The New Hampshire Water Resources Research Center (NH WRRC) is accepting applications for the FY 2023 State Water Resources Research Institute Program grant (Section 104 of the Water Resources Act).

The NH WRRC invites research and information transfer proposals from investigators at any college or university in New Hampshire for consideration in the Center's FY 2023 research program. The proposed research must be directed at research priorities of New Hampshire, New England, or the northeastern United States and align with the program objectives of the USGS RFP (section A2, pages 2-3). The NH WRRC has developed a list of NH priority areas (see below). To be considered for funding, proposals must be submitted by email to nh.wrrc@unh.edu no later than Monday, March 27, 2023 at 5:00 p.m. The NH WRRC highly encourages proposals from principal investigators who are from underrepresented or underserved groups in STEM, and from institutions that serve majority minority populations. Proposals are encouraged that increase diversity, equity, inclusion, and justice, which intersect with water research and resources. Proposals that address issues in historically marginalized or underserved communities are highly encouraged.

Detailed instructions for proposal preparation are included in section E (Project Proposals) of the 2022 USGS RFP (pages 10-12). We anticipate that the final 2023 USGS RFP will be released in March 2023 and that no substantive changes to the proposal format will be made. Proposal items 1 through 16 can be combined in a single PDF and items 11 through 16 should not exceed 10 pages (including references). Please submit your budget breakdown and budget justification (item 17) using the separate USGS budget templates. Please also include a supplementary document describing your data management plan. Other sections of the application instructions describe how the NH WRRC must format the proposal package for submission to the USGS. Only one-year projects will be considered at this time, but funding for subsequent years may be requested on an annual basis. The anticipated budget year is from 1 September 2023 to 31 August 2024 and budgets must be approved by your institution’s grants and agreements office. Note to any USNH investigators, please do not route proposals through Cayuse at this stage. The overall research budget is anticipated to be approximately $92,000, but funds have not yet been appropriated for FY 2023. The federal budget cap for each project (total direct costs) is $30,000. Indirect costs are not an allowable charge to the federal budget. The federal budget requested must be matched by one non-federal dollar for each federal dollar requested. Match can be supplied by working with NGOs such as watershed organizations who supply time or monetary support for the project, a portion of academic year faculty salary, support of graduate students by non-federal funds, volunteer labor and unrecovered indirect costs.

Proposals submitted to the NH WRRC will be reviewed by an external panel. The highest-ranked proposals will be selected and applicants will be notified by April 17, 2023. If you plan to submit a proposal, please send a courtesy message to nh.wrrc@unh.edu by March 20, 2023 so that we can arrange for reviewers. Please include the provisional title, principal investigator(s) and if possible, please suggest two or more potential technical reviewers with whom you have no conflicts of interest. Modifications to the

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The NH WRRC, not individual investigators, will submit the final proposal package (including SF-424 forms) to the USGS via grants.gov. Criteria for proposal evaluation include 1) relevance to the goals of the NH WRRC; 2) scientific quality of the work being proposed; 3) qualifications of the investigator to conduct the proposed research; 4) likelihood of success, and 5) past record of the investigator in publication and dissemination of research results. Proposals involving students or seeking seed funding are encouraged.

Questions relating to submission of proposals or matching funds can be directed to the NH WRRC Associate Director Michelle Shattuck (michelle.shattuck@unh.edu).

**NH WRRC RESEARCH PRIORITY AREAS AND EXAMPLE ISSUES**

**Water Quality**
- Non-point source pollution (e.g., septic systems, stormwater, development and agricultural runoff)
- Legacy and emerging contaminants (e.g., plastics, PFAS, pharmaceuticals etc.)
- Point source pollution (e.g., wastewater treatment facilities)
- Effectiveness of buffer zones and best management practices (BMPs)
- Linking water quality data and biological communities
- Pathogens and harmful algal blooms (e.g. cyanobacteria)
- Bacterial indicators for human health protection
- Invasive species

**Water Quantity and Availability**
- Quantifying water needs, uses, opportunities and efficiencies
- Aquifer delineation, mapping, and protection
- Groundwater availability and artificial recharge
- Water supply reliability and resilience

**Climate Change and Climate Variability**
- Impacts of climate change on water quality and quantity
- Preparedness for extreme events (e.g., floods and droughts)
- Watershed resilience

**Management, Policy, Planning and Socioeconomics**
- Systems approach on a watershed scale to management: economic factors and quality of life
- Social science and the human dimensions of water resources
- Ecosystem services and valuing water
- Low impact development
- Planning and conservation
- Management, regulation, and allocation
- Coupled human-hydrologic system models
- Infrastructure improvement and cost-benefit analysis

**Education, Outreach and Technology Transfer**
- Sharing and translating research results for various audiences (public, managers, policy makers etc.)
- Water resources conferences, seminars, and webinars
- Water quality and water use education
- Education opportunities for students