



Date Issued: Thursday, February 9, 2023

REQUEST FOR PROPOSALS (RFP)

Developing an Environmental, Social, and Governance Framework for Water Utilities (RFP 5206)

Due Date: Proposals must be received by **3:00 pm Mountain Time on Monday, April 10, 2023**

WRF Project Contact: Harry Zhang, PhD, PE, h Zhang@waterrf.org

Project Sponsors

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

Project Objectives

- To develop a water-sector-specific environmental, social, and governance (ESG) framework, and address related topics
- To prepare a user-friendly ESG framework report with synthesis of case studies for water utilities

Budget

Applicants may request up to \$125,000 in WRF funds for this project. WRF funds requested and total project value are evaluation criteria considered in the proposal selection process.

Background and Project Rationale

A spotlight is being placed on the water sector as it seeks to address the prevailing issues associated with environmental and climate change risks, water equity, and effective governance. The water sector continues to be at the forefront of climate impacts. It has a significant role in reducing energy usage and waste generation, preserving natural resources, and addressing environmental risks. It is also one of the critical lifeline sectors most impacted by the dramatic changes in climate. In the face of budget constraints, the water sector is tasked with maintaining and enhancing public health and safety; addressing diversity, equity, and inclusion in the workforce; increasing access to water and wastewater services for customers; addressing services for disadvantaged communities; maintaining financial sustainability; and moving towards net-zero carbon and energy goals.

In order to develop an ESG framework, we must define how ESG relates to the water sector. The "Environmental" category may include, but is not limited to, water quality, constituents of emerging concern (CECs), energy use, greenhouse gas emissions, and resilience to extreme events. Examples for the "Social" category include affordability; safety; diversity, equity, and inclusion (DE&I); customer satisfaction; and community engagement. The "Governance" category may include governance structure, policies and practices, and business ethics.

An integrated ESG framework specific to the water sector can play an important role in addressing these inter-related challenges. While there are general ESG management, reporting, and best practice guides available, many of these are corporate-focused or for general-purpose sub-national governments such as cities and counties, and are not specific to water utilities. While work has been done in this area by a few utilities, there is more to be learned for the water sector to develop tailored frameworks and tools to manage and report on ESG. Furthermore, there is not currently adequate alignment on ESG water metrics, and there is a lack of consensus on what and how to report based on these water metrics, which creates confusion for water utility leaders. The water sector has an unprecedented opportunity to increase the transparency of utility environmental and social sustainability performance, and to quantify and disclose stewardship efforts regarding DE&I and the achievement of sustainable development goals.

Research Approach

The research approach in this project includes five components as follows.

Task 1. The research team will synthesize key elements of ESG frameworks as applicable to the water sector and document methods for tracking utility performance. This includes consideration of the interconnections of the role of water in human and environmental health. The summary will include how utilities use data to support water infrastructure investment, climate mitigation and adaptation, water supply security, the water-energy nexus, water data and intelligent water systems, and the value of water in existing ESG frameworks available in the U.S. and internationally. The summary will include a comparison of available performance tracking systems (e.g., AWWA Utility Benchmarking Performance Indicators, Sustainability Accounting Standard for Water Utilities and Services issued by Sustainability Accounting Standards Board [SASB], and those listed in references or from literature) and how ESG can be incorporated.

The research team will also conduct a comprehensive literature review of triple bottom line analysis, cost benefit analysis, and sustainability reporting, including a review of WRF's research efforts to date. In addition, the research team will evaluate the state-of-the-practice and advancement of ESG and related metrics and approaches among bond issuers, certifiers of ESG and related bonds (e.g., Climate Bonds Initiative), credit rating agencies, and investors in water utilities.

In addition, the research team will conduct an online survey on the current state of ESG applications on both national and global scales (e.g., Canada, Australia, and European countries), focusing on the water-related perspective from utilities and municipalities.

Task 2. The research team will adapt existing ESG methods, metrics, and reporting for the water utility sector. Drivers for using ESG vary, and the metrics will address the goals that may be identified, such as customer service or financial ranking for large water companies. Common financial sector frameworks may be adapted, such as the Global Reporting Initiative, the Principles for Responsible Investment, the EU Taxonomy for Sustainable Activities, and the SASB's Sustainability Accounting Standard. In addition, the research team will explore how to customize relevant elements of frameworks in the context of different water utility types (public and private) and sizes, based on analysis of key attributes and elements of ESG frameworks and implementation, along with public availability of data. In addition, the research team will consider connecting and adapting UN Sustainable Development Goals (SDGs), which include certain water specific metrics, in the ESG framework.

Task 3. The research team will conduct an invitation-only virtual workshop with partner utilities and organizations to incorporate real-world experience and gather feedback, including comparison among ESG frameworks and related water metrics. The virtual workshop participants will include the Project Advisory Committee members, representatives from participating utilities, WRF's collaborators and partners, and other invitees recommended by WRF and the research team. This task can be jointly performed with Task 4 for greater efficiency in conducting a beta test of the draft ESG framework.

Task 4. The research team will prepare a report, a test of the draft framework, and templates for reporting using the framework. One of these should be a user-friendly report about the ESG framework, including background information, an explanation of methods used, results in the form of the proposed ESG framework, and case studies for water utilities. The research team will conduct beta testing of the draft ESG framework by a selected group of water utilities regarding its comprehensiveness, usability/user-friendliness, and other applicable factors. Based on the feedback, the research team will prepare a utility-facing publication and user-friendly template for reporting.

Task 5. For broader community outreach, the research team will conduct a webcast hosted by WRF and collaborating organizations on the overall findings of this project. The research team should submit at least one open access peer-reviewed journal paper, which can be done after the completion of the project. In addition, the research team should consider additional outreach activities (through the applicant's cost share, if possible), such as presenting project findings at professional conferences aimed at water utility practitioners, or sharing project findings through sector newsletters and other communication channels.

Expected Deliverables

- A stand-alone literature review synthesis of ESG frameworks with examples of successful utility implementation.
- An invitation-only virtual workshop focusing on the water-sector-specific ESG framework, along with logistics planning and all supporting materials (e.g., agenda, presentations, meeting notes, and workshop summary).
- A utility-facing user-friendly publication addressing:
 - Synthesis of the state-of-the-practice
 - Beta testing of the draft ESG framework for water utilities
 - Template for reporting using the ESG framework for water utilities
 - A chapter summarizing knowledge gaps, research needs, and preliminary project concepts for recommended research projects in the future.
- Broader outreach
 - Webcast and public outreach materials (e.g., infographics that can help communicate research findings to water utilities).
 - Submitting one open access peer-reviewed journal paper and additional outreach products as applicable.

Communication Plan

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 review publication submissions, and other forms of project information dissemination are typically encouraged.

Project Duration

The anticipated period of performance for this project is 15 to 18 months from the contract start date. The related publications from this project can go beyond the project duration.

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.

Clements, J., J. Henderson, and A. Flemming. 2021. *Economic Framework and Tools for Quantifying and Monetizing the Triple Bottom Line Benefits of Green Stormwater Infrastructure*. Project 4852. Denver, CO: The Water Research Foundation. (<https://www.waterrf.org/research/projects/economic-framework-and-tools-quantifying-and-monetizing-triple-bottom-line>)

Global Reporting Initiative. 2022. *The GRI Perspective - ESG Standards, Frameworks and Everything in Between*. (<https://www.globalreporting.org/media/jxkgrggd/gri-perspective-esg-standards-frameworks.pdf>)

Kenway, S., C. Howe, and S. Maheepala. 2007. *Triple Bottom Line Reporting of Sustainable Water Utility Performance*. Project 3125. Denver, CO: The Water Research Foundation. (<https://www.waterrf.org/research/projects/triple-bottom-line-reporting-sustainable-water-utility-performance>)

Sustainability Accounting Standards Board. 2018. *Water Utilities and Services - Sustainability Accounting Standard*. ([https://www.sasb.org/wp-content/uploads/2018/11/Water Utilities Services Standard 2018.pdf](https://www.sasb.org/wp-content/uploads/2018/11/Water_Utilities_Services_Standard_2018.pdf))

U.S. Environmental Protection Agency. 2021. *Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts*. (<https://www.epa.gov/cira/social-vulnerability-report>)

U.S. Environmental Protection Agency. 2022a. *Climate Resilience Evaluation and Awareness Tool (CREAT)*. (<https://www.epa.gov/crwu/climate-resilience-evaluation-and-awareness-tool-creat-risk-assessment-application-water>)

U.S. Environmental Protection Agency. 2022b. *Resilient Strategies Guide for Water Utilities*. (<https://www.epa.gov/crwu/resilient-strategies-guide-water-utilities#/?region=101&utilityType=4&utilitySize=1315&assets=&priorities=&strategies=&fundingSource=s>)

U.S. Environmental Protection Agency. 2022c. "Integrated Planning Implementation Documents." (<https://www.epa.gov/npdes/integrated-planning-implementation-documents>)

Wasley, E., K. Jacobs, and J. Weiss. 2020. *Mapping Climate Exposure and Climate Information Needs to Water Utility Business Functions*. Project 4729. Denver, CO: The Water Research Foundation. (<https://www.waterrf.org/research/projects/mapping-climate-exposure-and-climate-information-needs-water-utility-business>)

The Water Research Foundation. 2021. *Community-enabled Lifecycle Analysis of Stormwater Infrastructure Costs (CLASIC)*. (<https://www.waterrf.org/clasic>)

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

The Emerging Opportunities Program has unique proposal requirements. Please follow the submission instructions below. Proposals not adhering to the restrictions below will not be accepted.

The entire proposal, ***excluding*** the proposal cover worksheet, resumes, budget form, budget narrative, co-funding support form (when applicable), schedule, and references, should **not exceed fifteen pages in length**. Proposals must include the following components.

- **Proposal Cover Worksheet:** https://www.waterrf.org/sites/default/files/file/2021-07/Proposal_Cover_Worksheet.pdf
- **Background and Statement of Need:** Provide a brief summary of the current state of knowledge for the issue that the proposed research will help address, and the drivers for the proposed research.
- **Objectives:** The proposed research objectives should be clearly identified in one or two sentences.
- **Technical Approach:** Describe how the proposed research will be conducted and the tasks necessary to accomplish the objectives.
- **Benefit to WRF Subscribers:** Identify the practical benefits of the proposed research to water utilities and the water community.
- **Research Team and Other Participants:** Identify the key members of the research team and provide brief statements of their qualifications to conduct the proposed research. Identify any other organizations that have committed to collaborate on the proposed research. Curriculum vitae or resumes for research team members are required.
- **Budget:** A detailed budget is required. The researcher should identify the amount of WRF funds requested and any other cost-share, in-kind, or cash support for the proposed research. Cost-share, in-kind, and cash support is not required for submission, however, is encouraged. The following items will need to be included with the budget. *Instructions for Budget Preparation* are available at <https://www.waterrf.org/sites/default/files/file/2019-09/InstructionsforBudgetPreparation.pdf>.
 - Proposal Budget Form: https://www.waterrf.org/sites/default/files/file/2021-07/15_BudgetForm.xlsx
 - Budget Narrative (see instructions for budget preparations)
 - Emerging Opportunities Co-Funding Support Form (when applicable): Each co-funding organization providing cash to the project payable directly to WRF must complete a separate Emerging Opportunities Co-Funding Support Form and include it with the proposal package. The form is available at

https://www.waterrf.org/sites/default/files/file/2021-07/RPP_Co-Funding_Support_Form.pdf

- **Schedule** - A detailed schedule is required.
- **References** (optional) – detailed citations are not required in the proposal, but may be provided at the discretion of the researcher.

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 domestic or international 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.

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 Monday, April 10, 2023.

The online proposal system allows submission of your documents until the date and time stated in this RFP. Submit your proposal at <https://forms.waterrf.org/230365814215855>

Please ensure you upload the required documents before the deadline. **Proposals submitted after the deadline will not be accepted.**

Questions to clarify the intent of this RFP and WRF's administrative, cost, and financial requirements may be addressed to the WRF project contact, Harry Zhang, PhD, PE, at (571) 384-2098 or hzhang@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.

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The following utilities have indicated an 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 upon your settings, you may need to click refresh on your browser to load the latest file.)**

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