

ONE  
WATER  
**BIG  
IDEA**



**Accelerate technology adoption  
to build efficiency and improve  
water service.**

This is one in a series of policy briefs that comprise the One Water for America Policy Framework.

To download an Executive Summary, additional policy briefs, or learn how you can get involved, please visit: [www.uswateralliance.org/initiatives/listening-sessions](http://www.uswateralliance.org/initiatives/listening-sessions).

America's water supplies and services are at risk. Climate change, growing income disparities, and the threats posed by our aging water infrastructure call into question the continued availability of safe water supplies and reliable, affordable water service. In light of these challenges, we must come together and create a new era of water management in America—one that secures economic, environmental, and community wellbeing.

To that end, the US Water Alliance worked with more than 40 partner organizations to host 15 One Water for America Listening Sessions across the country. These discussions engaged more than 500 leaders, including water utility managers, public officials, business executives, farmers, environmental and watershed advocates, community leaders, philanthropic organizations, planners, and researchers.



**One Water for America**  
Listening Sessions



What we heard from these stakeholders was truly inspiring. Across the nation, people from all walks of life are collaborating and innovating to advance sustainable water management solutions. Now is the time to spread and scale up these successes to benefit more communities across the country. In these seven policy briefs, we have compiled the strongest, most consistent themes from the One Water for America Listening Sessions into **seven big ideas for the sustainable management of water in the United States**:

- 1. Advance regional collaboration on water management**
- 2. Accelerate agriculture-utility partnerships to improve water quality**
- 3. Sustain adequate funding for water infrastructure**
- 4. Blend public and private expertise and investment to address water infrastructure needs**
- 5. Redefine affordability for the 21st century**
- 6. Reduce lead risks, and embrace the mission of protecting public health**
- 7. Accelerate technology adoption to build efficiency and improve water service**

Each of these policy briefs digs further into one of these big ideas—exploring the key issues behind it; presenting policy solutions that are working at the local, regional, state, and national levels; and providing real world examples of how these solutions *are* being implemented and *do* produce positive results.

The One Water for America Policy Framework is a clarion call to action to accelerate solutions for the water management problems of our age. In doing so, we secure a brighter future for all.

## Accelerate technology adoption to build efficiency and improve water service.

### Context

To solve some of our most pressing water challenges, we must invest in, develop, and deploy new technologies and processes that can drive transformations in water management. For example, wastewater—industrial and municipal—can be converted into valuable resource streams. Sensors and satellites can provide precision data on water quality, water quantity, and infrastructure condition, facilitating decision-making. Partnerships among industries, agriculture, and water utilities can foster creative ideas for long-term resource sustainability. The water sector is filled with innovative ideas, but the challenge lies in accelerating their implementation, and we heard at every One Water for America Listening Session that this is fundamental to fixing our nation’s water challenges.

The Center for Reinventing the Nation’s Urban Water Infrastructure (ReNUWIt), an interdisciplinary research center at Stanford University, estimates that only five percent of the \$4.3 billion (in 2012) in venture capital money invested in the clean tech industry is focused on water.<sup>1</sup> We heard throughout our listening sessions that the lack of investment is due to both technological and institutional challenges affecting water infrastructure, including a long regulatory approval process for new technologies, the risk associated with failure of new technologies, and the lack of uniform standards across political jurisdictions. Some water utilities cite other internal barriers to innovation, like cultural inertia, lack of resources, and siloed organizational structures.<sup>2</sup>

In this policy brief, we review key issues that influence the adoption of new technologies and approaches for improved water management. We also recommend solutions and provide case studies for creating a more enabling policy environment that can help us accelerate technology adoption at the local, regional and state, and national levels.

## **Key Issue:**

### **Pace of implementing new technologies and processes**

The water sector has the potential to be a driver for innovation and economic growth in communities. While many industries, cities, and utilities are leading the development and application of innovative technologies and approaches, adoption across the utility sector remains slow compared to other industries. Given the critical mission of protecting public health, water utilities tend to be risk-averse, and their leadership and local communities may frown on becoming test cases for water technology research and development. In addition, utilities provide continuous reliable water service, meaning there is little time for validating new technologies in the face of day-to-day demands. The regulatory approval process for new water technologies tends to be long, and it varies from state to state, which can discourage private investment in solutions and dampen innovation. Finally, testing and scaling new technologies is resource-intensive, which inhibits the adoption of existing solutions and innovations. Private industry, meanwhile, is advancing water innovation more rapidly. Responding to water-related risks to business, industries are aggressively exploring and implementing the technologies necessary to keep workers employed, facilities open, and businesses profitable.

## **Key Issue:**

### **Capacity to collect, analyze, and share data securely**

Many technological innovations are enabling better data collection, management, and analysis. Water sensors, coupled with advances in information technology and data analytics, are leading to the availability of real-time water quality and quantity information. Better data management, in turn, can enable us to make more effective decisions, build more efficiency into water system operations, and optimize revenues. By sharing and integrating information on water quality, quantity, and usage at a watershed scale, we can transform our ability to better manage water resources. There is a powerful business case for sharing and integrating water information to facilitate better decision-making.<sup>3</sup> However, many communities and utilities do not have the capacity to effectively use the large volume of data that existing and new technologies produce. For those that do, there is sometimes a reluctance to collect or share data, given concerns on how this information may be understood by the public or used by regulators, as well as growing unease over cybersecurity issues.

## **Key Issue:**

### **Mindset toward innovation**

In the private sector, necessity drives innovation in water management. Business imperatives call for finding new ways to secure sustainable water supplies, conserve water in production processes, and manage waste streams in compliance with regulations. On the public sector side, meeting our water challenges means that water utilities must continue moving their position on innovation from being “nice-to-have” to “mission critical.” While there are notable exceptions, many utilities today operate much as they did 20 years ago. The ability to embrace and implement technological innovation depends on a variety of factors, including leadership and culture, regulatory environment, and funding mechanisms for system improvement. At the heart of the challenge is fostering an innovation mindset, which calls for bold leadership, culture change, training, and peer-to-peer exchange.

# Policy Solutions

Local Level	Regional & State Level	National Level
<ul style="list-style-type: none"><li>• Foster a culture of innovation</li><li>• Support and grow water clusters</li><li>• Invest in solutions that build efficiency and pay for themselves</li><li>• Foster idea sharing and consolidation of investments in research and development</li></ul>	<ul style="list-style-type: none"><li>• Fix regulatory barriers to technological innovations, and establish processes to streamline technology adoption</li></ul>	<ul style="list-style-type: none"><li>• Establish a coordinated national strategy for water technology research and development across federal government agencies</li><li>• Utilize regulatory flexibility to create a risk/reward framework that incentivizes technology innovation</li><li>• Support development of a national test bed network, and create an innovation fund to support pilots of new technologies.</li><li>• Support development of a national clearinghouse to share and spread best practices</li><li>• Maintain EPA's Clusters program</li></ul>

## Solutions: Local Level

### Solution:

#### Foster a culture of innovation

Private industry has long embraced innovation as a way to create competitive advantage, by increasing productivity, reducing costs, and/or enhancing value to customers. Water utilities are generally monopolies in their communities, and their primary focus is reliable public health protection, with less focus typically placed on innovation for more efficient, effective, sustainable service. Yet health protection and innovation can be complementary goals. The water stresses we face today are prompting more utilities to develop dedicated innovation programs and work toward cultural change, preparing their organizations to embrace innovation in ways that enhance efficiency and value, while simultaneously reinforcing the imperative of public health protection. A culture of innovation also means openness to non-traditional ways of partnering with other entities that use, and influence, water resources and water management decisions. By joining hands with local industrial water users and agricultural interests, communities and utilities can find creative solutions to water management challenges, while serving multiple needs.

### In Action

- **AlexRenew.** Describing itself as “one of the most advanced water resource recovery public utilities in the United States,” Alexandria Renew Enterprises in Virginia has built innovation directly into its organizational vision. AlexRenew sees innovation as a pathway to: (1) supporting the local economy through stable rates, supported by diversifying revenue and maximizing resource recovery; and (2) ensuring ongoing compliance with changing regulations. The utility’s focus on innovation has supported the implementation of leading-edge technology to reduce nitrogen in its effluent, helping to protect the Chesapeake Bay; recycle 1.4 billion gallons of water onsite to run their own equipment; reuse nearly all of the methane gas produced in utility operations; and offer reclaimed water for use throughout the City of Alexandria. Internally, innovation is encouraged through a Safety, Environmental and Sustainability (SES) Committee, which engages employees in identifying and implementing improvements utility-wide.
- **The Dow Chemical Company.** In North Seadrift, TX, the Union Carbide Corporation (a wholly owned subsidiary of The Dow Chemical Company) operates the Seadrift Facility, a large industrial complex with several manufacturing units involved in the production of plastic resins and other organic chemicals. Wastewater and stormwater from the facility are routed through an onsite wastewater treatment system, which originally consisted of primary/secondary treatment ponds and a shallow tertiary pond. The tertiary pond was operated

as a solar stabilization pond with no active mixing, and algal blooms in the pond led to exceedance of the plant's discharge permit criteria. In collaboration with the Texas Commission on Environmental Quality (TCEQ) and Dow's "near neighbors" community, Dow studied several alternatives and settled on a natural treatment solution: converting part of the tertiary pond to constructed wetlands. Not only did the natural treatment solution have lower capital and operating costs than other "gray" infrastructure solutions, it also returns treated water to the ecosystem; enhances wildlife habitat; and creates recreational, outreach, and education opportunities for local residents. Partnering early with local and state authorities helped the facility find a water management solution that met multiple community needs.

## **Solution:** Support and grow water clusters

Economic clusters are geographic concentrations of interconnected companies, universities, and other organizations with a specific industry focus. These networks go by a variety of names, but their goal is to leverage a region's assets to create economic opportunity and catalyze innovation. According to the US EPA, there are currently 18 environmental technology clusters across the nation,<sup>4</sup> from Las Vegas to Milwaukee to Philadelphia, most of which have a focus on water. These clusters often begin organically—for example, with a foundation of local water-related (and water-dependent) industries that evolves into partnerships among academia, NGOs, government agencies, and utilities. Communities can recognize, nurture, and celebrate water clusters as an important pathway to spur innovation and accelerate the adoption of new technologies.

### **In Action**

- **The Water Council.** Headquartered in the Global Water Center in Milwaukee, WI, next to the world's largest freshwater system, The Water Council is a nonprofit organization that drives economic, technology, and talent development to support the global water industry. As a leading US water cluster and one of the most powerful water technology hubs in the world, the organization convenes global water leaders and supports more than 190 members from small and mid-sized businesses and large global corporations to engineers, entrepreneurs, utilities, government agencies, education

programs, and nonprofits, with services, programming and networking opportunities. Established as a 501(c)(3) in 2009, The Water Council fosters a spirit of collaboration among public, private, and academic sectors with a shared commitment to finding innovative solutions to critical global water challenges.

- **Cleveland Water Alliance.** The Cleveland Water Alliance is a nonprofit organization that joins Northeast Ohio corporations, universities, and government agencies to drive economic development through water innovation and promote the value of water to the region. Challenges and competitions are used to surface new water technologies and innovative approaches to generate enduring solutions to water problems in Lake Erie and beyond. The program reaches beyond political boundaries to engage utilities, research institutions, governmental agencies, incubators, venture capital, and private industry partners throughout the Lake Erie basin, and it includes utilities in Detroit, MI; Windsor, ON; Toledo, Sandusky, Avon Lake, and Cleveland, OH; Erie, PA; and Buffalo, NY. Initial programming includes the Erie Hack project, focused on data and engineering solutions, and the Internet of H2O project, aimed at encouraging next generation data networking and sensor technology for monitoring and managing nutrients in water bodies.

## **Solution:** Invest in solutions that build efficiency and pay for themselves

As previous sections of this report have discussed, infrastructure replacement is a top priority for communities nationwide. To get greater value out of our capital investments in water infrastructure, city departments and utility managers can use technological innovations to extend asset lifetimes, operate more efficiently, and reduce costs. For example, the use of smart metering can be invaluable in identifying leaks and failures in water distribution systems. Many wastewater utilities are transforming themselves into resource recovery organizations, harvesting nutrients and energy from the wastewater they manage. Investments in resource recovery can generate new revenue streams and offset the costs of facility operations. Some utilities, like DC Water and NEW Water in Green Bay, WI, use innovative technologies to produce biosolid fertilizer products and generate energy to support facility

operations. For facilities that generate more energy than they need, excess energy can be sold back to a local power utility, further offsetting utility operating costs.<sup>5</sup>

#### **In Action:**

- **San Francisco Public Utilities Commission (SFPUC).** SFPUC has installed automated water meters that now provide the utility and its customers access to more precise information about water use. Customers can access information on their water use via a My Account online portal, and the utility also alerts customers to continuous usage patterns that may indicate a water leak. These customer service improvements have resulted in more accurate billing, SFPUC operational savings, and quicker leak detection, which saves water and associated costs for SFPUC and its customers. The utility is also exploring the use of data collection from distribution system leak detection equipment, as well as advanced metering, to identify system water loss in district metering zones. This information can help the utility better prioritize system repairs to minimize water loss.
- **Metropolitan Water Reclamation District of Greater Chicago (MWRD).** In 2016, MWRD began operating the world's largest nutrient recovery facility at their Stickney Water Reclamation Plant. Using Ostara technology, the facility recovers phosphorus and nitrogen from wastewater to create a high value fertilizer. The technology allowed cost-effective implementation of enhanced biological phosphorus removal without increasing the plant's footprint. Ostara reduces the treatment plant's nutrient loadings to the Chicago/Calumet river system, upstream of the Mississippi River basin, while creating a new revenue stream through fertilizer sales.
- **SUEZ.** At some utilities, like SUEZ's drinking water utility in Rockland County, the implementation and integration of mobile technology has created a paperless workforce. Workers can perform various water operations while gathering near-real time GIS data on assets or activities performed throughout a water system. The use of mobile technologies such as smart phones and tablet devices—coupled with ESRI Survey123, GIS, and GPS applications—allows a utility operator to create a workforce of efficient mobile data collectors. The data collected can then be passed along to various applications such as maps or dashboards, which display a status of the water system in near-real time instead of waiting until day's end to

see what occurred during the operational period. It has eliminated hundreds of paper records and manual data entries per day, and it has saved, on average, two to three work hours per day for each user. Following a successful initial deployment, the program is being expanded to additional SUEZ utilities.

#### **Solution:**

### **Foster idea sharing and consolidation of investments in research and development**

Utilities and companies should establish, or participate in, platforms to test new equipment and exchange related information that would offer significant water efficiency and economic benefits, and could encourage regulators to be more receptive to new technologies. By consolidating efforts, resources can be pooled to maximize impact and foster synergies. The water utility sector will also need to work with states that have technology validation programs to secure reciprocity, which can help to avoid redundant or burdensome testing and validation efforts.

#### **In Action:**

- **Leaders Innovation Forum for Technology (LIFT).** LIFT is a multi-pronged initiative spearheaded by the Water Environment & Reuse Foundation (WE&RF) and the Water Environment Federation (WEF) to help bring new water technologies and approaches to the field quickly and efficiently. LIFT identifies innovations of interest to utilities and maintains them in an online clearinghouse. In partnership with EPA, NSF, and DOE, LIFT is leading the development of a national test bed network to connect new technology providers with test facilities appropriate for their needs. LIFT helps utilities and industry end users share the cost and risk of conducting demonstrations to accelerate adoption of new technologies. In collaboration with NACWA and WEF, LIFT provides travel scholarships for utilities to see innovations of interest at other utilities around the world and share what they learn with peers. LIFT also benchmarks how individual utilities accomplish research and development, and then undertakes training, education, and outreach to spread these ideas. Through a peer-to-peer utility innovation network of over 400 facility owners, LIFT helps utility managers share experiences, activities, and interests.

- **Current.** Serving the Chicago region, Current is a platform for delivering cutting-edge water research, at-scale water technology validation, and commercialization support. Created through a partnership of local universities, utilities, businesses, and the city, Current illustrates the commitment of the region to water innovation. The Chicago region boasts a water utility with one of the largest treatment plants in the world, as well as a number of other major infrastructure assets from airports to transportation hubs. Current is focused on aligning capabilities in a way to establish Chicago as a leader in water innovation. Their strategy is centered on the innovation value chain—reverse engineering programs to bring technology solutions to clients that they want and need, and orienting research based on market demand. This means not only looking for synergies among national labs, but working with water sector businesses to create a network within the region.

## Solutions: Regional & State Level

### Solution:

#### Fix regulatory barriers to technological innovations, and establish processes to streamline technology adoption

States and localities should conduct an audit of their existing regulations and look to eliminate or modify those that are hampering opportunities for the development and deployment of technological innovation. The nation's fragmented regulatory structure prevents new innovations from being developed and can prevent proven innovations to effectively spread and scale. In addition, states can help streamline technology adoption by setting standards for piloting and implementing new water management technologies. States can also jointly develop shared permitting and certification platforms. If states agree on a set of common standards, a technology that has qualified and been approved in one state would be able to enter an expedited approval process in a reciprocal state.

### In Action:

- **National Blue Ribbon Commission for Onsite Non-potable Water Systems.** One promising approach to water management in the built environment is the use of onsite systems that collect and treat non-potable water, and then reuse it for non-potable purposes such as toilet and urinal flushing, cooling, or irrigation within the building. However, a lack of state or national water quality standards for onsite non-potable water systems (ONWS) and wide variations in water quality criteria have hindered development and implementation of these systems. To address the lack of and inconsistencies in standards, the National Blue Ribbon Commission for Onsite Non-potable Water Systems—a coalition of public health agencies and water utilities from 11 states and the District of Columbia—developed a suite of resources for state and local regulators. The Commission produced a guidebook<sup>6</sup> that presents a consistent national approach for developing regulations and oversight and management regimes that protect public health. The recommended national approach provides for consistent standards that are transferable from state to state and community to community, while maintaining flexibility for each community to meet specific local needs. The report also includes policy templates and models for program implementation, which state and local policy makers can tailor for their own use. These resources are a significant step in addressing the institutional barriers that have been limiting innovation in the way we manage water within individual buildings.
- **Wisconsin Economic Development Corporation.** To expand Wisconsin's economic competitive advantage, the state's economic development agency placed an emphasis on strengthening its seven key historic industry clusters with water technology at the forefront of its efforts. Assistance comes in a wide range of funding and services including support for entrepreneurs, international business development, business attraction, and marketing that is tailored specifically to the water technology industry.

## Solutions: National Level

- **Establish a coordinated national strategy for water technology research and development across federal government agencies.** Responsibilities for water-related R&D currently are spread among several federal agencies. For example, EPA's Office of Research and Development undertakes leading-edge research to provide the solid underpinning of science and technology for the Agency. At the Department of Energy, Argonne National Laboratory has emerged as a leader in water technology innovation and disseminator of best practices. The federal government, in partnership with water sector organizations, should develop a coordinated national strategy for research and development. In addition, the federal government should direct increased funding and attention to water research.
- **Utilize regulatory flexibility to create a risk/reward framework that incentivizes technology innovation.** EPA should incorporate incentives and flexibility into regulatory programs to encourage utilities to pilot technologies that can drive improved delivery of service—and better protect public health—without the fear of permit violations, fines, or stricter regulation.<sup>7</sup> As an example, greater use of watershed-based NPDES permits would help encourage partnering among utilities and other water users in a watershed to find more cost-effective means of protecting water resources. Also, EPA's SRF and WIFIA programs can be optimized to minimize finance barriers and risks, and to encourage leveraging of philanthropic and private capital to help de-risk projects that rely on water technology and innovation. Finally, national effluent guidelines and pretreatment standards can be designed with specific incentives for industries to use innovative approaches that go beyond the statutory requirement of "best available treatment economically available."
- **Support development of a national test bed network, and create an innovation fund to support pilots of new technologies.** A national water test bed network could facilitate technology adoption by giving utilities the information they need about the application, operation, costs, and benefits of newer, innovative technologies. This network could be enabled through a national water innovation fund, which could support pilots, demonstrations, and testing of water technologies. For example, the FAST (Facilities Accelerating Science & Technology) Water Network, led by LIFT, assists those developing and piloting technologies for the water sector. It works to connect researchers, new technology providers, and other innovators in the water industry with test facilities appropriate for their needs.
- **Support development of a national clearinghouse to share and spread best practices.** A national program should be developed with a central focus on sharing best practices that enable water systems, regardless of size, to share best practices, develop joint partnerships with public and private utilities, engage private sector expertise and technology, and access private capital markets. Such a national program would provide small and distressed water systems with the technical capacity to comply with regulations and to undertake projects to improve services.
- **Maintain EPA's Clusters program.** EPA's Water Cluster Program is designed to drive innovation in water technologies throughout the country. The Cluster Program advises self-organized cluster groups, encourages collaboration, tracks the work of technology clusters, and connects EPA programs to cluster needs. This program has played a role in facilitating the creation of water technology clusters, which allow public agencies, private partners, universities, and entrepreneurs to collaborate and advance innovative water solutions.

## Conclusion

Across the public and private sectors, courageous leaders are creating new pathways to water innovation. Every day, new ideas are emerging on how we can manage water for greater efficiency, better use of resources, and a higher quality of service, often at a reduced cost. The challenge lies in getting these solutions implemented on a broad scale. To do so, we must navigate the challenges of a fragmented regulatory structure, cultural resistance to change, and ingrained habits of operating independently from one organization, and one community, to the next.

More than anything else, accelerating innovation requires that we have the will to change. It requires bold leadership to drive transformation through organizations and across departments. It requires a spirit of collaboration to forge new, mutually beneficial partnerships across sectors and agencies. We know we can do better at managing water. We have to *want* to do better, and put in the energy required to realize the changes we envision, hand-in-hand with the communities we serve.

## Endnotes

- 1 Kiparsky, Michael, David Sedlak, Barton Thompson Jr., Bernhard Truffer, "The Innovation Deficit in Urban Water: The Need for an Integrated Perspective on Institutions, Organizations, and Technology," *Environmental Engineering Science*, 2013, <http://online.liebertpub.com/doi/abs/10.1089/ees.2012.0427>
- 2 "Fostering Innovation Within Water Utilities," *Water Research Foundation and Water Environment & Reuse Foundation*, 2017, <http://www.waterrf.org/PublicReportLibrary/4642.pdf>
- 3 "Internet of Water: Sharing and Integrating Water Data For Sustainability," *The Aspen Institute*, 2017, <https://www.aspeninstitute.org/publications/internet-of-water/>
- 4 "Clusters Map," *US Environmental Protection Agency*, 2017, <https://www.epa.gov/clusters-program/clusters-map>
- 5 "Research Area: Resource Recovery," *Water Environment & Reuse Foundation*, 2017, [http://www.werf.org/i/ka/Resource\\_Recovery/a/ka/Resource\\_Recovery.aspx?hkey=07bf0712-bbc5-410c-b318-e0108e5b9021](http://www.werf.org/i/ka/Resource_Recovery/a/ka/Resource_Recovery.aspx?hkey=07bf0712-bbc5-410c-b318-e0108e5b9021)
- 6 "A Guidebook for Developing and Implementing Regulations for Non-potable Water Systems," *National Blue Ribbon Commission for Onsite Non-potable Water Systems*; US Water Alliance, Water Environment & Reuse Foundation, Water Research Foundation, December 2017, <http://uswateralliance.org/sites/uswateralliance.org/files/NBRC%20GUIDEBOOK%20FOR%20DEVELOPING%20ONWS%20REGULATIONS.pdf>
- 7 Fiorino, Dan, "The New Environmental Regulation," MIT Press, 2006, <https://mitpress.mit.edu/books/new-environmental-regulation>

# Thank you to the One Water for America Collaborating Partners

The US Water Alliance is deeply grateful to the more than 40 partner organizations that worked with us to host the Listening Sessions and provide their insight and recommendations in the development of the policy framework. The collaborating organizations are top leaders in their spheres of influence, and this project would not have been possible without their support and guidance.

## Program and Funding Partners

The Charles Stewart Mott Foundation  
National Association of Clean Water Agencies  
Pisces Foundation  
Water Environment Federation  
Turner Foundation

## National Collaborators

Alliance for Water Efficiency  
American Planning Association  
American Rivers  
American Society of Civil Engineers  
Bipartisan Policy Center  
Building America's Future  
Ceres  
The Conservation Fund  
National Association of Water Companies  
The Nature Conservancy  
US Water Partnership  
Water Environment & Reuse Foundation  
Water Research Foundation  
Water and Wastewater Equipment Manufacturers Association  
WateReuse Association

## Regional Host Partners

American Water Resources Association, Washington Section  
Atlanta Regional Commission  
Bay Area Council  
Cleveland Water Alliance  
Current  
Detroit Water and Sewerage Department  
Everglades Foundation  
Iowa Agriculture Water Alliance  
Iowa Soybean Association  
KC Water  
Metropolitan North Georgia Water Planning District  
Mid-America Regional Council  
Northeast Ohio Regional Sewer District  
San Francisco Public Utilities Commission  
Santa Clara Valley Water District  
Sewerage and Water Board of New Orleans  
Tucson Water  
Washington Public Utility Districts Association  
Washington State Department of Health  
Washington Water Utilities Council  
Water Resources Research Institute of the UNC System  
Water Supply Forum



One Water, One Future.

[www.uswateralliance.org](http://www.uswateralliance.org)  
[@WaterAlliance](https://twitter.com/WaterAlliance)

©2018 US Water Alliance. All rights reserved.