



**Date Posted: January 3, 2024**

## **REQUEST FOR PROPOSALS (RFP)**

### ***Best Practices to Attract and Retain a Diverse Water Workforce: Regional Workforce Initiatives (5238)***

**Due Date:** Proposals must be received by **3:00 pm Mountain Time on Wednesday, February 28, 2024**

**WRF Project Contact:** Miriam Hacker, PhD, [mhacker@waterrf.org](mailto:mhacker@waterrf.org)

#### **Project Sponsors**

This project is funded by The Water Research Foundation (WRF) as part of WRF's Research Priority Program.

#### **Project Objectives**

- Understand how regional workforce initiatives identify what is needed when recruiting individuals for the water workforce.
- Develop a set of best practices/models necessary for facilitating recruitment and retention in the water workforce through regional workforce initiatives.
- Establish and demonstrate criteria of success for facilitating collaboration and promoting recruitment and retention through regional workforce initiatives.

#### **Budget**

Applicants may request up to \$150,000 in WRF funds for this project.

#### **Background and Project Rationale**

Maintaining a consistent workforce in the water sector is critical for reliable service provision, which ensures the health and wellbeing of local communities. The water workforce is employed through utilities, government offices and agencies, private businesses, and non-profit and community-based organizations. Occupations cover a number of activities that include but are not limited to trade and vocational expertise, construction, operation, design, regulation, administration, finance, and management of infrastructure assets. Keeping pace with changes in the water sector can prove challenging for workforce management. For example, utilities are increasing digitization and pursuing a One Water Approach, leading to a need for increased technological competency and awareness of alternative water sources. This shift requires the water sector to adapt what type of workers they hire as well as how they are recruited and retained, especially following the fundamental shift in the workforce arena since COVID-19.

Challenges regarding resource allocation for training and recruitment and impacts to retention persist across regions and system sizes (NLC 2021). Additionally, jobs with similar requirements in other sectors create competition. Analysis of occupational employment statistics found that there are opportunities to improve diversity in the water workforce, with women, Black, and Hispanic workers being particularly underrepresented (Kane and Tomer 2018).

Workforce development has been consistently addressed by national and local efforts, including case study development, training programs, and outreach programs (US EPA 2020, 2023). Despite some examples of successful workforce collaboration, there remain opportunities to better document best practices and standardized approaches. A great example of this is the uptake of regional water workforce initiatives: collaborative arrangements of private, public, and civil sectors across geographic regions that compound resources for efforts in recruitment, training, and retention of individuals entering the water sector.

This research project focuses on regional workforce initiatives at various scales. ‘Regional’ can carry a variety of meanings but typically includes initiatives crossing jurisdictional boundaries, including metropolitan areas (e.g., Bay Area Water/Wastewater Workforce Reliability, Baywork (Baywork 2023)), within states (e.g., the West Michigan Water Careers Program (Parks and Horne 2021)), or across multiple states in a geographic region (e.g., New England Water Environment Association Water Warrior Committee (Jmoran 2017)). Regional initiatives are also seeing a spectrum of maturity. There is an opportunity to understand what makes an initiative successful to inform best practices for others looking to implement their own workforce initiatives in their local context.

The **desired research outcomes** for this project include developing a roadmap to understanding the key components of successful regional water workforce initiatives and developing a set of key success criteria to assist evaluation of this model. These outcomes would answer questions like: where are there commonalities and differences in regional workforce initiatives that should be considered? This is a critical step in identifying what the water sector needs to adjust its recruitment and retention processes to align with shifts in the sector and improvement of diversity, equity, and inclusion outcomes.

### **Research Approach**

To accomplish the three objectives above in a way that also aligns with WRF’s mission, priority will be given to proposals that demonstrate: 1) systematic analysis of regional water workforce initiatives and 2) practical guidance for water sector leaders based on these findings.

This RFP is intentionally flexible in the research approach to encourage creativity and originality from proposers. Proposers should describe how they will conduct the research to meet the objectives listed above. There are several considerations that would be useful for proposers to consider when developing proposal materials:

- **Context.** Provide background information and demonstrate how the proposed work will address the following aspects of this project, including:

- What existing work has been done to demonstrate the value and importance of regional workforce development initiatives at various scales for various outcomes?
  - Improved recruitment and retention
  - Creating innovative pathways to water sector careers
  - Improving diversity, equity, and inclusion in the water workforce
- How do these regional initiatives intersect with efforts from other industries to improve diverse, equitable, and inclusive outcomes for recruitment and retention?
  - Are there other industries or sectors that have done related work that the water sector can learn from? (Example: Workforce Hubs established through the Investing in America Agenda (The White House 2023), AmeriCorps, and other initiatives)
- How do regional initiatives measure success of programming and how does this compare across initiatives?
  - How do these initiatives and organizations shift to align with changes in the water sector?
- What are the key collaborations within and adjacent to the water sector that are needed to create, implement, and maintain successful regional initiatives?
- **Methodology.** Based on context, what approach is proposed to evaluate impact of regional initiatives?
- **Application.** Use the developed methodology to analyze existing regional water workforce initiatives. Please note, WRF is in contact with various regional workforce initiatives across the United States and Canada and can help the research team with case selection. However, proposers must demonstrate their own ability to identify cases for evaluation and analysis.
- **Dissemination.** How will findings from the analysis be synthesized in a way that is accessible to water sector leaders? This also relates to the Communication Plan discussed below.

### Expected Deliverables

Desired research outcomes are listed at the end of the Background and Project Rationale section. Outputs developed by the research team should be accessible to a diverse range of audiences in the water sector. Recognizing this intent, proposals should clearly state what deliverables are expected from proposed work. Examples of expected deliverables may include, but are not limited to:

- Research Report
- Guidance Manual
- Fact Sheet, Case Study, White Paper, etc.
- Workshop (consider plan to document workshop)
- Web tool (consider plan for maintenance)

Proposals should clearly state the expected deliverable, target audience, and justification for how this accomplishes project objectives.

### Communication Plan

WRF researchers are asked to take an active role in communications to strengthen the relationship with research users. From the beginning of your project, think about how you plan

to tell people about your research objectives and results. Communications planning should be part of the proposal process. An outline of the communications plan should be included in the proposal. Throughout the first year of the project, a more detailed strategy will need to be developed.

By building communications planning into the research process, the necessary links with the target audience(s) can be established early on. The WRF Research Program Manager will help you develop your final communications plan. A member of the WRF Communications and Marketing Team will be able to work with you to ensure that your product is compatible with WRF's standards and requirements.

Please review WRF's *Project Deliverable Guidelines* for information on preparing a communication plan. The guidelines are available at <https://www.waterrf.org/project-report-guidelines#project-deliverable-guidelines>. Conference presentations, webcasts, peer-reviewed publication submissions, and other forms of project information dissemination are typically encouraged.

### **Project Duration**

The anticipated period of performance for this project is 18-24 months from the contract start date. Proposals should specify this period through a schedule with key milestones.

### **References and Resources**

- Baywork. 2023. About BAYWORK. <https://www.baywork.org/>
- Jmorán. 2017. Water Warriors Committee Focuses on Veterans in the Workforce. New England Water Environment Association (NEWEA). <https://www.newea.org/2017/09/27/water-warriors-committee-focuses-veterans-workforce/>
- Kane, J., and A. Tomer. 2018. Renewing the Water Workforce: Improving Water Infrastructure and Creating a Pipeline to Opportunity. Project 4751. Denver, CO: The Water Research Foundation; Washington, D.C.: Metropolitan Policy Program at Brookings. <https://www.waterrf.org/research/projects/renewing-water-workforce-improving-water-infrastructure-and-creating-pipeline>.
- NLC (National League of Cities). 2021. Hard-to-Fill Infrastructure Jobs: A Challenge to Building Our Future. NLC. <https://www.nlc.org/resource/how-hard-to-fill-infrastructure-jobs-impact-building-our-future/>
- Parks, J. and J. Horne. 2021. FY 2020-2021: Innovative Water Infrastructure Workforce Development Grant Program. US EPA. [https://www.epa.gov/system/files/documents/2022-05/Grand\\_Rapids-Factsheet.pdf](https://www.epa.gov/system/files/documents/2022-05/Grand_Rapids-Factsheet.pdf)
- The White House. 2023. FACT SHEET: Biden-Harris Administration Announces Strategies to Train and Connect American Workers to Jobs Created by the President's Investing in America Agenda. The White House. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/16/fact-sheet-biden-harris-administration-announces-strategies-to-train-and-connect-american-workers-to-jobs-created-by-the-presidents-investing-in-america-agenda/>.

- US EPA (United States Environmental Protection Agency). 2020. America’s Water Sector Workforce Initiative: A Call to Action. US EPA. [https://www.epa.gov/sites/default/files/2020-11/documents/americas\\_water\\_sector\\_workforce\\_initiative\\_final.pdf](https://www.epa.gov/sites/default/files/2020-11/documents/americas_water_sector_workforce_initiative_final.pdf)
- US EPA. 2023. Water Sector Workforce. <https://www.epa.gov/sustainable-water-infrastructure/water-sector-workforce>

The following list includes examples of research reports, tools, and other resources that may be helpful to proposers. It is not intended to be comprehensive, nor is it a required list for consideration.

- Prior projects funded by WRF
  - Olstein, M. A., D. L. Marden, J. G. Voeller, J. D. Jennings, P. M. Hannan, and D. Brinkman. 2005. Succession Planning for a Vital Workforce in the Information Age. Project 2850. Awwa Research Foundations and American Water Works Association. <https://www.waterrf.org/research/projects/succession-planning-vital-workforce-information-age>.
  - Bennet, D. H., and A. Bennet. 2011. Organizational Development for Knowledge Management at Water Utilities. Project 4003. Denver, CO: Water Research Foundation. <https://www.waterrf.org/research/projects/organizational-development-needed-implement-knowledge-management-strategy-water>
  - Manning, A., T. Brueck, M. Isbell, and P. Brink. 2008. Workforce Planning for Water Utilities – Successful Recruiting, Training, and Retaining Operators and Engineers to Meet Future Challenges. Project 4005. Awwa Research Foundation and American Water Works Association. <https://www.waterrf.org/research/projects/workforce-planning-water-utilities-successful-recruiting-training-and-retaining>
  - McTigue, N. E., and R. S. Mansfield. 2013. Competency Model Development and Application to Meet Water Utility Workforce Needs. Project 4244. Denver, CO: Water Research Foundation. <https://www.waterrf.org/research/projects/competency-model-development-and-application-meet-water-utility-workforce-needs>
  - Moyer, J., R. Kincaid, K. Wilmot, K. Novick, M. Long, M. Nikolas, and M. Shadden. Business Continuity Plans for Water Utilities. Project 4319. Denver, CO: Water Research Foundation. <https://www.waterrf.org/research/projects/business-continuity-plans-water-utilities>
  - Oxenford, J., D. M. Hughes, S. Karasik, and Z. Bukhari. 2019. Building Workforce Skills for Intelligent Water Operations. Project 4663. Denver, CO: The Water Research Foundation. <https://www.waterrf.org/research/projects/building-workforce-skills-intelligent-water-operations>
  - Kane, J., and A. Tomer. 2018. Renewing the Water Workforce: Improving Water Infrastructure and Creating a Pipeline to Opportunity. Project 4751. Denver, CO: The Water Research Foundation; Washington, D.C.: Metropolitan Policy Program at Brookings. <https://www.waterrf.org/research/projects/renewing-water-workforce-improving-water-infrastructure-and-creating-pipeline>

- Campbell, M. 2019. Strategic Workforce Plan and Employee Value Proposition. Project 4982. Denver, CO: The Water Research Foundation.  
<https://www.waterrf.org/research/projects/strategic-workforce-plan-and-employee-value-proposition>
- Quinn, A., C. Safriet, K. Feeney, and V. Lauff. 2014. National Economic and Labor Impacts of the Water Utility Sector. Project 4566. Denver, CO: The Water Research Foundation; Alexandria, VA: Water Environment Research Foundation.  
<https://www.waterrf.org/research/projects/national-economic-and-labor-impacts-water-utility-sector>
- Other organizations/associations
  - Water Environment Federation (WEF). 2021. Compendium of Successful Water Workforce Practices. Water Environment Federation.  
<https://www.accesswater.org/publications/-10080033/compendium-of-successful-water-workforce-practices>
  - Work for Water. 2024. Work for Water. <https://www.workforwater.org/>
    - Website sponsored by American Water Works Association (AWWA) and WEF promoting water as a career opportunity
  - US EPA. 2022. Making Water a Career of Choice. US EPA.  
[https://www.epa.gov/sites/default/files/2021-01/documents/wf\\_case\\_study\\_compendium.pdf](https://www.epa.gov/sites/default/files/2021-01/documents/wf_case_study_compendium.pdf)
  - AWWA. 2024. Attracting, Training, and Retaining Talent.  
<https://www.awwa.org/Resources-Tools/Resource-Topics/Workforce>
  - United States Government Accountability Office (US GAO). 2018. Water and Wastewater Workforce:
    - Recruiting Approaches Helped Industry Hire Operators, but Additional EPA Guidance Could Help Identify Future Needs. <https://www.gao.gov/products/gao-18-102>

Ongoing workforce research is being facilitated by WRF through the following projects:

- WRF. *In Process*. Preparing the Water Sector to Embrace Technology: Skillsets and Enterprise Management Approaches for the Digital Age. Project 5178. Denver, CO: The Water Research Foundation.
- Porter, K. *In Process*. Diversity, Equity, and Inclusion Best Practices for the Water Sector Workforce. Project 5186. Denver, CO: The Water Research Foundation.  
<https://www.waterrf.org/research/projects/diversity-equity-and-inclusion-best-practices-water-sector-workforce>

Efforts will be made through Foundation staff to facilitate introductions and identify opportunities for collaboration to complement these ongoing efforts. If there are specific ways teams would like to coordinate in a way that enhances their proposed work, this should be included in the proposal.

### **Proposal Evaluation Criteria**

The following criteria will be used to evaluate proposals:

- Understanding the Problem and Responsiveness to RFP (maximum 20 points)
- Technical and Scientific Merit (maximum 30 points)
- Qualifications, Capabilities, and Management (maximum 15 points)
- Communication Plan, Deliverables, and Applicability (maximum 20 points)
- Budget and Schedule (maximum 15 points)

### **Proposal Preparation Instructions**

Proposals submitted in response to this RFP must be prepared in accordance with WRF's *Guidelines for Research Priority Program Proposals*. The current version of these guidelines and the *Instructions for Budget Preparation* are available at <https://www.waterrf.org/proposal-guidelines>. The guidelines contain instructions for the technical aspects, financial statements, indirect costs, and administrative requirements that the applicant must follow when preparing a proposal.

Proposals that include the production of web- or software-based tools, such as websites, Excel spreadsheets, Access databases, etc., must follow the criteria outlined for web tools presented in the *Web Tool Criteria and Feasibility Study for The Water Research Foundation Project Deliverables* at <https://www.waterrf.org/project-report-guidelines#webtool-criteria>.

### **Eligibility to Submit Proposals**

Proposals will be accepted from both US-based and non-US-based entities, including educational institutions, research organizations, governmental agencies, and consultants or other for-profit entities.

WRF's Board of Directors has established a Timeliness Policy that addresses researcher adherence to the project schedule. The policy can be reviewed at <https://www.waterrf.org/policies>. Researchers who are late on any ongoing WRF-sponsored studies without approved no-cost extensions are not eligible to be named participants in any proposals. Direct any questions about eligibility to the WRF project contact listed at the top of this RFP.

### **Administrative, Cost, and Audit Standards**

WRF's research program standards for administrative, cost, and audit compliance are based upon, and comply with, Office of Management and Budget (OMB) Uniform Grants Guidance (UGG), 2 CFR Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, and 48 CFR 31.2 Contracts with Commercial Organizations. These standards are referenced in WRF's *Guidelines for Research Priority Program Proposals*, and include specific guidelines outlining the requirements for indirect cost negotiation agreements, financial statements, and the Statement of Direct Labor, Fringe Benefits, and General Overhead. Inclusion of indirect costs must be substantiated by a negotiated agreement or appropriate Statement of Direct Labor, Fringe Benefits, and General Overhead. Well in advance of preparing the proposal, your research and financial staff should review the detailed instructions included in WRF's *Guidelines for Research Priority Program Proposals* and consult

the *Instructions for Budget Preparation*, both available at <https://www.waterrf.org/proposal-guidelines>.

### **Budget and Funding Information**

The maximum funding available from WRF for this project is \$150,000. The applicant must contribute additional resources equivalent to at least 33% of the project award. For example, if an applicant requests \$100,000 from WRF, an additional \$33,000 or more must be contributed by the applicant. Acceptable forms of applicant contribution include cost share, applicant in-kind, or third-party in-kind that comply with 2 CFR Part 200.306 cost sharing or matching. The applicant may elect to contribute more than 33% to the project, but the maximum WRF funding available remains fixed at \$150,000. Proposals that do not meet the minimum 33% of the project award will not be accepted. Consult the *Instructions for Budget Preparation* available at <https://www.waterrf.org/proposal-guidelines#RPP-instr-budget-prep> for more information and definitions of terms.

### **Period of Performance**

It is WRF's policy to negotiate a reasonable schedule for each research project. Once this schedule is established, WRF and its sub-recipients have a contractual obligation to adhere to the agreed-upon schedule. Under WRF's No-Cost Extension Policy, a project schedule cannot be extended more than nine months beyond the original contracted schedule, regardless of the number of extensions granted. The policy can be reviewed at <https://www.waterrf.org/policies>.

### **Utility and Organization Participation**

WRF encourages participation from water utilities and other organizations in WRF research. Participation can occur in a variety of ways, including direct participation, in-kind contributions, or in-kind services. To facilitate their participation, WRF has provided contact information, on the last page of this RFP, of utilities and other organizations that have indicated an interest in this research. Proposers are responsible for negotiating utility and organization participation in their particular proposals. The listed utilities and organizations are under no obligation to participate, and the proposer is not obligated to include them in their particular proposal.

### **Application Procedure and Deadline**

Proposals are accepted exclusively online in PDF format, and they must be fully submitted before 3:00 pm Mountain Time on February 28, 2024.

The online proposal system allows submission of your documents until the date and time stated in this RFP. To avoid the risk of the system closing before you press the submit button, do not wait until the last minute to complete your submission. Submit your proposal at <https://forms.waterrf.org/cbruck/rfp-5238>.

Questions to clarify the intent of this RFP and WRF's administrative, cost, and financial requirements may be addressed to the WRF project contact, Miriam Hacker at 571.384.2116 or [mhacker@waterrf.org](mailto:mhacker@waterrf.org). Questions related to proposal submittal through the online system may be addressed to Caroline Bruck at 303.347.6118 or [cbruck@waterrf.org](mailto:cbruck@waterrf.org).



## 5238 Utility and Organization Participants

The following utilities have indicated interest in possible participation in this research. This information is updated within 24 business hours after a utility or an interested organization submits a volunteer form, and this RFP will be re-posted with the new information. **(Depending on your settings, you may need to click refresh on your browser to load the latest file.**

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