US Water Alliance

Recovering Stronger

Transforming Water Management Post COVID-19

Advancing Water Equity in Small and Rural Communities: The Role of Digital Solutions

Preface

Small and rural communities across the United States can lack a strong economic base from which to grow and thrive. Water utilities in isolated parts of the nation are often responsible for serving large geographic areas with small populations who are unable to pay for needed water system improvements and ongoing operations. Any strategy to advance an equitable water future requires a renewed focus on the needs of the people served by these systems and the implementation of meaningful solutions.

This report explores a vital pathway to advance water equity and the essential need of small and rural communities to access safe and reliable water services: adopting and implementing practical digital water management solutions. While attention typically centers on the next big technology and digital breakthroughs, those who lack even the most basic of digital technologies are being left further behind—sometimes to devastating effect.

The upside is that accessible solutions exist. Through coordination on a core set of solutions, our nation can support small water and wastewater systems in adopting digital solutions to safeguard and develop water access where it is most needed. This would be a significant step toward an equitable water future.

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Introduction

Climate change, disaster risk, water stress, and lack of infrastructure disproportionately affect Black, Indigenous, and Communities of Color, as well as low-income households.[1] More than two million Americans lack access to running water and indoor plumbing, and many communities are precariously on the verge of losing access to safe, reliable water and wastewater services.[2] With a national water infrastructure rating of D+ from the American Society of Civil Engineers, small water utilities in particular face a daunting set of challenges to equitably deliver safe, reliable water and wastewater services.

Of the nation's more than 145,000 public water systems, 97 percent serve communities of 10,000 people or fewer,[3] yet large utility systems receive more sector attention and funding.[4] Disasters and disruptive events such as the COVID-19 pandemic and climate impacts reveal and exacerbate racial and societal inequities that disproportionately affect the most underserved—many of whom live in small and rural communities. This perpetuates a widening knowledge gap between large urban utilities and water systems in small communities, and it contributes to greater inequity in the nation's approach to technological development and investment with a continued design focus on the needs of the larger utilities. By elevating the national discourse on water access and affordability, we may guide equitable investment in the water infrastructure of these communities, creating a pivotal step toward prosperity.

Presidential Executive Order 14008 created the government-wide *Justice40 Initiative* to deliver "forty percent of the overall benefits of relevant federal investments to disadvantaged communities," including investments in "critical clean water infrastructure." Combined with the passage of the 2021 Infrastructure Investment and Jobs Act (IIJA), these federal actions will fuel unprecedented investment in underserved, water-stressed communities. With intention, these investments can help communities advance water equity. Water equity occurs when all residents have access to safe, clean, affordable drinking water and wastewater services; are resilient in the face of floods, drought, and other climate risks; have a role in decision-making processes related to water management; and share in the economic, social, and environmental benefits of water systems.[5]

This report explores a vital pathway to help small and rural communities advance water equity, quality, access, and resilience through the adoption and implementation of digital solutions. Digital technologies and the data and functionality they provide can improve water services for underserved communities by lowering the cost for operators to observe system health and needs in real time. With a mix of research, holistic thinking, and support, small utilities can adopt digital solutions as a core strategy for safeguarding water access in places where it is most precarious. This report identifies foundational digital technologies, challenges, priorities, and opportunities. By elevating and prioritizing the conversation and twenty-first century solutions for rural water systems, we can increase national resilience and prosperity.

Water Access in Small Towns and Rural Areas: An Equity Imperative

Water is a common good, and reliable access to water and sanitation are necessary to support social safety nets, quality of life, and community prosperity.[6] Equity in the water sector occurs at the intersection of social, infrastructure, policy, and marketplace activities. Social equity refers to just and fair inclusion—a condition in which everyone has an opportunity to participate and prosper. Equitable infrastructure provides consistent quality and service regardless of location or social status. Inequity in the marketplace is revealed by the gap between services and vendors focused on large systems and those serving smaller ones, creating an unequal playing field determined by institutional customers' budgets and purchasing power instead of needs in public health, environmental quality, and social equity.

Scaling digital solutions and technologies among small and rural systems is insufficient on its own to better safeguard water access in all communities where it is threatened. However, doing so is an underutilized strategy with significant potential to improve the ability of many small and rural systems to provide safe, reliable water services.

Many small systems lack basic digital capabilities for several reasons. One major reason is that most policies, investments, and marketplace innovations (including digital technologies) were designed to support larger water systems. As a result, threats, needs, and opportunities among the nation's small water and wastewater systems are less supported, understood, and visible. Another significant reason is the fragmented patchwork of federal, state, and local government entities with some authority over water resources, systems, or management. Water systems in the United States and its territories operate within an inconsistently structured mix of governmental powers and regulations, many of which have a narrow slice of authority. This fragmentation of governance and responsibilities affects small systems by rendering them visible only when water quality or service problems become acute and dangerous. Though technology upgrades will provide significant improvements in daily operations, the lack of consistency in authority, policies, and enforcement is a national issue affecting water utilities of all sizes.

Community wealth is not a reliable determinant of a water utility's performance, and low-wealth communities can have well-run water systems. System failures are most often related to management structures and a lack of resources. Small water facilities may be managed by contractors, traveling technicians, volunteers, or part-time operators—some only available on-call. Because rural water utilities can be relatively isolated, operators often use familiar, dependable components repairable with minimal outside help. Monitoring is done in person using manual methods including sight, sound, smell, and taste, with results tallied by pen and paper. Institutional knowledge may reside with one or two water workers also responsible for unrelated tasks like grass-cutting and general maintenance. For systems lacking remote monitoring technologies, an ongoing concern during the onset of the pandemic was that no one could manage or operate the water system if an operator fell ill. In a 2020 survey of small water utilities in California, 41 percent were not using any digital technology or sensors, and 54 percent had no remote access capabilities.[7] Nationally, this number is unknown.

One of the primary benefits of technology and digital approaches to water management is de-risking these management pressures and constraints that can pose a significant threat to the populations served. Yet small systems need much more attention and focused efforts to help them transition to these solutions.

Key Digital Solutions to Safeguard Water Access

Smart water technologies in the public and private sectors provide water systems with predictive and actionable information and functionalities to manage their operations and infrastructure more efficiently and effectively. Cumulatively, these solutions can save utilities scarce resources and help manage risks while building resilience. While this report's core focus is how digital solutions can safeguard precarious water access for underserved communities, without core digital capacities, small water utilities are isolated from a range of other supportive resources and from participating in future innovation or opportunities that could benefit their customers and regions served.

This section presents five key digital solutions, what they do, and why their contribution is significant for equitable and sustainable water access. Each can be pursued independently but are highly complementary. These digital solutions are:

1. **Cloud-based transitions to reduce paperwork, manage systems remotely, and increase security**
2. **Up-to-date digital maps of pipes, pumps, and service equity to improve planning and response capabilities**
3. **Remote monitors to assess system operations, equipment, and water flow in real time**
4. **Automation of time-consuming manual processes to improve operations and management**
5. **Modern customer service and billing to improve accuracy and customer relations**

Cloud-based transitions to reduce paperwork, manage systems remotely, and increase security

Small utilities often use handwritten data for multiple purposes. In many cases, this information is transferred to a standalone computer—a multi-step process vulnerable to inconsistencies and risk with data stored digitally but locally. Modern water system management applications are cloud-based, and the global cloud computing market is a rapidly growing technology sector. Cloud-based applications provide operators and support staff remote access, real-time monitoring, data backups, security updates, collaboration tools, technical support, automation systems management, and cost savings. These systems offer users the capacity to run web-based applications that collect, analyze, and store critical data on secure servers, reducing the need for cash-strapped utilities to purchase and maintain standalone hardware and software.

Cloud-based water utility management systems can easily scale based on the needs of the utility and produce substantial cost savings over traditional hardware-based systems. Because many community utilities operate with limited people power, successfully adopting and incorporating cloud-based file creation and storage services for tasks that require multiple manual steps can free precious time. One easy example is to move a utility from paper records-keeping to cloud-based storage and synchronization services, such as Google Drive, Microsoft SharePoint, or Dropbox. Files and other data are then automatically saved, backed up, secure, searchable, and easy to share and collaborate on with others. The cumulative effect of such modest shifts can significantly support and free water system capacity for other functions.

Cyber security also continues to be an important infra-structure weakness, and older computer systems are particularly vulnerable. Current federal policy does not address small systems that serve fewer than 3,300 people.[8] Cloud connectivity shifts cyber risk away from the utility to the cloud-service provider and offers access to full-time security, data backup, and when paired with automation can seamlessly manage energy transition to backup during emergencies. With utilities facing increased cyber security threats—including those designed to disrupt or tamper with water quality—small systems increasingly need access to this first line of cyber defense support.

Up-to-date digital maps of pipes, pumps, and service equity to improve planning and response capabilities

GIS, or geographic information systems, are digital tools used to map, store, visualize, analyze, and interpret geographic data. Unfortunately, many small water utility operators lack access to accurate maps showing their service area boundaries or water pipe and facility locations throughout their service area. Sometimes, the only available maps are paper versions created when the system or major components of the system were built. Because of outdated or nonexistent maps, vulnerabilities and risks increase, threatening public health and system solvency. Time is critical to prevent contamination when an event such as a pressure loss or leak occurs. The lack of a system map can mean locating the problem in person, which may take days and require unnecessary costs, as operators are faced with the challenge of physically identifying and uncovering the problem.

Water systems use GIS to build and maintain a real-time knowledge bank of their pipes, community infrastructure, and customers. GIS is an interconnected, multi-departmental resource able to show accurate data in a format that communicates viscerally with stakeholders and community members. Mapping community infrastructure and social layers accurately can spark change in how residents perceive their responsibilities toward the operations, management, and governance of the system.[9]

Once these system maps are in place, GIS helps utilities understand how their infrastructure interacts with other utilities, natural ecosystems, and community-based social vulnerabilities. Government agencies such as FEMA, EPA, USGS, USDA, NOAA, and the CDC offer vital GIS data layers and programs that can be leveraged to design more resilient infrastructure services and secure investment. Private sector industries such as real estate and energy use GIS to map social, industrial, and environmental infrastructure. Ideally, these data layers can also be merged to support a more holistic approach to community development.

Remote monitors to assess system operations, equipment, and water flow in real time

Many rural systems serving low-wealth communities depend on operators and technicians who manage multiple systems across a large area. Without remote monitoring and sensing capabilities, these operators lack consistent, real-time information about processes, risks, and issues. In addition, rural technicians often spend more time traveling to and from sites than inspecting equipment, managing processes, and logging findings. Climate change makes poorly monitored and often unmapped systems increasingly vulnerable to biological contamination, corrosion, failure, and leaks. Remote monitoring and sensing technologies can address these and other challenges and provide multiple benefits to customers and communities.

Analog meters for billing lose accuracy over time, are difficult to read, and provide little information to customers. As climate stresses, droughts, and other threats to water increase, old, dysfunctional meters exacerbate the loss of both water and revenue. Digital meters can be fundamental.

Flowmeters, sensors, and cameras offer a growing array of affordable options to support safe, accurate, and efficient services. Devices can monitor flow and leak detection, pump and motor status, weather conditions, and more—including the ability to trigger alarms and alerts that help operators respond to issues and support community emergency management needs. In combination with GIS data, monitors and sensors provide timely, actionable information on water loss, pressure, outages, chemical balance, and other issues that affect infrastructure management, water quality, and customers' health.

Overall, the water industry is moving toward end-to-end intelligent systems with real-time remote monitoring and sensing technologies playing a central role. Sensors are becoming smaller, smarter, and less expensive. Remote monitors provide a steady stream of data that gives operators and intelligent software the ability to anticipate and address problems quickly, minimizing damages, extending the lifespan of the equipment, and reducing wear and tear on operators and vehicles. While the benefits of digital monitoring technologies are advancing steadily in the larger water sector, too many small systems are falling behind. Fundamental remote monitoring technologies are vital to achieving One Water goals and meeting the water equity challenge.

Automation of time-consuming manual processes to improve operations and management

Systems lacking automation are more vulnerable, more inconsistent in providing quality water services, and more difficult to operate. Many small systems require daily, in-person monitoring and adjustment of flow rates and chemicals. A time gap in rectifying a pump failure or a delay dispensing a chemical can quickly become a health threat affecting the entire system. For example, boil water advisories can last days as the system clears and rebalances. With basic automation, systems are more stable, resilient, and easier to manage. This reality was accentuated by the COVID-19 pandemic: water workers who could control aspects of their treatment plants and other systems while working from home had clear advantages over those who could not.

Automation technologies integrate analytics and system components to manage actions and processes that support consistent, efficient operations and maintenance. Well-designed "smart" water systems reduce human error, facilitate compliance, improve incident response time, monitor wear and tear, and stabilize (and often decrease) chemical and energy use. Systems like Supervisory Control and Data Acquisition (SCADA) monitor, analyze, and predict future needs and performance. In many smart systems, inputs include weather conditions, which provide adaptation capabilities to help utilities and communities be more resilient to climate disruptions.

The energy and functional needs of a water system vary with fluctuating demands. Automated systems adapt quickly to these demands and environmental stressors. Moving from manual to automated operations reduces health risks to the community, mitigates stressors on the system, and enables clean water delivery more reliably, efficiently, and equitably.

Modern customer service and billing to improve accuracy and customer relations

In addition to managing operational processes via manual entry and paper data logs, many systems use outdated methods for customer service, accounting, and billing. Manual billing management requires a monthly routine of entering usage data, preparing and printing bills, and making trips to the bank to deposit checks and cash. In many cases, options to pay digitally or by credit card are unavailable, and in some scenarios, customers must pay in person or have fees collected through house calls. For systems lacking full-time staff, billing and customer service responsibilities may be outsourced to contractors with no water system management background, and service-related issues may go unresolved for long periods, exacerbating public health and safety threats.

Modern customer service and billing systems can be cloud-based and integrated with other digital technologies like GIS, monitors, and SCADA to perform multiple functions, including providing emergency information and notifications. For small systems that may still be using paper processes, upgrading to digital solutions for online or remote payments is transformative for customers and operators. Web-based customer service and billing can also be a platform for educational resources and support, including information on how the utility works, troubleshooting common problems, how to access social support services, and guidance to customers about their responsibilities to be good stewards of water.

Customer relations are vital for effective utility operations. In addition to clean, reliable water, customers expect transparent, accurate, and understandable billing with compassionate and convenient payment options. Operators need customer management systems that are accurate, timely, and easy to manage. Accurate metering, billing, and collection are the financial lifeblood of any utility. Customer service and billing systems that connect across functions reduce demands on personnel, streamline finances, and build trust that can be the difference between success and failure.

Guidelines and Steps to Incentivize and Scale Digital Solutions

Many small systems have been left behind and require attention and support to better serve their communities. One dimension of this support must include improved assistance to adopt and implement digital solutions for water and wastewater challenges and operations. The hard work is to assess diverse geographies, systems, populations, and authorities to better understand the mix of existing and missing technologies, triage risk, identify opportunities for immediate action, and guide pilot programs and community case studies to see which best deliver local or regional capacity and results. Another important consideration before widespread rollout can occur is addressing the broadband technology access gap in many small and rural communities. Broadband is required by many digital technologies, yet it is the country's most inequitably distributed infrastructure.[10] Fortunately, the IIJA's rural broadband initiative is beginning to improve access.

As broadband access is increasing, many communities can achieve significant improvements for relatively small investments. Many digital solutions are inexpensive and accessible, making the challenge of scaling digital equity for small water systems achievable with the right mix of research, planning, capacity development and deployment, and investment.

To make progress, utilities, policymakers, technical assistance providers, and investors can advance the following priorities for action.

Reduce the financial risk for small utilities to adopt digital solutions

Reducing financial risk for small utilities starts with inclusion. All stages of research and planning must include the voices of the community and key stakeholders. Local and regional participation and buy-in are critical to assessing existing capacities and determining which digital advancements match needs, goals, and finances.

First, small systems taking a risk on a new digital solution need reasonable liability protection. One barrier to implementing digital solutions is the fear of failure and regulatory compliance repercussions. EPA and states should consider liability and other support options that limit this risk.

The market for smart water technologies is constantly changing, growing, and increasingly competitive. Small and often understaffed systems face many choices in determining which products will produce the best results in their specific contexts, and decision-makers want access to a variety of affordable, proven technology upgrades vetted by a neutral public or private organization. Several existing entities do evaluate technologies, but small systems are typically not well represented among the majority of them. Technologies can be assessed for different needs, including ease of installation, operation, compatibility with other systems, modularity, energy use, and repairability. In partnership with technical assistance providers, states and regions can develop programs that hold competitive bidding processes for technology solutions that prioritize small utility needs—taking some of the vetting burden off small systems. Another opportunity is for states to create master contract templates for small utilities and vendors that include consistent language about data ownership, transfer of services, cyber support, and outcomes-based options with pricing based on community size and use.

With funds flowing from the IIJA, states can aggregate additional funding sources through mechanisms such as infrastructure banks to create central repositories of resources to assist small communities in applying for support. Many of these investments can be leveraged to reduce financial burdens, making it easier for small utilities to plan for and adopt improvements.[11] Additionally, Congress can use its oversight powers to not only ensure that investments are distributed equitably, but also that the agencies and contractors approving the use of the funds are held accountable if a system fails,[12] thus reducing the burden on a small community's future resilience.

Develop and test models to extend financial and staff capacity for small systems to adopt digital solutions

Enabling limited staff and resources to stretch as far as possible is important. However, the field lacks data on what partnerships and approaches work to scale foundational digital solutions in small and rural communities. Adopting digital solutions will require change management, and key questions (such as how to facilitate change management at scale among small utilities) remain unanswered.

Regional collaboration on water investment, management, and operations can lead to more efficient and durable solutions. While traditional utility cooperation models like regionalization and consolidation could help scale digital solutions, states, investors, and groups of systems themselves could invest in testing various models to help scale digital solutions among small systems through the aggregation of resources and staff. Each potential model described could be overseen by a collective of public and private organizations that could each serve as a neutral, centralized vetting body and clearinghouse where pilot results could be compared, specific digital solutions could be evaluated for effectiveness in the small system context, and future resources and results could be stored for other small systems. These collaborations could also determine clusters of small systems to participate in pilots based on context, criteria, and readiness—a promising model already used among larger water systems seeking further innovation through forums like the Technology Approval Group.[13]

The first model to test may seek to extend the staffing, technological, or data capacity of a large system to small systems in the region that could benefit from the foundational digital solutions described in this report. Water quality and availability in larger urban centers often depend upon the health of upstream or nearby rural water resources and systems. There could be mutual benefit to large and small systems from investing in digital solutions that improve upstream small system performance.

A second pilot may involve a set of regionally adjacent small systems working together to jointly procure technologies and services. Doing so could lower costs compared to each system procuring the technology or service independently. These systems could participate in parallel change management processes for staff or volunteers to fully adopt and integrate their chosen solutions. Similarly, a group of systems could also develop shared service agreements where one vendor or contractor supports and staffs multiple systems to implement a given solution.

A third pilot may seek to create a "virtual utility co-op" owned by and in service of small utilities focused on initiatives like digital transformation. These virtual utilities could serve entire regions, collect revenue from each municipality, and deliver digital solutions and services for all participating systems. Co-op functions could vary, but these virtual utilities would be charged with activities like vetting solutions that could benefit its small system owners for their unique contexts, efficiently procuring solutions, leading adoption efforts using either its own staff or system staff (depending on the solution), ensuring effective implementation, and aggregating data produced to inform system and regional decision making.

Aside from scaling digital solutions, these collaborative efforts could generate additional benefits across a region. The benefits could range from improving regional relationships to catalyzing further regionalization or innovation opportunities.

Build operator capacity to adopt and operate digital solutions

For many, the transition to digital technologies means learning new software and functional processes, including online safety and engaging with online communities. Digital literacy is a global equity issue, and elders are the fastest-growing demographic. Within the next few years, the workforce will embody five generations.[14] Many people want to work beyond traditional retirement and are excited about training in new technologies. Opportunities lie in working across age groups, and digital solutions can serve as a multigenerational recruiting tool to build valuable technical skill sets while serving the community. Pilot programs for innovative water technologies must include targeted community outreach through planning and implementation, as diversity in the workforce of both the water and the technology sectors continues to lag.[15]

Utility peer-to-peer programs and skill-building learning platforms are vital to supporting small utility alignment and engagement while attracting, retaining, training, and expanding the water workforce. Several existing peer exchange programs, like the California Water Data Consortium, share this perspective. Online education and training resources are key to providing easy access for operators to gain critical career skills. Agencies and rural water organizations in every state provide training to help operators earn and maintain licenses and certifications as part of the requirements of the Safe Water Drinking Act of 1996.[16] Programs can be tailored to specific mixes of digital technologies used by localities and leveraged as recruitment tools for broader participation in the water sector. These efforts will build confidence in the water system.

Make water innovations accessible to small, struggling systems

The challenge of gaining access to water innovations also represents an opportunity to harness the knowledge and ingenuity of local cultures.[17] Technicians and residents of rural areas know their problems. Given the tools, resources, time, and community input, small water systems can support innovative solutions specific to their social, cultural, and environmental challenges while building new socio-economic opportunities.

Many small systems need federal and state governments to provide the policies, clarity, incentives, funding, and programmatic support necessary to enable the adoption of new technology. States and the federal government need to provide equity-oriented funding opportunities to spur investment in scaling the use of digital solutions by small systems. EPA, USDA, and other agencies offer support to small utilities for identifying and funding upgrades, but these mechanisms focus primarily on loans rather than grants. However, many of these investments can generate significant returns, which could position small systems to be able to take loans and support repayment by improving their financial capacity. EPA and USDA may also consider more explicit guidance to technology providers and researchers who receive federal funding to test and innovate with small water systems so they can inform research and design.

Philanthropy—working with industry and rural water organizations—can also support the adoption of innovative technologies with pilot programs that test a suite of technologies tailored to specific regional needs. Working with local and state governments, these pilots can lead to widespread adoption and improved services for similar community systems.

Conclusion:
Now is the Time to Scale Digital Solutions to Secure and Safeguard Water Access

Safeguarding water access is just one benefit of scaling digital solutions among small and rural water systems. Digital water management solutions empower communities to achieve a wide range of social, environmental, and economic benefits such as climate adaptation, disaster preparedness and response, workforce development, and new business and operational models. Forty percent of operating costs for water systems can be for energy, and many digital solutions easily integrate with renewable sources such as solar and wind.[18] With a smart water system in place, communities may even be able to participate more easily in future innovations and leapfrog into other transformative services such as microgrids, wastewater monitoring for public health, and circular economy initiatives to capture nutrients, energy, and other assets from waste streams to generate revenue. In addition, digital data from smart water systems provides unbiased information to guide decision-making tailored to the needs of people and ecosystems.

Our responsibility to work more harmoniously with water underlies our ability to thrive. Infrastructure is a set of interdependent systems, and digitally-enabled water utilities connect small communities to each other and the world. To be successful, support for small communities in adopting new water technologies must be a collective effort across government, philanthropy, academia, business, nonprofits, and residents. For digital solutions to accrue multiple benefits at scale, public and private sectors must increase targeted action, partnership, data collection, research, and funding. The role of states is to set targets, benchmark performance, create enabling conditions, remove barriers, and prioritize funding.[19] The roles of philanthropy, academia, business, and nonprofits include research, seed funding, administrative support, and the development of pilot programs for states and regions to readily adopt.

As federal agencies and states work together to coordinate the planning and implementation of the IIJA, historically underserved communities should increasingly come online. The time is right for small utilities and advocates to vigorously pursue digital solutions to ensure no community is left behind.

> **Just as the use of chlorine greatly improved workplace productivity in the early 1900s, the adoption of digital technologies will improve workplace productivity today, especially in the most economically burdened areas of rural America.**
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> **Ronny Carter,** Rural Water Technician, Louisiana, 2022

Notes

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About the US Water Alliance

The US Water Alliance advances policies and programs to secure a sustainable water future for all. Established in 2008, the Alliance is a nonprofit organization that brings together diverse interests to identify and advance common-ground, achievable solutions to our nation's most pressing water challenges. Our members and partners include community leaders, water providers, public officials, business leaders, environmental organizations, policy organizations, and more. We:

Educate the nation about the true value of water and water equity, as well as the need for investment in water systems. Our innovative approaches to building public and political will, best-in-class communications tools, high-impact events, media coverage, and publications are educating and inspiring the nation about how water is essential and in need of investment.

Accelerate the adoption of One Water principles and solutions that effectively manage water resources and advance a better quality of life for all. As an honest broker and action catalyst, we convene diverse interests to identify and advance practical, achievable solutions to our nation's most pressing water challenges. We do this through our strategic initiatives and One Water Hub, which offer high-quality opportunities for knowledge building and peer exchange. We develop forward-looking and inclusive water policies and programs, and we build coalitions that will change the face of water management for decades to come.

Celebrate what works in innovative water management. We shine a light on groundbreaking work through story-telling, analysis of successful approaches, and special recognition programs that demonstrate how water leaders are building stronger communities and a stronger America.

US Water Alliance

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