THE Water Research FOUNDATION

Solicited RFP

This project is being funded through the Solicited/Focus Area Program, which enables WRF to solve broadly relevant subscriber issues and challenges with a targeted, sustained research effort. The program is developed around research topics that are of high interest and priority to WRF subscribers because of a challenge or opportunity that is present, emerging, or anticipated, and for which research will help subscribers manage and address the challenge or optimize the opportunity.

This project is funded under the Issue Area "Sustainable Integrated Water Management (SIWM)" and is intended to support the Issue Area objective(s):

The objective of the Sustainable Integrated Water Management program is to engage partners to advance sustainable integrated water management for communities by:

- ***Transitioning an "integrated water management" approach into practice by taking a holistic view of wastewater, stormwater, drinking water, and reclaimed/reused water;***
- ***Optimizing stormwater programs through lifecycle analysis and green infrastructure implementation to create adaptable and resilient water infrastructure;***
- ***Transforming comprehensive planning and watershed management by engaging partners in the agriculture, forestry, and planning communities at the national, state, regional, and local levels.***

One Water Cities: Development of Guidance Documents and Assessment Metrics *(RFP #4969)*

Project Objectives

- *To evaluate the state of the art of One Water Cities practices though a literature review, expert interviews, a web search, and a survey*
- *To establish key metrics and benchmarks to assess the progression towards One Water Cities by conducting a literature review, an analysis of existing examples, and consultation with key utilities*
- *To identify and document best practices for One Water Cities, including balancing competing tradeoffs*

Budget

Proposals may request WRF funds for $90,000. WRF funds requested and total project value will be criteria considered in the proposal selection process.

Background

The pressures of population growth, water scarcity, water pollution, climate change, and competition for water among municipal, industrial, agricultural, and ecosystem water uses have resulted in the adoption of the concept of "One Water" by leading edge water utilities and their partners in the United States (US Water Alliance, 2016). One Water is generally defined as a holistic view of water and waste in a city/municipality, and is closely related to the sustainable cities movement (Mukheibir et al. 2015; Howe and Mukheibir, 2015).

Sustainable Cities—Forerunners to One Water Cities. Theorists have been calling for a more holistic view of water and other materials in cities for many years (Wolman, 1965). Some call this the "circular economy," which means integrating waste products from one process into another (Hannon et al. 2016), while others view it as an "urban metabolism" that mimics an ecological metabolism. These concepts have been linked to sustainable city efforts in Europe and Australia (Kennedy et al. 2010). The concept

behind the sustainable cities movement emerged from the United Nations' Bruntland Commission after the publication of its sustainable development report in 1987. In the following decade, widespread adoption of sustainability plans occurred in Europe and Australia.

Cities in the United States began to adopt sustainability plans in 1998 (San Francisco, New York, and Santa Monica, among others). In 2005, the U.S. Conference of Mayors called for cities to develop carbon emissions inventories and mitigation plans. Two hundred cities committed immediately, and today there are over 1,000 cities that have signed the Climate Change Plan agreement. Although all major city systems, including water and waste, are now included in most local sustainability plans, the emphasis of the early efforts in the United States was on reducing and mitigating carbon emissions, primarily for transportation and energy systems. During the past decade (with some early adopters before that), cities and counties began to integrate water concerns into their sustainability plans, beginning with stormwater (Wheeler, 2013).

Stormwater and green infrastructure are now widely seen by cities as important elements of sustainability, climate change, and land use plans (EPA, 2014). Integration of stormwater with local plans and codes is facilitated by the co-location of land use planning and the majority of stormwater utilities within local general purpose governments. Integration of the water quality and quantity concerns of water supply and wastewater utilities has been slower, although leading edge cities have embraced water reuse and changed local regulations to make this feasible. Integration of environmental needs for water in official local land use plans and regulations is predominantly a concern of nonprofits and watershed planning at the regional level, although there are notable exceptions, such as Marin County, CA (also an early water reuse proponent).

Sustainability Metrics—Applicability to the Context of One Water Cities. With the rise of sustainable cities came the development of indices purporting to assess which city was the most sustainable, both in the US and in Europe. Initially, these indices relied on aggregate measures of carbon emissions and transportation related indicators for each city. The measures were then summed into a single rating for each city. These were then assembled into a ranking. Rankings of metropolitan areas or cities according to their sustainability, such as the Sustainable Cities Index (https://www.arcadis.com/en/global/our-perspectives/sustainable-cities-index-2016/), U.S. Cities Sustainable Development Goals Index (http://unsdsn.org/wp-content/uploads/2017/08/US-Cities-SDG-Index-2017.pdf), and others, are popular. The latter, however, contains only two indicators for water: water stress and lack of access to plumbing. An index of 34 indicators was developed in 2016 to help decision makers set priorities for water-related actions in order to measure progress towards water sensitive city goals (Chesterfield et al. 2016). Benchmarks are available, for example the Water Sensitive Cities Index (https://watersensitivecities.org.au/solutions/wsc-index/). In addition, a ranking system using multiple indicators for water efficiency, resiliency, and quality was prepared for global cities (Arcadis, 2016). However, neither set of benchmarks/indicators has been translated to the U.S. local and regional decision-making context. Rankings of cities/metro areas that promote the "circular economy" are also available.

Individual cities and metropolitan areas in the United States are awash in sustainable indicators and metrics using small area data. These have been developed to identify problem areas; set goals for attainment of carbon emissions, transit ridership, or number of trees planted, for example; and to monitor progress. The LEED (Leadership in Energy and Environmental Design) certification system was developed to assess the sustainability of local building projects and neighborhoods by evaluating the design against key indicators. However, it has been criticized for not paying sufficient attention to water

indicators. Water utilities and local governments have access to a wide variety of water-related indicators, some at an aggregate level, some at a smaller level. The USGS maintains a Watershed Boundary Dataset (WBD) that contains data on various scales of hydrologic units (watershed-based), which some researchers link to Census small area data. This is the source of many water indicators or metrics, some of which are used to measure compliance for water quality goals, while others are used to assess water supply. Utilities and municipalities also have internal performance measurement systems for decision-making purposes that may or may not incorporate some of the water quality and quantity goals.

A key question for the water industry is how to measure the progress of the United States, and of individual jurisdictions, towards One Water. Benchmarks (comparing one jurisdiction to another – please see the International City/County Manager's Association benchmark project at https://icma.org/open-access-benchmarking) or indicators (metrics) are used to guide progress and provide feedback to decision makers for planning, budgeting, and goal setting. Fortunately, there is robust literature about indicator systems and metrics at the city level for sustainability, including water (Hak et al. 2007). There are numerous theoretical publications about water indicators (Hoekstra and Chapagain, 2007; Novotny et al. 2010b), and voluminous literature about sustainable water indicators, including an encyclopedia of 1,800 indicators. However, none of these indicators have been assessed in terms of what is needed by decision makers within water utilities, cities, metropolitan areas, or watersheds to measure progress towards One Water. The STAR Community indicator system for sustainable city certification is an exception, but this program has not been evaluated by professional water associations as to its usefulness for water utilities (http://www.starcommunities.org). There are also numerous local governments and water utilities that have developed their own systems.

One Water and Integrated Water Resource Management. One Water was initially an effort to integrate planning and operations for all water, and to integrate then with city and metropolitan development. In a sense, it is an effort to integrate water utilities and their issues into the sustainable city movement by harking back to the metabolism of the city concept. The term One Water at the city scale is often used interchangeably in Europe as Cities of the Future. Other related terms with similar, but slightly different, definitions put forward by water academics and water professionals include Integrated Water Resources Management (IWRM) and Integrated Water Management (IWM). The former concept, originating with the UN in 1992 with the Dublin Principles, has a long history. It often focuses on environmental rather than urban concerns (Ingold et al. 2016; Mitchell, 2005; Rahaman and Varis, 2005).

In 2006, the seminal "Green Cities, Blue Waters" workshop was held in the United States (also called the "Wingspread Workshop on Cities of the Future"). This conference, and a subsequent U.S. conference in 2007, gave rise to a network of water professionals committed to research and activities to promote a holistic and sustainable vision of water and the city (Elmer, 2014). Over the following decade, these efforts included International Water Association's City of the Future program, UNESCO's Sustainable Water Management Improves Tomorrow's Cities' Health program, the formation of the U.S. Water Alliance, and numerous publications (Baker, 2009; Novotny et al. 2010a; Mitchell and Howe, 2012). These efforts ultimately resulted in the current efforts for One Water.

One U.S. nonprofit conflates One Water with integrated water management: "Integrated water management considers the urban water cycle as a single integrated system, in which all urban water flows are recognized as potential resources. Integrated water management is practiced through inclusive and jointly planned management of all water systems – where all waters are resources and are valued and put to use" (American Rivers, 2015). Another effort defines IWM as a watershed process to

protect environmental water flows (Colorado Basin Roundtable, 2018). California uses the term Integrated Regional Water Management (IRWM) to require integrated watershed planning by all parties in 18 watersheds. This term is also used in other major watershed plans (Bateman and Rancier, 2012).

Current State of One Water Efforts. One Water efforts can take many forms. For example, the 2018 One Water Summit in Minnesota ranged from presentations where success towards One Water involved collaboration on many water issues between many institutions, to simple partnerships between institutions on a state of the art water issue such as water reuse or green infrastructure. Many water utilities now understand One Water as integrating planning and service delivery for water supply, wastewater, and stormwater. The American Planning Association has promoted One Water for urban water infrastructure and land planning (Cesanek et al. 2017).

In the past several years, many localities have produced One Water plans to manage all their water resources (drinking water, wastewater, stormwater, groundwater, recycled water, surface water) across all watersheds in a city or region (US Water Alliance, 2016). These include the City of Los Angeles, the City/County of San Francisco, and the Atlanta Metropolitan Region. The Cynthia and George Mitchell Foundation released a comprehensive report in January 2018 on how the state of Texas can implement One Water solutions at the state, regional, and local levels (http://cgmf.org/p/one-water-report.html). There are many smaller jurisdictions that have prepared One Water plans, which may or may not address all three major water systems and which likely do not address resource recovery. At a global scale, Singapore, Rotterdam (Netherlands), and other European cities have adopted and implemented One Water plans, although these efforts may be called Cities of the Future or Eco-cities plans. Many IRWM plans involving multiple actors, including utilities, have been prepared in California in the past decade, some touted as successful and others not. One academic study notes that multi-watershed efforts can occur through collaborative networks, rather than setting up new organizations.

Need for a Handbook for Comprehensive Practices towards One Water Cities. WRF and other organizations have produced a number of publications on One Water. In 2015, WE&RF released a report and a guidebook entitled *Pathways to One Water—A Guide for Institutional Innovation*. The documents contain WRF's definition of One Water and present best practices at a high level for overcoming institutional barriers for implementing integrated water and land resource projects. In 2016, the US Water Alliance issued the report, *One Water Roadmap,* which emphasized the need to adopt One Water solutions for local water issues in order to capture economic opportunities for public and private sectors along with social and environmental benefits. WRF also issued the *Blueprint for One Water* in 2016, which provides a useful framework that utilities can use to begin movement towards One Water, also at a high level. A more recent WRF report provides a users' guide on integrated planning frameworks for wastewater and stormwater (WRF, 2018). In addition, a WRF report addressed collaboration with planners as a strategy to achieve sustainable water supply innovations such as water reuse that are an important part of One Water (Fedak et al. 2018). This included specific practice-based solutions. Another WRF report outlines collaboration strategies with planners as a way of achieving One Water elements (Stoker et al. 2018). Still another WRF report presents practice-based case studies about how utilities developed integrated wastewater and stormwater plans (WRF, 2018). Similarly, a recent WRF report addresses how wastewater utilities can achieve net zero energy in a cost effective manner.

EPA and others in the industry have produced many handbooks that advise how to do service area planning for water supply, wastewater, and stormwater and green infrastructure on a sector by sector basis. Many address sustainability concerns. However, there is no comprehensive guidebook of best practices and case studies for water utilities and cities about how to integrate water supply planning,

wastewater planning, and stormwater planning, nor about resource recovery (an essential element of One Water Cities). In addition, guidance is needed about balancing competing tradeoffs towards the goals of One Water Cities.

Expected Outcomes
The expected outcomes of this project are threefold:

- Memoranda on the ***State of One Water*** literature and integrated water (resources) management today in the United States, based on the literature, a web search (e.g., webcrawl), and interviews with experts. This will include a survey of WRF subscribers about One Water best practices that makes recommendations about case studies for this project.

- Technical memoranda on the literature on water indicators ***to develop a benchmark framework and key metrics*** that can assess how cities/counties, utilities, and watersheds are progressing towards integrated water management and One Water Cities, and examples of how this can be implemented within U.S. utilities. This will result in pilot testing and a guidebook.

- ***A guidebook of best practices*** for urban water management and One Water, based on a review of existing manuals for utility service area and capital planning, the survey, and case studies, to provide guidance to utilities about how to balance competing needs in the effort to integrate One Water/integrated water management concepts and practices into service plans and investment decisions.

Research Approach

Task 1: One Water Literature Search and Subscriber Survey

Task 1a: Conduct a combination of a literature review, an internet search, and expert interviews (about eight to twelve) to identify, describe, and evaluate efforts for One Water plans, including efforts in the United States, Canada, Europe, Singapore, and Australia. As feasible, identify large, medium, and small cities and/or metropolitan areas, and/or jurisdictions in both wet and dry climates. This should result in a detailed memorandum. There are many "Eco-cities" in Europe that could fall into this category, which need not be reviewed in depth but should be included in the overall discussion.
Deliverable: Detailed memorandum (e.g., it could be turned into a peer reviewed article)

Task 1b: Review existing EPA and industry manuals and guidance on service area and capital planning about individual water sectors, One Water, and resource recovery. Review WRF historical reports to identify information that could be reincorporated into a guidebook for integrated planning. Results also to be used to inform the survey.
Deliverable: Short memorandum

Task 1c: Develop and conduct a survey of WRF subscribers about their experiences with integrating water supply, wastewater, stormwater, and resource recovery planning, in whole or in part. This should build on the two recently completed WRF reports on "integrated planning" (wastewater and stormwater) (WRF, 2018) and water utility collaboration with planning. The survey should include information on the institutional configuration of the utilities; size of population in jurisdiction served, a

metric for volume of services; an identifier for the utility that could enable linkage of the data with census and hydrologic unit code small area data. The survey should also request interest in having the subscribers' efforts documented in subsequent case studies/guidebook; participation in development of a benchmarking system; and their opinions about the adequacy of existing service area and capital planning manuals and guidebooks. Survey Questions would be developed in concert with an informed group of experts, including Project Advisory Committee members.

Analyze the survey results using basic descriptive statistics and cross tabs. The objective of the analysis is to identify case studies and examples of successful best practices; and to assess, if possible, structural and other factors for subscribers that have and have not attempted integrated efforts. The intent is to bring global experience into a U.S. context and possibly link with the UN's sustainable development goals.
Deliverable: Detailed memorandum with appendices

Task 2: Benchmarking Framework/Rating System and Metrics for One Water Cities

Task 2a: Conduct a detailed literature review to identify the range of water metrics and underlying data systems that could be used for benchmarking and rating progress of utilities and cities/metropolitan areas and watersheds towards One Water. The literature review should include theoretical literature, applied and gray literature, as well as examples from the field such as Metro Atlanta's metrics report; reports that track changes to local health and building regulations (San Francisco Public Utilities Commission); integration of food waste with energy production (East Bay Municipal Utility District); data used in the scenario planning efforts that included water, such as those in the Sacramento Region and Maryland used several years ago. The literature search should explore variations that might be recommended or produced for different types of water institutions and climate conditions.
Deliverable: Detailed memorandum (e.g., it could be turned into a peer reviewed article)

Task 2b: Develop a benchmarking framework/rating system with key metrics for One Water Cities. This will include the development of a refined definition of One Water City, with key metrics that will evaluate whether a city is on the path to become a One Water City and/or is progressing forward with a more limited integration but still with the goal of becoming a One Water City. The system should account for geographic coverage, which includes cities/metropolitan areas in both the U.S. and a selected global region (e.g., Australia, Europe. and/or Singapore); climate/weather impacts on a city scale, especially for coastal cities and cities in drought regions.
Deliverable: Memorandum describing the proposed rating system

Task 2c: Test (perhaps pilot) and revise system and develop guidebook. Using volunteers identified during the survey, test the system. This may also include piloting the concepts and key metrics with one or more of the utilities identified in the survey as an illustration of what the system can provide to a city. This may also involve convening a group of key water professionals to assess the proposed system. Develop the guidebook for the system. This could be entitled *Benchmarking Framework and Rating System with Metrics for Assessing the Progression towards One Water Cities*.
Deliverable: Guidebook for benchmarking/rating/metrics system

Task 3: Guidebook/Manual for One Water Cities Best Practices

Task 3a: Conduct case studies of One Water City best practices. Conduct case studies of successful efforts, whether in whole or in part based on the survey. The selection of case studies will consider the scale/size of the cities (e.g., large, medium, and small cities). There should be a case study protocol reviewed by WRF. The case studies should identify best practices for balancing competing tradeoffs, such as applying a multi-criteria decision-making approach, including under extreme events (such as flooding). The analysis of the case studies should use the benchmarking framework/rating system with metrics mentioned above to the maximum extent feasible.
Deliverable: Detailed case study report

Task 3b: Present both initial and revised case studies at a workshop for a group of participating utility and municipality representatives to seek feedback.
Deliverable: Revised case study Report

Task 3c: Prepare draft and final guidebook after addressing review comments on best practices for One Water Cities based on case studies and the two literature reviews. This could be a user-friendly guidebook on integrated planning for water supply, wastewater, stormwater, and resource recovery.
Deliverable: Draft and final guidebook or manual on best practices for utilities seeking to make progress to becoming One Water Cities

Task 4: Community Outreach

Conduct a webinar, present at conferences, and develop other publications for broader community outreach. The two literature reviews could easily be turned into peer-reviewed articles in the water industry.

Deliverables: In summary, the deliverables in this project shall include:

(1) Task 1 Deliverables
- a) Detailed memorandum on the state of One Water Cities and literature, recommendations on whether to conduct a survey, nd selection of case studies and detailed case study protocol.
- b) Short memorandum on existing professional guidebooks on integrated water and/or capital planning
- c) Detailed memorandum with appendices on survey of WRF subscribers

(2) Task 2 Deliverables
- a) Detailed memorandum on literature review of benchmarks, metrics, and indicator for water
- b) Memorandum on proposed framework and system
- c) Guidebook for One Water benchmarking system

(3) Task 3 Deliverables
- a) Detailed case study report
- b) Workshop
- c) Revised case study report
- d) Draft and final guidebook or manual for best practices for water utilities to achieve One Water Cities status

(4) Task 4 Deliverables

a) Communication and outreach materials (e.g., webpage, webcast, conference presentations, and publications).

Selection Process and Criteria

Proposals will be reviewed by WRF and the Project Advisory Committee (PAC) and/or Issue Area Team (IAT) for the Sustainable Integrated Water Management (SIWM) issue area. This review team may be complemented as needed by subject matter experts. As part of the evaluation process, WRF reserves the right to request interviews, either via conference call or in person, with qualified applicants if necessary.

Applicants are encouraged to develop and submit research plans that meet the research goals of this RFP, provide sufficient details of their budget, and outline schedules and milestones that can successfully deliver on the stated research goals, objectives, and tasks.

WRF will evaluate proposals on the following components:

- **Understanding the Problem and Responsiveness to RFP (20%)**
  Does the proposal adequately explain the problem? Does it reflect knowledge of the issue and how solving the problem will benefit the water industry? Have the RFP objectives been adequately addressed? If proposed objectives differ from the RFP, do stated objectives address current or future needs of the water industry? Are data quality objectives specified?
- **Technical Approach and Scientific Merit (40%)**
  Was the proposal prepared with supportive information and is it self-explanatory and clearly understandable? Is the proposed effort technically defensible? Is the approach practical? Can the project objectives be achieved in the stated time period with the allotted personnel and budget?
- **Management and Communication Plans (10%)**
  Are the roles, responsibilities, and assignments clear? Do the supporting organizations on the team have complementary skills? Does the lead organization have adequate resources to provide the appropriate level of management, oversight, and project implementation? Is the Quality Assurance/Quality Plan acceptable? Are schedules and deliverables clearly defined?
- **Budget and Schedule (10%)**
  Is the budget within the advertised budget for the project? Has the applicant provided an appropriate (at least 25%) and significant in-kind contribution to the project? Is the level of effort allocated to each task logical? Is the indirect cost rate reasonable (35% or less is competitive), and has it been detailed in the proposal? Is the schedule realistic? Do the proposed budget and schedule match funding needs to milestones and demonstrate the value of the research relative to the proposed cost?
- **Qualifications of Organization and Key Personnel (10%)**
  Does the lead organization have demonstrated experience and expertise in the issues and objectives discussed in the RFP? Do the key project personnel have experience in the proposed area of research? Have key personnel committed an appropriate amount of time to the project? Are water supply and wastewater agencies involved?
- **Staff Evaluation and Input Based on Past Performance (10%)**

Proposal Preparation Instructions

Proposals submitted in response to this RFP must be prepared in accordance with The Water Research Foundation's document *Guidelines for Focus Area Program Proposals*. The most current version of these guidelines is available at: http://www.waterrf.org/funding/ProposalDocuments/GuidelinesForFocusAreaProgramProposals.pdf. The guidelines contain instructions for the technical aspects, financial statements, and administrative requirements that the applicant must follow when preparing a proposal.

Please note that the selection criteria listed here are different from those listed in the Guidelines for Focus Area Program Proposals document. The selection criteria in this RFP will be used to evaluate the proposal.

Eligibility to Submit Proposals

This RFP solicits proposals from all technically qualified applicants, including educational institutions, research organizations, federal or state agencies, municipalities, 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 http://www.waterrf.org/funding/Pages/policies.aspx. 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. If you have any questions about your eligibility for WRF projects, please contact the WRF research staff listed at the bottom of this RFP.

Administrative, Cost, and Audit Standards

WRF's Solicited Research Program standards for administrative, cost, and audit compliance are based upon, and comply with, Office of Management and Budget Uniform Grants Guidance, 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 the WRF's *Guidelines for Focus Area 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 financial staff should review the detailed instructions included in WRF's annually released *Guidelines for Focus Area Program Proposals*.

Budget and Funding Information

The funding available from WRF for this project is $90,000. A minimum 25 percent of the total project value must be contributed by the applicant (i.e., the applicant's minimum contribution must equal one-third of WRF funds requested). 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 25 percent to the project but the maximum WRF funding available remains fixed at $90,000. **Proposals that do not meet the minimum 25 percent of the total project value will not be accepted.**

Period of Performance

The proposed project schedule should be realistic, allowing ample time for the preparation of final reports and for review of project results. 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 http://www.waterrf.org/funding/Pages/policies.aspx.

Utility and Organization Participation

WRF is especially interested in receiving proposals that include both participation and contribution of resources from water utilities and organizations in the research effort. Information on utilities and/or organizations that have indicated an interest in participating in this research project are listed on the last page of this RFP. While WRF makes utility and organization participation volunteers known to applicants, it is the applicant's responsibility to negotiate utility and organization participation in their particular proposal, and the utilities and/or organizations are under no obligation to participate.

Application Procedure and Deadline

Proposals are now being accepted exclusively online in PDF format and must be fully submitted before 2:00 PM Mountain Time, Tuesday, November 27, 2018. All of the forms and components of the proposal are available online in the "Proposal Component Packet" zip file. A login is required to download this packet and use the proposal website. This information is available at https://proposals.waterrf.org/Pages/RFPs.aspx

The online proposal system allows submission of your documents until the date and time stated in the 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.

Questions to clarify the intent of this Request for Proposals and WRF's administrative, cost, and financial requirements may be addressed to the Program Director, Dr. Harry Zhang, at (571) 384-2098 or by e-mail at hzhang@waterrf.org.

UTILITY AND ORGANIZATION PARTICIPANTS

The following utilities have indicated an interest in possible participation in this research. This information is updated within 24 business hours of when a utility submits a volunteer form, and this RFP will be re-posted with the new information.

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Related Web Pages

(1) One Water Los Angeles
https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-owla?_adf.ctrl-state=5xogvzd6u_4&_afrLoop=3804423604729212#!

(2) One Water San Francisco
http://www.sfwater.org/index.aspx?page=1091

(3) One Integrated Plan for Metro Atlanta's Water Resources (aka "One Water Atlanta")
http://northgeorgiawater.org/plans-manuals/

(4) Advancing One Water in Texas
http://cgmf.org/p/one-water-report.html

(5) U.S. Conference of Mayors. Climate Protection Agreement.
https://www.usmayors.org/mayors-climate-protection-center/.

(6) Example - Urban Sustainability Directors Network
https://www.usdn.org/

(7) Example - Development of Global Water Resilience Framework
http://100resilientcities.org/five-cities-selected-develop-global-water-resilience-framework/

(8) Example - Sustainable Cities Index and Sustainable Cities Water Index (by Arcadis)
https://www.arcadis.com/en/global/our-perspectives/sustainable-cities-index-2016/
https://www.arcadis.com/en/global/our-perspectives/which-cities-are-best-placed-to-harness-water-for-future-success-/

(9) Example – Global Cities Index (by A.T. Kearney)
https://www.atkearney.com/global-cities/full-report

(10) Example – Water Sensitive Cities Index (by The Cooperative Research Centre for Water Sensitive Cities (CRCWSC) in Australia)
https://watersensitivecities.org.au/solutions/wsc-index/