REQUEST FOR PROPOSALS (RFP)

Integrating Equitable Outcomes into Water Reuse Projects (RFP 5303)

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Due Date
Proposals must be received by 3:00 pm Mountain Time on Wednesday, May 7, 2025.

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

Project Objectives

- Equip utilities and decision-makers to holistically assess an alternative water system's potential benefit and/or impact.
- Quantify or operationalize equitable impacts from alternative/diversifying water systems.
- Identify metrics to assess and inform decision-making processes for equitable implementation of diversifying water systems.

Budget
Applicants may request up to $200,000 in WRF funds for this project.

Background and Project Rationale
Alternative source water or water reuse projects present emerging opportunities to increase community resiliency and meet environmental objectives. However, beyond environmental impacts, there is unique potential to offset existing water challenges and potentially improve community access and service provision quality. In 2017, the US Water Alliance released a national briefing report which delineated "water equity" across three major pillars:

- Ensure all people have access to clean, safe, affordable water service.
- Maximize the community and economic benefits of water infrastructure investment.
- Foster community resilience in the face of a changing climate.

Water reuse systems can benefit communities by expanding water supplies and improving local resiliency. However, the intersection between these principles of water equity and these

innovative systems remains unclear. Who stands to benefit from alternative water systems, and how does this new type of infrastructure affect local investments, such as workforce development, neighborhood revitalization, and affordability?

An opportunity exists to strengthen the understanding of equitable outcomes within the context of water reuse systems. Water professionals, planners, and other decision-makers need to be equipped to appropriately engage communities during project conception and highlight project benefits. While funding opportunities increasingly emphasize the need to engage different communities, clear metrics for evaluating water equity in infrastructure projects remain limited. Addressing this gap will help ensure that water reuse projects are designed and implemented in a way that maximizes community benefits.

Research Approach

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. The following approach is intended as a starting point. Please note that proposers are expected to demonstrate some level of partnership in their work. However, WRF is also available as a resource to help support the project team in identifying case studies, or project participants. Please note that diversity of representation across the types of water reuse projects is important for a successful proposal.

Task 1: Strengthening the definition of "water equity" in the context of diversifying water systems.

- Literature review to synthesize current and past work on equity considerations for alternative water systems. Topics to be covered include, but are not limited to:
  - Identifying what motivates communities to consider water reuse and how these drivers relate to equitable outcomes.
  - Characterizing settings/cases where reuse implementation addresses inequities within the utility and more broadly, e.g. a table or summary of criteria where reuse can improve inequities.
  - Understanding how equity considerations overlap/complement other initiatives, such as One Water Approach (US Water Alliance), Utilities as Anchor Institutions (US EPA), and others.
  - Incorporating lessons learned from past WRF research and analogous systems, like green stormwater infrastructure and other water systems that have made significant strides in this space.

Task 2: Developing an equity framework for diversifying water systems

- Synthesize outcomes from Task 1 into an accessible framework for water planners and other key decision-makers to utilize during the conceptual, design, planning, and implementation phases.
- Ideally, this equity framework would be co-created with experts in environmental justice and water equity space to encourage collaboration between utilities and communities.

Task 3: Operationalizing the framework with case studies

- Identify projects that exemplify aspects of the equity framework and demonstrate the use of key metrics for either measuring impact or benefits from alternative water systems (e.g. cost-benefit, trust, access, etc.).
- Provide guidelines that identify resources needed to make adoption more accessible and provide a holistic picture of impacts (e.g. workforce, regulation, service provision, public health, funding, etc.).
- Provide guidelines or initial ideas on how to operationalize reuse in a way that advances water justice, e.g. case studies showing how utilities have used an equity lens in their reuse programs.
- Case studies should represent a variety of types of water reuse systems in a diverse range of geographic contexts. Again, proposing teams should demonstrate an understanding of the landscape and existing partnerships, but can also work with WRF to ensure this representation during the project period.

Expected Deliverables

The deliverables for this project are intentionally flexible to encourage creativity and originality from proposers. However, proposals should be clear on how deliverables are relevant and the appropriate mechanism for communicating research findings to the target audience. Potential deliverables may include (but are not limited to):

- Guidance document expanding previous definitions of equity with respect to diversifying water systems and recommendations for maximizing co-benefits to communities
- Research report (must use WRF's *Research Report Template*)
- Equity framework for practical project planning to operationalize the expanded equity definitions
- In-depth case studies showcasing the various aspects of the equity framework
- Webcast, conference presentation, etc.
- Peer-reviewed journal article
- Field demonstration/pilot project
- Fact sheet, case study, white paper, etc.
- Workshop (consider a plan to document workshop)
- Technology Deliverables (must follow the *Technology Deliverables Guidance*)

Please note that conference presentations, workshops, and webcasts may be included as part of the Communication Plan but are not necessarily considered as sufficient stand-alone deliverables for this work.

Communication Plan

Please review WRF's *Project Deliverable Guidelines* for information on preparing a communication plan. 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.

References and Resources
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.

Chaudhry, R. M., and A. Harper. 2023. "EPA Spearheads Water Reuse for Climate-Resilient Infrastructure." *Journal AWWA* 115 (3): 62–66. https://doi.org/10.1002/awwa.2074.

EPA (U.S Environmental Protection Agency). 2021. "Water Utilities as Anchor Institutions." Overviews and Factsheets. US EPA, Office of Wastewater Management. https://www.epa.gov/sustainable-water-infrastructure/water-utilities-anchor-institutions.

Howe, C., and P. Mukheibir. 2015. *Pathways to One Water: A Guide for Institutional Innovation*. Project 4487. Alexandria, VA: Water Environment Research Foundation. https://www.waterrf.org/research/projects/institutional-issues-one-water-management.

Losoya, J., J. Walker, A. Fuller, and J. Seefeldt. 2022. "Ensuring One Water Works for All: Opportunities for Realizing Water Reuse in Affordable Housing." Austin, TX: National Wildlife Federation. https://texaslivingwaters.org/wp-content/uploads/2022/04/Opportunities-for-Realizing-Water-Reuse-in-Affordable-Housing.pdf.

May, L. et. al. 2024. *Incorporating Equity and Social Dimension into Community Climate Adaptation Planning and Watershed Management: A Review of the Literature and Resources*. Project 5180. Denver, CO: The Water Research Foundation. https://www.waterrf.org/serve-file/resource/PROJECTPAPTER-5180-1.pdf

Osman, K. K., M. E. Hacker, and K. M. Faust. 2023. "Conceptualizing Equity for Onsite Nonpotable Water Reuse Systems in the United States." *Journal of Sustainable Water in the Built Environment* 9 (2): 04023002. https://doi.org/10.1061/JSWBAY.SWENG-475 .

Raucher, R., J. Henderson, R. Atwater, E. Rosenblum, R. Watson, J. Chong, D. Basoli, D. Callow, and E. Miles. 2019. *Challenges and Practical Approaches to Water Reuse Pricing*. Project 4662. Denver, CO: The Water Research Foundation. https://www.waterrf.org/research/projects/challenges-and-practical-approaches-water-reuse-pricing.

Raucher, R. S., and G. T. Tchobanoglous. 2014. *The Opportunities and Economics of Direct Potable Reuse*. Project 1710. Alexandria, VA: Water Reuse Research Foundation. https://www.waterrf.org/research/projects/opportunities-and-economics-direct-potable-reuse.

Roller, Z., and S. Gasteyer. 2019. “Closing the Water Access Gap in the United States.” Washington D.C.: DigDeep, US Water Alliance. https://static1.squarespace.com/static/5e80f1a64ed7dc3408525fb9/t/6092ddcc499e1b6a6a07ba3a/1620237782228/Dig-Deep_Closing-the-Water-Access-Gap-in-the-United-States_DIGITAL_compressed.pdf.

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* and *Instructions for Budget Preparation*. These 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 *Technology Deliverables Guidance*.

Eligibility to Submit Proposals
Proposals will be accepted from both U.S.-based and non-U.S.-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. 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.*

Budget and Funding Information
The maximum funding available from WRF for this project is $200,000. 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 $200,000. Proposals that do not meet the minimum 33% of the project award will not be accepted. Consult the *Instructions for Budget Preparation* 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.

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 Wednesday, May 7, 2025.

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/RFP5303

Questions to clarify the intent of this RFP and WRF's administrative, cost, and financial requirements may be addressed to the WRF project contact, George Kajjumba at 571.384.2116 or gkajjumba@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.

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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