



Utah Water Research Laboratory
UtahStateUniversity

UTAH CENTER FOR WATER RESOURCES RESEARCH
UTAH STATE UNIVERSITY
8200 Old Main Hill, Logan, UT 84322-8200
<http://uwrl.usu.edu/research/ucwrr>

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November 28, 2022

Dear Colleague:

The Utah Center for Water Resources Research (UCWRR) at the Utah Water Research Laboratory (UWRL) invites pre-proposals for the USGS 104b Water Research Institute annual base grant program, for the 2023-2024 funding cycle. Faculty members or affiliates at any institution of higher education in Utah are eligible to apply. This program targets applied research that addresses water problems in Utah. **NOTE: The funding for this grant is contingent upon congressional appropriations. We have not yet received official notification of the final amount to be apportioned to the states for the 2023 program, and reductions in funding and/or funding delays are possible.**

The proposed research should address one of the identified priority research needs or another area of benefit to the State of Utah. Preference will be for research projects led by early career faculty and those that support graduate students. The UCWRR highly encourages proposals that include or benefit underrepresented, minority, or underserved groups in STEM. We also encourage proposals that increase diversity, equity, inclusion, and justice relating to water research topics, or that address water issues in historically marginalized or underserved communities. **Pre-proposals are due at the UCWRR on or before Tuesday, February 28, 2023, 5:00 PM MST.**

Guidelines for preparing and submitting pre-proposals are included in the attached Request for Pre-Proposals FY 2023. Pre-proposals will be reviewed and ranked by a committee of four, consisting of a representative from each of the following: (1) UCWRR (director David Tarboton), (2) another college at USU, (3) another Utah university, and (4) USGS. After this initial review, the highest-ranking pre-proposals will be invited to submit full proposals for inclusion in the total USGS proposal for Utah. We anticipate that 4 research proposals will be selected for funding based on budgets and research funds available. Requested funding amounts should not exceed \$30,000 and must be matched with \$1 (non-federal) to every \$1 (USGS-federal). Congress changed this match requirement last year to 1:1 from the prior 2:1 match requirement. **Successful proposers should plan for a full proposal submission in approximately April/May 2023, but the final submission date is contingent upon official USGS 104b RFP guidelines (not yet available).** We anticipate the project period for FY 2023 will be from September 1, 2023, through August 31, 2024.

Please contact me with any questions concerning procedures or potential research topics. Please forward this to other faculty and encourage participation in this program.

Sincerely,

A handwritten signature in black ink that reads "D. G. Tarboton".

David G. Tarboton,
Director UWRL/UCWRR



Utah Water Research Laboratory
UtahStateUniversity

Utah Center for Water Resources Research
USGS 104(b) Competitive Research Grants Program
Request for Pre-Proposals FY 2023

Deadline: February 28, 2023, 5:00 PM

Project Period: 9/1/2023 – 8/31/2024

Send To:

Carri Richards
Utah Center for Water Resources Research
Utah Water Research Laboratory
Utah State University, Logan, Utah

Email: carri.richards@usu.edu

For further Information:

See the UCWRR website:
<https://uwrl.usu.edu/research/ucwrr/>
or USGS website:
<https://water.usgs.gov/wrri>

Questions:

Carri Richards: (435) 797-8040

Program Description and Objectives:

The Utah Center for Water Resources Research (UCWRR) is one of 54 federally authorized water resource institutes in the United States. It operates under the authority of the Water Resources Research Act of 1964, as amended in 1984, through the Water Resources Research Institutes Program administered by the USGS. Program objectives are as follows:

- Plan, facilitate, and conduct research to aid in the resolution of State and regional water problems
- Promote technology transfer and the dissemination and application of research results
- Provide for the training of scientists and engineers through their participation in research
- Provide for competitive grants to be awarded under the Water Resources Research Act

Eligibility:

Any faculty member or affiliate at an institution of higher education in the State of Utah can apply. Federal employees are NOT eligible as a principal investigator but may participate as a co-investigators.

Research Priorities

USGS Circular 1488 (<https://doi.org/10.3133/cir1488>), *Water Resources Research Act Program—Current Status, Development Opportunities, and Priorities for 2020–30*, lists seven focus areas for this program:

- Water Scarcity and Availability
- Water Related Hazards and Climate Variability
- Water Quality
- Water Policy, Planning, and Socioeconomics
- Ecosystem and Drainage Basin Functions
- Water Technology and Innovation
- Workforce Development and Water Literacy

Proposed projects should articulate how they align with these focus areas and the associated goals and opportunities listed in this circular with application to Utah and the western US.

Proposers should also articulate how their research benefits Utah or meets high-priority needs in the State.

Preference will be given to research projects led by early career faculty and those that support graduate students. The UCWRR highly encourages proposals from principal investigators who are from underrepresented or underserved groups in STEM and from institutions that serve minority populations. Additionally, we encourage proposals that increase diversity, equity, inclusion, and justice related to water research topics, or that address water issues in historically marginalized or underserved communities.

Funding Information:

Pre-proposals should be for projects of 12 months duration that address water problems in the State of Utah or regional concerns that affect Utah. It is anticipated that 4 projects will be selected to submit full proposals. Requested funding amounts should not exceed \$30,000 (matching funds are required).

The funding for this grant is contingent upon congressional appropriations. Congress has authorized \$14 million for the USGS 104b program as part of last year's Infrastructure Investment and Jobs Act, with around \$133,000 to be awarded to Utah in Plan Year 2023. The projects selected in the pre-proposal process will submit full proposals as part of Utah's USGS 104b proposal once the official RFP for this fiscal year becomes available. Given government budgetary uncertainty, reductions or delays in funding are also possible.

Matching Requirement:

Matching funds of 1:1 non-federal to federal dollars are required. Indirect costs are not allowed on the Federal cost category. However, indirect costs may be used to provide part of the matching requirements (i.e., indirect costs computed for federal funds may be used as part of the non-federal match. Indirect costs are allowed on the non-federal funds portion of the budget as match).

Selection Criteria:

The proposed projects will be ranked based on the following criteria:

30% – Scientific merit (*scientifically sound, advances basic knowledge, innovates, results in peer-reviewed scientific literature and/or information transfer to stakeholders and the public*)

30% – Applicability to Utah’s need (*addresses one or more Utah high-priority water quality or quantity needs*)

20% – Broader impact considerations (*includes component(s) addressing diversity, equity, inclusion, justice, or involving historically marginalized, underserved, or indigenous groups*)

20% – Training and workforce development (*supports early career faculty, graduate students*)

NOTE: Final decisions will also weigh and consider the full portfolio of projects to be submitted.

Instructions:

Project pre-proposals should include:

- (1) A project description of no more than 5 pages (excluding citations & investigator qualifications)
- (2) A 1-page draft budget. Formal institutional commitment from sponsored programs is not required at the pre-proposal stage, but the budget draft should state how the 1:1 match requirement will be met.

NOTE: Projects selected for inclusion in the full UCWRR proposal to USGS will be required to submit content responsive to the FY2023 USGS 104b request for proposals when it is released. This content must be submitted to the UCWRR no less than three weeks prior to the USGS deadline to allow time for assembly of the full proposal. The FY2023 USGS 104b RFP has not yet been released, and dates are uncertain and subject to USGS approval processes and federal government budget appropriations. We anticipate release of the RFP during March/April 2023, with the full proposal due in May 2023. We anticipate that the FY2023 USGS RFP will be similar to 2022 and will require only a 1:1 match. Until the FY2023 RFP is available, proposers should refer to the FY2022 RFP at:

<https://www.grants.gov/web/grants/view-opportunity.html?oppld=338369>

Timeline:

The 2023 schedule is as follows:

- Pre-proposals due to UCWRR on Tuesday – February 28, 2023
- Committee reviews pre-proposals – March 1 to March 24, 2023
- Proposers notified of selection status – April 1, 2023
- Materials due to UCWRR for inclusion in the full USGS proposal – April 10, 2023
- Full proposal due to USGS – May 1
- Expected project timeframe – September 1, 2023 to August 31, 2024

Contents:

- 1) Title. Concise but descriptive.
- 2) Project Type. Choose from the following: Research, Information Transfer, Information Management System, or Education.
- 3) Focus Categories. Choose a maximum of three focus categories from the list provided (See Focus Categories section below), with the most preferred focus category first.

- 4) Research Category. Choose from the following the one category that most closely applies
 - a. Water Scarcity and Availability
 - b. Water Hazards and Climate Variability
 - c. Water Quality
 - d. Water Policy, Planning, and Socioeconomics
 - e. Ecosystem and Drainage Basin Functions
 - f. Water Technology and Innovation
 - g. Workforce Development and Water Literacy
- 5) Keywords. Enter keywords of your choice descriptive of the work
- 6) Principal investigator(s). Provide name, academic rank, university, email address and phone number of the principal investigators
- 7) Abstract. Provide a brief description of the problem, methods, and objectives.
- 8) Statement of regional or State water problem. Include an explanation of the need for the project, who wants it, and why. Describe how the work proposed aligns with one or more focus areas in USGS Circular 1488 (<https://doi.org/10.3133/cir1488>), *Water Resources Research Act Program—Current Status, Development Opportunities, and Priorities for 2020–30*.
- 9) Statement of results or benefits. Specify the type of information that is to be gained and how it will be used.
- 10) Nature, scope, and objectives of the project, including a timeline of activities.
- 11) Methods, procedures, and facilities. Provide enough information to permit evaluation of the technical adequacy of the approach to satisfy the objectives.
- 12) Related research. Show by literature and communication citations the similarities and dissimilarities of the proposed project to completed or ongoing work on the same topic.
- 13) Training potential. Estimate the number of graduate and undergraduate students, by degree level, who are expected to receive training in the project.
- 14) Budget breakdown. A one-page draft budget and basic budget justification including details on meeting the 1:1 match.
- 15) Investigator’s qualifications. Include resume(s) of the principal investigator(s). Limit to 2 pages with no more than 15 pertinent publications.

Reporting Requirements:

All outputs of your 104b supported research must acknowledge both the USGS and UCWRR for the 104b grant opportunity and must include the project number assigned to your research.

At the completion of the project, recipients will be required to prepare a final report summary. The USGS tracks project productivity such as research publications, conference proceedings, patents, student participation, training sessions, etc., and you will be required to provide this information in your project summary report and to report on publications and other outcomes that result from this project for up to 2 subsequent years.

The following additional information must be provided as a reporting requirement:

- Name, major, degree program of all students who have worked on the project
- One or more publication quality photo(s) of project-related work (and/or student performing such work)
- Electronic copies of any student thesis or dissertation, poster, or PowerPoint presentation resulting from the project
- Journal articles submitted for publication or link to publication
- Fact sheets or any other materials produced as part of the project
- A final abstract (around 250 words) summarizing major findings of the project suitable for newsletter publication
- Publications, presentations, information transfer, student support, and notable achievements and awards

FOCUS CATEGORIES

ACID DEPOSITION	ACD
AGRICULTURE	AG
CLIMATOLOGICAL PROCESSES	CP
CONSERVATION	COV
DROUGHT	DROU
ECOLOGY	ECL
ECONOMICS	ECON
EDUCATION	EDU
FLOODS	FL
GEOMORPHOLOGICAL PROCESSES	GEOMOR
GEOCHEMICAL PROCESSES	GEOCHE
GROUNDWATER	GW
HYDROGEOCHEMISTRY	HYDROGEO
HYDROLOGY	HYDROL
INVASIVE SPECIES	INV
IRRIGATION	IG
LAW, INSTITUTIONS, AND POLICY	LIP
MANAGEMENT AND PLANNING	M&P
METHODS	MET
MODELS	MOD
NITRATE CONTAMINATION	NC
NON POINT POLLUTION	NPP
NUTRIENTS	NU
RADIOACTIVE SUBSTANCES	RAD

RECREATION	REC
SEDIMENTS	SED
SOLUTE TRANSPORT	ST
SURFACE WATER	SW
TOXIC SUBSTANCES	TS
TREATMENT	TRT
WASTEWATER	WW
WATER QUALITY	WQL
WATER QUANTITY	WQN
WATER SUPPLY	WS
WETLANDS	WET