THE Water Research FOUNDATION

GUIDELINES FOR RESEARCH PRIORITY PROGRAM PROPOSALS

June 2024

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Overview of Important Requirements

1. Applicants must submit a Co-funding Support Form for each utility or organization that is contributing co-funding cash to the project that will be payable directly to WRF (see "Co-funding Support Form" under Section II—Instructions for Preparing Proposals).

2. All files uploaded must be in PDF format and should **not** be locked/secured with a password.

3. Proposal review and selection include an evaluation of the submitting organization's financial statements and its Statement of Direct Labor, Fringe Benefits and General Overhead, or a Federally negotiated indirect cost rate agreement (see "Financial Statements" and "Indirect Cost Documentation" under Section II—Instructions for Preparing Proposals). This evaluation is an integral part of WRF's proposal review and selection process. These guidelines also clarify that cost analysis of the proposed budget is an integral part of proposal review and selection (see "Technical Review and Evaluation Process" under Section III—Proposal Review and Selection).

4. A signed IRS Form W-9 is required for all U.S. entities to submit a proposal (see Section II.20: IRS Form W-9) or W-8BEN for international entities.

5. Project Demographic Data Collection Form is a new form this year that is required for all submissions.

Definitions

Allowable Costs. Costs that meet the criteria for allowable costs per 2 CFR 200.403.

Applicant. Any eligible entity or organization that submits a proposal in response to a WRF request for proposals.

Co-Funder Funds. The portion of the project funds that each co-funder has agreed to contribute in cash to fund the project, payable in full to WRF.

Co-Principal Investigator (Co-PI). An individual involved with the Principal Investigator in the scientific development or execution of a project. A Co-PI typically devotes a specified percentage of time to the project and is considered "key personnel." A Co-PI may or may not be a part of the sub-recipient's organization. The designation of a Co-PI, if applicable, does not affect the Principal Investigator's roles and responsibilities as specified in the Project Funding Agreement.

Cost Share. The portion of allowable costs that the sub-recipient, subcontractor, or third-party participant contributes toward completing a WRF project. Cost share includes any non-federal cash and non-cash contributions from the sub-recipient and subcontractors, and non-federal cash contributions from participants. All cost share must meet the requirements in 2 CFR 200.306.

Participant. An individual or organization that provides third-party contributions or other material support to a WRF research project but does not enter into a contractual relationship with WRF, the sub-recipient, or a subcontractor.

Principal Investigator (PI). The sub-recipient's (applicant's) employee with primary responsibility for ensuring that all terms and conditions of the agreement are met and to whom notices of insufficiencies are given by WRF.

Project Advisory Committee (PAC). A group of independent volunteers appointed by WRF to provide independent technical review, assistance, and/or expertise to WRF regarding all project reports and other work products.

Project Funding Agreement (PFA). The sub-award (contract) between WRF and the sub-recipient to conduct a WRF research project.

Research Program Manager. The WRF employee responsible for reviewing all actions taken by the sub-recipient and with authority to communicate all WRF decisions concerning the process, procedure, scheduling requirements, funding requirements, and outcome of the sub-recipient's project.

Request for Proposals (RFP). An open and competitive solicitation of proposals for funding to conduct a specific WRF research project.

Subcontractor. Any individual or organization with whom the sub-recipient, or another subcontractor, separately contracts to complete one or more specific tasks required by a WRF research project.

Sub-recipient. The legal entity or organization with which WRF enters into a PFA (agreement) to conduct a WRF research project.

Survey. The U.S. government's Paperwork Reduction Act of 1995 (PRA) establishes conditions on the use of federal funds for conducting information collection activities (e.g., surveys). Under the PRA, an information collection activity is defined as obtaining facts or opinions from ten or more persons by the use of standard questions presented in forms, telephone or personal interviews, the internet, requests for narrative responses to questions, or almost any other means. Typical WRF project activities that meet this broad definition include mail surveys, telephone surveys, email or web-based surveys, and face-to-face meetings (e.g., workshops) that aim to obtain information from ten or more water utility employees and/or other water professionals.

Third-Party In-Kind. The value of non-cash contributions that a participant provides toward completing a WRF project. Third-party in-kind must be necessary and reasonable for proper and efficient accomplishment of a WRF project. All third-party in-kind must meet the requirements in 2 CFR Part 200.306.

I. OVERVIEW

The Water Research Foundation

The Water Research Foundation (WRF) is the leading research organization advancing the science of all water to meet the evolving needs of its subscribers and the water sector. WRF is a nonprofit, educational organization that funds, manages, and publishes research on the technology, operation, and management of drinking water, wastewater, reuse, and stormwater systems—all in pursuit of ensuring water quality and improving water services to the public. The purpose of WRF is *to advance the science of water to improve the quality of life for all communities*.

WRF's research programs are among the most scientifically credible and best-coordinated water research programs in the world. Information regarding WRF research programs can be found at www.waterrf.org/programs.

The Research Priority Program

The Research Priority Program enables WRF to address broadly relevant subscriber issues, challenges, and opportunities. Projects are prioritized and approved for funding by WRF's Board-appointed Research Advisory Council (RAC). Sixty percent of WRF's annual research budget is allocated to this program. Individual Research Priority Program projects are typically awarded to researchers via a competitive request for proposals (RFP) process. The RFPs are developed by WRF staff and volunteer experts enlisted from water utilities and other water organizations. Additional information on the Research Priority Program is provided at www.waterrf.org/research-priority-program.

II. INSTRUCTIONS FOR PREPARING PROPOSALS

The following section outlines the general instructions for preparing a proposal in response to a WRF RFP. Additional specific instructions are included in each RFP.

The WRF funding level (dollar amount) specified in the RFP is the maximum amount that WRF will provide toward achieving the objectives set forth in the RFP. Proposals requesting funds from WRF greater than those indicated in the RFP will not be considered.

Full proposals must be submitted online using the unique project-specific link within the RFP. You will assemble your proposal components into two proposal packets. Please use the following naming convention for your two packets: YourOrgName_Packet1.pdf and YourOrgName_Packet2.pdf. Please ensure your two proposal packets contain the required documents and are uploaded before the deadline. The following section outlines the general instructions for preparing a Research Priority Program proposal.

When developing the proposal, the below requirements must be followed:

1. Proposals must fit on standard continental U.S. letter-sized paper (8 ½ × 11 inches) with minimum margins of one inch on each side of the paper.
2. Text font size must be a minimum of 12 point.
3. Applicants may include logos, and alternative templates may be used so long as submittals follow the requirements outlined above (paper size, margins, font size).
4. WRF's logo is copyrighted and **should not** be displayed on proposals.

Proposals must include the components listed below. **Proposals that are missing any of these required components will be considered incomplete and potentially ineligible for consideration**. Please note the enforceable page limits for certain components of the proposal as identified below. **Proposals exceeding these page limits will not be considered**.

All files must be compiled into two PDF proposal packets and should not be locked/secured with a password. If you are not a U.S. entity, some required forms (such as a Form W-9) may not apply to you. Simply upload the packet document stating "N/A" in those instances.

Packet/Component	**Required**	**Page Limit**
PACKET ONE – Technical Review and Evaluation		
1. Proposal Cover Sheet	Yes	
2. Project Abstract	Yes	1
3. Project Description	Yes	22
4. Application Potential	Yes	1
5. Quality Assurance/Quality Control	Yes	20
6. Management Plan	Yes	2
7. Communication Plan	Yes	1
8. References		
9. Licenses and Inventions		
10. Budget Narrative	Yes	
11. Schedule	Yes	
12. Current and Pending Form	Yes	
13. Third-Party Contribution Letters of Commitment*	Yes	
14. Curriculum Vitae or Resumes for Key Team Members	Yes	2 pages/person
PACKET TWO – Cost Analysis and Financial Grant Management Capabilities Evaluation		
15. Budget Form	Yes	
16. Financial Statements	Yes	
17. Indirect Cost Documentation	Yes	
18. Financial Grant Management Capabilities Form	Yes	
19. Certification and Assurance Forms	Yes	
20. IRS Form W-9	Yes	
21. Co-funding Support Form*	Yes	
Project Demographic Data Collection Form	Yes	

*As required, see further instructions below.

PROPOSAL PACKET ONE (Technical Review and Evaluation):

1. **Proposal Coversheet**
   Complete the form fields of the Proposal Coversheet.

2. **Project Abstract (1 page)**
   The abstract should summarize the research objectives, technical approach, and anticipated results and benefits. It must include the names of the Principal Investigator (PI) and any Co-PIs, the applicant (submitting organization), and participating water utilities and/or organizations, as well as the funding amount requested from WRF and the total of cost share and third-party in-kind contributions.

3. **Project Description (22 pages)**
   Include the following sections:

   a. Research Objective – Clearly identify the objective in one or two sentences.
   b. Background/Understanding of the Problem – Provide a detailed description of the relevant topic background, including your current understanding of the problem, the current state of knowledge, regulatory perspective (where applicable), and significance to water utilities and the water community.
   c. Technical Approach – Provide a well-developed experimental plan (including details such as replicates, frequency, etc.) that includes the objectives of the research, the methods that will be followed, and the nature and extent of the anticipated results.
   d. Originality and Innovation of the Research – Briefly identify how the proposed work is unique and innovative. How is the proposed work different from other related research, and how will it impact future research?

4. **Applications Potential (1 page)**
   Define the practical benefits of the proposed project to the water community. What will be the products of the research (e.g., knowledge, protocol, instrument, software package, etc.)? How can they be used, who will use them, and what level of sophistication will be required? Define the steps to be taken in the project to ensure practical application (e.g., utility involvement). Where possible, identify additional efforts following project completion that will be needed prior to application of the research results.

5. **Quality Assurance/Quality Control (20 pages)**
   Provide a detailed description of the procedures that will be used to ensure the quality of project data (e.g., statistical basis for number of analyses, statistical methods to be used in data evaluations, sample duplicates, blanks, and blind samples). If the project involves laboratory analyses, this description should indicate whether the laboratory performing the analyses is accredited or certified for the analyses of concern. If the

laboratory is not certified, and/or if nonstandard methods are used, detailed quality assurance/quality control procedures must be submitted with the proposal.

6. Management Plan (2 pages)

Identify the individuals and organizations participating in the project, their specific roles and responsibilities, and their time commitment to the project. Describe how the PI will maintain accountability for the individuals and organizations involved in the project. Include a concise organizational chart showing the relationships and the lines of communication among the research team and all project participants.

7. Communication Plan (1 page)

Provide a draft plan for how the project results and key outcomes will be communicated effectively and in a timely manner to WRF subscribers and other end users who will apply the results for the benefit of the water community. WRF will work with the selected PI to refine the draft Communication Plan prior to the start of the project. The draft Communication Plan should address the following questions:

- Who are the target audiences for the final deliverable(s)?
- Who are the end users of the project results, and what other WRF stakeholders might benefit from knowing the results?
- What deliverables and communication activities are necessary to reach the target audiences effectively? What format, content, focus, and level of detail are appropriate?
- During the project, when should communication occur? Should there be interim deliverables and communication activities before project completion?
- Are there opportunities for joint or combined communication activities with those of other ongoing, related projects?

The proposed budget should include costs and resources associated with implementing the Communication Plan. Applicants are encouraged to review WRF's Guidelines for Preparing Research Reports and Products for information and considerations about various project communication tools and activities.

Proposals that include the production of web- or software-based tools, such as spreadsheets, databases, websites, and calculators, must follow the requirements presented in the Technology Deliverables Guidance document.

8. References (as required)

Include an alphabetical list of references for works cited. References should conform to journal format.

9. Licenses and Inventions (as required)

If the research is likely to produce inventions, new products, or processes (or improvements thereof), include a statement defining the relationship between the proposed research and any pre-existing patents or patent applications owned or controlled by the applicant, subcontractors, or any participants. Identify the patents or patent applications and attach copies. WRF does not exercise any claims on patent rights for new inventions, products, or processes developed through our research; however, if a patent application could result from the proposed project, include a statement as to the proposed ownership of any resultant patent. **NOTE: WRF does not endorse or certify commercial products or processes.**

If a patented product or process is being used in the research and is not owned by the applicant, then a license to use the patent must be submitted with the proposal.

10. Budget Narrative

Itemize, explain, and justify each cost included in the project budget, and identify when (Year 1, Year 2, etc.) during the period of performance the cost is expected to be incurred. Budget tables are often the best way to represent costs on a yearly basis. **Note: Do NOT include individual salary and wage rates in the Budget Narrative.**

The Budget Narrative must provide sufficient detail to enable each itemized cost to be evaluated for allowability and appropriateness for the project. Refer to the Instructions for Budget Preparation for additional information on specific items that must be addressed in the Budget Narrative.

Any applicants subject to the Single Audit Act must provide, within the Budget Narrative, the name, title, email address, and phone number of the sub-recipient employee who is familiar with the Single Audit Report, including the financial statements and expenditures of federal awards, **AND** provide the sub-recipient's publicly available URL for WRF's access to the Single Audit Report (e.g., State Auditor or university website). See section 16-1 below.

The Budget Narrative must accompany the completed WRF Research Project Budget Form.

11. Schedule

Applicants should include a detailed timeline of the project, including start and end dates for each task (including deliverables such as the draft product and final product) and responsible party (e.g., a Gantt chart or schedule table). The contractual period of performance should include additional time for review and required revisions to draft deliverables. Note: the specific dates may need to be altered depending on the timing of the selection process and funding agreement negotiations.

12. Current and Pending Form

Complete the form fields of the Current and Pending Form. A completed Current and Pending Form is required for the PI and for each Co-PI listed on the Proposal Cover Sheet. List all public support (e.g., U.S. federal funding, state grant funding) and private support (e.g., industry-supported projects, in-house support, etc.) to which the individual has committed time, regardless of salary support. The proposal being submitted to WRF should be listed in the pending section. The PI and each Co-PI must commit a reasonable and appropriate amount of time to the project, commensurate with the proposed scope of work described in the Project Description and the Management Plan.

13. Third Party Contribution Letters of Commitment (as required)

Most WRF RFPs require a match of at least 33 percent <u>of the project award</u> as cost share, applicant in-kind, or third-party in-kind. If the applicant's budget includes third-party contributions, these contributions must be confirmed by letters of commitment. The letter of commitment must identify the type (e.g., cash, labor, materials, services, etc.) and estimated dollar value of the contribution, and it must be signed by an authorized representative of the organization. Letters of commitment must match the budget form. An email communication will be accepted as a letter of commitment so long as the email originates from an authorized representative and adheres to the requirements set forth above. No letters of commitment or changes to letters of commitment will be accepted after the proposal submittal deadline. **Third-Party contributions will not be considered in the proposal selection process unless a letter of commitment, with the exact dollar amount of contribution listed, is included with the proposal.**

14. Curriculum Vitae or Resumes for Key Team Members (2 pages/person)

Upload Curriculum Vitae or abbreviated resumes as a single file for the PI, Co-PI, and any other key members of the research team.

PROPOSAL PACKET TWO (Cost Analysis and Financial Grant Management Capabilities Evaluation):

The following items are for internal WRF evaluation purposes and will <u>not</u> be provided to the Project Advisory Committee (see Section III—Proposal Review and Selection)

15. Budget Form

Complete the Proposal Budget Form to provide a realistic, cumulative budget for the project. Consult the Instructions for Budget Preparation for details on preparing the budget. Costs will be evaluated for allowability under the applicant's relevant U.S. federal cost principles and any project-specific guidelines identified in the RFP. The budget should include sufficient funding to prepare the project deliverables described in Section IV—Award Administration.

The Budget Form must be accompanied by a detailed Budget Narrative in the main body of the proposal (See **10. Budget Narrative**).

If indirect costs are included on the budget form, the applicant must substantiate their indirect cost rate as outlined below in "Indirect Cost Documentation." **Note:** Recovery of overhead is not required, but if indirect costs are not budgeted, WRF will undertake some examination to assure that recovery is not included within another budget element.

16. Financial Statements (for the last fiscal year)

16-1. **Entities subject to the Single Audit Act (2 CFR Part 200 Subpart F):** A hard copy of the Single Audit Report is not required during the proposal submission process but may be requested later if any review, the Data Collection Form (SF-SAC), or the Single Audit Report in the Federal Audit Clearinghouse indicates issues needing review in the Single Audit.

16-2. For-profit (commercial entities) and all entities <u>NOT</u> subject to Single Audit: Provide the highest level available from the following descending three levels of independent (external) CPA-prepared Balance Sheets and Income Statements (and associated notes):

- Audited Financial Statements, including Notes, (do not submit hard copy statements but comment in the Budget Narrative if your company complies with SEC Form 10-K requirements)
- Reviewed Financial Statements in accordance with Statements on Standards for Accounting and Review Services (SSARS) issued by the AICPA (American Institute of Certified Public Accountants)
- Compiled Financial Statements in accordance with SSARS issued by the AICPA

Confidentiality

WRF does not enter into Confidentiality or Non-Disclosure Agreements regarding corporate financial information contained in research proposals. However, WRF does understand the sensitivity surrounding corporate financial information and is careful to review and maintain it confidentially and only on a need-to-know basis. Only WRF staff assigned to review the submission see financial statements, direct labor schedules, and budget detail. This kind of information is not provided to the Project Advisory Committee nor to individuals outside WRF. This procedure applies to Financial Statements and related Statements of Direct Labor, Fringe Benefits and General Overhead, and the Financial Grant Management Capabilities Form (see 18 below).

17. Indirect Cost Documentation (for the last fiscal year)

If indirect costs are budgeted anywhere within the project, including cost share, provide the highest level available from the following descending four levels of agreements and statements in accordance with federal cost principles:

a. U.S. federal government agency approved **Indirect Cost Negotiation Agreement/Determination** OR **Audited Statement** of Direct Labor, Fringe Benefits, and General Overhead (for-profit entities are required to comply with 48 CFR 31.2)
b. **Reviewed Statement** of Direct Labor, Fringe Benefits, and General Overhead in accordance with SSARS issued by the AICPA (for-profit entities are required to comply with 48 CFR 31.2)
c. **Compiled Statement** of Direct Labor, Fringe Benefits, and General Overhead in accordance with SSARS issued by the AICPA (for-profit entities are required to comply with 48 CFR 31.2)
d. **Election to charge a de minimis rate of 10%** of modified total direct costs in accordance with 2 CFR 200.414

Note: Recovery of overhead is not required, but if indirect costs are not budgeted, WRF will undertake some examination to assure that recovery is not included within another budget element. Alternatively, if the applicant's accounting system permits, costs may be allocated in the direct costs categories.

18. Financial Grant Management Capabilities Form

Use the Financial Grant Management Capabilities Form to provide the requested information regarding financial and accounting systems, policies, and procedures by completing the fields in the form and uploading the document**. Note: This form should be completed by the organization's financial staff, including staff familiar with the Uniform Grants Guidance.** This information is used to evaluate the capability of the applicant's systems to meet the criteria outlined in WRF's Project Funding Agreement. Signatures are required and may be either inserted into the form as images or hand-written on scanned forms.

19. Certification and Assurance Forms (3 forms)

Three related forms are included in one file. Complete the form fields in the Certifications and Assurance Form. Signatures are required and may be either inserted into the forms as images or hand-written on scanned forms. The information on these forms will be used by WRF to determine applicant eligibility and should normally be completed by sub-recipient finance, grants management, or contracting staff.

If no funds have been paid to any person to influence action on any federal contract, grant, cooperative agreement, etc., then only two forms, Certification Regarding Lobbying and Assurances and Certifications Non-Construction Programs, need be completed, signed, and submitted to WRF.

How others complete the forms may or may not be relevant to your situation, but generally:

- Disclosure of Lobbying Activities, SF-LLL – is generally not required, since most WRF sub-recipients do not make any payments to any lobbying entity for influencing any federal person in connection with a federal grant, cooperative agreement, etc.
- Certification Regarding Lobbying – is generally always required, since most WRF sub-recipients can certify they have not and will not pay federal funds to any person to influence any federal person in connection with a federal grant, cooperative agreement, etc.
- Assurances and Certifications Non-Construction Programs – is always required, since at least some of the items on the form are relevant to all WRF sub-recipients.

20. IRS Form W-9

For all U.S. entities, a certified (signed) Form W-9 is required. Obtain the latest version from www.IRS.gov, complete the information, and upload the signed first page (only) with your proposal. Outdated revisions of the form may not be acceptable.

For non-U.S. entities, include the W-8BEN form.

21. Co-funding Support Form (as required)

Any participant in the project (sub-recipient or co-funder) who is contributing cash payable to WRF should complete the Co-funding Support Form. The Co-funding Support Form provides information pertinent to the agreement. Each co-funder will receive a Letter of Agreement outlining their contribution and expectations.

Project Demographic Data Collection Form-Required Form

In our effort to both comply with certain federal regulatory requirements applicable to recipients of federal financial assistance and to evaluate progress toward internal diversity goals, The Water Research Foundation ("WRF" or "we" or "us") requires submission of certain data elements noted in federal and state requirements. All data submitted should be supported by original source documentation retained by the submitting organization or individual.

The Project Demographic Data Collection Form is required to be submitted by all entities and/or individuals submitting proposals to The Water Research Foundation for funding consideration. The form must be submitted regardless of the proposed project's funding source (i.e., federal or non-federal project). The individual or entity submitting this document should be the lead organization; subrecipients and subcontractors must submit applicable information through their applicable pass-through entities. The form must be signed (electronically or wet) to be considered valid. Failure to sign and submit this document with a proposal may result in disqualification.

III. PROPOSAL REVIEW AND SELECTION

Proposals are selected for funding based on technical merit, cost analysis, and evaluation of the submitting organization's financial and grant management capabilities. The WRF proposal review involves two steps:

1. **Technical review:** Proposals are reviewed and evaluated on technical merit and cost analysis. The criteria by which proposals are reviewed can be found in Attachment 2. (See **Technical Review and Evaluation** below.)

2. **Evaluation of financial and grant management capabilities:** Once a proposal has been selected for consideration based on technical review and cost analysis, then an evaluation of the financial and grant management capabilities is conducted prior to final approval for funding. This is a risk evaluation of the organization's capability to meet the administrative, financial, audit, and programmatic requirements of WRF's Project Funding Agreement. (See **Financial Grant Management Capabilities Evaluation** below.)

WRF will fund a single proposal for each RFP, unless otherwise specified. WRF may choose not to fund any of the proposals submitted in response to an RFP.

All proposals and proposal reviews are treated confidentially and are available only to WRF staff and Project Advisory Committee members.

Technical Review and Evaluation

Technical review and evaluation of proposals is performed by an independent Project Advisory Committee (PAC) and the Research Program Manager. PACs are composed of volunteer professionals with expertise in the RFP topic area. PACs provide guidance, review all project reports and work products, and generally monitor project technical performance on behalf of WRF and the water community. PACs and the Research Program Manager review all proposals received in response to the RFP. WRF staff are ultimately responsible for selecting a proposal for funding consideration based on technical review and evaluation. *Proposals are reviewed according to the criteria in Attachment 2.*

Applicants should be aware that timeliness on past WRF projects will be considered during proposal evaluation. WRF's Timeliness Policy can be found on WRF's website. PI’s performance on previous WRF projects is also considered in proposal selection.

Cost Analysis

Concurrently with the technical review and evaluation, WRF staff conducts a cost analysis of the proposal that is guided by the *Budget Form* and Budget Narrative. The objectives of the cost analysis are to determine the necessity, reasonableness, and allocability of costs proposed in the proposal budget. Each budget is also reviewed for cost allowability under the Uniform Grants Guidance. Principles governing the allowability of costs are contained in the Uniform

Grants Guidance at 2 CFR 200 Subpart E for non-commercial entities, and in the FARS at 48 CFR 31.2 for commercial organizations.

If project funding includes co-funding paid to WRF, a pre-contract meeting will be scheduled with the research team, co-funders, and WRF staff assigned to the project. The purpose of the meeting is to familiarize all parties involved with the co-funding language in the contractual funding agreement and general participation in the project.

Financial Grant Management Capabilities Evaluation

Once a proposal is selected for funding consideration through technical review and evaluation and cost analysis, WRF staff assesses the financial grant management capabilities of the submitting organization. This is a risk evaluation of the organization's capability to meet the administrative, financial, audit, and programmatic requirements of WRF's Project Funding Agreement.

Potential applicants are encouraged to review Financial and Grant Management Research Guidelines for additional background and information about the financial grant management capabilities evaluation. It is important that **both** the applicant's proposed Principal Investigator and financial staff understand the federal regulations that apply to their proposal, and how these directly influence WRF's cost analysis and financial grant management capabilities evaluation.

IV. AWARD ADMINISTRATION

Terms and Conditions

WRF will enter into a Project Funding Agreement (PFA) with the selected researcher. WRF's standard PFAs for both federally funded and non-federally funded projects are available at www.waterrf.org/guidelines-and-forms#sample-contracts. The selected researchers and their subcontractors will be expected to comply with the terms and conditions of the applicable standard contractual funding agreement.

WRF has established a 45 business day period for contractual funding agreement negotiations, commencing on the issuance date of the draft agreement and ending on the return date of the final fully executed agreement. Upon the issuance of the draft agreement, the researcher has 10 business days to review the draft and respond back to WRF with (a) requested revisions, or (b) the approval to proceed to a final agreement. WRF will conduct contractual funding negotiations in good faith and in a timely manner for this period. Upon completion of the contract negotiations, a final executed agreement will be issued to the researcher. The researcher has 10 business days to execute the final agreement. The contract will be executed by both parties via DocuSign. If a researcher is experiencing contractual issues, please convey the issue(s) to the WRF Contract Manager listed in the PFA in Exhibit B – WRF Key Contacts.

<u>If an agreement cannot be reached within this 45 business day period, WRF may choose, at its sole discretion, to terminate the negotiations</u>.

Applicants and their proposed subcontractors are therefore strongly urged to review the standard contractual funding agreement before submitting the proposal to determine that the terms and conditions are acceptable. Prior review of the standard contractual agreement is beneficial to all project participants. Please note that the standard funding agreement reflects WRF's intention to solely own all worldwide copyrights in all the Work Product (Project Information Summary, Periodic Reports, Draft and Final Reports). WRF does grant the sub-recipient and any co-funders a right to use the data from the Work Product with some restrictions outlined in the standard contractual funding agreement.

WRF's contractual funding agreement is a not-to-exceed subaward of financial assistance. The WRF funding level (award dollar amount) specified in the funding agreement is the maximum amount that WRF will provide toward achieving the scope of work set forth in the applicant's proposal.

Additional, project-specific terms and conditions may apply as set forth in the RFP.

Federal Administrative, Cost, and Audit Requirements

All WRF sub-recipients, regardless of source of funding, are required to comply with WRF Proposal Guidelines, all relevant U.S. laws and regulations, and agreement terms and conditions related to U.S. Federal Financial Assistance, including, but not limited to, 2 CFR 200, which is the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards, also known as the Uniform Grants Guidance, implemented on December 26, 2014. An electronic version of 2 CFR 200 is available at www.ecfr.gov by browsing to Title 2, Subpart 200. Cost principles for commercial entities are still referenced under the FARS at 48 CFR 31.2; an electronic version is available at www.ecfr.gov by browsing to Title 48, Subpart 31.2.

Participating Utilities and Organizations

WRF places high value on water utility and organization participation and active involvement in our research projects. Utility and organization participation helps ensure that WRF-sponsored research is directly responsive to subscriber and stakeholder needs. Participating utilities and organizations should be considered an integral element of the research team. It is the responsibility of the PI to ensure that participating utilities and organizations provide support to the project as set forth in the proposal. PIs are encouraged to keep participating utilities and organizations apprised of status throughout the course of the project. In accordance with WRF's standard contractual agreement, each participating utility and organization must be given an opportunity to review the project's use of their data and conclusions regarding their data, and must be provided with reasonable opportunity to correct and respond to any problems or difficulties uncovered by the data and test results prior to their publication or use. The participating utility and organization confirmation are part of the contract deliverables (shown in Exhibit B of the PFA). At the end of a project, the PI is responsible for providing the final utility and/or organization financial participation that is reconciled against the project budget (shown in Exhibit C of the PFA) and the final invoice showing all incurred costs to date against the proposed scope of work.

PAC Meeting

While most communications between the PAC, research team, and Research Program Manager are done via email, conference calls, or web-based meetings, projects may also include a one-day, face-to-face meeting during the project. These meetings typically involve the PAC, the Research Program Manager, and the research team. The meeting will sometimes include participating utilities, project co-funders, and other stakeholders. This meeting may be held at any time during the project, as agreed between the PAC, Research Program Manager, and PI. The PAC meeting is an opportunity for face-to-face interaction among the key project stakeholders.

WRF covers WRF staff and PAC member travel costs for the PAC meeting using non-project funds. The research team is expected to cover any research team travel costs associated with the meeting.

Project Deliverables

Deliverables described below are required for most WRF projects. Applicants should allocate adequate resources for developing these deliverables. Once a proposal is selected, the project reporting schedule and specific reporting requirements will be negotiated in Exhibit B of the PFA. All project deliverables (with the exception of products such as spreadsheets, databases, videos, websites, etc.) must be submitted in Microsoft Word® or Adobe InDesign software with figures, tables, and graphics embedded in the text. All deliverables must be submitted electronically (via email, or if the files are too large, via Dropbox or other electronic method).

Project Information Summary

The Project Information Summary is typically due one month after the project start date and should be completed using the template available on WRF's website. The Project Information Summary Template is provided by WRF to outside audiences for informational purposes, including posting on the WRF website. Therefore, reasonable effort should be made to exclude information that may be considered sensitive to organizations participating in the project.

Periodic Reporting

Periodic reporting is a requirement for all WRF research projects, as it allows WRF to evaluate the researcher's progress and performance on a project. Periodic reporting also provides a mechanism for ongoing review of technical findings by WRF and the PAC. Finally, it provides information that enables WRF to review and approve the sub-recipient's invoices.

Most projects will require submittal of Periodic Reports, which are described below. Some projects will have specialized periodic reporting requirements, and Exhibit B of the PFA will include the reporting schedule and requirements for a project.

The Periodic Report format is outlined in Attachment 1—Periodic Report Format and Content. Note that the Title Page and Status Summary are due every three months, while the more extensive Technical Summary and the Website Update are due every six months (i.e., with every other Periodic Report). As stipulated in Exhibit B of the PFA, an invoice detailing expenses incurred during the reporting period must be submitted with each periodic report. Sub-recipient invoices will not be paid until the associated Periodic Report is received and accepted. Report and invoice reminders will be sent to the PI from the Project Coordinator, a WRF staff member who assists the Research Program Managers in tracking all contract deliverables.

WRF generally posts the Website Update on the WRF website to provide information for subscribers on research in progress. In some instances, WRF may edit the Website Update for clarity and readability. WRF may also choose not to post the Website Update at its discretion.

Researchers sometimes wish to use the Technical Summary to present sections of the Project Report as a work in progress, thereby reducing the level of effort required to compile the Project Report at the end of the research phase. This approach is acceptable if approved by the WRF Research Program Manager and the PAC.

Final Deliverable

WRF generally plans to publish a report for each project, but a number of other outreach options are available. The options are detailed in WRF's Project Deliverable Guidelines. It is the researcher's responsibility to prepare the final deliverable in accordance with WRF's guidelines and requirements, whether the deliverable is a standard final report, white paper, video, external website, etc. Project-specific requirements for the final deliverable may be set forth in the RFP.

The target audience for the final deliverable is the water sector (i.e., utilities, consultants, manufacturers, regulators, and other water professionals); accordingly, the deliverable(s) must clearly provide practical benefits to the water sector.

A completed Copyright Permission Form, as described in the Project Deliverable Guidelines, is required.

If a researcher chooses to produce a standard final report, they must use WRF's Research Report Template.

A Draft Report should be submitted for review at the completion of the research phase of the project. The report should be submitted electronically (via email, or if the files are too large, via file transfer such as Dropbox). WRF will review the Draft Report as set forth in the **Review and Alteration of Project Deliverables** section below, and WRF may require additional drafts of the Draft Report.

To be considered acceptable, the Draft Report must be clearly written and responsive to the project goals and objectives.

The Final Report should be a revision of the accepted Draft Report. The report should be submitted electronically (via email, or if the files are too large, via file transfer such as Dropbox).

Review and Alteration of Project Deliverables
All deliverables will be reviewed by WRF, and WRF retains the right to require response to comments, questions, and suggested revisions. This response may include an explanation and clarification of technical information or revisions to the deliverables. WRF will also have the right to make grammatical, stylistic, or syntax revisions to any deliverables submitted to WRF, or to request such revisions from the researcher. Unless otherwise specified, the researcher is to provide revisions in response to technical comments within 45 calendar days of receipt of the comments and is to respond to formatting or editorial comments within 14 calendar days of receipt of the comments. The need for revised drafts of deliverables shall be determined at the sole reasonable discretion of WRF.

Webcasts
Project webcasts are intended to communicate project-specific findings to WRF subscribers and other stakeholders. The decision on whether to hold a webcast will be made at the sole discretion of WRF. The webcast may be scheduled prior to, or up to six months following, submittal of the final deliverable. The webcast will be hosted by WRF in coordination with the PI. WRF will cover the costs of hosting the webcast outside of the project budget but cannot compensate the PI for their time in preparing or providing the webcast.

V. The Water Research Foundation Non-Discrimination Policies and Complaint Procedures

Americans with Disabilities Act (ADA) and Religious Accommodation
WRF will make reasonable accommodation for qualified individuals with known disabilities and employees whose work requirements interfere with a religious belief unless doing so would result in an undue hardship to WRF or cause a direct threat to health and safety. If you believe you need accommodation, contact Human Resources.

Equal Employment Opportunity (EEO) and Unlawful Harassment
The Water Research Foundation (WRF) is dedicated to the principles of equal employment opportunity (EEO). We prohibit unlawful discrimination and harassment against applicants or employees based on age, race (including traits historically associated with race, such as hair texture and length, protective hairstyles), sex (including pregnancy, childbirth, or related medical conditions and lactation), gender identity, color, religion, national origin, disability, military status (including membership in the National Guard, Civil Air Patrol, and Virginia Defense Force), genetic information, veteran status, or any other status protected by applicable state or local law. This policy applies to all employees, including managers, supervisors, co-workers, and non-employees such as customers, clients, vendors, consultants, etc.

EEO Harassment
WRF strives to maintain a work environment free of unlawful harassment. In doing so, WRF prohibits unlawful discrimination against applicants or employees on the basis of age 40 and over, race, sex (including pregnancy, childbirth, or related medical conditions and lactation), sexual orientation (including transgender status), color, religion, national origin, disability, military status (including

membership in the National Guard, Civil Air Patrol, and Virginia Defense Force), genetic information, veteran status, or any other status protected by applicable state or local law.

Unlawful harassment includes verbal or physical conduct that has the purpose or effect of substantially interfering with an individual's work performance or creating an intimidating, hostile, or offensive work environment. Actions based on an individual's age 40 and over, race, sex (including pregnancy, childbirth, or related medical conditions and lactation), sexual orientation (including transgender status), color, religion, national origin, disability, military status (including membership in the National Guard, Civil Air Patrol, and Virginia Defense Force), genetic information, veteran status, or any other status protected by applicable state or local law will not be tolerated. Prohibited behavior may include but is not limited to the following:

- Written form such as cartoons, e-mails, posters, drawings, or photographs.
- Verbal conduct such as epithets, derogatory comments, slurs, or jokes.
- Physical conduct such as assault or blocking an individual's movements.

This policy applies to all employees including managers, co-workers, and non-employees such as customers, clients, vendors, consultants, etc.

Sexual Harassment

Because sexual harassment raises issues that are to some extent unique in comparison to other types of harassment, WRF believes it warrants separate emphasis. WRF strongly opposes sexual harassment and inappropriate sexual conduct. Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature, when:

- Submission to such conduct is made explicitly or implicitly a term or condition of employment.
- Submission to or rejection of such conduct is used as the basis for decisions affecting an individual's employment.
- Such conduct has the purpose or effect of substantially interfering with an individual's work performance or creating an intimidating, hostile, or offensive work environment.

Employees and Non-employees are expected to always conduct themselves in a professional and businesslike manner. Conduct which may violate this policy includes, but is not limited to, sexually implicit or explicit communications whether in:

- Written form, such as cartoons, posters, calendars, notes, letters, e-mails.
- Verbal form, such as comments, jokes, foul or obscene language of a sexual nature, gossiping or questions about another's sex life, or repeated unwanted requests for dates.
- Physical gestures and other nonverbal behavior, such as unwelcome touching, grabbing, fondling, kissing, massaging, and brushing up against another's body.

This policy applies to all employees including managers, co-workers, and non-employees such as customers, clients, vendors, consultants, etc.

Complaint Procedure

If you believe there has been a violation of the ADA, EEO, or harassment policy based on a protected class, including sexual harassment, please use the following complaint procedure. WRF expects employees and non-employees to make a timely complaint to enable the organization to investigate and correct any behavior that may be in violation of this policy.

Report the incident to your manager or Human Resources, and in the case of non-employees to the HR Manager, who will investigate the matter and take corrective action. Your complaint will be kept as confidential as practicable. If you prefer not to go to either of these individuals with your complaint, you should report the incident to the Chief Operating Officer.

WRF prohibits retaliation against an employee and non-employees for filing a complaint under this policy or for assisting in a complaint investigation. If you perceive retaliation for making a complaint or your participation in the investigation, please follow the complaint procedure outlined above. The situation will be investigated.

If WRF determines that an employee’s behavior is in violation of this policy, disciplinary action will be taken, up to and including termination of employment. If WRF determines that a non-employee’s behavior is in violation of this policy, WRF reserves the right to sever the business relationship.

ATTACHMENT 1
THE WATER RESEARCH FOUNDATION
Periodic Report Format and Content

Periodic reporting is a requirement for all WRF research projects. Most projects will require submittal of Periodic Reports, the format for which is shown below. *Some projects have specialized periodic reporting requirements, and Exhibit B of the Project Funding Agreement will include the reporting schedule and requirements for a particular project.*

PERIODIC REPORT

I. **Title Page** – 1 page (every 3 months)
- Project title and number
- Periodic report number and period covered
- Principal Investigator and organization
- Project start date and end date
- Subcontractors, participating utilities and organizations, and other participants
- Project funding
- Project objective

II. **Status Summary (basic Periodic Report)** – 2 to 5 pages (every 3 months)
- Statement of goals for the reporting period
- Summary of work tasks completed and accomplishments during reporting period, including significant findings, major observations, statement of how goals were met, and applicability of findings to the water community.
- Assessment of actual versus planned progress for each work task (recommend using a table to show actual versus percent completed for each task)
- Tasks proposed to be completed in the upcoming period
- Problems encountered
- Rationale for proposed changes (if any) to the scope of work
- Brief explanation of abstracts, presentations, papers, and reports submitted for publication or presentation during reporting period
  - List of submitted/published reports (title, author, journal/conference, date)
  - Copy of submitted/published reports and presentations
- Response to questions and comments on previous report

III. **Technical Summary** – 5 to 20 pages (every 6 months, include with Status Summary)
- Methods and materials
- Data and analysis
- Significant findings
- Applicability of findings to water utilities
- Response to questions and comments on previous report

IV. **Website Update** - 1 to 2 pages (every 6 months, include as separate section after Technical Summary)

- Project title and number
- Principal Investigator and organization
- Reporting period (i.e., period covered by update)
- Activities and progress since previous Website Update; work to be performed next period
- Findings of significance to WRF subscribers and other stakeholders; how/why are they significant?
- Statement of how overall project results will ultimately benefit water utilities and the water community
- Brief statement on communications and outreach (presentations, papers, etc.)

ATTACHMENT 2
THE WATER RESEARCH FOUNDATION
Research Priority Program Proposal Evaluation Criteria

Evaluation Criteria
1. Understanding the Problem and Responsiveness to RFP (maximum 20 points)
Does the proposal demonstrate a thorough understanding of the issue(s), including the current state of knowledge, regulatory perspectives (if applicable), and significance to the scientific community and water utilities? Does the proposal adequately address the RFP objectives? If the objectives in the proposal go beyond those in the RFP, do they address current or future needs?
2. Technical and Scientific Merit (maximum 30 points)
Is the proposal clearly understandable and prepared with appropriate supporting information? Is the approach technically sound with clear project goals and objectives? Does the approach include the necessary components to achieve the desired outcome? Does the proposal reflect creativity, originality, or innovation? Does the proposal outline adequate QA/QC procedures?
3. Qualifications, Capabilities, and Management (maximum 15 points)
Do the applicant and key personnel possess the necessary knowledge, skills, abilities, experience, and resources to accomplish the project? Have key personnel committed an appropriate amount of time? Do the PI and lead organization provide the appropriate level of management and oversight to successfully complete the project? Are team roles, responsibilities, and assignments clear?
4. Communication Plan, Deliverables, and Applicability (maximum 20 points)
Does the proposal include an effective communication plan that is applicable to the intended end users and other identified stakeholders? Are the project deliverables well-described? Will the deliverables provide value to the intended target audiences and address the practical applications of the research? Are utilities and key stakeholders appropriately engaged?
5. Budget and Schedule (maximum 15 points)
Does the proposal provide good value for the amount of funding requested? Is the budget realistic and commensurate with the work plan and time frame? Has the applicant provided significant in-kind contributions (at least 33% of the project award)? Is the level of effort allocated to each task reasonable (if applicable)? Is the schedule realistic for the tasks described?