

State Drinking Water Program Challenges and Best Practices: Small and Disadvantaged Water System Funding and Assistance



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Glossary

List of Acronyms Included in this White Paper

ARPA – American Rescue Plan Act
ASADRA – Additional Supplemental Appropriations for Disaster Relief Act
ASDWA – Association of State Drinking Water Administrators
BIL – Bipartisan Infrastructure Law
CDBG – Community Development Block Grant Program
DWSRF – Drinking Water State Revolving Fund
EPA – U.S. Environmental Protection Agency
FEMA – Federal Emergency Management Agency
HUD – U.S. Department of Housing and Urban Development
PWS – Public Water System
TA – Technical Assistance
TMF – Technical, Managerial, Financial
TNC - Transient Non-Community Water System
SDWA – Safe Drinking Water Act
USDA – United States Department of Agriculture
WIIN – Water Infrastructure Improvements for the Nation (WIIN) Act

Executive Summary

State drinking water programs have a long and successful history of providing funding and technical assistance to small and disadvantaged water systems. This work is done in coordination with their Infrastructure Financing Agencies (where applicable), and with EPA Regions and other federal, state, technical assistance providers, and local partners to identify and implement creative and innovative solutions that consider all opportunities for providing funding and assistance. These coordinated approaches also include considerations for whether small and disadvantaged water systems:

- Can continue to sustainably fund, operate, and maintain the system and provide safe drinking water, or whether there is a need for restructuring, regionalization, or partnerships;
- Can demonstrate that they have the technical, managerial, and financial (TMF) capacity required for Drinking Water State Revolving Loan Fund (DWSRF) loans, or whether the state can condition loans with requirements for water systems to develop TMF capacity;
- Require alternative solutions to pay for small and simple costs for equipment and services that are sometimes beyond the DWSRF and other federal funding programs; and
- Could be given additional assistance if federal program requirements and restrictions were more flexible, and eligibilities were expanded for additional types of projects and assistance.

These considerations have served as the impetus for driving state actions and innovative solutions that provide funding and assistance for several types of projects that are tailored to the local and water system specific needs. With the Biden Administration’s emphasis on increasing infrastructure funding and addressing environmental justice, state drinking water programs face both opportunities and challenges with expanding on these successful approaches to help small and disadvantaged water systems upgrade, manage, maintain, and sustainably operate their systems. While the Bipartisan Infrastructure Law (BIL) significantly increases water infrastructure funding for the next five years, these coordinated approaches are key for addressing state challenges, and highlight the need for flexibilities and alternative solutions for providing this funding and assistance to small systems and communities that need it most.

State and Water System Challenges with Funding

Both states and water systems face challenges with providing and accessing funding for small and disadvantaged water system infrastructure needs. These challenges (that are described herein) are exacerbated by fundamental issues that are complex and difficult to address and overcome.

State Challenges and Roadblocks with Providing Funding:

- States have more demand for DWSRF loans and grants than funding, and small projects are sometimes not competitive with other larger projects.
- States have workforce challenges with funding, hiring, and retaining staff to review and manage the DWSRF loans and grants.
- For-profit non-community water systems are ineligible for DWSRF loans, and some states require a municipal sponsor to fund other types of private water systems.

Small and Disadvantaged (Rural) Community Challenges:

- These systems often lack capable full-time operators and rely on volunteer board members from the community that have a limited understanding of how to run the water system and meet health-based standards and requirements.
- These systems are financially unable to pay back loans; are challenged by the lack of political support to take on loans; and lack debt capacity to qualify for loans.

States Have Achieved Success, Despite Limitations and Differences

- Limited staff and resources.
- Limited funding from PWSS grants.
- Limited funding from state budgets and fees.
- Different priorities for use of DWSRF set-asides.
- Different laws and policies for funding projects.
- Different geographies, demographics, and politics.

- These systems do not typically apply for funding because they need dedicated no-cost funding and assistance for project development and oversight, for qualifying for funding, and for the entire project and funding process from start to finish.
- These systems sometimes have declining populations and competing demands for basic community needs that rank higher than paying rates for drinking water.

States Have Achieved Success in Overcoming Limitations and Challenges

Despite these limitations and challenges, states have achieved significant successes. These successes (that are described herein) include coordinated efforts with many different partners to provide diverse types of federal, state, and local funding and assistance to small and disadvantaged water systems. These successes also include work that has been done outside the DWSRF out of necessity, due to the DWSRF restrictions and requirements.

- **States Help Water Systems Prepare and Apply for and Manage Project Funding:** Some state drinking water programs have staff and technical assistance providers that can help their small and disadvantaged water systems with dedicated no-cost funding and assistance to prepare for projects, and for the entire project and funding process from start to finish.
- **States Help Water Systems with a Wide Range of Projects and Activities:** Many states have funded or conducted a wide ranges of projects and activities to help their small and disadvantaged water systems including: funding for back-up generators, valve exercising, purchasing equipment, test well drilling, and providing assistance for operation and maintenance activities that cannot be funded by the DWSRF or set-asides, as well as water audits, workforce development, and asset management plans.
- **States Work with Partners to Leverage Funding and Assistance from Multiple Sources:** Many states have formally established committees and councils (or general coordination efforts) where state drinking water programs regularly meet and coordinate with USDA, FEMA, and other federal and state agency funding programs, technical assistance providers, and private foundations to consider all possible sources of funding and assistance for their small and disadvantaged water systems.
- **States Use a Variety of Funding Sources:** State drinking water programs have obtained funding from a variety of other federal funding programs, such as [ARPA](#), [WIIN](#), [ASADRA](#), and [FEMA](#), to help their small and disadvantaged water systems. Some states have used a combination of these and other funding sources such as [USDA Rural Development](#) and [HUD CDBG](#) for many types of projects including lead service lines, addressing SDWA violations and emerging contaminants, water security and resilience, and more.
- **Some States Have Dedicated Water System Funding:** Some states have been able to provide their own funding to overcome the shortcomings of the DWSRF and other federal funding programs. However, most states do not have this type of state budget funding and need additional flexibilities to help reduce barriers for small and disadvantaged water system access to the DWSRF and other federal funding.

States Could Achieve More Success with Increased Federal Funding and Flexibilities

Many of the state successes have been achieved through efforts beyond the DWSRF out of necessity to help their small and disadvantaged water systems. Increased funding from EPA for technical assistance that is directed by or directly coordinated with states - separate from the DWSRF and set-asides - would enhance and increase these assistance activities that are already being conducted by some states. Additional actions by EPA to maximize the DWSRF flexibilities, remove restrictions and requirements, and expand eligibilities would also help address state and water system challenges and enhance state efforts to build on their successes.

Introduction

The [Association of State Drinking Water Administrators \(ASDWA\)](#) worked with the Southwest Environmental Finance Center and the ASDWA DWSRF and Small Systems Committees, and Justice40 Workgroup to develop this white paper, along with a June 2022 [ASDWA Letter of Recommendations to EPA](#). ASDWA has also developed an [Environmental Justice webpage](#) with a table of state disadvantaged community definitions and a collection of case studies on state efforts to fund and assist disadvantaged communities. These documents collectively share innovative state approaches, explore challenges, identify additional opportunities for providing funding and assistance to small and disadvantaged water systems, and, most importantly, emphasize the need to consider whether these water systems can develop TMF capacity and continue to sustainably fund, operate, and maintain the system and provide safe drinking water.

ASDWA’s members, the state and territorial drinking water program administrators (and their staff), are responsible for ensuring that public water systems (PWSs) across the nation comply with the Safe Drinking Water Act (SDWA) to protect public health. In addition to many other responsibilities, the state and territorial drinking water programs implement the Drinking Water State Revolving Loan Fund (DWSRF) program and other federal funding sources that are funneled through the states (or coordinate implementation of the funding with the state infrastructure financing agency). The drinking water programs also use the DWSRF set-asides as well as other federal and state funding (if available) to provide technical assistance that addresses a wide range of water system needs. These funding and technical assistance efforts are particularly focused on helping the small and disadvantaged PWSs obtain funding for water system improvements to ensure the delivery of safe drinking water to their customers. Successful state efforts to provide funding and assistance for small and disadvantaged water systems include necessary collaboration with other state and federal agencies and programs, technical assistance providers, and many other partners.

With the Biden Administration’s renewed emphasis on increasing infrastructure funding and environmental justice, state drinking water programs are facing both opportunities and challenges with expanding on their successes to help small and disadvantaged PWSs address needs for upgrading, maintaining, managing, and sustainably operating their systems. The Bipartisan Infrastructure Law (BIL) provides an additional \$11.7 billion for DWSRF funding, \$15 billion for lead service line replacement, and \$9 billion, split between the DWSRF and Water Infrastructure Improvements for the Nation (WIIN) Grants, to address emerging contaminants. This massive influx of money creates an incredible opportunity for assuring SDWA compliance and protecting public health. However, flexibilities and alternative approaches are needed to address barriers to providing this funding caused by federal requirements and restrictions, and for helping the most at-risk PWSs and communities.

DWSRF Assistance from July 1996 – June 2021* and PWSs by Size**							
	Total for U.S.	Population Less than 501	Population 501 to 3,300	Population 3,301 to 10,000	Population Less than 10,001	Population 10,001 to 100,000	Population 100,001 and Above
Amount of SRF Assistance in Millions of Dollars	\$48,362.30	\$2,148.00	\$7,140.40	\$7,045.20	\$16,333.60	\$17,505.80	\$14,522.90
Percent of Total SRF Assistance	100%	4%	15%	15%	34%	36%	30%
Percent of PWSs by Size	100%	80.7%	12.7%	3.6%	92%	2.7%	0.3%
Number of PWSs by Size	≈148,000	119,210	18,811	5,253	143,274	4,060	449

*[Drinking Water SRF Assistance Provided by Selected Category \(from July 1996 – June 2021\)](#) (page 25 and 27)

**[EPA ECHO Data Dashboard](#)

The nation's smallest and disadvantaged PWSs have not historically used the DWSRF due to the significant challenges highlighted in this paper. The total amount of the DWSRF used by the smallest PWSs serving populations of less than 10,001 over the past 25 years is significantly less in percentages and dollars than the amount used by PWSs serving larger populations. In addition, more than 80% of the PWSs in the U.S. serve populations of less than 501 people and have used less than 4% of the total DWSRF assistance over the past 25 years. To change this dynamic and meet the goals of the BIL to provide specific percentages of funding to disadvantaged communities, states and EPA must work together to help improve access to the DWSRF resources for funding and technical assistance to support capacity building for these PWSs.

Purpose

The purpose of this white paper is to highlight innovative state approaches and explore opportunities to help small and disadvantaged water systems overcome unique challenges and to provide assistance with all aspects of obtaining funding and the associated requirements. This includes state approaches and opportunities for helping small and disadvantaged water systems prepare funding applications, navigating the funding process, and complying with funding and project requirements. These state approaches also include considerations to ensure that water systems can continue to sustainably fund, operate, and maintain the system and provide safe drinking water, or whether alternative approaches are needed to help these water systems with funding needs that may go beyond what federal programs can provide. These alternative approaches can sometimes help these water systems with:

- Small and simple costs for equipment and services that are beyond DWSRF and other federal funding programs;
- Additional assistance to help them with TMF capacity that is required for DWSRF loans and to be able to afford operating and maintaining their systems; and
- Options for restructuring, regionalization, and partnerships.

This white paper provides detailed information on:

- The top state challenges and roadblocks for effectively funding disadvantaged water system infrastructure needs;
- Innovative state approaches for other states to use as examples for addressing the multitude of challenges with providing funding and assistance to small and disadvantaged water systems.

Limitations: The purpose of this white paper is NOT to:

- Provide states with tools and/or resources for water systems that are unwilling to accept assistance and sustainably fund, operate, and maintain their system to reach and maintain SDWA compliance for the foreseeable future.
- Explore all available training and assistance, including technical, managerial, and financial (TMF) capacity development efforts that all states and partners provide, as there are many other resources and state examples that are not included in this paper and that are available from other sources, including those noted in the appendix.

Background

Process: This white paper includes information collected from a survey of ASDWA’s members in February 2022 on “Small and Disadvantaged Water System Funding and Assistance Needs.” The survey was conducted as the foundation for this white paper and ASDWA’s efforts to highlight state challenges and provide information for states to address the needs of these systems, as well as environmental justice concerns. ASDWA received responses from 34 states and the Northern Mariana Islands and conducted follow up interviews with ten states.

Variation in State Programs and Resources: State drinking water programs typically have limited staff and resources to implement funding and assistance efforts for small and disadvantaged water systems. Two of the primary funding sources for state drinking water programs are the Public Water System Supervision (PWSS) grants from EPA and the DWSRF set-asides. Several states also get funding from water system fees and from general state funds. Additionally, how states use the DWSRF set-asides varies considerably, and the fees and general funds that support drinking water programs and staff also varies considerably from state to state. Each state also has different priorities for using its funding which translates into significant differences in the amount and types of technical assistance, grants and loans, and loan subsidies available for small and disadvantaged water systems.

Water Systems are Defined Differently in Each State: Each state has different definitions for the terms “small water systems” and “disadvantaged communities” and may have different laws and policies for types of water systems and projects they can fund using the DWSRF (and sometimes state funds), as well as criteria for ranking and prioritizing the projects to be funded. These factors are influenced by the geography of the state and its water resources, the number and size of the PWSs and demographics of their customers, state and local governance, and other state-centric issues.

“Many small and disadvantaged water systems lack the staff, knowledge, skills, and resources needed to comply with current and future SDWA regulations.”

Small and Disadvantaged Water Systems Lack Capacity: Many small and disadvantaged water systems lack the staff, knowledge, skills, and resources needed to comply with current and future SDWA regulations. These gaps can result in violations, enforcement actions, and administrative orders against those systems. To add further complication, many of the water systems in these communities do not have enough customers with the ability to provide a sustainable rate base to reliably fund the system’s continued needs and new treatment requirements that did not exist when the system was originally established. Additionally, many do not have full-time operators with the training needed to operate their treatment systems effectively. Many systems also rely on volunteer board members from the community that have a limited understanding of the responsibilities and requirements or have the dedicated time needed to sustainably run the water system and meet health-based standards and regulatory requirements. For these reasons, collectively, the drinking water community needs to consider different approaches than have been used in the past.

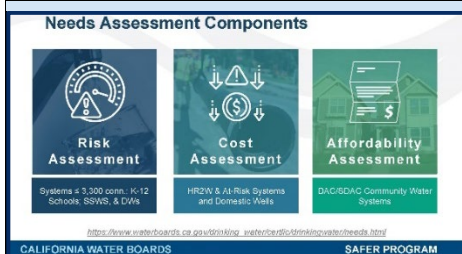
States Have Achieved Successes: Despite the limitations and challenges discussed, states have achieved significant successes in assisting small and disadvantaged water systems. This paper highlights many successful drinking water and infrastructure funding program efforts that states have achieved. Note that in some states, much of this work has been done outside of the DWSRF out of necessity. State drinking water programs are currently working across programs with their Infrastructure Financing Agencies (where applicable), and with EPA Regions and other federal, state, and local partners to find creative solutions to address these challenges. The issues facing small and disadvantaged water systems require coordinated approaches to ensure consideration of all opportunities for providing funding and assistance and present an opportunity for the DWSRF to advance in ways it has not been able to in the past.

States Have Processes to Ensure Water System Sustainability

Based on ASDWA’s survey responses, at least 28 states have a process to ensure that funding decisions take into account long-term and sustainable alternatives for small and disadvantaged water systems. Conducting financial reviews, assessing, and building TMF capacity and alternatives, and considering consolidation (or regionalization, restructuring, and partnerships) are components of the process that states use to rank water systems for DWSRF loans, as well as to further determine how best to help these systems with funding and assistance.

State Examples

Arizona TMF Evaluation: Arizona Department of Environmental Quality (ADEQ) has identified the need to establish a baseline to evaluate the overall health of the state’s regulated public water systems, as indicated by their TMF capacity. To establish this baseline and measure improvements in capacity, ADEQ has developed an assessment tool that captures key and critical aspects of a PWS’s TMF capacity and identifies strengths and weaknesses to be addressed. ADEQ will have the ability to query the assessments to identify trends in TMF capacity issues (e.g., lack of storage, lack of redundancy, asset management). ADEQ’s goal is to conduct a baseline assessment of all public water systems in FY22. Once ADEQ gains a clearer understanding of statewide capacity needs, the department will implement strategies to help PWSs improve their TMF capacity and will continue to utilize DWSRF set-asides to contract third-party technical assistance providers to assist water systems. In addition, ADEQ will re-assess PWSs periodically to capture changes in TMF capacity.



California SAFER: California’s passage of Senate Bill 200 in 2019 enabled the creation of the Safe and Affordable Funding for Equity and Resilience (SAFER) program which includes an annual Drinking Water Needs Assessment to provide foundational information and recommendations to guide the SAFER work in enhancing water system capacity and sustainability. The Needs Assessment is comprised of Risk Assessment, Affordability Assessment, and Cost Assessment components to inform the prioritization of available state funding and technical assistance. The state has now published its 2022 Water System Needs Assessment which is now accompanied by a new Dashboard that has numerous filters where users can look at the data in a variety of ways. Users can also drill into a system by clicking on its dot on the map or selecting Risk Categories at the top and exploring each risk category separately. The California SAFER program uses a suite of tools (including the needs assessment), funding sources, and regulatory authorities to prioritize collaborative, voluntary solutions, and relies on regulatory solutions when necessary.

Kansas Treatment Alternatives: Kansas first looks at options for source water protection, new wells, and consolidation for its groundwater systems, and considers funding for a treatment project as the last alternative for compliance.

Maine Consolidation Funding: Maine provides consolidation funding for connecting systems with capacity issues to another system that does not have a capacity problem. Maine provides 75 percent of the project cost up to \$100,000 for non-profit systems, and 50 percent of the project cost up to a maximum of \$100,000 for for-profit systems.

Many states provide additional DWSRF ranking points for systems proposing to regionalize.

State and Water System Challenges Identified in ASDWA Survey

The following challenges were identified by states in response to the associated survey questions. To the extent possible, similar survey responses were grouped together under a description that best captured the state concerns being expressed. Then, a ranking process was used to identify the challenges and roadblocks states considered most important: each time a state listed an idea as first, it was given three points; second, two points; and third, one point. The points were then added to determine the number of points for each issue. The issues were then ranked in order from highest to lowest. The top challenges from the list are presented below for each topic. These challenges are categorized by types of responses and are not listed in the sequential ranking order. These challenges are representative of the survey responses and are not applicable to all states, because some states do not have these same challenges.

State Challenges and Roadblocks for Effectively Funding Disadvantaged Water System Infrastructure Needs

Top Challenges and Roadblocks Identified in ASDWA Survey: While states were able to share their roadblocks and challenges in their own words for this survey question, many contained similar themes. The top 13 challenges and roadblocks are listed below. The list is separated into two categories – 1) internal state issues/concerns and 2) disadvantaged systems. The top two concerns mentioned the most were that the demand for financial assistance is greater than the states can fund (either grants or loans) and that disadvantaged communities would be unable to pay back loans or only want 100% grant funds.

Internal State Issues and Concerns:

- The demand for DWSRF loans and/or grants is greater than states can fund.
- States have workforce challenges with funding, hiring, and retaining staff to review and manage the DWSRF loans and grants.
- Small systems do not have the resources needed to access the DWSRF and are unable to pay the costs associated with federal funding requirements.
- Most DWSRF programs have a complex application process and significant processing times that hinder small systems from wanting (and being able) to access them in the time needed to complete a project.
- More resources are needed to provide outreach and coordination to increase the awareness of the DWSRF and other funding sources available to small systems and to assist water systems with the application processes.
- Small system applications are sometimes not competitive with larger system applications because they are not project ready and cannot meet TMF capacity requirements.
- Most states are unable to force consolidation and face challenges with local politics that can inhibit consolidation.
- Many states have updated their definition to better identify disadvantaged communities and water systems, and an evaluation of effectiveness of the new definitions is needed in the future.

Top State Challenges

- The demand for funding is greater than what is available.
- Difficulty with funding, hiring, and retaining staff.
- More resources are needed for application assistance.
- Outreach is needed to increase awareness of funding.
- Consolidation is not well received by communities.
- Some states cannot fund private community water systems.

Disadvantaged Water Systems:

- These systems are financially unable to pay back loans; are challenged by the lack of political support to take loans; want 100% grants; and have debt capacity restrictions which prevent them from incurring additional debt to pay back and qualify for loans.
- Disadvantaged systems lack the resources to begin the application process, and therefore do not apply.
- States are unable to help systems that are unwilling to accept assistance.
- The funding restrictions such as debt capacity and funding requirements such as TMF capacity, make loans and grants inaccessible to these water systems and make them ineligible for funding.
- These systems lack adequate staff and/or certified operators.

Small and Disadvantaged (Rural) Communities: Challenges with Accessing, Receiving or Administering Available Water System Infrastructure Funding

Top Challenges Identified in ASDWA Survey: To the extent possible, similar survey responses were grouped together under a description that best captured the state concerns being expressed. The top 10 challenges and roadblocks listed below. The list is separated into four categories – 1) eligibilities, 2) the process of applying, 3) system characteristics, and 4) prioritization. The top two concerns were defining what a disadvantaged community is, as the SDWA allows states to create their own definitions and can be difficult in states where there are fewer large systems compared to the number of small and disadvantaged water systems, and that these communities do not know how to apply for funds.

Eligibilities:

- Understanding what constitutes a disadvantaged community and how to create a definition that makes the community eligible for subsidized funding and assistance, especially when there are no (or very few) large systems in the state.
- Some states only provide DWSRF loans to municipalities, therefore disadvantaged communities such as a homeowner association would need a municipality to sponsor them or would have difficulty qualifying under the current state definition.



The Process of Applying:

- Knowing how to start the application process, understanding the requirements, and having the resources to apply for loans and grants.
- Lack of TMF capacity.
- Funding limitations – the cost of paying for services to complete financial and permit tasks required to apply for loans is too expensive.
- Staffing limitations – staff is unable to complete applications and application materials.

System Characteristics:

- Lack of adequate user charges and debt coverage.
- Ability to get projects in specific areas on the radar of elected officials and lack of representation by them to ensure the water systems' funding needs are considered in the municipality's budget.
- Understanding federal funding requirements.

Prioritization:

- The water system needs, and funding are ranked much lower than other competing priorities in the community.

Very Small Private Water Systems and/or Mobile Home Park Water Systems: Challenges with Accessing, Receiving or Administering Available Water System Infrastructure Funding

Top Challenges Identified in ASDWA Survey: Responses that were similar in nature were grouped together under a description that best captured the ideas being expressed. The top nine challenges listed below. The list is separated into four categories – 1) eligibilities, 2) applicability of DWSRF, 3) system characteristics, and 4) application process. The categories show the challenges that were most significant to the states. By far the biggest concern was the inability to fund private systems with the DWSRF program. While this is not a federal restriction, many states have their own state constitutions or other restrictions that prevent funding private systems. The second biggest concern was that the projects were too small, and the federal requirements drive up the costs too much which can make the projects uneconomical.

Eligibilities:

- Some states cannot fund private community water systems and require a municipal sponsor, and for-profit non-community water systems are ineligible for DWSRF loans.
- Much more work is required for the state to help small systems become eligible and prepare for funding, and to administer numerous small water system projects for smaller amounts of funding, than to administer several large water system projects using large amounts of funding.

Applicability of DWSRF:

- The federal requirements drive up costs that are too high for small projects.
- These systems have no collateral and no debt instrument to take on a loan.
- These systems lack an adequate legal structure to qualify for loans.

System characteristics:

- These systems are unable to pay for loans because they lack financial capacity and have extensive debt.
- These systems lack long-term viability, and the owners and managers are sometimes not willing to effectively manage and operate the system.
- These systems lack the necessary staff to effectively manage and operate the system.

Application Process:

- These systems do not know what funding is available, and how to get it.

DWSRF Restrictions and Requirements Create Small and Disadvantaged Water System Challenges

From the survey and through conversations with ASDWA's members, it became clear the DWSRF restrictions and requirements make the DWSRF funding process insurmountable for many small systems that need funding the most. Small systems with only a few hundred connections face higher costs for even their basic supplies. Requiring these systems to comply with Build America Buy America (BABA), American Iron & Steel (AIS), and Davis Bacon wages for the infrastructure projects these systems need only exacerbates the economic disadvantage imposed on these communities. Some states have resorted to utilizing their own funding to aid small, disadvantaged communities to overcome these shortcomings of the federal DWSRF program. The June 2022 [ASDWA Letter to EPA](#) provides a list of specific recommendations to address these challenges that are summarized here.

- **General:** Providing grants and loan forgiveness affects the state pool of revolving funds from the repayment of loans, which are then made available for providing new loans.

- **Water system cost and burden:** These requirements and restrictions increase the costs, time, and burden for small and disadvantaged water systems.
- **Type of legal entity:** Private water systems and Transient Non-Community Water Systems (TNCs) are not eligible for loans and set-asides funding from some states.
- **Davis Bacon wages:** Oversight and tracking is burdensome, the requirement is not applicable for non-union states, higher wages increase the cost of the loan, and cause water systems to seek other types of funding.
- **Build America Buy America (BABA)/American Iron & Steel (AIS):** Oversight and verification are burdensome, the requirement increases costs and delays (especially with inflation and supply chain issues), and waivers are needed.

States Help Water Systems Prepare and Apply for and Manage Project Funding

Small and disadvantaged water systems need dedicated no-cost funding and assistance for project development and oversight, for qualifying for funding, and for the entire project and funding process from start to finish. These extensive activities require funding, expertise, and resources that are beyond the capability of the water systems. Small and disadvantaged systems need a wide range of assistance as detailed below.

- **Before funding:** To conduct feasibility studies, preliminary engineering reports, customer relations and outreach, workforce development, and water system management training.
- **Getting ready for funding:** To perform financial audits, accounting, rate setting, asset management; conduct surveys and water audits; obtain operator services and permits, and professional services necessary to qualify (and be competitive) for funding. Additional challenges for these PWSs may include obtaining audited financial statements, dealing with unpaid historical taxes, and business entities that do not have the proper paperwork (e.g., nonprofits that never filed for a 501c3, etc.).
- **Professional services:** To conduct environmental reviews and develop engineering plans and specifications, and Capital Improvement Plans.
- **Assistance with the loan applications and process:** To complete the loan application process and associated paperwork and pay for legal counsel at loan closing.
- **Project accounting, management, and reporting:** To manage budgets and project completion timelines, provide construction oversight, and comply with project and funding reporting and requirements.
- **Project Delivery:** To close out the loan, start up the project, and ensure compliance after project completion.



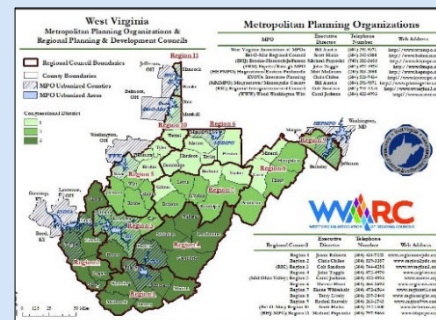
The June 2022 [ASDWA Letter to EPA](#) also recommends that the Agency provide additional funding for technical assistance that is directed by or directly coordinated with states - that is separate from the DWSRF and set-asides - and that could be incorporated into the Agency's current development of the technical assistance Community Solutions Teams. Additional funding and assistance from EPA would enhance and expand assistance activities already being conducted by some states. Following are examples from states that have provided direct assistance and other states that have contracts with TA providers to provide assistance and training to their water systems, that additional help from EPA could build upon.



Image provided by AZ DEQ

Arizona Drinking Water Program Staff and Contract Assistance: The Arizona Department of Environmental Quality (ADEQ) Safe Drinking Water Technical Assistance (TA) program provides a range of services to small and disadvantaged water systems to address water quality or infrastructure-related issues. The TA program utilizes DWSRF set-asides to engage one of multiple third-party contractors to assist water systems with various projects, including compliance options, site investigations and engineering reports, treatment selection and design, and management and financial planning (e.g., budget preparation, rates analysis, board training, asset management). While the TA contractors work on solutions, ADEQ staff works with the water system to identify and seek funding for needed improvements. From 2018 to 2021, the TA program has provided assistance for 187 projects.

West Virginia Regional Planning and Development Council Assistance: The state established [11 Regional Planning and Development Councils](#) that serve as "development districts" to more effectively utilize funding resources and maximize small communities' chances of attracting funds from federal, state, and local organizations to foster community and cooperation throughout the state. These councils can work directly with water systems to complete most of the project and funding process and associated activities to ensure funding is effectively managed and all program guidelines are followed. These can include providing services such as grant writing, environmental reviews, financial administration, drawdowns, account maintenance, income surveys, mapping capabilities, and more.



Ohio TA Provider Assistance: The state uses its DWSRF small system technical assistance set-aside to contract with Ohio Rural Community Assistance Partnership (RCAP) to provide mandatory training to village councils receiving principal forgiveness, training for administration and operators, assisting small systems with funding applications, providing direct technical assistance, assisting small systems with the Drinking Water Infrastructure Needs Survey, loan applications, water audits, rate surveys, asset management programs, and valve exercising. This assistance puts Ohio's water systems in a better position to obtain funding.

Rhode Island Contract Assistance: The state currently has two contracts in place to assist Very Small Systems (VSS) prepare for a Drinking Water State Revolving Fund (DWSRF) loan. The two contracts work hand and hand to ensure systems are ready for the loan process. The first contract is a Facilities Improvement Plan contract. Through this contract, very small systems can receive a full assessment of its system's infrastructure. The Facility Improvement Plan provides a complete picture of the system's current state. Some information included in the plan consists of an overall system description, including water sources, treatment processes and facilities, pumps and pumping stations, distribution system facilities, piping, and water storage. The plan also includes a capital improvement budget including cost and estimates, and an analysis of the potential of a connection to or consolidation with adjacent systems where appropriate. The information provided are recommendations for improvements to the system. The Facility Improvement Plan allows systems to understand the inner workings of their infrastructure and prepare to select projects to be funded by a DWSRF loan.

Rhode Island Engineering Assistance: The state’s engineering assistance contract can provide very small systems with assistance to develop engineering plans and completing the application to the Rhode Island Department of Health (RIDOH) for engineering approval for improvements to the system. This contract also provided oversight assistance for DWSRF-funded projects. Once RIDOH approves the project, this contract offers assistance with contractor selection, construction, start-up, and close-out activities for DWSRF-funded projects. For a system to receive assistance through the Engineering Assistance Contract, it must first participate in the Facilities Improvements Plan Program. RIDOH has a few other contracts to assist Very Small Systems to prepare for a (DWSRF) loan, including a contract to conduct income surveys to determine if a system is disadvantaged, and a contract to conduct financial and management training that is required for these systems to be eligible for principal forgiveness.

States Help Water Systems with a Wide Range of Projects and Activities

Small and disadvantaged water systems also need funding and assistance to help with several types of projects and activities. The following examples demonstrate how some states have provided funding for (or conducted) specific types of projects and activities to help their small and disadvantaged water systems address a particular need and fulfill requirements necessary to get ready for funding.

State Examples

Back-up Generators

Connecticut: The state used DWSRF funding to develop its Emergency Power Generator Program (EPGP) with streamlined procurement procedures for PWS projects costing less than \$100,000 using low-interest loans and subsidies to purchase and install generators to be used in the event of power outages. Subsidization is provided for up to 25% of the cost of eligible components for each generator project that receives DWSRF funding. The EPGP’s subsidy brought many small systems to the program that would not normally participate in the DWSRF.

Ohio: The state offered small grants (up to \$10,000), through the 15% Local Assistance and Other State Programs DWSRF set-aside, for systems with a population under 2,000 to purchase backup generators. Systems were required to include the generator in their asset management inventory prior to receiving reimbursement. Ohio plans to continue this grant program and expand it to include systems with populations under 10,000 and up to \$50,000 grants per system.



*Wilmington Ridge Emergency Generator
Connecticut DWSRF 2020 Annual Report*

Valve exercise/training

Vermont: The state funded a valve contractor to do a one-time visit to water systems to exercise all the valves and teach staff how to do it. The state also funds a contractor to work with water systems on water loss.

Drought

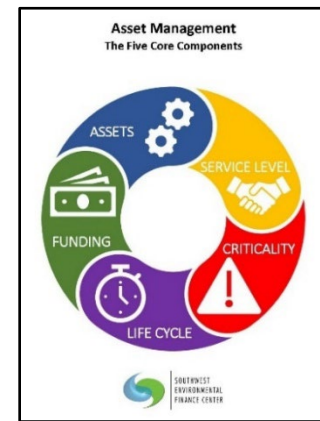
Texas: The Texas Water Infrastructure Coordination Committee created a drought strike force that could travel around the state to work with systems running out of water. This approach allowed them to help many small water systems use a combination of several different funding sources to implement drought mitigation actions such as developing new well fields.

Water Audits

Iowa: The State of Iowa has a contract with a technical assistance provider who does Capacity audits which not only includes traditional technical assistance but also asset management planning; water audits; capital planning; and new operator and council mentoring. This provider not only provides TA to the water system operational staff but then partners with the operational staff and follows through with their council or governing board to see asset and rate needs be implemented. The TA provider does, at a minimum, one year of follow up with the community. However, the average time span this contractor spends with a community is 23 months.

Asset Management

Ohio: The state has required all public water systems to have an asset management program since 2018. At that time, Ohio offered grants, up to \$10,000, for small systems (under 10,000) to develop their asset management program. In 2023, Ohio plans to offer additional funds to PWSs for the updating of those programs. A current and updated Asset Management Program has helped systems meet future funding needs by assisting in discussions with water boards, and councils on future funding needs and Capital Improvement Plans for water systems.



Minnesota Mapping: The state is working with the University of Minnesota to develop a lead service line mapping tool, which will provide water systems with the ability to upload their lead service line inventories allowing residents to search the inventory by address to determine if they have a lead service line. The tool will also provide customized communication for these residents. A census tract layer will be added to the tool to help water systems identify disadvantaged sections in their service area. The project is now underway and will be ready to share in a few months.

	A	B	C	D	E
		Current Year	2017		
Infrastructure Type	Assets	Original Cost	Current Value	Annual Depreciation	
11 Distribution	Curb Inlets	\$96,011.00	\$29,314.46	\$1,113.31	
	Distribution Lines	\$279,004.00	\$215,987.58	\$5,487.55	
	Hydrants	\$91,358.00	\$57,388.62	\$1,222.63	
	Valves	\$50,000.00	\$13,796.10	\$1,385.88	
	Distribution Total	\$486,416.00	\$396,086.55	\$7,516.36	
12 Source	Meters	\$0.00	\$0.00	\$0.00	
	Pumps	\$6,745.05	\$6,510.20	\$24.85	
	Wells	\$28,300.00	\$17,204.00	\$306.00	
	Wellseck310902132	\$0.00	\$0.00	\$0.00	
	Source Total	\$35,045.05	\$23,714.20	\$730.85	
13 Storage	Water Tower	\$73,000.00	\$65,494.43	\$8,195.57	
	Storage Total	\$73,000.00	\$65,494.43	\$8,195.57	
14 Treatment	Electrical Equipment	\$36,000.00	\$24,180.00	\$720.00	
	Laboratory Equipment	\$1,392.18	\$1,392.18	\$69.61	
	Mechanical Equipment	\$0.00	\$0.00	\$0.00	
	Pumps	\$0.00	\$0.00	\$0.00	
	Structure	\$48,883.00	\$744.17	\$172.09	
	Chemical Equipment	\$0.00	\$0.00	\$0.00	
	Treatment Total	\$86,275.18	\$26,616.35	\$1,011.69	
	(blank)	\$0.00	\$0.00	\$0.00	
	(blank) Total	\$0.00	\$0.00	\$0.00	
	Total Assets/Annual Depreciation	\$1,124,421.21	\$861,921.53	\$17,046.44	

Minnesota Small System Technical Assistance: The state used their 2% Small System Technical Assistance DWSRF set-aside to contract with Minnesota Rural Water Association (MRWA) to develop an [Excel-based asset management template](#) specifically for PWSs serving populations less than 1,000 - that other states may want to use as an example. The contract also provides training and assistance in completing the asset management plans including mapping key components of the distribution system when inventory maps are not available.

Vermont Asset Management Assistance and Training: The state offers up to \$50,000 in loan forgiveness for the development and implementation of a Department of Environmental Conservation (DEC) approved asset management plan. DEC generally issues asset management loans each year. The recipients can attend asset management training delivered by the Southwest Environmental Finance Center to learn more about asset management. The training also includes elected leaders.

Operations and Maintenance (O&M): Many small water systems need additional help with O&M that cannot be funded by the DWSRF or set-asides.

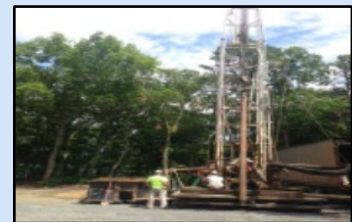
California: The state's Safe and Affordable Drinking Water Fund under the SAFER program can be used to fund direct O&M support. The state is currently working on a pilot project to offer O&M bridge loans for eligible water systems that are experiencing revenue shortfalls due to COVID-19.

Pennsylvania: Seven staff from the Drinking Water Program provide direct technical assistance to small water systems to help with filter plant performance evaluations, distribution system optimization, engineering evaluations and assessments, and performance-limiting factors to point out O&M deficiencies, which helps the water supplier identify and prioritize O&M needs and take corrective actions.

Purchasing Equipment for Multiple Water Systems

Pennsylvania: In the past, the state was able to use the 15% Local Assistance and Other State Programs DWSRF set-aside to purchase turbidimeters, chart recorders, and computers for multiple water systems, but used it as a loaner program to also obtain water quality data from the system. The water systems would then sign a memorandum of agreement (MOA) that they would share the data they obtained from using the equipment with the state. This was before the water systems were required to monitor for these parameters when the data was used for the Area Wide Optimization Program (AWOP) or the Partnership for Safe Water (PSW). The equipment was later returned to the state when the water system terminated the MOA or dropped out of AWOP or the PSW. Pennsylvania also bought a trailer-mounted generator and pump with funding from their security grant, and then later transferred ownership to Pennsylvania Water and Wastewater Agency Response Network (PA WARN). These might be good models that other states could use as examples to purchase other types of equipment to be used or shared by multiple water systems for other purposes.

Test Well Drilling: Small systems do not want to risk spending money on test wells when their ability to pay for a construction project is extremely limited, and the test wells may not be able to be used. Test well drilling is needed to confirm adequate water quality and quantity for new wells before a state construction permit can be issued, and then to be eligible for a loan as a shovel-ready project (depending on state-specific requirements). Funding is also needed for well rehabilitation, to demonstrate the safety of the well.



*Berkeley Township, New Jersey
2019 DWSRF Intended Use Plan*

Pennsylvania: EPA would previously not allow the state to use DWSRF set-asides for test well drilling because it was typically considered construction and not a technical assistance task. However, Pennsylvania is now working with EPA Region 3 on a WIIN grant application to be used for test well drilling. The state hopes to be able to obtain roughly \$1,062,000 to conduct test well drilling for an estimated ten water systems for three wells each at the cost of approximately \$30,000 per well.

Workforce Development



*Candelaria and Presidio
Operator Training, Texas CEQ*

Texas Spanish Language and High School Operator Training Curriculum:

Several organizations of the Texas Water Infrastructure Coordination Committee (TWICC) worked together to:

- Develop a water operator training curriculum for high school students that includes videos of water systems.
- Bring Spanish-speaking water operators from one community to do on-site training for operators in another community to run the water system.

States Work with Partners to Leverage Funding and Assistance from Multiple Sources

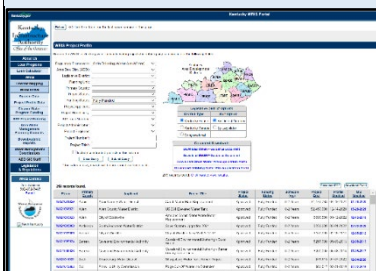
Many states have formally established partnerships and/or coordinate regularly with federal, state, and local partners to consider all possible sources of funding and assistance for their water systems, and particularly for their small and disadvantaged water systems that are specifically eligible for funding from additional programs such as USDA Rural Development and HUD Community Development Block Grants (CDBG). These state coordination efforts are sometimes directed

“States coordinate with EPA Regions and other federal, state, technical assistance providers, and local partners to identify and implement creative and innovative solutions that consider all opportunities for providing funding and assistance.”

by infrastructure funding committees and councils or other coordinated efforts, where state drinking water programs regularly meet and coordinate with USDA, FEMA, and other federal and state agency funding programs, technical assistance providers, and even private foundations. The following examples share how some states are working together with their partners on these coordinated efforts.

State Examples

Arkansas: The [Arkansas Water and Wastewater Advisory Committee \(WWAC\)](#) was created in 1992. It includes the following funding agencies: Department of Environmental Quality, Department of Health, Economic Development Commission, USDA-Rural Development, Communities Unlimited, and Arkansas Natural Resources Commission. The WWAC provides project guidance and recommends project financing to communities through its application process.



Kentucky WRIS Portal

Kentucky: The Kentucky Infrastructure Authority’s [Water Resource Information System \(WRIS\) financing portal](#) was developed with water and wastewater systems and local, regional, and state agencies. It provides resources, guidance, and training to help with everything from watershed protection to infrastructure development. The WRIS includes a geographic information system (GIS) with interactive maps to support regionalization, drought, and emergency contamination response, as well as data for water and wastewater treatment facilities, distribution systems, water sources, storage facilities, and a database of

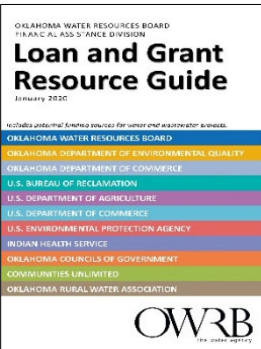
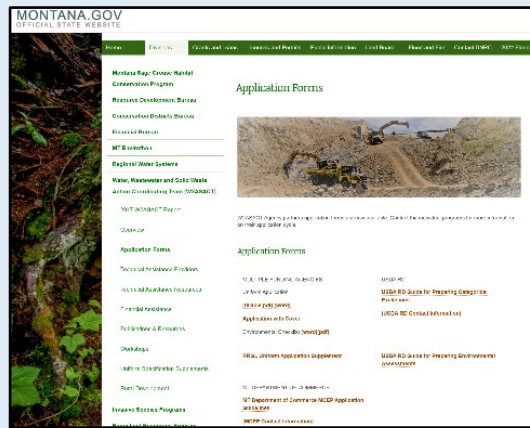
non-spatial systems information. Using the GIS infrastructure data in computer models allows for cost-effective analysis of engineering alternatives and provides grant and loan assistance to communities for water and wastewater infrastructure needs.

Minnesota: The Minnesota Department of Health’s Drinking Water Program coordinates regularly with other state agencies and the USDA, as well as the Army Corps of Engineers to assist drinking water utilities and fund infrastructure projects. These partners have one or two formal meetings per year. This coordination has led to co-funded projects using the state’s [Water Infrastructure Fund \(WIF\)](#), the DWSRF, and other agency funding sources. The WIF is provided by the state legislature and provides supplemental grants based on affordability criteria for water and wastewater infrastructure projects and can be partnered with other federal funding sources. The [City of Askov, Minnesota case study](#) provides an example of this coordination and funding using a WIIN grant, state grants, the DWSRF, and HUD CDBG.



Askov, MN Filter, Minnesota DOH

Montana: The State of Montana has created a uniform application form for water and wastewater systems to apply for state and federal funding. This idea came from the [Water, Wastewater and Solid Waste Action Coordinating Team \(W2ASACT\)](#) which was formed in 1982 to enhance coordination with representatives from state, federal, and non-profit organizations that finance, regulate, or provide technical assistance for community water and wastewater systems. Having only [one application for multiple funding sources](#), along with supplemental information for some of the specific program requirements, makes it much easier for water systems to apply for funding, as well as for the W2ASACT to provide grants and loans from multiple sources for different projects, or different parts of a water system project if needed. The W2ASACT meets formally several times a year and coordinates its efforts on a regular basis. The partners also conduct a yearly funding workshop at the Montana Rural Water Systems Conference where over 1,000 attendees come from water systems around the state including operators, mayors, clerks, and water boards.



Oklahoma: The [Oklahoma Funding Agency Coordinating Team \(FACT\)](#) is a group of federal and state organizations that offer financing to eligible Oklahoma public entities for water and wastewater projects. The purpose of the team is to facilitate the funding process through communication and streamlined application processes. In addition, the [Oklahoma Strategic Alliance](#) is comprised of the Oklahoma Department of Environmental Quality, the Oklahoma Rural Water Association, and the Oklahoma Water Resources Board, who have pooled resources to help small water and wastewater systems develop and implement plans to become sustainable, economically secure, and able to obtain infrastructure funding.

Oregon: Business Oregon, the state economic development agency, [provides information about infrastructure funding sources](#), hosts an annual infrastructure and brownfields conference, and holds monthly one-stop meetings. The one-stop meetings are held upon request by any stakeholder (City Manager, Engineer, Elected Official, etc.) working on a potential project or on behalf of the community to finance a public works project.

Texas: The [Texas Water Infrastructure Coordination Committee \(TWICC\)](#) is a one-stop shop for information on funding eligibility and technical assistance for water systems facing infrastructure or compliance issues. TWICC is a collaborative effort by State and Federal government agencies and technical assistance providers to promote an efficient process for affordable, sustainable, and innovative funding strategies for water and wastewater infrastructure projects that protect public health.

Washington: The Washington State [Infrastructure Assistance Coordinating Council \(IACC\)](#) is a nonprofit organization dedicated to helping Washington communities and tribes identify and obtain the resources they need to develop, improve, and maintain infrastructure. It consists of staff from 25 different state and federal agencies, local government associations, and nonprofit technical assistance organizations.

States Use a Variety of Funding Sources

Many state drinking water programs have helped their small and disadvantaged water systems obtain funding from a variety of sources such as the American Rescue Plan Act (ARPA), the WIIN, the Additional Supplemental Appropriations for Disaster Relief Act of 2019 (ASADRA), and the FEMA Hazard Mitigation Grant Program (HMGP), in addition to the DWSRF. Some states have used a combination of these and other funding sources to finance many distinct types of projects such as lead service line replacement, addressing SDWA violations, tackling emerging contaminants, water security and resilience, and more.

State Examples

Maryland Mixed Funding: Traditional funding sources used in the state have been the DWSRF, USDA Rural Development, and HUD CDBG Grants. DWSRF funding applications are solicited annually by the Maryland Department of Environment, so the systems need to be organized and prepared to apply. Over the past decade, more funding sources have become available such as ARPA, WIIN, and now the BIL. These funding sources have been used to help address aged infrastructure, underserved communities, lead service lines, and emerging contaminants such as PFAS. ARPA and WIIN funding have also been used in the state to fix serious distribution problems in the Pocomoke City which is an underserved community of just over 4,000 residents.

Montana Mixed Funding: The state is working with other partners to provide multiple sources of funding for a project for the Town of Whitehall using funds from the DWSRF (for interim financing), USDA RD, a grant from the Montana Department of Natural Resources, a grant from the Montana department of Commerce, a CDBG grant, and federal ARPA and WRDA funds. The town has a population of 1,038 and is currently under administrative order to address a uranium MCL violation. The total project cost is approximately \$8 million to address the violation and is currently in the design phase and will consist of treatment and a building, along with some piping reconfiguration, well rehabilitation, distribution improvements, and a new storage tank.

Oklahoma FEMA and DWSRF: The state is using the [EPA/FEMA MOU](#) to provide DWSRF bridge loans to water systems in advance of receiving FEMA funding which typically takes several years to get. The [Town of Webbers Falls, Oklahoma case study](#) provides an example of how the state provided a bridge loan to the East Central Oklahoma Water Authority to repair the water system after a major flooding event so the project could be completed 18 months earlier than when the funds would be available from FEMA under their normal timeline.



Town of Webbers Falls, Oklahoma DEQ

South Carolina ASADRA: The state used funds provided by the Additional Supplemental Appropriations for Disaster Relief Act of 2019 (ASADRA) for hurricane, earthquake, and wildfire relief to fund a variety of sustainable, resilient DWSRF projects, including some with principal forgiveness. These ASADRA projects were targeted at reducing negative impacts on the environment and public health caused by natural disasters in counties of the state with a FEMA Hurricane Florence disaster declaration. The projects with principal forgiveness were specifically for small systems with populations of less than 10,000 people that cannot afford a DWSRF loan, or a sustainable system owner that was willing to assume ownership of an unsustainable or abandoned system. These principal forgiveness projects in the [2020 Final Supplemental DWSRF IUP for ASADRA – SCDHEC](#) (see page 16, Appendix A-1) include costs for new generators, SCADA improvements, an emergency interconnection, and a chlorination system for a new well to replace others that were taken out of service.

Some States Have Dedicated Water System Funding

While state drinking water programs work with many other partners to consider all potential funding sources, the restrictions and requirements for the DWSRF and other federal agency funding programs sometimes make the process and cost impossible and not worth the effort for many small and disadvantaged water systems to apply for and obtain loans and grants. For this reason, some states have resorted to providing their own funding to aid these communities in overcoming the shortfalls of the DWSRF and other federal funding programs.

State Examples

Arizona: The Small Drinking Water Systems Fund (SDWSF) is managed by the ADEQ State SRF program. This is the only fund the ADEQ can access to help water systems purchase equipment or undertake construction of improvements. The fund is used to provide grants, including emergency grants, to operators, managers, or owners of small drinking water systems to repair, replace or upgrade water infrastructure to comply with rules and requirements. Since FY2018, ADEQ, with concurrence from the Arizona Corporation Commission (ACC), has recommended that 27 small water systems receive grants from this fund totaling \$1,968,241. Examples of projects include installing treatment, resolving water outages, purchasing media, and blending sources to prevent MCL exceedances, and consolidation.

California: The Safe and Affordable Drinking Water Fund was established as part of the SAFER program to address funding gaps for at-risk public water systems, small systems, and domestic wells. The state fund provides \$130 million per year through 2030 to help water systems implement both short- and long-term drinking water solutions.

Maine: The state's Small System Grants has a \$50,000 annual budget for very small systems (<100 population). The Very Small System Total Coliform (TC) Grants allow these systems to address TC deficiencies (well evaluation, repair, disinfection) using 100% principal forgiveness. Community and Not-for-Profit Non-Community water systems are eligible for this grant.

New Mexico: The state's Water Project Fund was set up in 2001 and receives 9% of the Senior Severance Tax Bond proceeds as well as a distribution from the Water Trust Fund. There are five eligible types of projects, including: water conservation and recycling; treatment or water reuse projects; flood prevention projects; Endangered Species Act collaborative projects; water storage, conveyance, or delivery projects; and watershed restoration projects. The awards are a combination of grants and loans, based on the financial capacity of the applicants.



Ohio: The H2Ohio Fund was launched by the governor in 2019 and was funded by the General Assembly to address serious water issues such as harmful algal blooms, failing drinking water and wastewater systems due to aging infrastructure, and lead contamination from old water pipes and fixtures. Recently, Ohio has offered \$50,000 grants per water system through H2Ohio to use towards service line identification, as well as inventory and mapping efforts. Additionally, Ohio is using H2Ohio funds to provide assistance through technical service providers such as Ohio RCAP and Ohio Rural Water Association.

Oklahoma: The state's Rural Economic Action Plan (REAP) is a point-based grant program designed to assist communities with 7,000 people or fewer that lack sufficient fiscal capacity. Higher priority is given to entities with a population of less than 1,750 people, rural water districts with fewer than 525 non-pasture taps, and school districts with fewer than 525 students.

Appendix of Resources

- ASDWA
 - [Environmental Justice Webpage](#)
 - Case studies (listed below)
 - [Capacity Development](#)
 - [Operator Certification](#)
- Environmental Protection Agency (EPA)
 - [BIL Resources for Drinking Water](#)
 - [Building the Capacity of Drinking Water Systems](#)
 - [Water Infrastructure and Resiliency Finance Center](#)
- Council of Infrastructure Finance Authorities (CIFA)
 - [State SRF Profiles](#)
- Environmental Finance Center Network (EFCN)
 - [Southwest Environmental Finance Center Asset Management Resources](#)
 - [Wichita State EFC Community Sustainability Tool for Water/Wastewater Infrastructure Investments](#)
 - [UNC Affordability Resources](#)
- [HUD Community Development Block Grant \(CDBG\) Program](#)
- National Rural Water Association (NRWA)
 - [Circuit Rider Program](#)
- Rural Community Assistance Partnership (RCAP)
 - [Community Resources & Tools](#)
 - [Regionalization/Partnerships](#)
- [USDA Rural Development](#)
- [Wateroperator.org](#)

Case Studies on ASDWA's Environmental Justice Webpage

- [Minnesota](#): Funding Infrastructure Improvements to Address DBP Violations in the City of Askov - A Shared Funding and Assistance Plan to Ensure Future Success
- [Oklahoma](#): Flood Recovery in Webbers Falls: A FEMA and DWSRF Funding Success
- [Pennsylvania](#): Addressing Ground Water Quality Filtration Needs - Watrous Water Association and Galeton Borough Authority Regional Project
- [South Carolina](#): Consolidation to Address Violations and Funding Needs – City of Florence and Town of Timmonsville
- [Virginia](#): Addressing Degrading Infrastructure in Port Royal, Virginia: A Drinking Water State Revolving Fund Success
- [Washington](#): Building Technical, Financial, and Managerial Capacity in Faranda: A DWSRF Small System Success
- [Washington](#): Addressing Degrading Infrastructure in Peoples Creek: A DWSRF Small System Success
- [Washington](#): Addressing Water Main Breaks in Vader: A DWSRF Small System Success