. Geological Survey (USGS). Section 104(b) of the Water Resources Research Act of 1984 requires the Institutes or Centers to:

- (1) "plan, conduct, or otherwise arrange for competent applied and peer reviewed research that fosters
 - (A) improvements in water supply reliability;
 - (B) the exploration of new ideas that
 - (i) address water problems; or
 - (ii) expand understanding of water and water-related phenomena;
 - (C) the entry of new research scientists, engineers, and technicians into water resources fields; and
 - (D) the dissemination of research results to water managers and the public.
- (2)"cooperate closely with other colleges and universities in the State that have demonstrated capabilities for research, information dissemination, and graduate training in order to develop a statewide program designed to resolve State and regional water and related land problems."
- (3)"cooperate closely with other institutes and other organizations in the region to increase the effectiveness of the institutes and for the purpose of promoting regional coordination."

Applications submitted under this Announcement are to be in furtherance of these objectives and promote the national mission and objectives of the U.S. Geological Survey which are focused on providing water-quality and -quantity information, understanding water availability, addressing the influence of climate on water resources, and responding to water-related emerging needs. Specific areas of emphasis are at the discretion of the individual Institute or Center Directors.

Priorities for the State of West Virginia

Over the years, the USGS 104b program has generated significant datasets. For FY23, we propose for graduate students and early career researchers to dive into **existing datasets** to generate publications and provide outreach to the general public on the topics listed below. Please reach out to Melissa O'Neal (Melissa.ONeal@mail.wvu.edu) if additional information is needed on the datasets that are available to researchers.

- Determine economic benefits from watershed restoration
- Ohio River Basin TDS trends
- Underground mine pool management
- Muddy Creek Watershed improvement impacts on the Cheat
- Innovative policies to encourage watershed scale restoration

Other Criteria for Funding Consideration

It is important that proposed projects have assistant professors early in their careers on the project (preferably as the PI), the potential for generating peer-reviewed publications, student training, and information transfer.

Peer-Reviewed Journal Articles Applicants who receive funding are expected to submit to a peer-reviewed journal for publication.

Applicants who have previously applied to USGS 104b program solicitations and have successfully received funding for their project(s) are required to submit their list of publications on their USGS 104b-funded project(s) as a criteria for consideration for funding in 2023.

Federal Award Information

Estimated Total Funding: \$146,840; Maximum Award Amount: \$50,000

Anticipated Award Funding and Dates

Anticipated Award Date: September 1, 2023

Funds have not yet been finalized for this program for FY 2023 and may affect the number of awards. The Government's obligation under this program is contingent upon the availability of funds.

Duration of Project

Proposed projects should be of 1 year in duration, starting on September 1, 2023 and ending August 31, 2024.

Eligibility

Applications will be accepted only from Institutes or Centers established pursuant to the provisions of Section 104 of the Water Resources Research Act of 1984, as amended. The applicant may consider project proposals only from faculty members or affiliates at institutions of higher education in its State. Therefore, eligible applicants are faculty members or affiliates at institutions of higher education in the State of West Virginia.

Cost Sharing or Matching

This program has a 1:1 cost share or matching requirement

- Each applicant must match each Federal dollar provided to support each proposed project with not less than one dollar from non-federal sources.
- Matching funds shall be obligated during the period of performance.
- The matching requirement should be met during each 12-month budget period.
- Matching funds may contain indirect costs and non-federal salaries and benefits. The applicant's negotiated indirect cost rate (NICR) may be applied to **both** qualifying federal and non-federal direct costs, and the result used to satisfy part of the matching requirement under the non-federal share. The NICR shall not be applied to tuition and equipment costs. **As per the Water Resources Research Act, federal funds shall not be used to pay indirect costs.**

Proposals NOT Eligible for Funding

- Applications for research on health effects involving human subjects.
- Applications for research involving oceanography (estuarine research applications are acceptable).
- Applications for research that do not meet program objectives as outlined.
- Applications submitted by an Institute or Center that has not met reporting requirements on a previous award by the USGS.
- Federal employees may, and are encouraged to, collaborate with college or university investigators in this program.
- Federal employees may not serve as a principal investigator (PI), but may serve as a Co-PI.
- Federal employees and agencies may not receive federal funds for any purpose under these awards.
- Federal employees and agencies may not serve as a source of matching funds under these awards.

Proposal Deadline

Proposals are due to wwwi@mail.wvu.edu no later than 5:00PM Eastern Time, March 3, 2023.

Timeline

March 3, 2023 -	5 PM Deadline for submitting proposals in pdf format to: wvwri@mail.wvu.edu
March 16, 2023 -	West Virginia Water Advisory Committee for Water Research completes proposal evaluations and makes selections to forward to U.S. Geological Survey; applicants notified.
May 2, 2023 –	Selected proposals sent to USGS for funding consideration

September 1, 2023 - USGS funding arrives at West Virginia Water Research Institute and is disbursed to USGS-selected project recipients within 30 days.

Applicants funded through this RFP will need to meet the following requirements:

Reporting Requirements

The Principal Investigator(s) of the successful proposal(s) will be obligated to submit a final report of the project to the WVWRI Director. The final report will be due September 13, 2024, and must include:

- Synopsis of the project
- Products (including publications submitted as pending and/or accepted for publication)
- Information transfer
- Student support (number of students supported with USGS 104b and matching funds)
- Notable achievements and awards

Acknowledgment of Support

The recipient is responsible for assuring that an acknowledgment of USGS support:

- is made in any publication (including World Wide Web pages) of any material based on or developed under this Agreement, in the following terms:
 - This material is based upon work supported by the U.S. Geological Survey under Grant/Cooperative Agreement No. (contact <u>Melissa.ONeal@mail.wvu.edu</u> for Grant/Cooperative Agreement number).
- is orally acknowledged during all news media interviews, including popular media such as radio, television and news magazines.

Disclaimer

Recipient is responsible for assuring that every publication of material (including World Wide Web pages) based on or developed under this Agreement, contains the following disclaimer:

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Geological Survey. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Geological Survey.

Publications

Publication of the results of any project carried out under this assistance award is authorized in professional journals, trade magazines, or may be made by the USGS. Such manuscripts or publications submitted to journals or professional publications for publication shall be accompanied by the following notation:

This manuscript is submitted for publication with the understanding that the United States Government is authorized to reproduce and distribute reprints for Governmental purposes.

Copies for USGS

Recipient is responsible for assuring that the WVWRI and USGS Project Office is provided access

to, either electronically or in paper form, a copy of every publication planned for publication simultaneously with its submission for publication. One reprint of each published article shall be submitted to the USGS Project Office immediately following publication.

Department of Interior Requirements

Two copies of each publication produced under a Grant or Cooperative Agreement shall be sent to the Natural Resources Library with a transmittal that identifies the sender and the publication. Contact Melissa O'Neal (Melissa.ONeal@mail.wvu.edu) for assistance.

The address of the library is:
U.S. Department of the Interior Natural Resources Library
Division of Information and Library Services
Gifts and Exchange Section
18th and C Streets, NW
Washington, DC 20240

Collaboration with WVWRI

Routine communications are expected between the project team and WVWRI staff. Updates may include information for social media posts, website articles, and participation in webinar events.

Significant Development Reports

Events may occur between the scheduled performance reporting dates which have significant impact upon the supported activity. In such cases, recipients are required to notify the Bureau in writing as soon as the recipient becomes aware of any problems, delays, or adverse conditions that will materially impair the ability to meet the objective of the Federal award. This disclosure must include a statement of any corrective action(s) taken or contemplated, and any assistance needed to resolve the situation. The recipient should also notify WVWRI in writing of any favorable developments that enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned. WVWRI will be responsible for communicating with USGS regarding the award.

Collaboration with Federal Employees

- Federal employees may, and are encouraged to, collaborate with college or university investigators in this program.
- Federal employees may not serve as a principal investigator (PI) but may serve as a co-PI.
- Federal employees and agencies may not receive federal funds for any purpose under these awards.
- Federal employees and agencies may not serve as a source of matching funds under these awards
- There is no funding available for collaboration by USGS staff.

Instructions for Proposal Preparation and Submission

Proposals must be submitted to e-mail address: wvwri@mail.wvu.edu by 5:00 PM Eastern Time, March 3, 2023.

NOTE: Only those proposals submitted by March 3, 2023, 5:00 PM Eastern Time deadline will be considered for selection by the West Virginia Advisory Committee for Water Research.

Each application shall be prepared and submitted following the specific instructions provided below. The proposal may be prepared using the word processing software of choice but must be converted to a pdf format before being submitted. Use Times New Roman, 12-point font.

Each proposal shall consist of the following elements. There are 12 elements: A-L. Each element is to start as a new section on a new page. Elements A-I are to be consolidated and included in a single pdf document, Element J- L as separate attachments and e-mailed to wwwri@mail.wvu.edu by 5:00 PM Eastern Time March 3, 2023.

A. COVER PAGE

The Cover Page shall not exceed 1 single-space page; 12 point Time New Roman font

- 1. **Title**. Concise but descriptive.
- 2. **Project Type**. Choose from the following: Research, Information Transfer, Information Management System, Education, or Other (please specify).
- 3. <u>Focus Categories</u>. Choose a maximum of three focus categories from the list provided (Attachment A), with the most preferred focus category first.
- 4. **Research Category**. Choose from the following the one category 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.
- 5. **<u>Keywords.</u>** Enter keywords of your choice that describe the work.
- 6. **Start Date.** Enter the anticipated start date for the project.
- 7. **End Date**. Enter the estimated end date for the project.
- 8. **Principal investigator(s).** Provide name, academic rank, university, email address, and phone number of the principal investigators.
- 9. <u>Congressional District</u> of the university where the work is to be conducted.

B. ABSTRACT

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

C. BUDGET BREAKDOWN

- Include a screenshot of the Budget Breakdown in the proposal pdf package (USGSBudgetFormat tab on budget template file; copy columns A-E and rows 1-34).
- Send the spreadsheet file as a separate attachment along with the proposal submission. *The budget template (excel file) can be downloaded here:*

D. BUDGET NARRATIVE

The project budget shall include detailed information on all cost categories and must clearly identify all estimated project costs. Unit costs shall be provided for all budget items including the cost of work to be provided by contractors or sub-recipients. In addition, applicants shall include a narrative description of the items included in the project budget, including the value of in-kind contributions of goods and services provided to complete the project when cost share is identified to be included (Cost Share section of this announcement). Cost categories can include, but are not limited to, those costs items included on the SF424A or SF424C.

• The budget narrative (fillable pdf) can be downloaded here: https://wwwri.wvu.edu/resources/opportunities

E. PROPOSAL TEXT

The Proposal Text shall not exceed 10 single-space pages; 12 point Time New Roman font.

- **Title.** Use the same title as on the cover page.
- <u>Statement of regional or State water problem</u>. Include an explanation of the need for the project, who 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.
- Nature, scope, and objectives of the project, including a timeline of activities.
- <u>Methods, procedures, and facilities</u>. 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.
- <u>Training potential.</u> Estimate the number of graduate and undergraduate students, by degree level, who are expected to receive training in the project.

F. DATA MANAGEMENT PLAN

Proposals submitted to USGS must include a supplementary document of no more than four pages labeled "Data Management Plan" (DMP). This supplementary document should describe how the proposal will conform to USGS policy on the dissemination and sharing of research results and associated data. A valid DMP may include only the statement that no detailed plan is needed (e.g. "No data are expected to be produced from this project"), as long as the statement is accompanied by a clear justification. This supplementary document may include:

• the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;

- the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
- policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
- provisions for re-use, re-distribution, and the production of derivatives; and
- plans for archiving data, samples, and other research products, and for preservation of free public access to them.

Additional guidance on data management plans is available from the USGS Data Management web site here: https://www.usgs.gov/products/data-and-tools/data-management-plans. Simultaneously submitted collaborative proposals and proposals that include subawards are a single unified project and should include only one supplemental combined DMP by the lead PI that also addresses all subaward data management needs, regardless of the number of non-lead collaborative proposals or subawards included.

G. RESUMES OF INVESTIGATOR'S QUALIFICATIONS

Each Resume shall not exceed 2 pages, nor list more than 15 pertinent publications.

Include Resume (s) of the principal investigator(s). No resume shall exceed two pages or list more than 15 pertinent publications. If previously funded through the USGS 104b program, indicate which publications are associated with the USGS 104b-funded project(s).

H. CONFLICT OF INTEREST DISCOLSURE

Submit as a 1-2 page document using 12 point Times New Roman font.

Recipients must notify the program immediately in writing of any conflict of interest that arise during the life of their Federal award, including those reported to them by any subrecipient under the award. Recipients must notify the program in writing to WVWRI if any employees, including subrecipient and contractor personnel, are related to, married to, or have a close personal relationship with any Federal employee in the Federal funding program or who otherwise may have been involved in the review and selection of the award. The term employee means any individual engaged in the performance of work pursuant to the Federal award. Recipients may not have a former Federal employee as a key project official, or in any other substantial role related to their award, whose participation put them out of compliance with the legal authorities addressing post-Government employment restrictions. See the U.S. Office of Government Ethics website for more information on these restrictions. USGS will examine each conflict of interest disclosure based on its particular facts and the nature of the project and will determine if a significant potential conflict exists. If it does, USGS will work with the recipient to determine an appropriate resolution. Failure to disclose and resolve conflicts of interest in a manner that satisfies USGS may result in any of the remedies described in 2 CFR 200.338 Remedies for Noncompliance, including termination of the award.

I. OVERLAP OF DUPLICATION OF EFFORT STATEMENT

Submit as a 1-2 page document using 12 point Times New Roman font.

Applicants must provide a statement indicating if there is any overlap between this Federal application and any other Federal application, or funded project, in regards to activities, costs, or time commitment of key personnel. If no such overlap or duplication exists, state, "There are no overlaps or duplication between this application and any of our other Federal applications or funded projects, including in regards to activities, costs, or time commitment of key personnel". If any such overlap exists, provide a complete description of overlaps or duplications between this proposal and any other federally funded project or application in regards to activities, costs, and time commitment of key personnel, as applicable. Provide a copy of any overlapping or duplicative proposal submitted to any other potential funding entity and identify when that proposal was submitted, to whom (entity name and program), and when you anticipate being notified of their funding decision. The statement and the description of overlap or duplication, when applicable, may be provided within the proposal or as a separate attachment to the application. If at any time a proposal is awarded funds that would be overlapping or duplicative of the funding requested from USGS, the applicant must immediately notify the USGS point of contact. Any overlap or duplication of funding between the proposed project and other active or anticipated projects may impact selection and/or funding amount.

J. MATCHING COST-SHARE LETTERS OF COMMITTMENT

Letter(s) of cost-share commitment on letterhead signed by the authorized person at your institution of higher education must contain the dollar value of cash and/or in-kind services committed to the project. Letters are to be scanned and included as an element in your proposal package. Please be sure that the scanned documents are legible. Federal employees and agencies may not serve as a source of matching funds under these awards.

K. INDIRECT COST RATE

Federal funds cannot be used to pay indirect costs. However, matching funds may contain indirect costs for the value of direct costs of both Federal and matching funds. (Refer to Attachment B.) Applicants outside West Virginia University must provide a scanned copy of the approved indirect cost rate agreement or other documentation to support the proposed indirect cost rate of their institute of higher education and included as an element in your proposal package.

L. SUB-RECIPIENT LETTERS OF INTENT

For proposals that include a sub-recipient (contractor), a letter of intent from the proposed sub-recipient that includes level of commitment (number of hours and hourly

rate), the value of commitment (total monetary value of cash or in-kind), and duration of commitment (period of performance) on letterhead with signature is required. Letters are to be scanned and included as an element in your proposal package.

Review Process

The West Virginia Advisory Committee for Water Research will review the proposals. The Advisory Committee, after considering the merit of a proposal, will make recommendations for funding to the Director of the West Virginia Water Research Institute. The Institute Director, giving due consideration to the available funding and the requirements of the funding agency (USGS), will develop a coherent research program and submit it to USGS to consider for review and approval.

Evaluation criteria include:

- a. Importance of proposed research: Proposal addresses one or more State emphasis area(s)/research priority(ies).
- b. Potential for success: Proposed project includes methods for competent applied and peer-reviewed research by fostering improvements in water supply reliability, exploration of new ideas that address water problems, or expands understanding of water and water-related phenomena.
- c. Potential to expand water quality expert base: Fosters the entry of new research scientists, engineers, and technicians into water resources fields.
- d. The proposal includes a solid plan for disseminating research results to water managers and the public via peer-reviewed journal articles and conference presentations; previously funded USGS 104b project researchers have a successful record of USGS 104b project results published in peer-reviewed journals.
- e. Qualifications of researchers: Project investigator(s) have demonstrated capabilities for research, information dissemination, and graduate training to complement the State program designed to resolve State and regional water and related land problems.
- f. The proposed project increases cooperative interaction with higher education institutes within the State of West Virginia.
- g. The proposed budget is adequate for the proposed project, including matching funds.