

WATER RESOURCES RESEARCH ACT
PROGRAM NATIONAL COMPETITIVE GRANTS
FY2023
PROGRAM ANNOUNCEMENT
For USGS 104g General

Revised 2/9/23 - changes in orange text

Notice of Funding Opportunity to all West Virginia Colleges and
Universities

through United States Geological Survey and West Virginia Water
Research Institute



Intent to submit notice due to: wwri@mail.wvu.edu

5:00PM Eastern Time, February 24, 2023

Proposal due to: wwri@mail.wvu.edu

5:00PM Eastern Time, March 10, 2023

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 Research 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. The addresses of the 54 Institutes are available at <https://water.usgs.gov/wrri/index.php>. Responsibility for administration of the Water Resources Research Act Program has been delegated to the U.S. Geological Survey (USGS). The 54 Institutes are organized as the National Institutes for Water Resources (NIWR). NIWR cooperates with the USGS in the administration of the Water Resources Research Act Program.

Program Objectives

Section 104(g) of the Water Resources Research Act of 1984 requires that this competitive grant program focus on: “water problems and issues of a regional or interstate nature beyond those of concern only to a single State and which relate to specific program priorities identified jointly by the Secretary (of the Interior) and the (water resources research) institutes.” Objectives of this program also include the following:

- Promote collaboration between the USGS and university scientists in research on significant national and regional water-resources issues. Proposals exhibiting substantial collaboration between the USGS and the applicant are strongly encouraged. Collaborative proposals should describe in detail the respective roles of the USGS and the applicant in the proposed work. It is anticipated that in FY2022 the USGS will have internal funds available for modest support of USGS scientists on selected proposals.
- Promote the dissemination and application of the results of the research funded under this program, both to the scientific community and to the general public.
- Assist in the training of scientists in relevant water-resource fields. Proposals that include a strong educational component (student support) are encouraged, as are those from early-career faculty.

Research Priorities

Proposals are sought on the topic of improving and enhancing the nation’s water supply and availability, and promoting the exploration of new ideas that address or expand our understanding of water problems, including the following specific areas of inquiry (levels of priority are not assigned, and the order of listing does not indicate the level of priority):

- **Abundance, location, and persistence of legacy nutrients:** What are the mechanisms that facilitate accumulation and persistence? Where in landscape are they stored and

what does that mean for the potential to enter or move through the hydrologic system? What are the methods, time periods, and utility to characterizing “new” versus “old” sources? Do related nutrients persist and move in the same way, and what does this mean for short- and long-term water quality?

- **Trends of integrated processes:** How do changes in one aspect of water quantity and availability affect other long-term aspects? For example, how are changes in groundwater identifiable as changes in streamflow patterns? How do changes in streamflow result in changes in water quality?
- **Water Conflict:** What are the risks of water conflict as a result of inter-basin transfers driven by water-use behavior, socioeconomic conditions, changing land-use patterns, and climate variability. Aspects for consideration include identification of thresholds, tradeoffs between sectors and(or) communities, conservation opportunities and stakeholder actions, agent-based modeling, relevant laws and regulations, and adaptive management.

Federal Award Information

Estimated Total Funding: \$2,000,000

Maximum Award Amount: \$310,000

Applicants shall not request total federal funds exceeding \$310,000 per project.

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 may be of 1 to 3 years in duration, with discrete 12-month budget periods.

Awards will be made directly to the **Water Resources Research Institute** through which the proposal was submitted. The project start date is expected to be within 30 days of receiving the award.

Eligibility

Awards are available only to Water Resources Research Institutes established pursuant to the provisions of section 104 of the Water Resources Research Act and listed at <http://water.usgs.gov/wrri/index.php>. **However, any investigator at an institution of higher learning in the United States is eligible to apply for an award through a Water Resources Research Institute.** The application, with full proposal along with the SF-424 and SF-424B and budget forms, must be submitted through grants.gov by the university at which the Institute is located.

The West Virginia Water Research Institute (WVWRI) is an eligible applicant on behalf of all West Virginia Colleges and Universities.

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

- Proposals for research on health effects involving human subjects.
- Proposals for research involving oceanography (estuarine research proposals are acceptable).
- Proposals that do not comply with the terms of this Announcement.
- Proposals for research that do not meet the listed Research Priorities.

Proposal Deadline

- **An Intent to Submit notice is due to vwvri@mail.wvu.edu no later than 5:00PM Eastern Time, February 24, 2023.**
- **Proposals are due to vwvri@mail.wvu.edu no later than 5:00PM Eastern Time, March 10, 2023. Proposals will not be accepted without prior submission of an Intent to Submit.**

Proposal Preparation

All proposal documents (elements 1-15) must be submitted as one file in PDF format. Each element has a maximum potential point value and these elements will be combined in order to rank the proposals. Elements 2-7 shall not exceed 10 single-spaced pages, with 12-point font and at least 1-inch margins, including tables, pictures, graphs, figures, and appendices. Proposals exceeding the page limit for elements 2-7 will not be considered. The supplemental information (elements 1,8-15) does not count towards the page limit but includes required parts of the proposal. Please include page numbers and short title in either header or footer, but nothing else. **Note that this format has been revised from previous years.**

Proposal Element	Description	Points
1. Cover Page	Must include full and short title, lead PI name and contact information (email and telephone number), collaborator and co-PI names, federal funds requested, matching fund contribution, abstract (300 words), plain-language summary (150 words), and keywords. This helps fulfill the new Project Abstract Summary requirement which will be visible to the public.	15 points
2. Address specific priority	<ul style="list-style-type: none"> • Repeat Title Only • Describe the problem/issue and directly address a research priority described in Section A2. • Document the magnitude of the situation and relevance to state, regional and national issues. • Why is this project/topic innovative, important, and timely? 	10 points
3. Integration with USGS science:	<ul style="list-style-type: none"> • How does the proposed work initiate or further collaboration with the USGS? • How does it supplement recent or ongoing work by the USGS? 	20 points
4. Scientific value of proposed work	<ul style="list-style-type: none"> • What are the goals and objectives of the research? • What is the potential to expand fundamental knowledge through the stated goals and objectives? • Describe the methods, field area, and facilities as a function of these objectives. 	20 points
5. Anticipated Benefits to Scientific Community and General Public	<ul style="list-style-type: none"> • Specify the type of information that is to be gained and how it will be used. • Describe the potential outcomes and the potential, realistic impacts of the proposed work. • How does the proposed research build on previous research or lay the groundwork for future research? • What tangible products are expected? These might include data, methods, workflows, manuscripts, and(or) new communication strategies. 	20 points

6. Products and Information Transfer	<ul style="list-style-type: none"> • Provide a timeline of key activities, including field seasons, data collection, and lab analyses, as appropriate. • Explain the planned transfer of results to user groups. • How will new information be made available to the scientific community and general public? • Identify stakeholders and planned communication strategies (e.g., workshops ,publications, extension). 	10 points
7. Training Potential	Detail the educational component, including student support and engagement of early-career researchers.	10 points
8. Budget	<p>Use the budget templates to provide the required detail and justification. The PI's salary is an acceptable budget item, but the federal share of the salary should not exceed two months per year. Document salary for other staff and researchers, including any overhead expenses at institutions beyond that of the PI.</p> <p><i>Please email Melissa O'Neal at moneal@mail.wvu.edu for the budget template.</i></p>	10 points
9. Data Management Plan	Should be in the context of products and information transfer (See below for additional information). Please use the template at https://www.usgs.gov/media/files/usgs-data-management-plan-checklist .	15 points
10. Cited Literature	Should include only those referenced in proposal.	
11. Qualifications of Research Team	Provide a brief biographical sketch, no more than 3 pages each, for the PI and any co-PIs.	2 points
12. Matching Commitment Letter	Institutional cost-sharing agreement (letter) signed by an official authorized to commit the applicant to all or part of the matching share or a third party, in-kind contribution signed by an official authorized to commit the third party. Scanned legible PDF documents should be uploaded as part of the proposal. The USGS does not need the originals.	
13. Letters of Support	These are optional. Scanned legible PDF documents should be uploaded as part of the proposal.	
14. Conflict of Interest Disclosure	See below for additional information.	
15. Overlap of Duplication of Effort Statement	See below for additional information.	

Collaboration by 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.

Detailed 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.

Please email Melissa O’Neal (moneal@mail.wvu.edu) for a copy of the budget narrative template.

Data Management Plan Requirements

Submit as a 1-2 page document in the proposal package.

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/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.

Conflict of Interest Disclosure

Submit as a 1 page document in the proposal package.

Per the Financial Assistance Interior Regulation (FAIR), [2 CFR §1402.112](#), applicants must state in their application if any actual or potential conflict of interest exists at the time of submission.

(a)Applicability.

(1)This section intends to ensure that non-Federal entities and their employees take appropriate steps to avoid conflicts of interest in their responsibilities under or with respect to Federal financial assistance agreements.

(2)In the procurement of supplies, equipment, construction, and services by recipients and by subrecipients, the conflict of interest provisions in 2 CFR 200.318 apply.

(b)Notification.

(1)Non-Federal entities, including applicants for financial assistance awards, must disclose in writing any conflict of interest to the DOI awarding agency or pass-through entity in accordance with 2 CFR 200.112.

(2)Recipients must establish internal controls that include, at a minimum, procedures to identify, disclose, and mitigate or eliminate identified conflicts of interest. The recipient is responsible for notifying the Financial Assistance Officer in writing of any conflicts of interest that may arise during the life of the award, including those that have been reported by subrecipients.

(c)Restrictions on lobbying. Non-Federal entities are strictly prohibited from using funds under a grant or cooperative agreement for lobbying activities and must provide the required certifications and disclosures pursuant to 43 CFR part 18 and 31 U.S.C. 1352.

(d)Review procedures. The Financial Assistance Officer will examine each conflict of interest disclosure on the basis of its particular facts and the nature of the proposed grant or cooperative agreement, and will determine whether a significant potential conflict exists and, if it does, develop an appropriate means for resolving it.

(e)Enforcement. Failure to resolve conflicts of interest in a manner that satisfies the government may be cause for termination of the award. Failure to make required disclosures may result in any of the remedies described in 2 CFR 200.338, Remedies for noncompliance, including suspension or debarment (see also 2 CFR part 180).

Overlap of Duplication of Effort Statement

Submit as a 1 page document in the proposal package.

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.

Review Process

Elements 1-15 (table in Proposal Preparation section) will be evaluated by a peer-review panel composed of Institute directors, university scientists, and USGS staff experienced in water-resources research. Note that both required elements and element scoring have been revised from previous years and are detailed in the project-narrative section.

Proposals submitted by the Institutes are evaluated for completeness after the closing date by OAG in consultation with the USGS WRRRA Program staff. The WRRRA Program staff notifies Institutes submitting unacceptable proposals that their proposals will not be further reviewed.

Only proposals submitted to grants.gov that meet the requirements of this announcement will be considered and evaluated by a peer-review panel composed of Institute directors, university scientists, and USGS staff experienced in water-resources research. After conflicts of interest have been considered, each proposal will be reviewed by at least three assigned reviewers. Each proposal will be discussed by the panel and scored according to the listed criteria. Each proposal will be assigned a panel member responsible for writing up the panel summary of the proposal evaluation. Panel summaries will be sent to the submitting Institute.

Regulatory Information

Refer to the U.S. Geological Survey (USGS) Award Terms and Conditions for the general administrative and national policy requirements applicable to USGS awards. USGS will communicate any other program- or project-specific special terms and conditions to recipients in their Notice of Award.

Administrative and National Policy Requirements

See the [“DOI Standard Terms and Conditions”](#) for the administrative and national policy requirements applicable to DOI awards.

Refer to the U.S. Geological Survey (USGS) Award Terms and Conditions for the general administrative and national policy requirements applicable to USGS awards. The USGS will

communicate any other program- or project-specific special terms and conditions to recipients in their Notice of Award.

Data Availability

Per the Financial Assistance Interior Regulation (FAIR), [2 CFR §1402.315](#):

(a) All data, methodology, factual inputs, models, analyses, technical information, reports, conclusions, valuation products or other scientific assessments in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual, resulting from a financial assistance agreement is available for use by the Department of the Interior, including being available in a manner that is sufficient for independent verification.

(b) The Federal Government has the right to:

(1) Obtain, reproduce, publish, or otherwise use the data, methodology, factual inputs, models, analyses, technical information, reports, conclusions, or other scientific assessments, produced under a Federal award; and

(2) Authorize others to receive, reproduce, publish, or otherwise use such data, methodology, factual inputs, models, analyses, technical information, reports, conclusions, or other scientific assessments, for Federal purposes, including to allow for meaningful third-party evaluation.

Performance Reports

Performance reports must contain a comparison of actual accomplishments with the established goals and objectives of the award; a description of reasons why established goals were not met, if appropriate; and any other pertinent information relevant to the project results. Final reports are due no later than 90 calendar days after the award period of performance end date or termination date. For awards with periods of performance longer than 12 months, recipients are required to submit **interim** financial reports on the frequency established in the Notice of Award.

Collaboration with WVVRI

Routine communications are expected between the project team and WVVRI 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 WVVRI 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. WVVRI will be responsible for communicating with USGS regarding the award.

Conflict of Interest Disclosures

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 WVVRI 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.