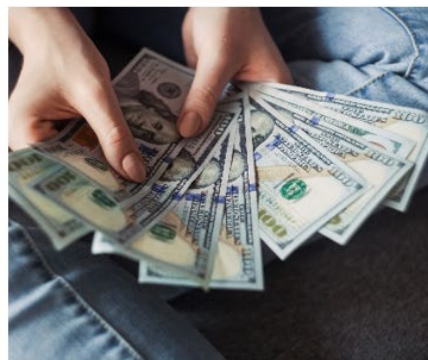


WATER SYSTEM PARTNERSHIPS:

A COMPENDIUM OF STATE PROGRAMS AND POLICIES



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Commonly Used Acronyms

AWOP	Area-Wide Optimization Plan
AWWA	American Water Works Association
CDBG	Community Development Block Grant
CWA	Clean Water Act
CWS	Community Water System
CWSRF	Clean Water State Revolving Fund
DWSRF	Drinking Water State Revolving Fund
EPA	Environmental Protection Agency
FY	Fiscal Year
IUP	Intended Use Plan
NTNCWS	Non-Transient Non-Community Water System
PSC	Public Service Commission
PUC	Public Utility Commission
PWS	Public Water System
SDWA	Safe Drinking Water Act
TA	Technical Assistance
TAP	Technical Assistance Provider
TMF	Technical, Managerial, and Financial
USDA	United States Department of Agriculture
WARN	Water/Wastewater Agency Response Network

Note: All URLs referenced in this guide are valid as of September 2024.

About This Guide




This guide contains information about programs, statutes, and policies implemented in the 50 states and Puerto Rico (herein referred to as the states) that encourage partnerships between drinking water systems. Water system partnerships encompass a variety of activities where entities (i.e., water systems, communities, non-profits, associations) work together to reduce operating costs, improve access to safe drinking water, and leverage limited resources. This document is intended as a starting point for public water system (PWS) owners or operators seeking information in their states *and* for state drinking water program staff who would like an overview of how other states encourage and facilitate partnerships. This guide will point communities towards resources as they begin to explore the benefits that partnerships can bring to their utility.




While this guide outlines state programs that directly support partnerships, it is by no means a comprehensive list of all ways a state is engaging in partnership activities. States often employ best management practices that indirectly support partnership development. Additionally, work focused on compliance with Safe Drinking Water Act (SDWA) requirements encourage partnership use (e.g., enhancing coordination, monitoring, and reporting). Some state sections in this guide contain specific legal or programmatic language that requires or encourages consolidation or restructuring of drinking water systems. Information about state drinking water programs and reference guides and manuals produced by the states are also included. The programs laid out in this guide are those in which the states explicitly commit to support the use of partnerships to help increase access to safe drinking water and improve operational efficiencies at drinking water systems.

This guide consists of three sections. The main body of the guide summarizes partnership policies, programs and/or regulations by state. This information has been compiled from the most recent version of state-produced documents that were available at the date of review. These documents include 2023 or 2024 Drinking Water State Revolving Fund (DWSRF) Intended Use Plans (IUPs); 2021, 2022, or 2023 revisions to Capacity Development Strategies; 2023 or 2024 Capacity Development and Operator Certification Annual Reports; 2023 Capacity Development Triennial Governors' Reports; state drinking water program websites; and other government files and information provided by state regulatory agencies.

In each state summary, efforts to promote partnerships are labeled with the following categories:

Table 1. Program/Policy Tool Icons Used in this Guide

PROGRAM OR POLICY ICON	MEANING
	DWSRF or Other Funding Mechanisms
	State Capacity Development or Operator Certification Programs
	Mid-Level, County or Regional Planning

PROGRAM OR POLICY ICON	MEANING
	State Drinking Water Enforcement Program
	State Legislation and/or Statute
	Emergency Planning

Partnerships Summary

Building capacity is essential to managing regulatory compliance, administrative and institutional capabilities, and financial resources. Capacity development is a process for water systems to acquire and maintain adequate technical, managerial, and financial (TMF) capacity. TMF capacity enables water systems to consistently provide safe and clean water to the public. Building capacity is essential to managing regulatory compliance, administrative and institutional capabilities, and financial resources. Water systems that face challenges in meeting capacity development needs may benefit from partnerships activities.

“Water system partnership” is an umbrella term used to define any informal or formal relationship or agreement between a water system and another entity (see Figure 1). The other entity or entities may include other water systems, regional, state, local, or tribal governmental and non-governmental bodies, or not-for-profit organizations. Water system partnerships are a cross-program, problem solving tool for building TMF capacity and addressing the unique challenges systems face meeting federal and state regulations. In addition to improving a system's capacity, partnerships can also help improve regulatory compliance and public health by providing safe, reliable, affordable, and accessible drinking water.

SAFE DRINKING WATER ACT: 1996 AMENDMENTS AND PARTNERSHIPS

In 1996, the Safe Drinking Water Act (SDWA) was amended in part to address the challenges small water systems faced. The new Act prioritized assistance to small water systems through establishing state capacity development and operator certification programs, and training and technical assistance (TA) targeting small water systems. Section 1420(C)(2) requires that States, in preparing their capacity development strategies, include a description of how the State will encourage the development of partnerships between PWSs to enhance the technical, managerial, and financial (TMF) capacity of the systems. In addition, the Act established the Drinking Water State Revolving Fund (DWSRF).

PWSs are required to provide safe drinking water to their customers that meets all federal SDWA requirements and state regulations. In order to deliver reliable service at full-cost pricing, water systems must maintain TMF capacity while balancing competing resources and the obligation to comply with new, evolving regulations. Partnerships are a key resource for water systems to work together to protect public health.

Drinking Water Systems Challenges

Drinking water systems, particularly those with limited resources, often face significant challenges in providing safe, reliable drinking water to their users at a reasonable cost. These water systems may lack TMF capacity or a

combination of these elements that would help them meet their public health protection goals. Other factors, such as aging infrastructure, a shrinking customer base over which to disperse costs, or a lack of qualified or knowledgeable operators can add to the challenges. Water systems, especially small water systems serving a population less than 10,000, may face challenges in providing drinking water that meets federal and state regulations. These challenges may include:

- ◆ limited access to and availability of qualified drinking water operators;
- ◆ persistent compliance issues;
- ◆ aging infrastructure;
- ◆ limited TMF resources and capacity;
- ◆ difficulty filling positions and maintaining continuity on governing bodies;
- ◆ inability to achieve economies of scale;
- ◆ emerging and legacy contaminants; and
- ◆ other water quality and/or quantity issues.

Fortunately, resources are available to assist water systems in building TMF capacity and overcoming challenges through partnerships with other water systems. Appendix A includes links to partnership resources produced by states, Environmental Protection Agency (EPA), or other organizations, as well as links to state statutes and regulations.

Types of Partnerships

Water systems can utilize partnerships to build capacity and enhance public health protection. Water systems that engage in partnerships can experience improved economies of scale, long-term savings, improved customer service, and increased TMF capacity. Water system partnerships encompass a range of opportunities. They can generally be categorized into four types (see Figure 1):

- **Informal Cooperation:** Coordination with other water systems, but without contractual obligations. Informal partnerships may consist of partners sharing equipment and creating mutual aid agreements for emergency response management.
- **Contractual Assistance:** Establishment of a contract with another water system or service provider where the contract and service ultimately remain under the water system's control. This type of partnership may include a system purchasing water from another system or contracting out operations and management to another water system.
- **Joint Powers Agency:** Creation of a new entity designed to serve the water systems that form it. These partnered water systems may share system management, operators, or source water.
- **Ownership Transfer:** Merger or mutual transfer of an existing entity or creation of a new entity. This type of relationship may be represented by one water system being acquired by another, or by being connected to another water system physically, financially, and managerially.

These partnership activities help water systems enhance their TMF capacity:

- ◆ **Technical Capacity** is defined as the physical and operational ability of a water system to meet SDWA and Clean Water Act (CWA) requirements, including the adequacy of physical infrastructure and the technical knowledge and capability of personnel. Examples of technical capacity include maintaining high quality source water, replacing outdated infrastructure, and operating and maintaining treatment and distribution system.

- ◆ **Managerial Capacity** is defined as the ability of a water system to conduct its affairs in a manner enabling the water system to achieve and maintain compliance with SDWA and CWA requirements, including institutional and administrative capabilities. Identifying water system ownership, staffing the appropriate personnel, and communicating regularly with customers are all examples of managerial capacity.
- ◆ **Financial Capacity** is defined as the ability of a water system to acquire and manage sufficient financial resources to allow the water system to achieve and maintain compliance with SDWA and CWA requirements. Ensuring revenues exceed costs, maintaining financial records, and establishing good credit are all examples of financial capacity. In addition, water systems that consider consolidation or restructuring may receive preferential treatment in loan or grant programs (e.g., higher priority for DWSRF loans).

In addition, when water systems are able to alleviate immediate concerns and improve public health protection, water systems are able to better understand their existing operations and maintenance (O&M) and capital improvement costs to plan for future operations. Partnerships can be as basic as sharing equipment, or as intricate as creating a new entity to manage a group of existing water systems. Partnerships should be mutually beneficial for water systems, their customers, and the state program. Partnerships can provide immediate and long-term benefits for the water system, state water programs, and water system customers. The most successful partnerships are those that benefit all participating water systems by addressing a shared challenge or by matching water systems with complementary strengths and expertise.

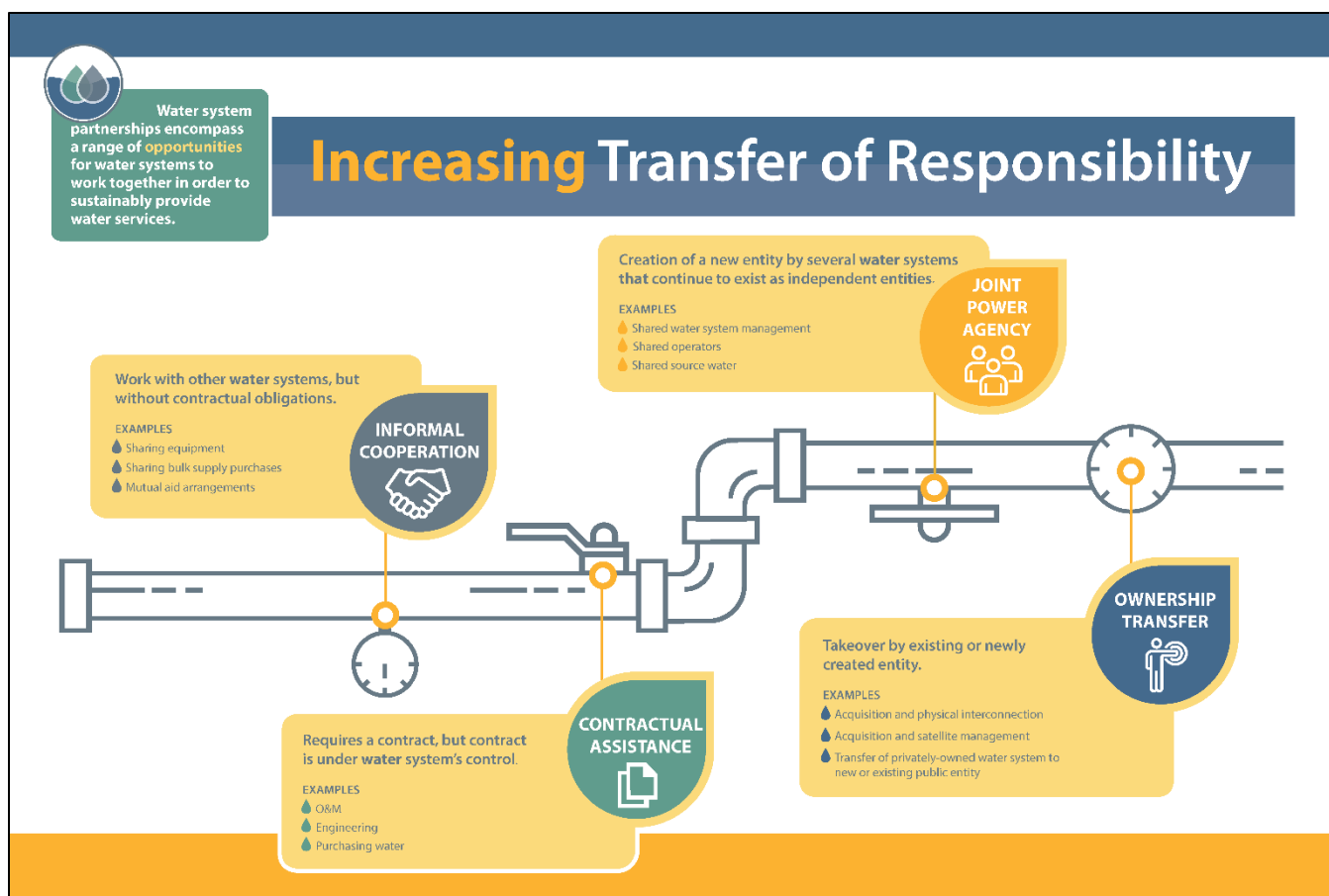


Figure 1. Partnerships Spectrum (Source: https://www.epa.gov/sites/default/files/2021-04/documents/partnershipshandbook_1-5-2021_508.pdf)

In addition to helping water systems, especially small ones, achieve and maintain TMF capacity, water system partnerships can reduce the oversight and resources that states need to devote to these systems. States can promote water system partnerships through capacity development and operator certification programs, loans, and set-asides in the DWSRF, and/or state legislation and regulations. In addition, state drinking water programs can promote partnerships through collaboration with other state agencies such as the public utility or public service commissions (PSCs).

Findings

States have directed many resources towards partnership development and offer a variety of programs to encourage partnerships. Many offer financial incentives to encourage their use to help systems provide safe drinking water. Specifically, forty-six states offer priority points in the DWSRF for partnerships (See row “Consolidating systems prioritized for DWSRF funding” in Table 2 below), and twenty-five states have a specific grant program to encourage their use (see row “State loan funds or incentive programs exist for consolidating systems” in Table 2). These grant programs are designed to address the barriers that prevent systems from providing safe drinking water to their customer base. For example, some systems may have a disadvantaged customer base that cannot fund efforts to address TMF capacity issues. In cases like these, states may offer grants to incentivize the consolidation of these struggling systems with higher-capacity PWSs. For example,

California has established the Safe and Affordable Funding for Equity and Resilience (SAFER) program to provide \$130 million per year to improve the capacity of small systems with violations of drinking water standards, which includes consolidation with larger systems. Similarly, states such as Connecticut, Louisiana, and North Carolina use disadvantaged community additional subsidization to incentivize the consolidation of struggling PWSs with higher-capacity systems.

Some PWSs may also lack the personnel or financial resources needed to conduct planning efforts, including consolidation planning efforts. Offering consolidation planning grants is a common method of addressing this issue among the twenty-five states with loan funds or incentive programs for consolidating systems. These grants enable PWSs to consider the viability of consolidating with other systems without necessarily requiring them to commit to consolidation. Maine, Washington, and New Hampshire are states that offer consolidation planning grants. For example, New Hampshire's Drinking Water and Groundwater Trust Fund offers grant awards for small community water systems (CWSs) to evaluate the feasibility and cost-effectiveness of connecting to another CWS. The insight gained from feasibility studies are intended to inform small water systems of the best long-term options for maintaining a safe, reliable drinking water supply for their customers. Receipt of the grant does not require the system to commit, or match, to an interconnection.

Many problems confronting the resiliency of the drinking water sector are of sufficient scale and cannot be addressed through partnerships between a few PWSs. To address this, twenty states have implemented regional planning efforts that incorporate water supply planning (see row "Regional planning incorporates water supply planning" in Table 2). These regional efforts address a range of issues, including many related to resilience, such as emergency response to natural disasters and long-term water availability challenges. For example, because many PWSs in Northeastern New Jersey share critical drinking water infrastructure, the New Jersey Department of Environmental Protection (NJ DEP) is supporting the development of a Resilient Northeastern NJ program to identify and implement strategies to improve long-term climate resilience in the region. The NJ DEP's role in this program involves researching and documenting infrastructure gaps and the interconnectedness of the large water systems in the state's northeast region. Understanding this interconnectedness will avoid catastrophic emergency situations and improve capacity development of the region's PWSs. Similarly, forty-eight states offer mutual aid agreements that facilitate resource sharing between utilities affected by natural disasters (See row "Water and Wastewater Emergency Mutual Aid Agreement exists" in Table 2). The formation of a state-level office that directs the water supply planning efforts of regional-level planning areas is another strategy to address long-term water availability challenges among the twenty states with regional planning efforts that incorporate water supply planning. Connecticut, Kansas, and Oklahoma have taken this approach. Within these regional planning areas, representatives from different institutions, including PWSs, can share information and coordinate on strategies for achieving water conservation plans. For example, Oklahoma has set a goal of consuming no more fresh water in the year 2060 than was consumed statewide in the year 2012 and has created the Water for 2060 Advisory Council and Oklahoma Comprehensive Water Plan in support of this goal.

To encourage partnership activities, twenty-three states include partnerships activities and facilitation of partnerships within their Capacity Development program (See row "Capacity Development program identifies and facilitates partnerships" in Table 2). Many parts of the country are encountering drinking water workforce challenges, so, in support of their Operator Certification program, fifteen states provide resources to encourage water system operator sharing or the employment of contract operators. These resources can include legal authorization for water systems to share operators or providing example contract operator agreements. (See row "Contract operator/operator sharing" in Table 2). Additionally, states recognize the importance of using

their capacity development control points to prevent the formation or continued operation of PWSs that struggle to deliver safe drinking water. Twenty states require new systems to consider interconnection to existing systems and sixteen states do not allow small system variances if consolidation or interconnection is viable (See rows “State requires new systems to consider interconnection to existing systems” and “State does not allow small system variances if consolidation or interconnection is feasible” in Table 2).

The remainder of the report’s findings is broken into three different sections, which can be accessed by clicking each of the boxes.



Conclusion

States support drinking water system partnerships in a variety of ways. This document can support water system owners and operators with understanding how their state encourages partnerships, and it showcases how other states encourage and facilitate partnerships. Systems can continue implementing partnerships as states further encourage their development. Ultimately, the goal of water system partnerships, regardless of their scale, is to build system capacity and improve public health protection.

For additional information on water system partnerships, please visit <https://www.epa.gov/dwcapacity/learn-about-water-system-partnerships>.

Matrix

The matrix below is a list of common state programs to encourage water system partnerships. To navigate to a specific state, click the state abbreviation at the top column. To navigate to a specific program within a state, click the “X” in the appropriate cell.

Table 2. Common State Programs that Encourage Water System Partnerships

	AL	AK	AZ	AR	CA	CO	CT	DE	FL	GA	HI	ID	IL	IN	IA	KS	KY	LA	ME	MD	MA	MI	MN	MS	MO	MT	NE	NV	NH	NJ	NM	NY	NC	ND	OH	OK	OR	PA	PR	RI	SC	SD	TN	TX	UT	VT	VA	WA	WV	WI	WY
Consolidating systems prioritized for DWSRF funding	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X	X	X
State loan funds or incentive programs exist for consolidating systems			X		X		X			X			X		X	X	X	X	X						X					X	X	X	X	X		X			X			X	X	X		X	X	X		X	
Capacity Development program identifies and facilitates partnerships	X	X	X		X	X		X			X							X		X		X	X	X				X		X	X	X					X	X						X			X	X	X	X	
Contract operator/ operator sharing		X	X					X				X	X	X	X				X		X				X										X						X	X					X		X		
Regional planning incorporates water supply planning							X	X	X	X				X		X	X			X						X	X	X			X	X			X	X					X		X	X		X					
Area-wide Optimization Program (AWOP)	X			X										X	X															X	X	X				X	X					X									
State does not allow small system variances if consolidation or interconnection is feasible		X	X				X		X	X							X	X		X		X			X					X	X												X			X	X	X			
State can appoint a receiver																	X	X						X	X				X													X			X	X	X				
State requires new systems to consider interconnection to existing systems		X		X	X		X		X	X		X	X				X			X		X									X			X				X			X	X	X	X	X		X				
Water and Wastewater Emergency Mutual Aid Agreement exists	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X

Alabama

Alabama Department of Environmental Management (ADEM)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Alabama's DWSRF program gives priority to projects that "use consolidation with other systems to correct existing deficiencies and improve management." Specifically, the DWSRF preapplication includes a priority ranking system which includes system consolidation as a factor with a maximum point value of 100. The ranking criteria is 1) the project will result in the elimination of at least one PWS, and 2) the project will establish a new interconnection between two water systems, where the beneficiary water system is served by only one source. The Alabama Drinking Water Finance Authority Act, No. 97-415 specifies that the DWSRF may finance legal fees and water buy-in fees associated with consolidation.



IDENTIFYING POSSIBLE SYSTEM CONSOLIDATIONS THROUGH SANITARY SURVEYS

The Capacity Development program encourages consolidation of non-viable water systems with other viable water systems to improve or inactivate non-compliant systems. In Fiscal Year (FY) 2022, ADEM developed a new sanitary survey form that incorporated elements of asset management. Sanitary surveys, which are conducted at least once every three years, are used to help identify systems lacking in TMF capacity that could benefit from consolidation. As a result, the number of non-viable water systems, both community and non-community, have decreased. According to ADEM's annual report, in FY2023, 14 permit modifications were issued for consolidation of water systems, changes in ownership, or other changes.



COORDINATION WITH OTHER GROUPS REGARDING NEW AND EXISTING SYSTEMS

ADEM's Drinking Water Branch coordinates with a stakeholder group, which includes state and federal agencies, to discuss the TMF capacity of proposed new water systems. Alabama's 2023 Triennial Capacity Development Report to the Governor reports "communication with these groups has discouraged the construction of non-viable new water systems and the expansion of marginally operated existing water systems." Encouraging existing viable systems to extend service to new areas rather than allowing the construction of new systems eases the regulatory burden on the state and increases public health protection.



AREA-WIDE OPTIMIZATION

ADEM continues to be an active participant in the EPA Region 4 Area-Wide Optimization Multi-State Pilot Program (AWOP-MSPP), a multi-state effort to maximize public health protection from microbial contaminants and disinfectant byproducts by coordinating existing system resources with proven performance improvement tools. The AWOP tools focus on things a water system can do to improve performance with little or no cost. AWOP also offers Performance Based Training which educates operators regarding AWOP tools and how to apply the tools to their plant or distribution system. Active participation in AWOP has consistently resulted in improvement to the TMF capacity of a water system. Several members of the Drinking Water Branch participated in and conducted activities associated with AWOP-MSPP. For the period of FY 2021, FY 2022, and FY 2023, the activities included planning meetings, workshops, TA and more.



EMERGENCY RESPONSE

Alabama's Water and Wastewater Agency Response Network (ALWARN) is a utility created mutual aid agreement which water systems may sign to access and distribute staff, equipment, and resources between water systems in the event of an emergency. The Water and Wastewater Agency Response Network (WARN) agreement allows utilities to share resources in a more expedited way, compared to other mechanisms that require a formal disaster declaration.



DRINKING WATER BRANCH EMERGENCY RESPONSE

The Drinking Water Branch operates as a conduit for information during emergency response, gathering and consolidating information and distributing that information to other groups within the Department, other state agencies, TA partners, and others to ensure available resources are deployed as necessary. The Branch gathers emergency contact information through a portal called AWECS to ensure communications during emergency responses are effective and timely. The Branch is exploring new methods to effectively gather and share information during emergency situations.

Helpful Links to State Resources

- ◆ ADEM Drinking Water Branch Reports (including Annual Reports and Capacity Development Triennial Governor's Reports): <https://www.adem.alabama.gov/programs/water/drinkingwater.cnt>
- ◆ Alabama Clean Water and DWSRF Information: <http://www.adem.alabama.gov/programs/water/srf.cnt>
- ◆ Environmental Regulations and Laws: <http://www.adem.alabama.gov/alEnviroRegLaws/default.cnt>
- ◆ Alabama Cooperative Extension System's Water Information Website: <http://www.aces.edu/waterquality/index.php>

Alaska

Alaska Department of Environmental Conservation (ADEC)
Division of Environmental Health
Division of Water



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Long-term goals of Alaska's DWSRF Program include improving coordination efforts between water system programs and agencies to achieve compliance and grow capacity, as well as establish "a process for coordinating funding strategies with other lenders such as United States Department of Agriculture (USDA) Rural Development." DWSRF funding is awarded to projects based on priority points. In Alaska's DWSRF program, projects that include consolidation or regionalization of two or more existing PWSs are awarded five points and projects that will enhance the sustainability of the system may also earn extra points. For example, projects can earn 50 points for "Fix It First" projects and 25 points for projects that will apply Effective Utility Management or planning. Principle loan forgiveness is also available to incentivize disadvantaged communities to implement DWSRF Sustainable Infrastructure Planning Projects (SIPP) such as consolidation studies. Figure 2 below discusses barriers impeding water system consolidation in Alaska that these programs are designed to address.



OPERATOR SHARING AND OPERATOR CERTIFICATION PROGRAM

ADEC can approve one contract operator to supervise more than one system according to the Operator Certification and Training Regulations (18 AAC 74). The department will consider the system size, complexity, accessibility, emergency planning, and other factors when approving the plan for such a scenario. To improve operator certification rates, the Operator Certification Program offers training materials and train-the-trainer events.



REMOTE MAINTENANCE WORKER (RMW) PROGRAM

The RMW Program includes 15 RMWs that provide TA to approximately 200 rural communities, allowing them to build strong relationships with the communities' water and wastewater operators and managers and a thorough knowledge of the systems. The RMWs provide rural utility operators and managers with educational materials, onsite training, and regional training workshops. RMWs also provide system-specific assistance and assist operators with developing or revising preventive maintenance plans.



TRAINING AND TECHNICAL ASSISTANCE

The Capacity Development Program holds quarterly Alaska Water Technical Assistance Providers Meetings. These meetings bring together the various agencies that provide TA to communities throughout Alaska, including the EPA, Alaska Native Tribal Health Corporation (ANTHC), DEC, the Alaska Department of Commerce, Community, and Economic Development's Rural Utility Business Advisor (RUBA), Rural Community Assistance Corporation (RCAC), and tribal regional health organization (RHOs). By convening these groups quarterly, DEC works to share regulatory updates and requirements, coordinate efforts, reduce duplicative efforts, and identify funding sources. Also, The Capacity Development Program coordinates annual regional meetings that bring together representatives of the regulatory programs and TA providers that work to support rural community sanitation needs. Each year, participants review and evaluate the current capacity status of all rural communities within a region to ensure that all community needs are identified, and a plan is developed to address them. The goal of these meetings is to coordinate effective and consistent communication between the agencies aiding rural communities with their sanitation infrastructure needs, to capture community needs for funding purposes, and to establish interagency collaboration on TA efforts to communities.



STATE ORDERED CONSOLIDATION OR INTERCONNECTION

The Regulatory Commission of Alaska (RCA) can order public systems with conduits, pipes, pipelines, mains, or other distribution or transmission facilities to allow other public systems to use these facilities when public convenience and necessity require it. Use must not result in substantial injury to the owner or in substantial detriment to the service provided. The user must pay for any necessary modifications or additions and may be required to pay reasonable compensation for use of the facilities [AS 42.05.311 (a)].



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

Applications for new PWSs that are located within one mile of an existing water system must include “an explanation why connection to the existing service is not in the customer’s interest” [3 AAC 52.715(b)(4)].



EMERGENCY RESPONSE

The Alaska Water/Wastewater Agency Response Network (AKWARN) is a network of utilities helping other utilities to respond to and recover from emergencies. AKWARN offers a forum for establishing and maintaining emergency contacts. This network provides expedited access to specialized resources to respond to and recover from emergencies that disrupt water/wastewater utilities. This network also facilitates training that focuses on the exchange of resources during an emergency. The AKWARN is led by EPA, Alaska Water Wastewater Management Association, Alaska DEC, Alaska Rural Water Association, and the Alaska Division of Homeland Security and Emergency Management. RMWs are also available to provide immediate assistance to utilities in the RMW program with emergencies.

Helpful Links to State Resources

- ◆ ADEC’s Contract Operator Approval Policy: <https://dec.alaska.gov/water/operator-certification/contract-operator-approval-policy/>
- ◆ Alaska State Revolving Fund: <https://dec.alaska.gov/water/technical-assistance-and-financing/state-revolving-fund>
- ◆ ADEC’s Drinking Water Program: <http://dec.alaska.gov/eh/dw/>
- ◆ Alaska’s Drinking Water Regulations: <https://dec.alaska.gov/eh/dw/regulations/>
- ◆ Statute and Administrative Code Infobase: <http://rca.alaska.gov/RCAWeb/Home.aspx>
- ◆ Village Safe Water Program: <https://dec.alaska.gov/water/village-safe-water/>
- ◆ AKWARN: <https://awwma.org/page/AKWARN>

Because of the remote nature of many areas in Alaska, physical interconnections are not always feasible. In fact, in many remote areas the state is focused on decentralized water and wastewater options in order to address the pressing need for affordable and reliable access to safe drinking water. For information visit:

<https://dec.alaska.gov/water/water-sewer-challenge/>.

However, other types of partnerships, such as operator sharing and coordination among water systems, are a way some systems are able to use partnerships to help manage and plan their water resources.

Figure 2: Barriers to Physical Interconnection in Alaska (Source: <https://dec.alaska.gov/water/water-sewer-challenge/>)

Arizona

Arizona Corporation Commission (ACC)
Arizona Department of Environmental Quality (ADEQ)
Arizona Water Infrastructure Finance Authority (WIFA)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

The Arizona WIFA prioritizes project applications that will include consolidation or regionalization. Eligible applications include projects needing to consolidate water supplies where a supply has become contaminated, or a system is unable to maintain compliance for TMF reasons. According to the 2023 Capacity Development Annual Report, two consolidation projects were funded in FY 22-23.



TRAINING AND TECHNICAL ASSISTANCE

ADEQ's Capacity Development program encourages consolidation or acquisition of non-viable water systems whenever possible and seeks to limit the creation of new water systems by steering water system applicants toward an existing water system. ADEQ's Safe Drinking Water TA Program helps improve small water systems' TMF capacity. The TA Program evaluates potential solutions, including consolidation with nearby existing water systems, and helps identify funding sources for these solutions. To assist or facilitate partnerships among water systems, ADEQ plans to develop a process or strategy to assist in consolidation, regionalization, or acquisition for systems lacking TMF capacity to create economies of scale as part of the new strategy implementation. This strategy will include fostering partnerships through different professional associations to promote collaboration between PWSs and emergency preparedness. Other programs used to help water systems acquire and maintain capacity include the Monitoring Assistance Program, training workshops for water system representatives such as owners, managers, or operators, and, in the future, an operator switchboard to help facilitate cross training, expansion of knowledge, and a forum to assist operators of different backgrounds to gain more technical expertise.



OPERATOR SHARING

Title 18-5-104 of the Arizona Administrative Code allows very small water systems to have remote operators, as long as the facility operator ensures all requirements are met, including that the remote operator resides no more than 200 miles by ground travel from the water system and they visit either weekly or monthly, based on the size and type of the system.



STATE ORDERED CONSOLIDATION OR RESTRUCTURING

The ACC has the regulatory power to order a public service corporation to make additions, improvements, or changes to an existing plant and to construct new structures, including interconnections to other systems. If any ordered changes require joint action by two or more public service corporations, the corporations must share the cost of those changes (after notice from the commission). If the corporations cannot agree upon an apportionment of the costs, the commission can order the corporations to pay at a proportion determined by the commission (Arizona Revised Statute 40-331).



EMERGENCY RESPONSE

Arizona's Water/Wastewater Agency Response Network (AzWARN) is a statewide mutual assistance program between water and wastewater utilities. This volunteer-based network allows utilities to help one another in times of emergency when the resources of a utility are overwhelmed. The foundation of the network is a signed mutual aid agreement between all participating utilities. The network provides member utility contact information and resource listings for use in emergencies.

Helpful Links to State Resources

- ◆ Arizona Department of Environmental Quality, Water Quality Division: <https://www.azdeq.gov/WQD>
- ◆ Arizona Operator Certification: <https://www.azdeq.gov/operator-certification>
- ◆ Water Infrastructure Finance Authority of Arizona: <http://www.azwifa.gov/>

- ◆ Arizona Administrative Code: <http://www.azsos.gov/rules/arizona-administrative-code>
- ◆ Arizona Corporation Commission Small Water Systems Ombudsman Office: <https://azcc.gov/utilities/small-water-ombudsman-office>

Arkansas

Arkansas Department of Health (ADH)
Office of Environmental Health
Arkansas Natural Resources Commission



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Systems seeking DWSRF funding receive priority points on the state's ranking criteria for projects involving consolidation or interconnection with an existing system that is compliant with SDWA regulations ADH awards between 10 and 50 priority points to consolidation projects and between 5 and 25 points for interconnection projects. The number of service connections in the system undergoing consolidation determines the number of priority points awarded, with smaller systems receiving more priority points. ADH also provides a special 1.5 percent lending rate for regionalization projects involving the physical interconnection or consolidation of 2 or more systems in which at least one of the systems is a PWS serving 10,000 or fewer customers. Additionally, systems seeking DWSRF funding must show that they have a long-term plan to undertake feasible and appropriate changes in operations necessary to develop adequate capacity. Arkansas' DWSRF IUP states that ADH's Engineering Section will encourage consolidation efforts, contract management, or partnerships with other communities in their area when two or more systems can benefit from this arrangement.



ENCOURAGING SYSTEM CONSOLIDATION

All Community Water Systems (CWSs) and Non-Transient Non-Community Water System (NTNCWSs) must have a long-range capacity plan that covers ten years and is updated every five years (016-24-07 Ark. Code R. § 1 Section VII.H). The plan must demonstrate TMF capacity and describe planned projects and potential alternatives to those planned projects, including interconnection with a neighboring system, purchased water arrangements, and alternate ownership arrangements. Additionally, ADH regulations require systems considering projects involving source development, treatment, or major distribution modifications to submit a preliminary engineering report for the proposed work. ADH regulations also require proposals for new systems to submit these preliminary engineering reports. During the review process, ADH staff encourage, where appropriate, efforts toward consolidation, interconnection, or combined operations with nearby PWSs.



OPERATING TRAINING PROGRAM

The Arkansas Water Works and Water Environment Association (AWW&WEA) consists of nine districts located in the various geographic areas of the state. Each district has a monthly meeting and provides training and networking opportunities for water and wastewater operators working in that general area. The meetings are informal and provide opportunities for water operators to network with other neighboring systems. Operators also receive training hours for attending meetings to be applied toward licensing renewal. ADH staff attends most of these meetings to provide a forum for open communication between the ADH district staff and the water systems in an informal setting. The AWW&WEA also sponsors an annual meeting held in the Spring at the Hot Springs Convention Center. The meeting provides training opportunities for operators, managers, and consultants. The conference provides opportunities for water operators, managers, engineers, state agencies and vendors to mingle in a classroom, social, and informal setting.



AREA-WIDE OPTIMIZATION

Arkansas networks with other states as part of the U.S. EPA's AWOP. As part of the network, Arkansas sets voluntary optimization goals for the targeted systems and then conducts evaluations and investigations as part of the Comprehensive Performance Evaluation. Each year ADH's Engineering Section documents the achievements that have been made in assisting these systems to reach their optimization goals.



EMERGENCY RESPONSE

Arkansas' Water and Wastewater Agency Response Network (ARWARN) is a utility created mutual aid agreement which water systems may sign to access and distribute staff, equipment, and resources between water systems in the event of an emergency. The WARN agreement allows utilities to share resources in a more expedited way than other mechanisms that require a formal disaster declaration.

Helpful Links to State Resources

- ◆ Arkansas Office of Environmental Health: <https://www.healthy.arkansas.gov/programs-services/topics/environmental-health>
- ◆ Arkansas Natural Resources Commission: <https://www.agriculture.arkansas.gov/natural-resources/>
- ◆ Arkansas Drinking Water Safety: <https://www.healthy.arkansas.gov/programs-services/topics/drinking-water>
- ◆ Arkansas Operator Certification: <https://www.healthy.arkansas.gov/programs-services/topics/drinking-water-operator-certification>
- ◆ Arkansas Water Development Page: <https://www.agriculture.arkansas.gov/natural-resources/divisions/water-development/>

California

California Environmental Protection Agency
California State Water Resources Control Board (SWRCB)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION AND FINANCING OF CONSOLIDATION PROJECTS

California's DWSRF program includes an incentive program for consolidation, with the amount of funding available depending on the type of consolidation project. Projects in which a water system completes a full physical consolidation of an existing water system (where the subsumed water system is no longer separately permitted) or a community (at least 15 year-round residential service connections or a year-round population of at least 25 people) not currently served by a PWS are eligible for up to \$10 million in zero percent (0%) interest rate financing per consolidated community/water system. The amount of principal forgiveness these projects are eligible for depends on system size and status as a disadvantaged community. Projects in which a water system either managerially consolidates or provides water via an interconnection (where separate water system permits still exist), or a master meter agreement to one or more small water systems (where separate water system permits still exist) are eligible for up to \$2 million in zero percent (0%) interest rate financing with the amount of principal forgiveness again dependent on system size and disadvantaged status. Projects in which a water system acts as an administrator to one or more small systems are eligible for up to \$5 million in zero percent (0%) interest rate financing with the amount of principal forgiveness dependent on system size and disadvantaged status.



SAFE AND AFFORDABLE FUNDING FOR EQUITY AND RESILIENCE

The Safe and Affordable Funding for Equity and Resilience (SAFER) program was established and funded pursuant to Assembly Bill 2501 (2018) and Senate Bill 200 (2019). It provides \$130 million per year for small systems with violations of drinking water standards to develop and implement sustainable and affordable solutions, conduct operations and maintenance, consolidate with larger systems, fund administrators to run the small systems, and more. Incentives including grants and zero interest loans are offered to large water systems to participate in consolidation projects. The program also provides planning grants and TA to help complete consolidation planning work at no cost to the larger water system. Between 2019 and 2023, 142 PWSs have been consolidated, serving nearly 100,000 Californians, with one of these consolidation projects utilizing the State Water Board's mandatory consolidation authority. SAFER Engagement Unit staff actively manage consolidation projects for failing water systems, which includes engagement with other SWRCB staff, local primacy agency staff, the various water systems involved in the project, the communities served, and additional key partners.



CAPACITY DEVELOPMENT PROGRAM AND TMF ASSESSMENTS

SWRCB invites stakeholders to participate in the implementation of the Capacity Development program. These stakeholders include PWSs, customers, TA providers, and government agencies. Also, new CWSs and NTNCWSs must complete a TMF assessment. One of the required components of the assessment is to evaluate the feasibility of consolidation. One metric SWRCB will use to track capacity building success is the number of water systems consolidated each year. Additionally, the SWRCB continues to expand investments in the TA program with a focus on small, disadvantaged communities and consolidations. In 2022, the Division of Financial Assistance approved \$64 million to be awarded to 6 new TA providers. An expanded list of qualified TA Providers will potentially allow for new types of and a greater volume of services to be available to communities and PWSs as well as expansion of services to other areas of the state.



SWRCB DRINKING WATER SYSTEM TOOLS

In 2021, the State Water Board developed a Drinking Water System Outreach Tool (Outreach Tool). The Outreach Tool shows the locations of PWSs, state small water systems, and domestic well density. The Outreach Tool also indicates what systems are failing or at-risk, as well as disadvantaged block groups. This tool allows public stakeholders to evaluate their own potential for consolidation with nearby water systems and allows larger water systems to investigate the potential for regional projects. In addition to the Outreach Tool, the California Water Partnerships Tool (Partnership Tool) was created to highlight the approximately 200 water partnerships and consolidations that have been completed between 2016 and 2022. The Partnership Tool provides a visual method to highlight for residents where other consolidations and/or partnerships have recently taken place near their community. These tools combined with the results of the 2020-2021 Risk Assessment results and input from local Division of Drinking Water staff was utilized to outreach to water systems where physical consolidation appeared to be a good alternative. In 2021, the SWRCB's Engagement staff sent out approximately 1,100 letters to water systems recommending consolidation and hosted 12 Water Partnership Training events. In 2022, SWRCB hosted 12 Water Partnership workshops and sent over 3,000 outreach letters to public drinking water systems to engage water system managers and community partners in achieving sustainable solutions across the State.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

In reference to submittals for operation permits, any new system applying for operation within the State of California must submit a preliminary technical report including a characterization of water quality and an evaluation of the feasibility of consolidation (Section 116527). In addition, if the SWRCB determines that consolidation or interconnection is feasible and that the proposed water system would not be able to deliver safe drinking water, the SWRCB may deny the permit [Section 116540(d)].



STATE-ORDERED CONSOLIDATION IN DISADVANTAGED COMMUNITIES

The SWRCB has the authority to order consolidation of a small water system within a disadvantaged community that is "at risk of consistently failing to provide an adequate supply of safe drinking water" with a receiving water system [Section 116682(a)]. Risk indicators are categorized by water quality, accessibility, affordability, and TMF capacity. In addition, Section 116684: Consolidation Liability Exemptions provides liability relief for a "consolidated water system, wholesaler, or any other agency in the chain of distribution that delivers water to a consolidated water system." Finally, if the SWRCB does not deem consolidation or interconnection feasible, they may contract with an administrator to provide administrative and managerial services to the selected system (Section 116686).

In 2021, the California legislature passed Senate Bill 403 (SB 403) authorizing the SWRCB to order consolidation where a water system serving a disadvantaged community is an at-risk water system or where a disadvantaged community is substantially reliant on at-risk domestic wells. "At-risk domestic well" is defined as "domestic wells that serve a disadvantaged community and are at risk of consistently failing to provide an adequate supply of safe drinking water as determined by the state board.



EMERGENCY RESPONSE

The California Water/Wastewater Agency Response Network's (CalWARN) mission is to support and promote statewide emergency preparedness, disaster response, and mutual assistance processes for public and private water and wastewater utilities. This new CalWARN web portal expands the participating utilities the ability to achieve agency, regional, and state preparedness by providing new tools and proven practices that can enhance readiness while providing daily value to utilities and their customers. The program provides its member utilities with a standard omnibus mutual assistance agreement and process for sharing emergency resources among participating utilities statewide; the resources to respond and recover more quickly from a disaster; a mutual assistance program consistent with other statewide mutual aid programs and the Standardized Emergency Management System and the National Incident Management System; a forum for developing and maintaining emergency contacts and relationships; and new ideas from lessons learned in disasters.

Helpful Links to State Resources

- 💧 California's Public Drinking Water Systems page:
http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/publicwatersystems.shtml
- 💧 California's Safe and Affordable Funding for Equity and Resilience:
<https://www.waterboards.ca.gov/safer/>

- ◆ California Operator Certification: http://www.waterboards.ca.gov/drinking_water/certlic/occupations/DWopcert.shtml
- ◆ California Capacity Development: http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/TMF.shtml
- ◆ California's Drinking Water Related Laws: http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Lawbook.shtml
- ◆ California DWSRF: http://www.waterboards.ca.gov/drinking_water/services/funding/SRF.shtml#
- ◆ CalWARN: <https://www.calwarn.org/>

Colorado

Colorado Department of Public Health and Environment - Water Quality Control Division



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Colorado prioritizes projects that restructure and consolidate water systems to correct contamination issues or to assist systems unable to maintain SDWA compliance due to insubstantial financial and managerial capacity. Under the category of “Sustainability,” projects that consolidate or regionalize PWSs are awarded 10 points. Several consolidations are included in the Drinking Water Revolving Fund (DWRf) 2023 Project Eligibility List.



TRAINING AND TECHNICAL ASSISTANCE

Colorado’s Capacity Development strategy includes a goal to “establish and foster training partnerships statewide [which] encourages capacity development by providing additional assistance and training opportunities that are distinct from the opportunities delivered directly by state staff.” Additionally, the Capacity Development strategy states that Colorado aims to “enhance communication and collaboration with the Colorado Operator Certification program to ensure that available training services meet operator training needs and professional development goals.” Colorado also has a strategic goal of supporting collaboration among all drinking water systems, such as by implementing their “Pursuing Drinking Water Excellence” program, which requires participants to share their success stories and tools with other water systems. Additionally, the Local Assistance Unit within the Community Development and Partnership Section in the Colorado Safe Drinking Water Program works in partnership with drinking water systems, assistance partners, and division staff from various program areas to provide training, assistance, and management support services to PWSs. The assistance partnership reaches operators and system owners on a grassroots level to improve compliance, enhance water quality, better position a system managerially, financially, and technically for the future, and to protect public health. The Local Assistance Unit also directly provides TMF assistance one-on-one and through group training to PWSs so they can strengthen their ability to supply safe drinking water to the public.



EMERGENCY RESPONSE

Colorado’s Water/Wastewater Agency Response Network (CoWARN) is a statewide network with a mission of preparing for emergency situations through a “utilities helping utilities” framework. CoWARN provides water and wastewater utilities with a mutual aid agreement, mutual assistance program, resources to respond to and recover from disasters, and a growing network of emergency contacts. Additionally, the Joint Security and Emergency Preparedness Committee formed under the Rocky Mountain Section of the AWWA and the Rocky Mountain Water Environment Association helps facilitate partnerships between systems of all sizes. The committee works to share information to help systems prepare and respond to emergencies and offers trainings in coordination with CoWARN.

Helpful Links to State Resources

- ◆ Colorado Drinking Water Program (Water Quality Control Division): <https://cdphe.colorado.gov/water-quality>
- ◆ Water and Wastewater Facility Operators Certification Board: <https://cdphe.colorado.gov/wwfocb>
- ◆ TMF Tools Web Portal: <https://www.colorado.gov/pacific/cdphe/tools-drinking-water-facilities-managers>
- ◆ Colorado Water Resources & Power Development: <http://www.cwrpda.com/>
- ◆ Colorado DWSRF: <https://www.cwrpda.com/drinking-water-revolving-fund>
- ◆ CoWARN: <https://cowarn.org/>
- ◆ Water Quality Control Commission Regulations: <https://www.colorado.gov/pacific/cdphe/water-quality-control-commission-regulations>

Connecticut

Connecticut Department of Public Health (DPH)
Connecticut Public Utilities Regulatory Authority (PURA)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

The DWSRF annual IUP reflects the top drinking water infrastructure priorities for the State of Connecticut, which include the promotion of consolidation and interconnection projects that increase PWSs' TMF capacity or ensure that a PWS has a sufficient margin of safety in their water supply. Priority points are awarded for projects that consolidate two or more PWSs, with the projects receiving more priority points based on the number of PWSs that they consolidate. Additional subsidization funds are available through the Disadvantaged Community Assistance Program (DCAP) to qualifying large PWSs if their project includes the consolidation of one or more small PWSs. State bond funding from the PWS Improvement Program is also available to partially subsidize interconnections and system consolidations.



REGIONAL PLANNING

Connecticut's state legislature passed "An Act Concerning a Connecticut Plan for Public Water Supply Coordination" (Public Act 85-535) in 1985, with the purpose of delineating service areas throughout the state and encouraging regional planning of Connecticut's water resources. Connecticut General Statute 25-33h-1(C) states that each Water Utility Coordinating Committee (WUCC) must prepare a coordinated water system plan that addresses assuring high quality drinking water for a 50-year period, water conservation, joint management, and source water protection planning in each area. These plans are intended to ensure that smart planning decisions are made about the future of Connecticut's drinking water and to guide the decisions of Connecticut's PWSs. The plans analyze important drinking water concepts within each of the planning areas, including the expansion and protection of public water supplies, water conservation, water rates, droughts, small water system viability and protection of drinking water supply sources.



REGIONAL PLANNING

The Connecticut Water Planning Council prepares a State Water Plan to help planners, regulators, and lawmakers make decisions about managing Connecticut's water in a manner that is consistent throughout the state with stakeholder-defined principles and available scientific data. The State Water Plan is a collection of scientific information, policy recommendations, and forward-looking steps that is intended to frame future water management laws, regulations, and resolution of specific local issues.



STATE ORDERED CONSOLIDATION OR RESTRUCTURING

Non-compliance, monitoring and reporting violations, or lack of certified operators are triggers that help the Connecticut Capacity Development program prioritize systems that may benefit from restructuring or connecting to another system. Restructuring and connecting non-sustainable systems can occur through formal enforcement actions, direct acquisition by another water system, or ordered acquisition approved by DPH and PURA. In certain circumstances, PURA, DPH, a municipality served by a water company, or an organization representing 20 percent of the water system's customers can petition the court for attachment of the assets of the company and to place the company in receivership. In cases where the acquisition of the system by the most suitable entity is ordered by DPH and PURA, the acquiring entity can recover the costs of acquisition and improvements through rates and can impose a rate surcharge to recover on a current basis all costs of the acquisition and necessary improvements. The surcharge can be imposed on the customers of the acquired and the acquiring company, revised quarterly, and "designed to recover 100 percent of the revenues to provide a net after-tax return on investment" (General Statutes Sec. 16-262l, 262n, 262o). In addition, compensation can be provided to the acquiring company.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

Small PWSs (serving 1,000 people or fewer or with 250 service connections or fewer) must obtain a Certificate of Public Convenience and Necessity (CPCN) from DPH prior to any construction or expansion. DPH, in coordination with PURA, will not issue a CPCN unless it determines that no feasible interconnection with an existing system is available (General Statutes Sec. 16-262m). The WUCCs also encourage new developers to use smart planning concepts and interconnect with viable PWSs with access to demonstrated TMF capacity when feasible.



EMERGENCY RESPONSE

DPH has helped facilitate the creation of the Connecticut Water/Wastewater Agency Response Network (CtWARN). The mission of CtWARN is to improve water system resilience by facilitating mutual aid between its members during emergencies. DPH also hosts monthly webinars open to members of CtWARN and federal TA contractors.

Helpful Links to State Resources

- ◆ Connecticut Department of Public Health Drinking Water Section: <https://portal.ct.gov/dph/drinking-water/dws/drinking-water-section>
- ◆ Water Utility Coordinating Committee: <https://portal.ct.gov/dph/drinking-water/wucc/water-utility-coordinating-committee>
- ◆ Connecticut DWSRF: <https://portal.ct.gov/DPH/Drinking-Water/DWS/Drinking-Water-State-Revolving-Fund-Program>
- ◆ General Statutes of Connecticut: <https://www.cga.ct.gov/current/pub/titles.htm>
- ◆ CtWARN: <https://ctawwa.org/CtWARN>
- ◆ Connecticut State Water Plan: <https://portal.ct.gov/water/water-planning-council/state-water-plan>

Delaware

Delaware Division of Public Health (DPH)
Office of Drinking Water (ODW)
Water Supply Coordinating Council (WSCC)
Department of Natural Resources and Environmental Control (DNREC)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Delaware's DWSRF provides financial assistance to publicly owned and privately owned CWSs and non-profit non-community water systems for drinking water infrastructure projects. Water systems facing compliance or long-term financial issues can consider physical, technical, and managerial consolidation with neighboring water systems. A system applying for a DWSRF loan receives priority points on its application if the system provides water to a non-complying system or if it provides water to an area of existing private wells with water quality deficiencies. Additionally, the DWSRF awards priority points to applications for projects that will result in the consolidation of complying water systems or an interconnection between water systems. Figure 3 below describes barriers to water system partnerships in Delaware that DWSRF financial assistance is intended to help overcome.



OPERATOR TRAINING AND TECHNICAL ASSISTANCE

Delaware's regulations require that all CWSs and NTNCWSs have licensed operators. The Public Water System Supervision Program, the Capacity Development Program, and the DWSRF Program continue to work with all the CWSs and NTNCWSs to ensure these systems have licensed operators, including a designated Direct Responsible Charge (DRC) operator. ODW works with Delaware Technical and Community College (DTCC) to provide customized operator training and certification assistance to facilities such as daycare centers, schools, and senior centers that experience the most limitations to water operator training and funding. ODW also works closely with DNREC to assist underperforming PWSs to improve drinking water safety and financial capacity after identifying them via DWSRF loan application review and sanitary surveys. Additionally, the Delaware Rural Water Association (DRWA) and Southeast Rural Community Assistance Project (SERCAP) provide operator assistance and training programs to PWSs. Furthermore, the Delaware Clean Water Initiative for Underserved Communities (CWI) helps provide clean drinking water and upgraded wastewater treatment for the state's low-income, underserved communities. Projects include connecting underserved communities to central drinking water and sewer systems.



ODW BLAST NEWSLETTER

To improve ODW's communication with PWSs, the Capacity Development Program started an email newsletter in 2018, The Blast. The Blast informs PWSs about training opportunities, free webinars/education sessions, and important regulatory and compliance issues. Currently, the monthly Blast is distributed to certified water operators, administrative contacts, and internally to ODW staff. The Capacity Development team is expanding the target audience to include additional drinking water stakeholders. The Blast is also used to share important or urgent information regarding Delaware Public Health Laboratory closures or changes in receiving schedules.



REGIONAL PLANNING

The WSCC was established by the Delaware General Assembly (26 Del. Code, 1305-1308) to achieve water-supply self-sufficiency and develop water supply plans for three counties in Delaware. These plans emphasize that interconnections can help water systems meet their peak demands and identify opportunities for developing these interconnections. The WSCC is chaired by the Department of Natural Resources and Environmental Control (DNREC) and is made up of representatives from the Office of the Governor, several state and county agencies, the Delaware River Basin Commission, the Delaware Geological Survey, the University of Delaware Water Resources Agency, the Delaware Rural Water Association, public and private water utilities, businesses, and citizens groups.



EMERGENCY RESPONSE

The Delaware Water/Wastewater Agency Response Network (DEWARN) prepares, organizes responses, and shares personnel in the event of natural or human-caused emergencies. ODW provides support in the development of intrastate mutual aid programs and an integrated response for DEWARN. Many CWSs also participate in DEWARN.



INTERCONNECTIONS FOR EMERGENCY RESPONSE

To ensure that their customers receive uninterrupted water service during emergencies such as fire protection or mechanical failures, municipalities can connect to other PWSs. In 2023, Delaware reported having 49 interconnected water systems. Some of these are for emergency use, such as fire protection; and some are permanent interconnected systems. Between 2020 and 2023, ODW had 10 new interconnections.

Delaware's Capacity Development program acknowledges some of the challenges that often impede water system partnerships and the resulting negative consequences in their 2023 Capacity Development Strategy:

- *"Political rivalry between private water utilities and municipalities may prevent interconnection or consolidation of any part of the operation. Officials of small municipalities may be reluctant to raise water rates as needed. This results in some small CWSs without adequate financial capacity to maintain their water system."*

Similarly, Delaware's 2023 Capacity Development Annual Report states that:

- *"Consolidation of PWSs often improves overall capacities. However, many PWSs do not consolidate due to the cost of interconnecting or fear of losing control of revenue."*

Figure 3. Barriers Impeding Water System Consolidation in Delaware (Source: Delaware's 2023 Capacity Development Strategy and 2023 Capacity Development Annual Report)

Helpful Links to State Resources

- ◆ Delaware's Administrative Code: <http://regulations.delaware.gov/AdminCode/>
- ◆ Delaware Office of Drinking Water: <http://www.dhss.delaware.gov/dhss/dph/hsp/odw.html>
- ◆ Delaware DWSRF: <http://www.dhss.delaware.gov/dph/hsp/dwsrf.html>
- ◆ Water Supply Coordinating Council: <https://dnrec.delaware.gov/water/boards/water-supply-coordination/>
- ◆ DEWARN: <https://drwa.org/dewarn/>

Florida

Florida Department of Environmental Protection (FDEP)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Encouraging the consolidation and regionalization of PWSs that lack TMF capacity is a long-term goal of the Florida DWSRF program. FDEP actively encourages consolidation by offering loan subsidies for system consolidation projects, including consolidation projects involving small and financially disadvantaged systems. Each year, 15 percent of DWSRF funding is reserved for small systems. Additionally, the Florida DWSRF program awards up to 300 priority points for projects involving the consolidation or regionalization of PWSs.



OPERATOR SHARING

Contract Operators meeting the Criteria for Determining Eligible Experience (Chapter 62-602.250, F.A.C.), can be under contract for the operation of several plants. Florida contracted with the Florida Rural Water Association (FRWA) to develop a Contract Operations Checklist with duties, assignments, and responsibilities that may want to be considered when establishing a contract between an operator and system owner, including the number of visits per week that the operator will make to the system.



STATE ORDERED RESTRUCTURING AND RATE SETTING

The Florida PSC has jurisdiction over utilities in 38 of 67 Florida counties. The PSC ensures water system capacity by promoting reasonable utility rates. The PSC also routinely provides management and financial advice to systems. If the PSC finds technical problems, it may require the system to conduct repairs or construct a new facility. Additionally, the PSC developed its staff assisted rate case (SARC) program for very small utilities, as they typically lack the resources to prepare the technical data needed to justify a rate increase. In a SARC, the PSC prepares the necessary accounting, engineering, rate, and financial information.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

FDEP is not authorized to prevent the construction of a new system based solely on the availability of alternative means to provide service in the area. However, new systems must use DEP Form 62-555.900(20) to explain why they propose to provide water services instead of connecting to another PWS and include a list of the alternatives considered. The list of alternatives is reviewed by the Capacity Development program. It is recommended that the owner attach an explanation to the completed DEP Form 62-555.900(20) with a description of the TMF reasons for starting a new system if regional water utilities might be able to provide service to all or part of the proposed service area. Florida also encourages new systems to communicate with neighboring PWSs even if they do not plan to connect because in some cases, PWSs near proposed service areas may be available to assist the new system temporarily.



REGIONAL PLANNING

The Florida Water Resources Act established that all water in Florida is a public resource managed at the state level by FDEP and at the regional level by Florida's five water management districts (WMDs). FDEP, having responsibility for the administration of the water resources at the state level, exercises general supervisory authority over the WMDs, which are responsible for the administration of the water resources at the regional level. The WMDs oversee water management planning, land use, consumptive use, water conservation, stormwater management, flood control, well permitting and water resource management. Every five years, each WMD creates a regional water supply plan. These plans include a water supply component in which water conservation and alternative water supply sources are used to augment the traditional water supply sources, along with a water resource development component wherein regional water resource management is formulated and implemented; a funding strategy for water resource development projects; consideration of how the water supply development project options serve the public interest or save costs; technical data to support the plan; a list of water bodies for which minimum flows and levels have been established or will be established; recovery or prevention strategies for the water bodies not meeting their minimum flows and/or levels and a list of water reservations.



EMERGENCY RESPONSE

Florida's Water/Wastewater Agency Response Network (FlaWARN) is the formalized system of "utilities helping utilities" to address mutual aid during emergency situations. These incidents may be man-made or a result of a natural disaster. The project's infrastructure consists of a secure web-based database of available resources and a practical mutual aid agreement designed to expedite the process in the event of an emergency. The goal of FlaWARN is to provide immediate assistance to impacted utilities until such a time that a permanent solution may be implemented. Florida's WATER Tracker system allows drinking and wastewater facilities to report their operational status, identify resource needs, and post available resources during emergency events. The system combines the needs of FlaWARN, FDEP's response center, and FRWA's resource and response tracking for emergency events that can disrupt drinking water and wastewater operations.

Helpful Links to State Resources

- ◆ Florida Department of Environmental Protection Source and Drinking Water Program: <http://www.dep.state.fl.us/water/drinkingwater/>
- ◆ Florida Operator Certification Handbook: <https://floridadep.gov/water/certification-restoration/content/operator-certification-program-publications-forms>
- ◆ Florida Contract Operations Checklist: <https://floridadep.gov/water/source-drinking-water/documents/contract-operations-checklist>
- ◆ Florida DWSRF: <https://floridadep.gov/wra/srf/content/dwsrf-program>
- ◆ FlaWARN: <https://flawarn.pwd.aa.ufl.edu/>
- ◆ Florida Water Management Districts: <https://floridadep.gov/owper/water-policy/content/water-management-districts>

Georgia

Georgia Environmental Finance Authority (GEFA)
Georgia Environmental Protection Division (Georgia EPD)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Georgia's DWSRF ranking criteria allows each project to receive a maximum of 100 points. Projects that will provide additional water supply to systems that have neither a backup well nor an emergency tie-in to another system receive 50 points. Projects that will expand an existing system capacity or construct a new drinking water system to ensure safe drinking water to serve existing residences/businesses in unserved areas. This could include a project to acquire a failing privately-owned system by a publicly-owned system.



FUNDING INTERCONNECTIONS WITH STATE LOAN FUNDS

The Georgia Reservoir Fund provides loans to expand the capacity of existing reservoirs or other water supply sources, or to establish new reservoirs or other sources for water supply. System interconnections are among the types of projects that are eligible for loans from the Georgia Reservoir Fund.



LOWER ENFORCEMENT PENALTIES FOR SYSTEMS THAT CONSOLIDATE

Georgia EPD's enforcement program has been a significant factor in encouraging private PWSs with limited capacity to physically merge or consolidate with local governmentally owned water systems or water authorities. Whenever possible, Georgia EPD encourages consolidation of PWSs that are chronically out of compliance with federal and state regulations with a nearby local governmentally owned water system or water authority. If formal enforcement action is being taken on a private water system, Georgia EPD may offer lower penalties if the water system agrees to connect to a local governmentally owned water system or water authority within a reasonable period of time. The governmentally owned larger water systems have the best track records for compliance and customer service, are generally larger systems, and have the TMF resources to provide safe, reliable drinking water on a consistent basis. Between 2013 and 2023, on average, four PWSs were successfully consolidated with a local governmentally owned PWS or water authority. Figure 4 below shows the number of water system consolidations in Georgia annually between 2013 and 2023.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

Any person who desires to own or operate or who desires to commence the operation of a PWS must first evaluate connecting to an existing local governmentally owned and operated PWS. New PWSs are required to evaluate the possibility of connecting to an existing publicly owned and operated PWS and, if it determines this is not viable, must explain its reasoning to Georgia EPD. New PWSs must also: provide written certification from the local government that it is aware and in concurrence with the development of the privately-owned PWSs; have a back-up water source; and enter into a trust indenture with the local government to assure compliance, unless the local government provides documentation that it has no desire to act in this capacity (Chapter 391-3-5-.04).



REGIONAL PLANNING

Georgia is divided into ten Regional Water Planning Councils. These councils, along with Georgia EPD, are responsible for periodically reviewing, revising and implementing ten regional water plans (RWPs). These RWPs help Georgia manage its water supply in a sustainable manner and protect public health and the environment. The RWPs help PWSs address water supply and capacity development issues by providing guidance for a sustainable, reliable, and safe supply of water for all users in Georgia. As provided in the State Water Plan, the regional plans are used to guide Georgia EPD's permitting decisions and GEFA's consideration of state loans to PWSs, including DWSRF loans.



CONTINUITY OF SERVICE AGREEMENTS

Privately-owned CWSs are required to provide a performance bond or letter of credit to assure the continuity of service. In some cases, CWS owners have entered into trust agreements with the local government in which the system is located. In other cases, the CWS owners have used non-government trustees (Georgia Rules for Safe Drinking Water, Chapter 391-3-5-.04(9)).



EMERGENCY RESPONSE

GAWARN is a network of utilities helping other utilities to develop a standard omnibus mutual assistance agreement and process for sharing emergency resources among members statewide; prepare for the next natural or man-made caused emergency; organize emergency response according to established requirements; and share personnel and other resources statewide under previously arranged agreements. GAWARN's steering committee board members consist of personnel from Georgia EPD, public utilities, Georgia Association of Water Professionals (GAWP), and Georgia Rural Water Association (GRWA). The board meets periodically to discuss progress of the program. Several large and small water systems that have signed the Mutual Aid Agreement are part of the GAWARN network. GAWARN has developed an interactive website program where utilities are able to request help, respond to incidents, and upload their resources into the program at <http://www.gawarn.org>. The GAWARN website has integrated the Resource Typing Manual, allowing each member to enter information specific to their utility about their resources including pumps and generators. The website makes it possible to request resources from neighboring utilities that have available resources.

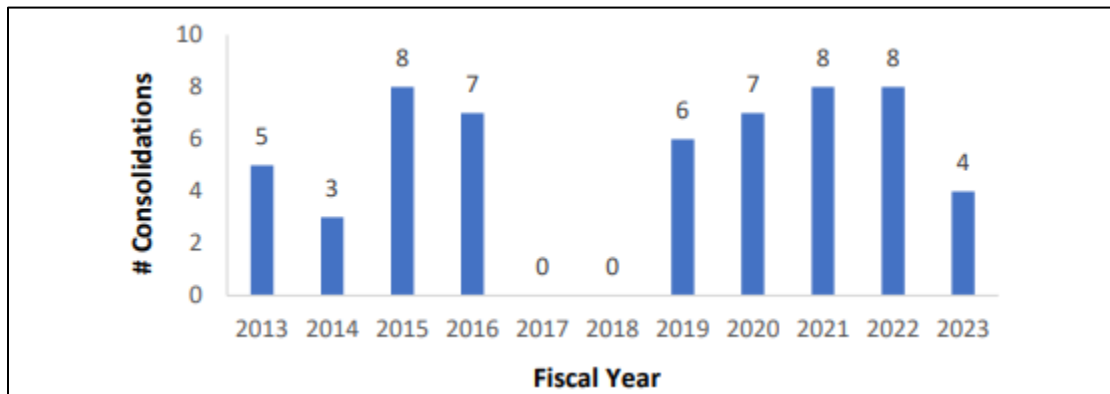


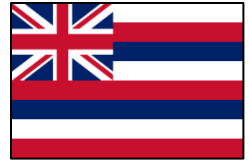
Figure 4. Number of Consolidated Water Systems in GA from 2013 to 2023 (Source: [Georgia's 2023 Capacity Development Annual Report](#))

Helpful Links to State Resources

- ◆ Georgia Drinking Water Program: <https://epd.georgia.gov/watershed-protection-branch/drinking-water>
- ◆ Georgia Chapter 391-3-5 Rules for Safe Drinking Water: <http://rules.sos.state.ga.us/gac/391-3-5>
- ◆ Georgia DWSRF: <http://gefa.georgia.gov/drinking-water-state-revolving-fund>
- ◆ Georgia IUPs: <https://gefa.georgia.gov/water-resources/intended-use-plans>
- ◆ GAWARN: <https://gawarn.org/>

Hawaii

Hawaii Department of Health Safe Drinking Water Branch (SDWB)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Consolidation projects are one of six allowable project types that Hawaii's DWSRF program will fund, along with treatment, transmission and distribution, source, storage, and creation of new systems. Hawaii's DWSRF program uses the following four categories for awarding priority points: drinking water quality and public health, affordability, compliance and enforcement, and sustainability/resiliency. Within the sustainability/resiliency category, projects that address drought mitigation measures, including interconnections between utilities and emergency water distribution, receive five priority points.



CAPACITY DEVELOPMENT ASSISTANCE

SDWB staff and its Technical Assistance Providers (TAPs) provide regular TA to small systems on technical capacity issues, water quality treatment, and financial and managerial planning. Also, small water systems in residential subdivisions are encouraged to contract with an operator and a financial management company to provide technical and managerial support. The Capacity Development program assists developers of new water systems with incorporating covenants for the community association to contract a system operator to operate the system and a private management company to bill customers, collect money owed, pay bills, and provide financial records. To start a new water system, the developer must demonstrate that the new system will have the financial capacity required to maintain and operate the system and cover repairs and replacement costs.

Helpful Links to State Resources

- ◆ Hawaii Department of Health Administrative Rules: <http://health.hawaii.gov/opppd/departments-of-health-administrative-rules-title-11/>
- ◆ Hawaii Department of Health Safe Drinking Water Branch: <http://health.hawaii.gov/sdwb/>
- ◆ Hawaii DWSRF: <http://health.hawaii.gov/sdwb/drinking-water-state-revolving-fund/>
- ◆ Hawaii Operator Certification: <http://health.hawaii.gov/sdwb/operatorcert/>

Idaho

Idaho Department of Environmental Quality (DEQ)
Idaho Public Utility Commission (PUC)



State Policies and Programs Regarding Water System Partnerships



OPERATOR SHARING AND STATEWIDE TRAINING

Idaho allows water systems to share operators so long as the operators are available on-call to direct staff and assistants. The Idaho Public Drinking Water System Switchboard provides links that allow water systems to search for licensed operators available for contract in their county.

During Idaho's FY 2023, Idaho DEQ staff in collaboration with the Idaho Rural Water Association (IRWA), conducted training during the Idaho Rural Water Association conference and during Webinar Wednesdays. IRWA offers classes for operators. Available classes and schedules may be accessed on the IRWA website and are displayed on the Idaho DEQ training calendar.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

Idaho DEQ requires new systems to investigate the feasibility of obtaining water service from an established water systems. "In demonstrating new PWS capacity, the owner of the proposed new PWS must investigate the feasibility of obtaining water service from an established PWS. If such service is available, but the owner elects to proceed with an independent PWS, the owner must explain why this choice is in the public interest in terms of environmental protection, affordability to water users, and protection of public health." [IDAPA 58.01.08 §500 (6)]. Additionally, the Idaho PUC's rules state that it "may deny certificates for proposed new small water companies when it is shown that there is no need for the service or that another company (whether municipal, cooperative, or investor-owned) is willing and able to provide similar or better service." (IDAPA 31.36.01. §102).



EMERGENCY RESPONSE

IRWA administers the Idaho Water and Wastewater Agency Response Network (IDWARN) and the program is available to all public and private water and wastewater system owners in Idaho. The Idaho DEQ participates in IDWARN and provides links to this program through the PWS Switchboard. IDWARN facilitates the sharing of personnel, equipment, materials and services between water and wastewater utilities in response to emergencies. Members sign a mutual aid agreement to facilitate rapid emergency response among member utilities. Idaho DEQ's Emergency Preparedness page contains information on IDWARN as well as emergency response templates from EPA and the Rural Community Assistance Partnership (RCAP) to provide water systems with a single location to access resources for training and development of emergency response plans and risk and resiliency assessments.



ONLINE SOURCE WATER PROTECTION TOOL

The Source Water Protection Planning Tool gathers potential contaminant data, water system sample history, and inventory data from existing databases and allows users to input system-specific information and narrative to develop an automated Source Water Protection Plan and Emergency Response Plan. The Emergency Response Plan framework meets the requirements for the drinking water and source water protection programs. The Emergency Response Plan also connects the water system with people and resources that can be used during an emergency.

Helpful Links to State Resources

- Idaho Department of Environmental Quality: <https://www.deq.idaho.gov/>
- Idaho Department of Environmental Quality Drinking Water Bureau: <https://www.deq.idaho.gov/water-quality/drinking-water/>
- Idaho Administrative Code: <https://adminrules.idaho.gov/rules/current/>
- Idaho Capacity Development: <https://www.deq.idaho.gov/water-quality/drinking-water/public-water-system-switchboard/capacity-development/>
- Idaho DWSRF: <https://www.deq.idaho.gov/water-quality/grants-and-loans/construction-loans/>

- ◆ Idaho Public Water System Switchboard: <https://www.deq.idaho.gov/water-quality/drinking-water/public-water-system-switchboard/>
- ◆ Idaho Emergency Preparedness page: <https://www.deq.idaho.gov/water-quality/drinking-water/public-water-system-switchboard/emergency-preparedness/>
- ◆ Idaho Source Water Protection Planning Tool: <https://www2.deq.idaho.gov/water/swpp/>
- ◆ Idaho Operator for Hire Search: <https://www2.deq.idaho.gov/water/OpForHire/Search>
- ◆ IDWARN: <http://www.idwarn.org/>



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

A long-term goal of Illinois' Public Water Supply Loan Program is to encourage the consolidation and regionalization of small PWSs so these systems can take advantage of economies of scale. The Illinois DWSRF Loan Priority Score criteria (35 IAC Part 662.345) states that loan projects can be given 75 priority points if they include the consolidation of two or more community water supplies into a single community water supply. Priority points are also given to applicants who are developing or implementing a source water protection plan or asset management plan.



FUNDING CONSOLIDATION WITH STATE LOAN FUNDS

IEPA operates a One Well Critical Review Principal Forgiveness program that offers principal forgiveness to PWSs that rely on one well for their water supply. The purpose of these loans is for the PWS to obtain a second source of water. Loan applicants must consider at least three alternatives and include a justification of the most feasible source alternative based upon financial considerations, operational requirements, operator qualifications, reliability, and water quality. By requiring systems to provide alternatives and include justification the IEPA believes this will steer applicants towards considering system consolidation.



OPERATOR SHARING AND OPERATOR CERTIFICATION PROGRAM

Rules for the Illinois Operator Certification Program (35 IAC Part 681) outline the duties and obligations of contract operators (35 IAC Part 681.1000) and require that contracts between water systems and operators stipulate how often the operator will be on site. The Illinois Rural Water Association developed a template contract that meets the requirements.



BUILDING TMF CAPACITY

IEPA conducts periodic inspections of all CWS systems to determine if their ongoing programs for monitoring, maintaining the water supply, and providing appropriate information to the water users meets the requirements of the Illinois Pollution Control Board's public water supply regulations and related standards. Field staff visually observe the facility and review on-site documents to evaluate the TMF capacity of existing systems. Prior to conducting a site-visit, a TMF pre-screening survey is sent to the official custodian and responsible operator in charge of each public water supply. The TMF pre-screening survey includes questions about if the PWSs has emergency interconnections and whether the emergency response plan provides alternate sources of water.



EMERGENCY RESPONSE

The Illinois Water/Wastewater Agency Response Network's (ILWARN) mission is to support and promote statewide emergency preparedness, disaster response, and mutual assistance matters for public and private water and wastewater utilities for natural and man-made events. Through the ILWARN web site, a member can request emergency equipment (pumps, generators, chlorinators, evacuator, etc.) and trained personnel (e.g. Treatment plant operators) that they may need in an emergency. The ILWARN program provides its member utilities with a standard omnibus mutual assistance agreement and process for sharing emergency resources among members statewide.

Helpful Links to State Resources

- ◆ Illinois Capacity Development: <https://epa.illinois.gov/topics/drinking-water/field-operations/capacity-development.html>
- ◆ Illinois Administrative Code: <http://www.ilga.gov/commission/jcar/admincode/titles.html>
- ◆ Illinois Wastewater/Stormwater and Drinking Water Loans: <https://epa.illinois.gov/topics/grants-loans/state-revolving-fund.html>

- ◆ Illinois Drinking Water Operator Certification: <https://epa.illinois.gov/topics/drinking-water/operator-certification.html>
- ◆ Illinois Rural Water Association Sample Contract for hiring a Contract Operator: <http://www.ilrwa.org/Downloads/Certified%20Water%20Plant%20Operator%20Contract.doc>
- ◆ ILWARN: <https://www.ilwarn.org/>

Indiana

Indiana Utility Regulatory Commission
Indiana Department of Environmental Management (IDEM)
Indiana Finance Authority (IFA)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Indiana's DWSRF program incentivizes projects that include the consolidation of two or more PWSs by providing priority points for various consolidation projects. For example, projects that incorporate consolidation or interconnection of a non-complying PWS with acute public health concerns are awarded 50 points, those that support consolidation of a non-complying PWS with chronic public health concerns are awarded 20 points, and those involving consolidation of a SDWA-compliant PWS or interconnection are awarded one point. Additionally, the IFA provides up to ten bonus points to projects that regionalize and/or remain regionalized with a nearby drinking water system, provides one point for participation in the Indiana Water/Wastewater Agency Response Network (InWARN), and deducts ten points for projects that disconnect from a viable regional water system ("non-regionalization").



TMF ASSESSMENTS

The Capacity Development program provides PWSs wishing to apply for DWSRF funding a self-assessment form. IDEM developed a self-assessment manual designed to assist existing PWSs in identifying their TMF needs. One component of this assessment asks if systems have considered consolidation with other nearby systems or sharing of operations and management expenses with other nearby systems as part of their financial planning. Additionally, Indiana conducts evaluations to identify "at risk" PWSs that "have very little, if any technical, managerial, and/or financial capacity to operate and maintain compliance with the SDWA". Indiana invites these "at risk" systems to participate in a capacity building program to direct them to strategies and resources to build their TMF capacity. One strategy for building this capacity is encouraging or requiring the consolidation or regionalization of systems that are incapable of maintaining adequate capacity.



ON-SITE ASSISTANCE

The IDEM Field Inspection and Capacity Development staff provide on-site TA or site visits to address a wide variety of operational problems, identify potential sources of contamination, and provide guidance on the remediation of contaminants in the drinking water. Capacity Development staff work with Field Inspection Staff to utilize information from sanitary surveys and other site evaluations to assist systems with whatever compliance issues they may be – or are at risk of – experiencing. The assistance provided is usually tailored to solve a particular obstacle or problem, though can be wider reaching if needed. On-site assistance has always proven to be extremely effective in reducing noncompliance rates and improving water quality. Sometimes, further assistance is required by third party companies i.e., analysts at the Indiana Regulatory Commission, the Office of the Utility Consumer Counselor, or Environmental Finance Centers. IDEM also partners with sibling agencies which share some regulatory responsibility: The Indiana Family and Social Services Administration has certification responsibility for childcare centers, the Indiana Department of Natural Resources licenses well drillers, the State Department of Health certifies and monitors laboratories that test the drinking water samples, and local health departments license food service establishments. This has created a network of assistance and collaboration upon which systems can rely.



IDEM DRINKING WATER BRANCH OPERATOR CERTIFICATION PROGRAM

The IDEM Drinking Water Branch Operator Certification Program provides assistance to operators regarding training and certification issues by:

- Coordinating with the Indiana Section of the AWWA Operator's School Committee to provide an annual twelve (12) week short course for people preparing to take the operator certification exam.
- Providing operators with information on how to obtain certification or continuing education units from such sources as the AWWA Teleconference and Seminar Video Library and the California State University Operator Training Program.
- Coordinating with the training providers to provide a one-day refresher course for operators that are scheduled to take the certification exam.
- Coordinating with other water associations, such as the Indiana Section of the AWWA and The Alliance of Indiana Rural Water to suggest and approve programs that provide continuing education units for certified operators.



OPERATING SHARING

IDEM allows for an operator to serve in responsible charge of more than one system. The operator must be able to demonstrate that sufficient time is spent at each system to assure that the certified operator is knowledgeable of the system's operation and that test reports and results are representative of standard operational conditions. Indiana rules require the certified operator in responsible charge to inform each system's owner of the amount of time that must be spent at their facility. This process helps to ensure that the systems are adequately supervised.



EMERGENCY RESPONSE

Indiana's Water and Wastewater Agency Response Network (InWARN) provides water and wastewater utilities with a Mutual Aid Agreement and process for sharing staff and resources statewide in the event of an emergency. After a disaster, member utilities can request assistance through InWARN's Regional Emergency Operations Coordinators (REOCs) or through the InWARN website and indicate the specific assistance needed. Member Utilities can respond if they have the personnel and equipment to do so. Since power and communication systems are often damaged during major emergencies, InWARN REOCs will work through State Emergency Management officials to communicate with Member Utilities in the affected areas.

Helpful Links to State Resources

- ◆ Indiana's State Revolving Fund: <http://www.in.gov/ifa/srf/>
- ◆ Indiana Drinking Water Page: <http://in.gov/idem/cleanwater/2381.htm>
- ◆ Indiana Operator Certification and Capacity Development: <http://in.gov/idem/cleanwater/2446.htm>
- ◆ InWARN: <http://www.inwarn.org/>

Iowa

Iowa Department of Natural Resources (DNR)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Iowa's DWSRF program prioritizes consolidation and regionalization projects. Loan forgiveness of up to 15 percent may be offered to consolidation/regionalization priority projects. The primary purpose of the consolidation or regionalization project must be for a system to obtain drinking water that more reliably meets SDWA requirements or to address its TMF issues within the system through consolidation or regionalization with another system. Consolidation or regionalization projects are eligible for loan forgiveness even if there is no violation or compliance issue for the system undergoing consolidation.



OPERATOR SHARING AND OPERATOR CERTIFICATION PROGRAM

Iowa DNR trains operators of surface water treatment plants on water treatment process optimization through Performance Based Training (PBT). During PBTs, operators and DNR staff participate in hands-on workshops and take turns presenting to the group. PBTs are an opportunity for water systems and operators to network and consult with each other.



AREA-WIDE OPTIMIZATION

Iowa DNR is a member of the national AWOP, which optimizes existing resources between states to improve public health protection for drinking water. AWOP seeks to improve the performance of drinking water treatment plants, provides communication and networking opportunities for state and water system staff, and prolongs the life of existing infrastructure, reducing the need to invest in new facilities to achieve compliance. PBT is one example of a resource that is provided through the optimization program that the state can use to assist PWSs in complying with the national drinking water regulations, to encourage partnerships between PWSs, enhance their capacity, and to assist PWSs in the training and certification of operators.



EMERGENCY RESPONSE

Iowa DNR participated in the development of the Iowa Water/Wastewater Agency Response Network (IOWARN), a voluntary assistance network that provides personnel, emergency equipment, materials, and other resources in the event of a major water-related emergency. Utilities coordinate mutual aid assistance and promote emergency preparedness for all sizes of water systems.

Helpful Links to State Resources

- ◆ Iowa Department of Natural Resources Water Supply Operations (WSO) Section: <http://www.iowadnr.gov/InsideDNR/RegulatoryWater/DrinkingWaterCompliance.aspx>
- ◆ Iowa Operator Certification: <http://www.iowadnr.gov/InsideDNR/RegulatoryWater/Certification/WaterWastewaterOperators.aspx>
- ◆ Iowa DWSRF: <https://iowasrf.com/drinking-water-loan-program/>
- ◆ IOWARN: <https://www.awwa-ia.org/iowarn>

Kansas

Kansas Department of Health and Environment (KDHE)
Kansas Public Water Supply Loan Fund (KPWSLF)
Kansas Water Authority (KWA)
Kansas Water Office (KWO)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

A goal of the KPWSLF is to encourage projects that involve regional consolidation or interconnection either for more efficient use of source water capacity or to reduce public health risks. For consolidation projects, the KPWSLF awards 10 priority points for each system that is consolidated. For example, two systems that consolidate into one system receive 20 priority points and three systems that consolidate into one system would receive 30 points. Five points are awarded for projects in which systems remain separate but purchase water with a permanent interconnection. Consolidation projects are also eligible for principal forgiveness.



FUNDING INTERCONNECTIONS WITH STATE FUNDS

The Regional PWS Planning Grant Program provides 50 percent matching funds for preliminary engineering studies that evaluate regional solutions to address public water supply system needs and challenges. The Regional PWS Planning Grant provides up to \$12,500 to match funding provided by the local project sponsors.

In addition, Kansas' Community Development Block Grant (CDBG) Program is a competitive grant program available to water systems serving populations with low to moderate incomes. The CDBG encourages consolidation of water supply services and CDBG applications must explore regionalization as a project alternative.



STATUTES AND REGULATIONS THAT ENCOURAGE PARTNERSHIPS

Kansas has been encouraging regionalization among water systems since 1957 through state legislation. State law requires KDHE to encourage regional cooperative public water supply projects in accordance with the regionalization strategy of the state water plan. There are several statutes which address water system partnerships, directly or indirectly.

- The Interlocal Cooperation Act (K.S.A. 12-2901 et seq.), passed in 1957, enables local units of government including school districts, townships, cities, rural water districts, and other governmental units to enter into agreements to work together.
- K.S.A. 82a-637 et seq., passed in 1969, establishes the procedures required for acquisition of a rural water district by a city when the district's service territory is within three miles of that city.
- The Public Wholesale Water Supply District Act (K.S.A. 19-3545 et seq.), passed in 1977, allows water suppliers to work together to build a common source and treatment center while maintaining their individual systems.
- K.S.A. 82a-650 et seq., passed in 2005, enables the consolidation of rural water districts. The act establishes the procedures for acquisition of a rural water district by another rural water district. This statute allows two or more rural water district boards to enter into an agreement to merge into a single district.



REGIONAL PLANNING

The KWO formulates the Kansas Water Plan, which is intended to support the management, conservation, and development of the water resources of the state. In 2014, the KWA, an advisory council within the KWO, established fourteen regional planning areas, each with a Regional Advisory Committee and priority goals. Regional Advisory Committees advise the KWA and KWO on local water-related issues, serve as a link to the public, and serve as a link to water management entities. The KWO is working to adopt guidelines for the development of regional water supply strategies, and develop a program to provide financial, technical, and planning assistance to water suppliers interested in developing a regional strategy.



AREA-WIDE OPTIMIZATION

The AWOP is a voluntary program initiated to assist water systems toward optimizing their existing water treatment processes without major expenditures or infrastructure improvement. KDHE initiated its AWOP in July 2017 and has since completed comprehensive performance evaluations (CPEs) aimed at optimizing water treatment plant turbidity performance at participating Kansas public water supply systems. In addition, AWOP team members participate in EPA Region 6 and 7 quarterly meetings and training sessions. These meetings and training sessions allow AWOP teams from participating states to share their knowledge and learn new methods of assisting water systems. The AWOP Coordinator position coordinates all AWOP activities and also provide TA to water systems that have compliance issues.



EMERGENCY RESPONSE

The Kansas Mutual Aid Program for Utilities (KSMAP) is a cooperative effort of state utility associations and state government agencies including Kansas Municipal Utilities, Kansas Rural Water Association, Kansas Section – AWWA, Kansas Water Environment Association, Kansas Municipal Energy Agency, Kansas Department of Health & Environment, energy utilities, and other organizations. The KSMAP program provides an organized structure for requesting and responding with help for utilities. A participating utility must adopt a resolution approving the program agreement and agree to assist other utilities when capable of doing so.

Helpful Links to State Resources

- ◆ Kansas Public Water Supply Section: <https://www.kdhe.ks.gov/409/Public-Water-Supply>
- ◆ Regional Public Water Supply Planning Grant: <https://www.kdhe.ks.gov/514/Loans-Grants>
- ◆ Kansas Capacity Development: <https://www.kdhe.ks.gov/410/Capacity-Development-Program>
- ◆ Kansas CDBG Program: <https://www.kansascommerce.gov/program/community-programs/cdbg/>
- ◆ Kansas Water Office: <https://www.kwo.ks.gov>
- ◆ Kansas Water Authority: <https://www.kwo.ks.gov/about-us/kansas-water-authority>
- ◆ Kansas Water Plan: <https://www.kwo.ks.gov/water-plan/water-plan>
- ◆ Kansas Mutual Aid Program for Utilities: <https://www.kmunet.org/page/MutualAid>

Kentucky

Kentucky Department for Environmental Protection Division of Water (KDOW)
Kentucky Public Service Commission (PSC)
Kentucky Infrastructure Authority (KIA)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

KIA awards up to 105 priority points to regionalization projects, including those that eliminate a PWS through a merger or acquisition, eliminate a water treatment plant as a result of an interconnection, or acquire an emergency potable water supply. The KIA Board sets, reviews, and approves interest rates at least annually. KIA recognizes that larger or particularly complex projects may require a lengthy planning and design process. KIA therefore offers planning and design loans that can cover regionalization studies, initial engineering assessments of the facilities along with other types of analyses and studies. KIA also uses the Local Assistance and Other State Programs set-aside to develop and implement local drinking water initiatives and other state programs, such as by providing grants to PWSs considering regionalization or consolidation. KIA also uses the set-aside to provide loans for the implementation of source water quality protection efforts.



REGIONAL PLANNING

In 2000, Area Water Management Councils were created in each of Kentucky's 15 Area Development Districts (ADDs). Figure 5 below shows these ADDs. The ADDs coordinate water management planning councils and employ water service coordinators to facilitate and implement water supply planning. Coordinators can submit projects through the Water Resource Information System (WRIS), a geo-database of water infrastructure and proposed projects in the state. KIA uses WRIS to prioritize funding from the DWSRF and Clean Water State Revolving Fund (CWSRF). The Area Water Management Councils meet quarterly and plan long range efforts for the public water and wastewater systems represented on the council.



STATE ORDERED CONSOLIDATION OR RECEIVERSHIP

The PSC is authorized to initiate and carry out feasibility studies to determine the possibility of merging water districts or merging water associations into water districts. Upon completion of a study, and after a public hearing, the PSC can order the merging of water districts or associations into a single water district and make any additional orders in connection with rates and charges. Secured debts continue to be paid under the terms and conditions of the outstanding obligations. The PSC can also purchase a system (Kentucky Revised Statutes (KRS) Chapter 74).



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

The KDOW has statutory authority under KRS 151.634 to approve or refuse plans for all new water systems based on their ability to demonstrate TMF capability. Senate Bill 263 modified Kentucky Revised Statute (KRS) Chapter 224A in relation to regionalization and asset management planning to further promote public drinking water system asset management planning. The Bill created a process and a fund to assist public drinking water systems with detecting water loss, developing and maintaining asset management plans, regionalization, and consolidation. The statutory changes authorize KIA to promulgate regulations and receive technical support from Energy and Environment Cabinet to implement the program.



STRATEGIC PLAN FOR WATER RESOURCE DEVELOPMENT

In 1999, the Water Resource Development Commission (WRDC) prepared a strategic plan for water resource development under the governor's executive order. One of the plan's recommendations was to: "promote and encourage water system regionalization." In 1999, there were roughly 700 PWSs in Kentucky, and as of 2023, there were 433 PWSs, with most non-community water systems being absorbed by CWSs.



EMERGENCY RESPONSE

Kentucky's Water/Wastewater Agency Response Network (KYWARN) is a statewide system of "utilities helping utilities" to address mutual aid during emergency situations. KYWARN assists members with emergency response and recovery, sharing emergency resources, and an emergency contact network.

Helpful Links to State Resources

- ◆ Kentucky Water Resources Information System Portal: <https://kia.ky.gov/WRIS/Pages/WRIS-Portal.aspx>
- ◆ Kentucky Infrastructure Authority: <http://kia.ky.gov/>
- ◆ Kentucky Capacity Development: <https://eec.ky.gov/Environmental-Protection/Water/Drinking/DWProfessionals/Pages/Drinking-Water-Planning.aspx>
- ◆ Kentucky Operator Certification: <https://eec.ky.gov/Environmental-Protection/Compliance-Assistance/operator-certification-program/Pages/default.aspx>
- ◆ Water Resource Development Commission: <https://eec.ky.gov/Environmental-Protection/Water/Protection/Pages/WaterSupplyPlanning.aspx>
- ◆ Kentucky Operator Certification Program Blog: <https://kyocp.wordpress.com>
- ◆ KYWARN: <https://www.kywarn.org/about/>



Figure 5. Kentucky Area Development Districts
(Source: [Kentucky Atlas & Gazetteer](#))

Louisiana

Louisiana Department of Health (LDH)
Louisiana Department of Environmental Quality (LDEQ)
Drinking Water Revolving Loan Fund Program (DWRLF)



State Policies and Programs Regarding Water System Partnerships



DWRLF PRIORITIZATION AND PRINCIPAL FORGIVENESS OF CONSOLIDATION PROJECTS

Louisiana's DWRLF uses system consolidation as one of the six categories for determining a project's priority ranking for DWRLF funding. The DWRLF awards more priority points for projects that consolidate greater numbers of systems and systems with higher populations. LDH's "Public Health Water Infrastructure Consolidation Initiative" provides 100 percent principal forgiveness DWRLF loans for projects that involve the consolidation a system that is not in compliance with SDWA with a system that is compliant. Additionally, LDH prioritizes Disadvantaged Community Additional Subsidy to consolidation projects that would eliminate PWSs that are not in compliance with the SDWA requirements.



ENCOURAGING SYSTEM CONSOLIDATION

Consolidation of water systems is an objective for the Capacity Development program. According to the 2023 Triennial Governor's Report, stricter capacity development requirements for new systems have helped direct potential new small systems toward consolidation with existing water systems. Additionally, existing systems facing difficulties are encouraged to and assisted in consolidating with systems that are compliant. LDH requires new water systems, water systems applying for DWRLF loans, and existing systems which have been selected to undergo a capacity assessment to complete a Business Plan packet. As part of this business plan, the system must "evaluate a reasonable number of feasible alternatives" for meeting the community's water needs, including consolidation with an existing system. LDH also encourages water systems to develop asset management plans. As part of these asset management plans, LDH recommends that water systems consider their capital improvement needs, including their capital needs related to system consolidation or regionalization.



STATE ORDERED CONSOLIDATION OR RECEIVERSHIP

The LDH State Health Officer can bring a civil action against a PWS to carry out the provisions of the state statutes and regulations. The court, on its own or upon application of the state health officer, can appoint a receiver to collect the assets of the system if the system has been abandoned or service has ceased; the operator of the system has failed or refused to comply with administrative orders; or circumstances necessitate the appointment of a receiver based on the state's rules. The court, upon a showing by the system owner or operator of good cause, can dissolve the receivership (RS 40 §5.9C). LDH recognizes that some small water systems face significant financial and operational obstacles and acknowledges that larger systems cannot always easily acquire these systems.



EMERGENCY RESPONSE

Louisiana's statewide Water and Wastewater Agency Response Network (LaWARN) provides water and wastewater utilities with a Mutual Aid Agreement and process for sharing staff and resources statewide in the event of an emergency, in addition to a forum for developing and maintaining emergency contacts and relationships.

Helpful Links to State Resources

- ◆ Louisiana Department of Health: <https://www.ldh.la.gov/>
- ◆ Louisiana Department of Environmental Quality: <https://deq.louisiana.gov/>
- ◆ Louisiana DWRLF: <http://new.dhh.louisiana.gov/index.cfm/page/431/n/285>
- ◆ Louisiana Safe Drinking Water Program: <http://new.dhh.louisiana.gov/index.cfm/page/963>
- ◆ Louisiana Capacity Development: <http://www.dhh.louisiana.gov/index.cfm/page/433>
- ◆ Louisiana Operator Certification Program: <http://dhh.louisiana.gov/index.cfm/page/416>

- Public Health Water Infrastructure Consolidation Initiative: https://ldh.la.gov/assets/oph/Center-EH/DrinkWaterRevolve/DWRLF_Financial/LDH_2019_Consolidation_Initiative_postcard.pdf
- LaWARN: <https://lrwa.org/resources/#LaWARN>

Maine

Maine Department of Health and Human Services, Drinking Water Program (DWP)



State Policies and Programs Regarding Water System Partnerships



DWSRF GRANTS FOR CONSOLIDATION PROJECTS

One of the long-term goals of the Maine DWSRF is to support the consolidation or interconnection of PWSs to improve service or capacity. The Maine DWSRF offers PWS Consolidation Grants to facilitate the consolidation of water systems with a TMF capacity issue into a more viable PWS, with the goal of eliminating the non-viable water system. The maximum amount for this grant is \$100,000 and will cover no more than 50 percent of the cost of a water system's consolidation for for-profit facilities and no more than 75 percent of the cost of a PWS consolidation for not-for-profit facilities. Additionally, Maine DWSRF awards 65 priority points to projects involving the consolidation of non-viable water systems into a more viable water system.



CONSOLIDATION GRANTS

DWP offers an Emerging Contaminant Consolidation Grant and Small Public Water System Emerging Contaminant Grant to enable water systems to address PFAS contamination by consolidating with a PWS with PFAS below the MCL. The Emerging Contaminant Consolidation Grant provides a 100 percent grant for the first \$249,000 of project costs and any additional needs are 50 percent grant up to a maximum grant of \$2,000,000. The Small Public Water System Emerging Contaminant Grant provides up to a \$60,000 grant to cover project costs up to \$50,000 with an additional \$10,000 allotted for engineering fees.



CAPACITY DEVELOPMENT ASSISTANCE

The Capacity Development program uses DWSRF set-aside money to offer Capacity Development grants to water systems for the preparation of plans, studies or reports to help water systems maintain or improve TMF capacity. System consolidation studies are one of the types of studies that is eligible for funding under this grant. Grant funding covers 75 percent of plan or study costs up to \$30,000 and is provided on a reimbursement basis to water systems that have completed approved plans or studies. Water System Consolidation Studies fund consolidation planning efforts. Systems can apply for a Capacity Development Grant for a consolidation study as a group, or each of the systems interested in consolidation can apply for its own Capacity Development Grant for a consolidation study to help the systems obtain capacity prior to the consolidation.



OPERATOR SHARING

Maine's PWS Operator Requirements allow water systems to contract operations out to another utility or water operator contracting firm. DWP maintains a list of contract operators on its website. Additionally, the DWP Capacity Development Training Reimbursement Fund subsidizes costs associated with water system personnel on topics approved by the Board of Licensure of Water System Operators and allows training providers to receive reimbursement for training water system employees, operators, owners, trustees, volunteers, and all licensed water operators.



EMERGENCY RESPONSE

Maine's statewide Water and Wastewater Agency Response Network (MEWARN) provides water and wastewater utilities with a Mutual Aid Agreement and process for sharing staff and resources statewide in the event of an emergency, in addition to a forum for developing and maintaining emergency contacts and relationships. DWP funds the Maine Rural Water Association (MRWA) to provide PWSs with emergency preparedness TA through MEWARN administrative support, maintenance of an emergency contact database, and recruitment of new members. Additionally, MEWARN is developing a Drought/Emergency Response Network comprised of entities/individuals affiliated with bulk water delivery. According to the 2023 Triennial Report to the Governor, 133 public water and wastewater systems have joined the MEWARN between 2010 and 2023. DWP provided \$46,768 to MRWA for emergency preparedness TA and MEWARN administrative support between 2021 and 2023.



EMERGENCY RESPONSE

The Maine Water Utilities Association (MWUA), an association of water systems in Maine that DWP funds through the DWSRF 15 percent Capacity Development set-aside, conducts mini regional tabletop scenario-based exercises that gather regional groups of water system professionals together to work through multiple smaller facilitated emergencies, enabling increased participation and knowledge sharing. MWUA also offers a Helping Hand survey that collects information, experiences, and relevant data from water systems into a centralized database that other water systems can access to inform their decision making.

Additionally, MRWA has received funding from DWP to conduct tabletop exercises that bring together DWP, Maine Department of Environmental Protection (DEP), Maine Emergency Management Agency (MEMA), Maine County Emergency Management Agencies, local emergency responders, and MRWA. The primary goal of the exercises is to enhance the ability of the utilities and other parties to effectively prepare for, manage, and respond to a drinking water emergency. This includes improving the understanding of the water utilities' interdependencies and impacts of loss of drinking water and fire protection services during a disaster.

Helpful Links to State Resources

- ◆ Maine Drinking Water Program: <http://www.medwp.com>
- ◆ Maine DWSRF Financial Resources (DWSRF and other loans and grants): <http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/pws/financialResources.shtml>
- ◆ Maine Capacity Development: <http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/capacityDevelopment.shtml>
- ◆ Maine Contract Operator Guidelines: <http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/PWSOperatorRequirements.shtml>
- ◆ Maine List of Contract Operators: <https://www.maine.gov/dhhs/mecdc/environmental-health/dwp/pws/ContractOperators.shtml>
- ◆ MEWARN: <http://www.mewarn.org/>

Maryland

Maryland Department of the Environment (MDE)

Maryland Department of the Environment Water Supply Program (MDE WSP)

Maryland Water Infrastructure Financing Administration (MWIFA)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

MDE established the Integrated Project Priority System for Drinking Water Capital Projects which outlines the criteria for prioritizing projects for DWSRF funding. MWIFA, a unit of MDE, then administers the funds. According to the criteria, 40 priority points are assigned to projects that include the consolidation of two or more PWSs. Projects that extend water service to an unserved area with individual wells with documented severe water shortage or documented acute/chronic water quality problems will receive 30 priority points.



OPERATOR TRAINING

MDE meets periodically with training and TA organizations such as the Chesapeake section of the American Water Works Association (CSAWWA), Water and Wastewater Operators Association of Maryland, Delaware and DC (WWOA), and The University of Maryland Environmental Finance Center to plan assistance and training and uses various sources of funding to help these institutions develop and offer appropriate training where water systems have the greatest need. MDE is working to have a presence at conferences to meet and build partnerships with these organizations. Currently water system operators provide training to other operators through the water and wastewater operators' short course.



REGIONAL PLANNING

State and local planning processes generally encourage consolidation of small systems to improve system reliability and economy, and encourage the proactive management of water supplies. In 1997, the Maryland Legislature enacted Smart Growth legislation limiting most State infrastructure funding to areas that local governments designate for growth. Through this process, preference for specific State funding, including Drinking Water Revolving Loan Funds, is given to infrastructure improvement projects which are in the Priority Funding Areas. Additionally, counties are required to develop and implement water and sewerage plans to ensure that adequate water supply systems are available, and that expansion and extension of water supplies is orderly and consistent with the local/county land use plans. All new water systems must be incorporated in the County Comprehensive Water and Sewer Plan before an MDE Construction Permit is issued. Water systems are required to develop capacity management plans, the purpose of which are to assist local governments and other owners of community water supply systems in Maryland determine the capacity of their water supply systems and allocate that capacity in a responsible manner.



STATE ORDERED CONSOLIDATION OR INTERCONNECTION

Maryland Environmental Article §9-221 provides authority for MDE to require improvements to water systems that do not provide adequate quantity or quality of water. Under this article, MDE may require the owner of the water system to alter or extend the water supply system or to install a new water supply system.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

According to Maryland Code of Regulations General Requirements (COMAR 26.03.12.03) and Capacity Development Requirements (COMAR 26.04.01.36), proposed new water systems must demonstrate adequate TMF capacity before they can receive a construction permit. Strict TMF requirements prevent the construction of non-viable water systems and may cause projects to consider consolidation to existing systems as an alternative to the establishment of a new water system.



EMERGENCY PLANNING AND RESPONSE

MDE WSP provides guidance, a support network, and TA to water systems during emergencies (e.g., power outage, hurricane, terrorist attack, water contamination). During sanitary surveys, field engineers provide technical support and encourage water systems to develop and update emergency plans. As of 2023, 81 percent of CWSs have an emergency plan of operation. The WSP holds a contract with the Maryland Rural Water Association (MRWA) to help small water systems update their vulnerability assessments and emergency response plans.



EMERGENCY RESPONSE

The Maryland Water/Wastewater Agency Response Network (MDWARN) is a network of utilities helping other utilities to respond to and recover from natural disasters. The MDWARN program provides its member utilities with a standard mutual assistance agreement for sharing emergency resources among members statewide. Through the MDWARN website, a member is able to request equipment that they may need in an emergency, such as pumps, generators, chlorinators, or evacuators.

Helpful Links to State Resources

- ◆ Maryland Department of the Environment Water Supply Program: http://mde.maryland.gov/programs/Water/water_supply/Pages/index.aspx
- ◆ Maryland Water Infrastructure Financing Administration: http://mde.maryland.gov/programs/water/WQFA/Pages/mission_statement.aspx
- ◆ Maryland Capacity Development: http://mde.maryland.gov/programs/Water/water_supply/CapacityDevelopmentResources/Pages/index.aspx
- ◆ Maryland Operator Certification: http://mde.maryland.gov/programs/Water/Water_Supply/Pages/OperatorInformation.aspx/Pages/OperatorGuidance.aspx
- ◆ MDWARN: <https://www.mdwarn.org/>

Massachusetts

Massachusetts Department of Environmental Protection (MassDEP)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Massachusetts' DWSRF program may award priority points for consolidation and restructuring projects. The PWSs must describe the reason for consolidation. Points may be given if the purpose of the project is to eliminate a public health problem or a TMF capacity problem. Points also may be awarded for consolidating a PWS designed to replace a contaminated source instead of treating contamination in the water supply system currently in use.



OPERATOR TRAINING

The MassDEP Drinking Water System (DWS) Management Handbook contains a section on contract operators, with recommendations on what to look for in hiring a contract operator and terms to consider in a contract, including duties, duration, compensation, frequency of visits, and owner and operator responsibilities.



TMF ASSESSMENTS

MassDEP uses a self-administered "Assessing Your Drinking Water Systems Capacity" questionnaire as a first step in evaluating a system's TMF capacity. The questionnaire asks basic questions about a system's existing permanent or emergency interconnections and the willingness to consolidate or connect with neighboring systems.



CONSECUTIVE SYSTEM AGREEMENTS

All consecutive PWSs are required to file an agreement describing the operational responsibilities of the parent and consecutive systems. These agreements help establish successful long-term partnerships between the systems. MassDEP has a consecutive systems fact sheet that includes information on determining responsibilities between systems; registration, identification, evaluation, and agreement protocols; and examples and conditions to include within a Memorandum of Understanding.



EMERGENCY PLANNING AND RESPONSE

MassDEP developed a "Handbook for Water Supply Emergencies" which helps water suppliers prepare their Emergency Response Plan required by 310 CMR 22.04(13). One of the emergency response measures discussed is procuring alternative sources of water, including through interconnections.



EMERGENCY RESPONSE

The Massachusetts Water/Wastewater Agency Response Network (MAWARN) allows public water and wastewater systems in Massachusetts to receive rapid mutual aid and assistance from other PWSs in Massachusetts to restore services damaged by natural or man-made incidents. Public utilities sign the MAWARN standard agreement, which then allows them to share resources with any other public system in Massachusetts that has also signed the standard agreement. MAWARN is available to all public water and wastewater systems in Massachusetts. Participation is voluntary, free, and is not mandated by any local, state, or federal regulation.

Helpful Links to State Resources

- Massachusetts Drinking Water Program: <https://www.mass.gov/topics/drinking-water>
- Massachusetts DWSRF: <https://www.mass.gov/info-details/drinking-water-state-revolving-fund-srf-program>

- MassDEP Drinking Water System Management Handbook: <https://www.mass.gov/files/documents/2016/08/uf/sysmngt.pdf>
- MassDEP Self-Assessment Questionnaire to Assist Small PWSs with Capacity Development: <https://www.mass.gov/doc/self-assessment-questionnaire-to-assist-small-public-water-systems-with-capacity-development-0/download>
- Massachusetts Operator Certification: <http://www.mass.gov/ocabr/licensee/dpl-boards/dw/>
- Consecutive Water Systems: <https://www.mass.gov/doc/consecutive-water-systems-fact-sheet/download>
- Handbook for Water Supply Emergencies: <https://www.mass.gov/doc/guidelines-for-public-water-systems-appendix-o-handbook-for-water-supply-emergencies-0/download>
- MAWARN: <http://mawarn.org/>

Michigan

Michigan Department of Environment, Great Lakes, and Energy (EGLE)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Michigan's DWSRF prioritization system awards a maximum of 100 points to projects that apply for funding. The prioritization system awards up to 20 points for consolidation projects, including five points for each CWS being consolidated and three points for other types of PWSs being consolidated. Additionally, five points are awarded for projects that include infrastructure assets for multiple systems.



CAPACITY DEVELOPMENT ASSISTANCE

EGLE encourages surface water systems to take steps to protect their drinking water sources through the implementation of a Surface Water Intake Protection Program (SWIPP) and completion of a Source Water Protection Plan (SWPP). Through a SWIPP, communities develop partnerships with surrounding communities to identify and take action to protect the area around the intake and the watershed that impacts it. Communities with an approved SWIPP receive priority points on their projects when applying for DWSRF funding. EGLE operates a grant program that provides about \$100,000 annually to support the development of SWIPPs.



PROMOTION OF WATER SYSTEM PARTNERSHIPS

Michigan's Capacity Development Strategy states that the establishment of water supply authorities have been a successful tool for enhancing the TMF capacity of Michigan's PWSs. Water supply authorities are formal agreements between water systems to share resources, while allowing the systems to remain separate organizations. A water supply authority can allow the members to each maintain their own autonomy, while gaining the financial benefits of being part of a larger organization. These water supplies can also share central administrative tasks (such as billing and human resources), along with equipment, and can enable PWSs to purchase equipment they otherwise would not have been able to afford.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

As part of its new system approval process, EGLE requires new privately-owned CWSs to submit proof of refusal to accept ownership or operational responsibility from the governing body of a city, county, village, township, or other governmental entity where the new system would be located. In addition, prior to EGLE issuing a permit, the owner of the privately-owned CWSs must stipulate that it will transfer the ownership and operation of the system to a governing body of a city, village, or township, or its designated public entity if connection to the publicly owned system becomes practical (Michigan Safe Drinking Water Rules R 325.11705-11706. Additionally, EGLE requires new PWSs to provide an analysis comparing the development of the proposed, new PWS to consolidating with an existing, reasonably available PWS alongside its application for a construction permit.



EMERGENCY RESPONSE

Michigan's Water/Wastewater Agency Response Network (MiWARN) is a statewide system of "members helping members" to offer mutual aid during emergency situations. MiWARN facilitates emergency contacts, relationships, and resources needed to respond to and quickly recover from natural or human caused disasters.

Helpful Links to State Resources

- ◆ Michigan Drinking Water Program: http://www.michigan.gov/deq/0,1607,7-135-3313_3675---,00.html
- ◆ Michigan Community Water Supply Program: http://www.michigan.gov/deq/0,4561,7-135-3313_3675_3691---,00.html
- ◆ Michigan DWSRF: http://www.michigan.gov/deq/1,1607,7-135-3307_3515_3517---,00.html
- ◆ Michigan Operator Certification: http://www.michigan.gov/deq/0,1607,7-135-3308_3333_4171-10155--_00.html

- ◆ Michigan Capacity Development: http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3691-61632--_00.html
- ◆ MiWARN: <https://www.mi-water.org/mi-warn##>

Minnesota

Minnesota Department of Health (MDH)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

MDH awards ten priority points for proposed projects that will result in the consolidation of existing public drinking water suppliers and seven priority points to projects that will address a demonstrated need for a new backup well or interconnection with another public water supply. By comparison, projects that will address issues that led to acute violations of maximum contaminant levels (MCLs) or outbreaks of waterborne diseases within the last 36 months will be assigned up to 25 points.



OPERATOR TRAINING

Minnesota has guidelines that allow PWSs to achieve compliance by contracting with an operator that is not a direct employee of the system. MDH must approve all contracts that intend to achieve compliance for certification and must receive an actual copy of the contract. The premise of a contract operator is they must be in direct charge of the water system; however, they can have other people work under their supervision. Contract operators do not necessarily have to perform every day-to-day operating task including sampling. MDH provides guidelines for contracts between water system owners and operators, including a recommendation of the number of visits per week that an operator should make, based on the system's classification. In addition, contracts must include the contract period and duties of the owner and the operator.



AWWA "BIG BROTHER" PARTNERSHIPS

The Minnesota Section of the AWWA helps improve the TMF capacity of struggling PWSs through its "Big Brother" and Peer Review programs. Through "Big Brother" arrangements water system operators at large PWSs with good TMF capacity offer their assistance on operations and maintenance questions to personnel at lower capacity PWSs. In the Peer Review Program, any PWS experiencing difficulties can fill out a comprehensive self-assessment to evaluate its present condition and focus attention on deficient areas in its operation or management. A Peer Review Team, consisting of volunteers from the surrounding communities, operators or managers from other utilities, and customers of the system, is then assigned to review the self-assessment and complete an in-depth evaluation of the system.



EMERGENCY RESPONSE

Minnesota's Water/Wastewater Agency Response Network (MnWARN) is a statewide system of "utilities helping utilities" to address mutual aid during emergency situations. MnWARN assists members with emergency response and recovery, sharing emergency resources, and an emergency contact network.

Helpful Links to State Resources

- ◆ Minnesota Department of Health Drinking Water Protection: <https://www.health.state.mn.us/communities/environment/water/dwp.html>
- ◆ Minnesota Operator Certification: <https://www.health.state.mn.us/communities/environment/water/wateroperator/index.htm>
- ◆ Minnesota Contract Operator Requirements: <https://www.health.state.mn.us/communities/environment/water/wateroperator/requirements.htm>
- ◆ MnWARN: <http://www.mnwarn.org/>
- ◆ Minnesota DWSRF: <https://www.health.state.mn.us/dwrf>
- ◆ Minnesota Administrative Rules: <https://www.revisor.mn.gov/rules/>

Mississippi

Mississippi Department of Health (MSDH)
Public Service Commission of Mississippi (PSC)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

One of the objectives of Mississippi's DWSRF program priority ranking criteria is to use consolidation as a method of correcting PWSs' existing deficiencies and improving its management. The ranking criteria awards priority points based on the number of users who will benefit from the project, and any project that includes consolidation of ownership and management of two or more separate systems receives extra points equal to half the priority points awarded. Mississippi's 2022 Capacity Development Amended Strategy for Existing PWSs states that "the purpose of assigning consolidation points is to promote reliability, efficiency and economy of scale that can be achieved with larger water systems while discouraging the proliferation of numerous separate small systems with their inherent inefficiencies and limitations."



TRAINING AND TECHNICAL ASSISTANCE

MSDH provides DWSRF funding to Mississippi State University Extension Service to coordinate the PEER Review Program, which started in 2002. The voluntary program pairs selected water system operators with other water system operators to assist them in preparing for the annual MSDH inspection and any rule changes. The PEER Review team members are volunteers with experience as PWS operators or managers and are not affiliated with any regulatory agency. The program is geared toward improving water systems' technical operations through peer-to-peer interaction. MSDH has found that PWSs that participate in the PEER Review Program frequently have improvements in their Capacity Assessment scores.



STATE ORDERED CONSOLIDATION OR RECEIVERSHIP

The PSC can petition the Chancery Court in the county where the system is doing business to attach the assets of a privately-owned water system and appoint a receiver if the system is unable or unwilling to adequately serve its customers, has been actually or effectively abandoned by its owner, or has management that is grossly inefficient, irresponsible, or unresponsive to the needs of its customers. The court-appointed receiver must operate the water system in a way that preserves the water system's assets and serves the best interests of the customers. Control of and responsibility for the water system remains with the receiver until the court determines that it is in the best interest of the customers for the system to be returned to the owner, transferred to another owner, assumed by another water system or public service corporation, or liquidated.



ENFORCEMENT ACTIONS TO ENCOURAGE CONSOLIDATION

MSDH assures a safe drinking water supply by strictly enforcing laws and statutes pertaining to the SDWA, operator certifications, overloaded water systems, corrosion control facilities, cross-connection control, and water system member board training. Mississippi's 2022 Capacity Development Amended Strategy for Existing PWSs states that "significant factor in improving the capacity of PWSs in Mississippi has been [MSDH's] stringent enforcement of the requirements of the Federal and Mississippi SDWAs. PWSs with limited TMF capacity have significant difficulty in complying with the requirements of these laws. This stringent enforcement program is a significant factor in encouraging PWSs with limited capacity to merge physically and/or administratively with neighboring systems." Additionally, the Capacity Development Strategy states that the strict enforcement of operator licensure requirements "continues to be a significant factor in encouraging PWSs with limited capacity to merge physically and/or administratively with neighboring systems." In general, MSDH encourages neighboring water systems to consider consolidation when this appears to be the only viable solution for providing safe and adequate drinking water to their customers.



EMERGENCY RESPONSE

The Rural Water Emergency Assistance Cooperative (RWEAC) is a network of independent water/wastewater utilities in Mississippi organized informally as a cooperative to provide a coordinated emergency response effort to assist water/wastewater systems needing assistance in accordance with the terms and conditions of the RWEAC mutual aid agreement. Participation in the RWEAC network is on a voluntary basis. There is no cost to participate.

Helpful Links to State Resources

- ◆ Mississippi Department of Health Bureau of Public Water Supply: http://msdh.ms.gov/msdhsite/_static/30,0,76.html
- ◆ Mississippi DWSRF: http://msdh.ms.gov/msdhsite/_static/44,0,127.html
- ◆ Mississippi Capacity Assessment Reports: https://msdh.ms.gov/msdhsite/_static/30,0,76,63.html
- ◆ Mississippi Water Supply Regulations: http://msdh.ms.gov/msdhsite/_static/30,0,76,225.html
- ◆ Rural Water Emergency Assistance Cooperative: <https://msrwa.org/rweac/>

Missouri

Missouri Department of Natural Resources (DNR)
Missouri Public Service Commission (PSC)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

The Missouri DWSRF program assigns priority points for interconnection and consolidation projects. The DWSRF program awards 20 priority points for interconnection projects to address drought, flooding, or compliance issues. The DWSRF program also awards 20 priority points for consolidation projects, including projects that will allow a PWS to become a regional water supplier, projects that will enable small PWSs to consolidate into a regional water supplier, and projects that will result in a new water distribution system or existing distribution system upgrade to meet the standards of a regional water supplier. The program also awards 10 priority points to projects that addresses a need for a new backup well or a backup interconnection with another PWS. Additionally, the DWSRF program offers Regional Connection Grants for projects that propose regionalization or consolidation. Systems receiving this grant are eligible for additional subsidization in the form of a grant amount of up to \$3 million, not to exceed 50 percent of the total project cost. These projects must propose the connection of a CWS experiencing technical or cost challenges to a nearby existing system or interconnection to a regional wholesale water provider in order to provide safe or adequate drinking water.



FUNDING CONSOLIDATION WITH STATE GRANTS

Missouri DNR's Public Drinking Water Branch offers Engineering Report Services grants to small water systems serving populations of 3,300 or fewer. Participation in this grant program is based on compliance, infrastructure condition, and capacity, as well as willingness of the systems' owner to make a good faith effort to pursue the recommendations of the Engineering Report, including physical, operational, or managerial consolidation options. Engineering contract services provide systems with funding to conduct an entire system evaluation that considers several options, including regionalization and consolidation with nearby water systems, restructuring, operational changes, treatment changes, infrastructure improvements, and other TMF improvements. Systems that consider regionalization offers receive priority points in the DWSRF priority ranking criteria. Additionally, existing systems that are applying for funding must submit engineering reports that include an evaluation and cost estimate for each alternative, including consolidation and regionalization. Eligible applicants may receive an 80 percent grant with a 20 percent recipient match with a maximum grant amount of \$30,000. Applicants qualifying as disadvantaged may receive a 100 percent grant with a maximum grant amount of \$37,500.



OPERATOR SHARING

Missouri DNR hosts an online Operator Certification Database with information about certified operators who are willing to contract with owners of water systems in the state. Water system owners can use the database to search for nearby operators by county that are certified at the desired level. In addition, operators can search the database for water systems that either have no operator listed or list an operator who is not properly certified.



TRAINING AND TECHNICAL ASSISTANCE

Missouri DNR contracts with Missouri Rural Water Association to provide technical experts, also known as circuit riders, to assist mostly small public drinking water systems with TMF capacity needs regarding water loss, rate assistance, water treatment, asset management, distribution mapping, natural disasters, operator certification, board member roles and responsibilities, and source water protection. Missouri DNR also conducts a voluntary biennial electronic survey to measure the success of water systems' TMF capacity activities, identify TMF challenges, collect stakeholder input, and provide PWSs an opportunity to express their interests for assistance, including assistance on consolidation and regionalization projects.



ENCOURAGING SYSTEM CONSOLIDATION

Missouri DNR utilizes communication strategies to promote the consolidation and regionalization of Missouri's water and wastewater systems. Missouri DNR continues to develop and revise publicly available online maps, fact sheets, and templates for water systems to explore consolidation and regionalization opportunities, and to promote their benefits.

Additionally, Missouri DNR operates an Issued Drinking Water Permits table where users can search for PWSs in their area. Users can view the permits that neighboring systems have been issued and collect their contact information to inquire about potential regionalization or consolidation partnerships.



STATE ORDERED CONSOLIDATION OR RECEIVERSHIP

Missouri Revised Statutes (MRS) stipulate that the Missouri PSC can petition a circuit court for an order to attach the assets of an 8,000 or fewer customer water utility and place it under the control of a water system receiver if it is unable or unwilling to provide safe and adequate service, has been abandoned by its owners, or has defaulted on any financial obligation owed to a unit of state government. The receiver must operate the system in the best interests of the customers and must attempt to preserve the assets of the system until further notice from the court. After a hearing, the court must determine whether to return control and responsibility of the system back to its owners or order the receiver to liquidate the assets of the system (MRS § 393.145).



EMERGENCY RESPONSE

The Missouri Water / Wastewater Agency Response Network (MoWARN) is a statewide mutual aid response network to help utilities better handle emergencies. It is part of a nationwide program sponsored by the AWWA. In the event of an emergency such as flood, severe weather, fire, explosion, hazardous materials spills, contamination, and more, the MoWARN network provides emergency response 24/7 to utilities who cannot fully mitigate the situation alone. The benefits of MoWARN include assistance from utilities statewide, emergency response sharing and the ability to respond and recover more quickly from natural and man-made disasters.

Helpful Links to State Resources

- ◆ Missouri Operator Certification: <http://www.dnr.mo.gov/env/wpp/opcert/oprtrain.htm>
- ◆ Contract Operator Form: <https://dnr.mo.gov/document-search/contract-operator-form-mo-780-2002>
- ◆ Missouri Revised Statutes: <http://revisor.mo.gov/main/Home.aspx>
- ◆ Capacity Development Program: <https://dnr.mo.gov/water/business-industry-other-entities/technical-assistance-guidance/public-drinking-water-systems/capacity-development>
- ◆ Missouri DWSRF: <https://dnr.mo.gov/water/business-industry-other-entities/financial-opportunities/financial-assistance-center>
- ◆ Engineering Report Services Grant Application: <https://dnr.mo.gov/document-search/engineering-report-services-grant-program-application-mo-780-2177>
- ◆ MoWARN: <https://mowarn.org/>
- ◆ Issued Drinking Water Permits: <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/public-drinking-water-systems/issued>

Montana

Montana Department of Environmental Quality (MDEQ)
Montana Department of Natural Resources and Conservation (DNRC)
Public Water Supply Bureau (PWSB)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

The Montana DWSRF Priority List ranking criteria awards 30 points to projects that involve the consolidation of a regional public water supply that would serve two or more existing public water supplies. MDEQ has a goal of funding regionalization projects that would increase the TMF capacity of the overall system, would result in some improvement to public health, or bring a PWS into compliance with the SDWA. Additionally, PWS applicants lacking in TMF capacity or compliance may still be eligible for a loan if the loan agreement will address the non-compliance, or the system agrees to undertake feasible and appropriate changes in operations such as consolidation or use of an alternative water supply.



OPERATOR TRAINING

MDEQ created a new innovative facility-based training for operators that is designed to provide an opportunity for operators to earn continuing education credits during TA visits at their own systems through approved training providers. The PWSB hopes to reduce systems annual training costs, improve training quality that is specific to each individual system, document critical operational information for system reference, and expand the partnership between MDEQ and other TA entities across the large rural state.



CAPACITY DEVELOPMENT ASSISTANCE

Montana's Capacity Development strategy includes primary tools implemented by MDEQ for identifying and prioritizing systems in need of capacity development assistance. This strategy includes technical support from the Midwest Assistance Program (MAP), Montana Rural Water Systems (MRWS) and Rural and Tribal Environmental Solutions (RATES). Members of MAP, MRWS and RATES routinely visit sites throughout Montana and can identify systems in need of capacity development assistance. MDEQ PWS, MAP, MRW and RATES all have approved training providers on staff and have partnered with MDEQ PWS to bring facility-based training opportunities to fruition. MDEQ feels the incentive of potentially earning continuing education credits (CECs) while completing facility-based capacity development training with emphasis on the five-core question framework of asset management will entice water system participation across Montana.



REGIONAL PLANNING

The Montana DNRC supports four main regional water authorities and participates in the review and implementation of regional water planning. These four regional systems are the Fort Peck Dry Prairie Rural Water System, the Rocky Boy's North Central Montana Regional Water System, the Musselshell-Judith Regional Water System (Central Montana Regional Water Authority), and the Dry-Redwater Regional Water Authority. The four systems maintain partnerships with local tribes and government agencies, and have relied on funding from local communities, the U.S. Bureau of Reclamation, Montana DNRC, the State of Montana, the DWSRF and other federal and tribal grant programs. This funding helps small systems address challenges from drought, aging infrastructure, and increasing costs.



EMERGENCY RESPONSE

The Montana Water/Wastewater Agency Response Network (MTWARN) provides water and wastewater utilities with a Mutual Aid Agreement and process for sharing staff and resources statewide in the event of an emergency, in addition to a forum for developing and maintaining emergency contacts and relationships.

Helpful Links to State Resources

- Public Water Supply Program: <https://deq.mt.gov/water/Programs/dw>
- Montana Operator Certification: <https://deq.mt.gov/water/assistance>
- Montana Water Quality Resources : <https://deq.mt.gov/water/resources>

- ◆ Montana's Regional Water Systems: <https://dnrc.mt.gov/Conservation/Conservation-Programs/regional-water>
- ◆ Montana SRF: <https://dnrc.mt.gov/Conservation/Grant-and-Loan-Programs/Loans/State-Revolving-Fund-Loans>
- ◆ MTWARN: <https://montanawarn.wordpress.com/>

Nebraska

Nebraska Department of Environment and Energy (NDEE) – Drinking Water Division



State Policies and Programs Regarding Water System Partnerships



TRAINING AND TECHNICAL ASSISTANCE

The NDEE Drinking Water Division integrates with TA providers and other regulatory agencies to collect information for analysis and identify opportunities to address water system deficiencies. In addition to the water operator training classes offered by the NDEE Drinking Water Division, additional trainings are held in collaboration with the "2 percent Team," a subset of partners that receive set-aside DWSRF funding to provide TA to PWSs serving 10,000 people or less as well as water systems that are on the 2 percent Priority List, which are PWSs most in need of TA. Partners include the Midwest Assistance Program (MAP), Nebraska Rural Water Association (NeRWA), the Nebraska Section of the AWWA (NSAWWA), League of Nebraska Municipalities (LoNM), Nebraska Central Community College (CCC), and Wichita State Environmental Finance Center. TA activities include supporting the development of operator skills and knowledge, assisting systems in meeting regulatory requirements, and developing asset management plans.



REGIONAL PLANNING

The NDEE encourages consolidation of existing systems and requires new CWSs and NTNCWSs to demonstrate TMF capacity before issuing operating permits. The NDEE also supports purchasing water from an existing system by encouraging prospective new CWSs or NTNCWSs to consider alternatives to becoming new systems. As part of the process of approving a new CWS, NDEE requires the prospective to complete a Community Public Water System Capacity Survey. The survey asks systems if they have a plan for an alternate water source, if needed, such as an emergency connection, regionalization, or purchasing water.

Additionally, the NDEE Drinking Water Division requires that any PWS serving 500 or fewer persons seeking funding from the DWSRF shall self-certify that they have considered an alternative drinking water supply from a drinking water delivery system sourced by publicly owned individual wells, shared wells and community wells.



EMERGENCY RESPONSE

Nebraska's Water/Wastewater Agency Response Network (NEWARN) is a statewide system of "utilities helping utilities" that supports public and private water and wastewater utilities to prepare for natural and human caused events in the Commonwealth. NEWARN provides utilities with a Mutual Aid Agreement and process for sharing emergency resources, in addition to a forum for water systems and agencies to maintain emergency contacts and relationships.

Helpful Links to State Resources

- ◆ Nebraska Department of Environment and Energy – Drinking Water Division: <http://dee.ne.gov/NDEQProg.nsf/WaterHome.xsp>
- ◆ Public Water Supply Program: <http://deq.ne.gov/NDEQProg.nsf/OnWeb/PWS>
- ◆ Nebraska Capacity Development: <http://dee.ne.gov/NDEQProg.nsf/OnWeb/PWS-CD>
- ◆ NEWARN: <http://newarn.org/>

Nevada

Nevada Division of Environmental Protection (NDEP)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION AND PRINCIPAL FORGIVENESS OF CONSOLIDATION PROJECTS

Nevada's DWSRF program ranks projects by priority points in order to determine how to award principal forgiveness for systems applying for DWSRF loans. Nevada awards 10 points to systems for consolidation into another PWS(s) if the assistance will ensure that the system returns or is able to maintain to a state of adequate TMF capacity. Nevada's DWSRF program evaluates systems that are addressing capacity deficiencies through physical or managerial consolidations as disadvantaged communities, enabling them to receive benefits such as principal forgiveness, negative interest loans, and grants.



TMF ASSESSMENTS AND SYSTEM CONSOLIDATION COORDINATION MEETINGS

One of the major objectives of Nevada's Capacity Development Strategy is to encourage partnerships between systems. One of the ways the state encourages water system partnerships is through a TMF Capacity Survey, which is used to assess overall system capacity and DWSRF eligibility. The TMF Capacity Survey asks if the system would be interested in consolidating either physically or managerially with another PWS, whether a feasibility study has been conducted, and if consolidation has been found to be a feasible option.



TECHNICAL ASSISTANCE TO SUPPORT CONSOLIDATION

NDEP also uses TA as an opportunity to encourage system consolidation. NDEP contracts with TA providers to provide TMF development support for PWSs with the greatest needs. This includes training operators and managers on how to develop core system plans to become better prepared for potential hardships and educating systems on the benefits of consolidating resources, either physically or managerially. NDEP also supports coordination meetings in which TA vendors, water system managers, and NDEP discuss the possibility of managerial or physical consolidation to build long-term capacity.



REGIONAL PLANNING OF SOURCE WATER PROTECTION

Nevada has continued to implement an Integrated Source Water Protection Program to address groundwater quality and quantity challenges facing many areas in the state. The NDEP's Bureau of Safe Drinking Water administers the Integrated Source Water Protection Program (ISWPP) and helps communities develop and implement Community Source Water Protection Plans (CSWPPs). Local CSWPPs require coordinated planning among all PWSs within a specific county to examine shared water sources, evaluate community development impacts to those sources, and discuss how to collectively manage potential risks from a broader perspective. This provides opportunities for a wide array of PWSs, from mobile home parks to larger districts and municipalities, to leverage resources and promote community-wide awareness and acceptance of the plan.



EMERGENCY RESPONSE

Nevada's Water/Wastewater Agency Response Network (NvWARN) is a statewide system of "utilities helping utilities" or "peer-to-peer approach" to incident response and recovery. NvWARN increases planning and coordination. NvWARN assists members with information exchange, identification of AWWA professional crew listings, and access to water professionals with training and experience to solve emergencies.

Helpful Links to State Resources

- ◆ Nevada Operator Certification: <https://ndep.nv.gov/water/operator-certification>
- ◆ Nevada Capacity Development: <https://ndep.nv.gov/water/financing-infrastructure/capacity-development>

- ◆ Nevada Source Water Protection: <https://ndep.nv.gov/water/source-water-protection>
- ◆ Drinking Water Regulations: <https://www.leg.state.nv.us/NRS/NRS-445A.html#NRS445ASec235>
- ◆ Capacity Development Survey: https://ndep.nv.gov/uploads/water-financing-srf-capacitydevelopment-docs/nv_tmf_capacity_survey_fy12.pdf
- ◆ NvWARN: <https://www.nvwarn.org/>

New Hampshire

New Hampshire Department of Environmental Services (NHDES)

New Hampshire Department of Drinking Water and Groundwater Bureau (DWGB)

New Hampshire Public Utility Commission (PUC)



State Policies and Programs Regarding Water System Partnerships



FUNDING CONSOLIDATION WITH STATE FUNDS

New Hampshire's DWSRF program offers priority points for consolidation and interconnection projects. New Hampshire awards 30 priority points for projects that consolidate two or more PWSs resulting in the inactivation of at least one PWS and for projects that connect existing homes that have contaminated or inadequate water supply to SDWA-compliant water sources. Additionally, New Hampshire awards 20 priority points to projects that interconnect two or more PWSs and supplement water supply between PWSs and 15 priority points to projects that interconnect two or more PWSs for emergency water supply.



FUNDING CONSOLIDATION STUDIES

New Hampshire's Drinking Water and Groundwater Trust Fund (DWGTF) offers planning grants for small CWSs to evaluate the feasibility and cost-effectiveness of connecting to another CWS. The insight gained from feasibility studies will inform small water systems of the best long-term options for maintaining a safe reliable drinking water supply for their customers. Receipt of the grant does not require the system to commit to an interconnection. These grant awards are intended to recognize the unique challenges small CWSs face in complying with current drinking water quality standards and emerging contaminants, maintaining qualified managerial and technical staff, and cultivating financial capacity. Eligible applications include CWSs serving up to 1,000 people and nonprofit, NTNCWSs. The DWGTF offers a maximum \$10,000 grant award per eligible water system for this grant.



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS AND TMF ASSESSMENTS

NHDES identifies PWSs in need of significant TMF assistance through the Capacity Development program through sanitary surveys, referrals from contract operators, requests from water systems, customer complaints, and repeat enforcement or non-compliance. The state notifies these systems of recommended improvements in site visit reports or sanitary survey reports, and the systems are entered into a "capacity development tracking database." When applying for DWSRF funding, systems that are being tracked on the database that address recommendations by the DWGB through the Capacity Development program are awarded 20 priority points.



OPERATOR CERTIFICATION PROGRAM

The NHDES Water Works Operator Certification Program regularly engages with partners and stakeholders in the water works industry and regulatory colleagues on a local and regional basis. The NHDES Drinking Water Operator Certification Program participates in the New England Water Works Association's (NEWWA) Operator Certification Committee. The mission of the Committee is to facilitate communication between agencies responsible for certification of water utility personnel, to work toward the acceptance of core certification program requirements, and to promote essential training to meet those requirements. The Committee is comprised of drinking water operator certification officials from each of the New England States, a member of the US EPA, staff from the New England Water Works Association, and practicing drinking water operators.



STATE ORDERED CONSOLIDATION OR RECEIVERSHIP

Under New Hampshire Revised Statutes Annotated 374:47, the New Hampshire PUC may appoint a receiver when the PUC finds that a PWS is failing to provide adequate and reasonable service and that the failure presents a serious and imminent threat to the health of the community, or when a regulated system is consistently failing to provide adequate and reasonable service. The PUC staff or appointed receiver have the authority to assess and manage all system assets and records. NHDES has the authority to investigate public water supplies and to require improvements. A NHDES Investigation is required when ten or more people report water quality or quantity concerns for a particular water system. If the Department determines that an extension of water service from an existing PWS is the most feasible and cost-effective alternative; that the extension is consistent with municipal master planning, rules, and policy; and that the existing PWS has adequate capacity to serve the problem area, the NHDES can order an existing system to allow the connection.



EMERGENCY PLANNING

DWGB programs include regular outreach activities for source water protection and emergency preparedness assistance to community PWSs, especially municipalities and village districts. In SFY 2023, DWGB held an annual source protection conference with 160 local officials and water operators in attendance. DWGB provided outreach on cybersecurity to CWSs through webinars, direct emails with links to resources and a PWS cybersecurity webpage, and created a cybersecurity implementation grant program, among other activities.

Helpful Links to State Resources

- ◆ New Hampshire Drinking Water Site: <https://www.des.nh.gov/water/drinking-water>
- ◆ NHDES Small Public Water Supply Help Center and Capacity Assurance: <https://www.des.nh.gov/water/drinking-water/public-water-systems/small-pws-help-center>
- ◆ New Hampshire Operator Certification and Training: <https://www.des.nh.gov/water/drinking-water/public-water-systems/operator-certification>
- ◆ New Hampshire Capacity Development: <https://www.des.nh.gov/water/drinking-water/public-water-systems/capacity-development>
- ◆ Drinking Water Grants: <https://www.des.nh.gov/business-and-community/loans-and-grants/drinking-water>
- ◆ Drinking Water and Groundwater Trust Fund: <https://www.dwgtrf.des.nh.gov/>
- ◆ Planning Grants for Small Systems: <https://www.dwgtrf.des.nh.gov/funding-programs/planning-grants-small-systems>

New Jersey

New Jersey Department of Environmental Protection (NJDEP)
New Jersey Infrastructure Bank (NJ I-Bank)
New Jersey Board of Public Utilities (BPU)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

The New Jersey Water Bank is a partnership between the NJDEP and the NJ I-Bank to provide low-cost financing for the design, construction and implementation of projects that help protect, maintain and improve water quality. Publicly owned CWSs, including CWSs owned by water commissions, water supply authorities and water districts, as well as privately owned and nonprofit noncommunity PWSs, are eligible for Water Bank assistance. A project must be assigned points to be eligible for funding. Projects involving the purchase and/or consolidation of a water system to comply with the SDWA for capacity development reasons receives 165 priority points. Projects that involve the construction of new or rehabilitation of existing interconnections between water systems to improve water pressures to maintain safe levels, promote availability of alternative source of supply, or to ensure compliance with the SDWA receive 30 priority points.



ENCOURAGING SYSTEM PARTNERSHIPS THROUGH NETWORKING

New Jersey's Capacity Development program encourages the development of partnerships between PWSs to enhance their TMF capacity by sponsoring trainings, workshops, and other opportunities for interaction among water systems. This interaction provides the opportunity for networking among the different sizes and types of systems. The Capacity Development program also encourages large systems to invite small system representatives to their training sessions when appropriate. In addition, the Capacity Development program promotes the interaction of similar size PWSs to discuss and learn from peers demonstrating adequate TMF capacity through seminars and roundtable sessions.



AREA-WIDE OPTIMIZATION

NJDEP participates in the AWOP, a partnership between EPA, state agencies, and supporting organizations. AWOP promotes capacity development in water systems through treatment process optimization. The program also provides technical training to NJDEP staff.



REGIONAL PLANNING

NJDEP is supporting the development of the Resilient Northeastern NJ program. This program is a collaborative effort between municipal, county, and state representatives, community-based organizations, and community members to identify and implement strategies to improve long-term climate resilience in the region. The NJDEP's role in this program involves researching, reviewing, investigating, mapping, and documenting infrastructure gaps and the interconnectedness of the large water systems in the state's northeast region. A team consisting of staff with a wide range of knowledge and expertise has been developed to implement the initiatives of this high priority project.



STATE ORDERED CONSOLIDATION OR RESTRUCTURING

NJDEP encourages consolidation of water systems when assistance through the capacity enhancement process cannot meet minimum capacity standards. In some cases, the NJDEP may pursue the acquisition of any failing water system in accordance with the Small Water Company Takeover Act (N.J.S.A. 58:11-59). Through an administrative hearing process, the NJDEP and the BPU can take actions, including acquisitions, and require expenditures to make necessary improvements at small water systems that are in noncompliance with water quality regulations or that have failed to comply with an order of the NJDEP. At the hearing, the NJDEP must issue an Administrative Consent Order that: sets forth a schedule for compliance for the acquiring entity; stipulates that the acquiring entity is not liable for any fines and penalties resulting from the violations that caused the acquisition provides for the immediate inclusion in the rates of the acquiring entity the anticipated costs of necessary improvements; authorizes the acquiring entity to commence eminent domain proceedings; revokes the franchise of the acquired entity; and renders the owner or operator of the acquired entity unfit to hold any other water franchise.

Helpful Links to State Resources

- ◆ New Jersey Department of Environmental Protection Division of Water Supply and Geoscience: <http://www.nj.gov/dep/watersupply/>
- ◆ New Jersey Infrastructure Bank: <https://www.njib.gov/>
- ◆ NJDEP Operator Training and Certification: http://www.nj.gov/dep/watersupply/dws_train.html
- ◆ New Jersey Capacity Development Program: http://www.nj.gov/dep/watersupply/dws_loans_capdev.html
- ◆ Resilient Northeastern NJ: <https://www.resilient-nj.com/>

New Mexico

New Mexico Environment Department (NMED) - Drinking Water Bureau (DWB)
New Mexico Finance Authority (NMFA)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

The NMED DWSRF Priority Ranking System ranks eligible projects within six categories to determine their selection for funding. Within the regionalization category, ten priority points are awarded to projects that assist in the formation of a regional water system in accordance with the New Mexico Regional Water System Resiliency Act. PWSs that have completed the formation of a regional water authority in accordance with the New Mexico Regional Water System Resiliency Act receive five additional priority points for their projects. Five priority points are awarded to projects seeking to consolidate or connect two or more PWSs that will begin to operate as one system, projects that extend water service to existing homes not currently being serviced by a centralized water system, and projects that provide an emergency interconnection to another PWS. Finally, PWSs that participate in a regional sharing of resources with other PWSs receive three additional priority points. New Mexico also makes funding from the local assistance and other state programs set-aside available to capacity development and assistance efforts, including regionalization and collaboration projects.



TRAINING AND TECHNICAL ASSISTANCE

The NMED Sustainable Water Infrastructure Group (SWIG) is responsible for providing training, community planning, and infrastructure development assistance to PWSs through the implementation of the DWSRF and other funding. SWIG is comprised of six teams, one of which is the Regionalization and Sustainability Team. This team was created to promote regionalization efforts, establish sustainable solutions, and incorporate resiliency into infrastructure projects. The team establishes various resource hubs to encourage collaboration and resource sharing between PWSs. The efforts of this team are focused on sustainable resilient solutions to adapt to changing conditions including increased regulations, fewer operators and board members, and changing climate conditions. The team collaborates with numerous stakeholders to build support for regionalization through collaboration, assistance, and information sharing. SWIG holds regional outreach events to provide a comprehensive picture of water system sustainability in regional outreach settings. Collaborative efforts of the Assessment and Policy, Regionalization and Sustainability, Source Water Protection, and Capacity Support teams have been targeted to educate PWSs about impending regulatory changes, capacity development, and resiliency. Presentations cover topics related to emergent contaminants, the Revised Lead and Copper Rule, source water protection, sustainable development, regionalization, and capacity building. The presentations focus on educating PWSs to increase awareness of the regulatory landscape, identify funding options, and how to become a fundable water system. All SWIG teams also provide trainings at operator schools and conferences hosted by NM Rural Water Association and the NM Water and Wastewater Association.



REGIONAL PLANNING

The Sanitary Projects Act (SPA) governs the formation of Mutual Domestic Water Consumer Associations (MDWCA). Under the 2006 revisions to the SPA, a new MDWCA cannot be formed if it is adjacent to a municipal water system that is able to provide water to the proposed service area of the new system at or below the cost of the new system. Figure 6 describes a water system partnership involving the consolidation of MDWCAs.



REGIONAL PLANNING

In 2023, New Mexico passed the Water Security Planning Act, a law designed to reinvigorate regional water planning around the challenge of projected reductions in supply. The Act created a roadmap for regionalized water planning and implementation that prioritizes the unique needs of local communities, makes use of the best available science and data, and maintains compliance with federal and state laws. As part of the Act, New Mexico created a new campaign, Main Stream New Mexico, to share information and collect input to establish new rules and guidelines to revitalize regional water planning. Additionally, New Mexico has developed a 50 Year Water Action Plan and New Mexico Water Plan 5 Year Review as part of these regional planning efforts.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

The NMED New Mexico Drinking Water Regulation 20.7.10.201.F and NMFA require PWSs to demonstrate adequate capacity prior to receiving DWB approval for new system construction and operation. As part of demonstrating adequate capacity, the PWS must explain why consolidation with a nearby system is not feasible.



EMERGENCY RESPONSE

The New Mexico Water/Wastewater Agency Response Network (NMWARN) is a private, voluntary agreement between systems to help each other out in emergency situations. This agreement sets out rules which will govern the request and provision of assistance by drinking water and wastewater WARN members during emergencies. Membership is open to all drinking water and wastewater utilities in New Mexico, public or private, and there is no cost to execute the agreement and join the NMWARN. Membership will allow any utility to request assistance or provide assistance during both man-made and natural emergencies.

The Lower Rio Grande Public Water Works Authority (LRGPWWA) started with the merger of five mutual domestic associations in 2009. As of 2024, the LRGPWWA consists of twelve water systems in five separate areas providing service to sixteen communities in the area south of Las Cruces and recognizes such benefits as a larger customer base to share costs, increased purchasing power, and a larger pool of available resources, among other benefits. More information on the LRGPWWA can be found in the EPA case study linked to below:

<https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=0df3d9ef64fd429685f317032f07c6e5>

Figure 6: Description of Lower Rio Grande Public Water Works Authority Partnership Activities (Source: <https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=0df3d9ef64fd429685f317032f07c6e5>)

Helpful Links to State Resources

- ◆ New Mexico Drinking Water Bureau: https://www.env.nm.gov/drinking_water/
- ◆ Drinking Water Bureau Managerial and Financial Assistance: https://www.env.nm.gov/drinking_water/community-services/
- ◆ New Mexico Technical Services: https://www.env.nm.gov/drinking_water/technical-assistance/
- ◆ New Mexico DWSRF: <https://www.nmfinance.com/water-project-fund/drinking-water-state-revolving-loan-fund/>
- ◆ NMWARN: <https://nmrwa.org/nmwarn/>
- ◆ Main Stream New Mexico: <https://mainstreamnm.org/>

New York

New York State Department of Health (NYSDOH)
New York State Environmental Facilities Corporation (EFC)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

Under the DWSRF program, NYSDOH promotes consolidation, regionalization, and interconnections for PWSs to enhance their TMF capacity. Systems that apply for DWSRF funding must carefully consider if interconnection will address the scope of the project with respect to its priority health ranking. If a system decides not to pursue a possible interconnection, it must provide a detailed justification "that the interconnection is a technically, financially, or managerially disadvantageous option." In addition, the small systems TA set-aside fund encourages small water systems to consider regional and collaborative approaches like consolidating, forming partnerships, and O&M agreements. NYSDOH awards 40 priority points to projects involving the development of a water system or extension of an existing system to service contaminated or insufficient yielding private wells at existing residential housing and 25 priority points to projects involving consolidation of water systems.



FUNDING CONSOLIDATION WITH STATE FUNDS

NYSDOH, along with the EFC, implement the Water Infrastructure Improvement Act (WIIA) and Intermunicipal Grant (IMG) programs, which provide funding to support drinking water and wastewater infrastructure improvements throughout New York State. IMG grants are available for projects that serve multiple municipalities, including projects that promote shared water quality infrastructure and interconnections.



ENCOURAGE AND EXPLORING SYSTEM CONSOLIDATION

NYSDOH encourages partnerships, such as restructuring or contract management, when two or more water systems can benefit from this arrangement. According to its 2023 Capacity Development Report, New York has formed a multiagency committee to explore opportunities to consolidate private water systems with PWSs.

The NYSDOH's Small Systems Program assists communities in applying for DWSRF funding and performing technical assessments. In addition, the Small Systems Program encourages small water systems to consider collaborative or regional approaches to water supply services, such as consolidating, forming partnerships, and initiating contract operation and maintenance agreements.



CAPACITY DEVELOPMENT ASSISTANCE

The NYSDOH uses a data management system to evaluate system capacity against certain criteria established in the Capacity Development Program Strategy Report. This system helps identify which systems are in need of capacity development. In consultation with local health department staff, select systems identified as being in "critical" need of capacity development are given direct assistance from either the state or local health department, or from one of NYSDOH's partners. Such assistance may include engineering support, training, system consolidation, or help with applying for funding.



AREA-WIDE OPTIMIZATION

The Drinking Water Source Protection Program (DWSP2) is a statewide initiative to provide municipalities with resources and tools to proactively protect their drinking water sources by building a comprehensive, sustainable DWSP2 Plan. This is a collaborative effort between the Department and the New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of State (NYSDOS) and the New York State Department of Agriculture and Markets (NYSAGM). State staff help communities by creating or strengthening stakeholder groups, updating source water assessments and maps, identifying protection and implementation strategies, and assisting with plan management. As of 2022, 64 municipalities have worked towards 13 creating action-oriented, community-driven DWSP2 Plans to protect their drinking water sources.



EMERGENCY RESPONSE

New York's Water/Wastewater Agency Response Network (NYWARN) is a statewide organization designed to provide utility to utility response during an emergency. The NYWARN program provides its member utilities with emergency planning and response and recovery information before, during and after an emergency. Benefits for members include standard omnibus mutual assistance agreement and process for sharing emergency resources among members statewide and a forum for developing and maintaining emergency contacts and relationships.

Helpful Links to State Resources

- ◆ New York State Department of Health: <https://www.health.ny.gov/>
- ◆ New York State Department of Health Drinking Water Protection Program: <http://www.health.ny.gov/environmental/water/drinking/>
- ◆ New York State Environmental Facilities Corporation: <https://efc.ny.gov/>
- ◆ New York Operator Certification: <http://www.health.ny.gov/environmental/water/drinking/operate/opcertfs.htm>
- ◆ New York Capacity Development: <http://www.health.ny.gov/environmental/water/drinking/capacity/>
- ◆ Final IUP – DWSRF: <https://health.ny.gov/environmental/water/drinking/water.htm>
- ◆ Water Infrastructure Improvement & Intermunicipal Grants: <https://efc.ny.gov/wiia>
- ◆ NYWARN: <https://www.nywarn.org/>

North Carolina

North Carolina Department of Environmental Quality (DEQ)
Public Water Supply Section



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION AND PRINCIPAL FORGIVENESS OF CONSOLIDATION PROJECTS

The North Carolina DWSRF Priority Rating System provides priority points for several types of consolidation projects. Projects whose sole purpose is to consolidate a non-viable public water supply or wastewater system receive 25 priority points. Projects that include a system merger receive 10 points and projects that involve system regionalization and/or system partnerships receive 5 points. Projects that create a new interconnection between systems not previously interconnected or create an additional or larger interconnection between two systems already interconnected which allows one system's public health water needs to be met during an emergency receive 5 points. Projects that involve any other type of interconnection receive 5 points.

Projects that eliminate a non-viable system to benefit a disadvantaged community with a financial need consistent with fund criteria and served by a public drinking water system will receive principal forgiveness for the full amount of the loan up to \$3,000,000. In this context, a disadvantaged community is a community served by a PWS that lacks capacity as defined in the SDWA, Sections 1420 and 1452(a)(3).

Additionally, the DWSRF offers principal forgiveness loans to water systems with adequate capacity who take over failing systems with long-term compliance issues. Through these efforts, the DWSRF Program consolidated 27 failing systems serving about 1,504 consumers between 2004 and 2023.



FUNDING CONSOLIDATION WITH STATE GRANTS

The DEQ Merger/Regionalization Feasibility grants were created in Session Law 2015-241, to broaden the use of grant funds to encourage water and wastewater utilities to improve system management and financing. Up to \$50,000 can be awarded to studies that evaluate the potential consolidation of two or more water systems, or interconnections with other systems for regional water supply or wastewater treatment. Figure 7 provides a link to a database and map showing physical interconnections between water systems in North Carolina.



AREA-WIDE OPTIMIZATION

The Public Water Supply Section has participated in the AWOP since 2000 and works cooperatively with water systems to use existing equipment and treatment processes to improve or optimize water quality. Public Water Supply Section employees, AWOP participants from other states, regulatory programs, EPA representatives, and water system operators participate in activities with host water systems to optimize their capabilities and allow participants to share and increase their knowledge of water treatment facilities. Additionally, North Carolina maintains a Wellhead Protection Program (WHPP), which is "a voluntary program intended for city and county governments and water supply operators that wish to develop and implement a plan to provide added protection to local ground water supplies." A local WHPP Plan requires the development of a contingency plan for responding to disruptions of the public water supply caused by contamination, which often includes establishing agreements with neighboring water systems for the provision of water during emergencies and thus encourages the development of partnerships between PWSs. Once a Wellhead Protection Program is in place, continued administration of the program is necessary in order for it to be successful.



EMERGENCY RESPONSE

North Carolina WaterWARN (NC WaterWARN) is a Water/Wastewater Agency Response network, a group of utilities committed to helping each other conduct response and recovery operations. NC WaterWARN provides member utilities a voluntary mutual aid and assistance network to combat water-related incidents throughout the State of North Carolina and an organized system for requesting assistance in the form of personnel, emergency equipment, materials and other required resources. Any drinking water or wastewater organization, public or private, may join NCWaterWARN. There is no size requirement for a utility to participate in the agreement. While being a completely voluntary association, NCWaterWARN can be utilized in times of crisis, even without a disaster declaration. During a declared disaster, NCWaterWARN integrates with the state's Emergency Operations Center.

Helpful Links to State Resources

- ◆ North Carolina Department of Environmental Quality: <https://www.deq.nc.gov/about-deq>
- ◆ Public Water Supply Section: <http://www.ncwater.org/pws/>
- ◆ Merger/Regionalization Feasibility Grants: <https://deq.nc.gov/about/divisions/water-infrastructure/i-need-funding/mergerregionalization-feasibility-grants>
- ◆ North Carolina Capacity Development: <http://deq.nc.gov/about/divisions/water-resources/drinking-water/capacity-development>
- ◆ NC WaterWARN: <https://www.ncrwa.org/nc-waterwarn.html>
- ◆ Map of North Carolina CWS Interconnections (prepared by UNC Environmental Finance Center, data from August 2015): <https://efc.sog.unc.edu/resource/interactive-map-of-community-water-system-interconnections-in-north-carolina/>

The Public Water Supply Section has worked with the University of North Carolina Environmental Finance Center (EFC) to develop and maintain a comprehensive database and interactive map of all of the physical interconnections between water systems in the state of North Carolina.

This and other partnerships resources from UNC EFC are located here: <https://efc.sog.unc.edu/>.

Figure 7: Information on Database and Map Showing Physical Interconnections Between Water Systems in North Carolina (Source: <https://efc.sog.unc.edu/resource/interactive-map-of-community-water-system-interconnections-in-north-carolina/>)

North Dakota

North Dakota Department of Environmental Quality (NDDEQ)
North Dakota State Water Commission
North Dakota Department of Health, Environmental Health Section



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

The North Dakota Department of Health developed a priority ranking system. Ten points can be awarded to systems that include the consolidation or regionalization of water supplies. Points are awarded based on the seriousness of compliance problems that consolidation would address. For comparison, water quality issues can be assigned up to 30 points. Additionally, measures to improve the PWS's resiliency during emergencies can be awarded points. Measures include, but are not limited to interconnections with other PWSs, generators, and flood protection.



REGIONAL PLANNING

North Dakota's municipal, rural, and industrial (MR&I) water supply program has supported the expansion of regional and rural water systems throughout the state. Figure 8 is a map of rural water districts and associations in North Dakota. The North Dakota State Water Commission has produced and regularly updated the North Dakota Water Development Plan to identify regional water infrastructure needs, and coordinate the funding of various projects, including regional water systems. The design and construction of water supply projects can be funded using through MR&I projects, including pipelines from water sources to PWSs and principal supply works for systems, and new regional water systems or enlargements or extensions of existing regional water systems.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

North Dakota's Capacity Development Strategy for New Systems, dated September 1999, requires new water systems to submit a technical plan to the state that includes an assessment of interconnection alternatives and describes the rationale for the chosen alternative. The Capacity Development program reports that new developments, including subdivisions, trailer courts, and industries generally occur adjacent to or within the service areas of existing PWSs and typically choose to consolidate with or purchase bulk water service by existing PWSs. As a result, there are many rural water systems throughout North Dakota that provide regionalized service or consolidation.



OPERATOR CERTIFICATION PROGRAM

Midwest Assistance Program (MAP) and North Dakota Rural Water Systems Association (NDRWSA) work in partnership with NDDEQ. The partnership between these two entities impacts operators and system owners on a grassroots level to improve compliance, enhance water quality, help TMF efforts for the systems future, and to protect public health. MAP and NDRWSA's purposes are to provide TMF assistance, by conducting one-on-one and/or group trainings to PWSs so they can strengthen their knowledge and ability to supply safe drinking water to the public and to protect their source water.



EMERGENCY RESPONSE

The North Dakota Water/Wastewater Agency Response Network (NDWARN) is a statewide water/wastewater agency response network of utilities helping utilities to prepare for the next natural or human-caused emergency. NDWARN provides water and wastewater utilities with a Mutual Aid Agreement and process for sharing emergency resources among water and wastewater agencies statewide, a mutual assistance program consistent with other statewide mutual aid and assistance programs and the National Incident Management System, the resources to respond and recover more quickly from a natural or human caused disaster, and a forum for developing and maintaining emergency contacts and relationships.

Helpful Links to State Resources

- ◆ Drinking Water Program: <https://deq.nd.gov/mf/DWP/>
- ◆ North Dakota DWSRF: <https://deq.nd.gov/MF/DWSRF/>
- ◆ MR&I Water Supply and Dakota Resources Act Information: https://www.swc.nd.gov/project_development/mri_water_supply.html
- ◆ Capacity Development Strategy for New Systems: <https://deq.nd.gov/Publications/MF/NewWaterSystemCapacity.pdf>
- ◆ NDWARN: <http://www.ndwarn.org/>

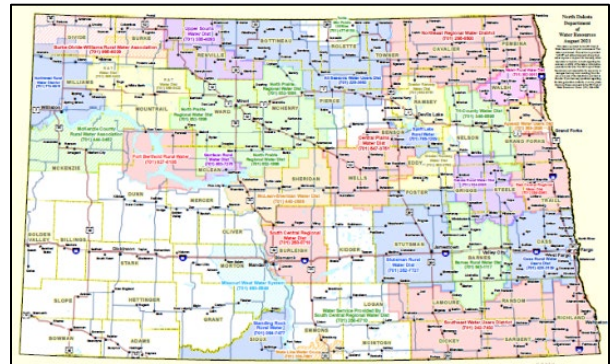


Figure 8. North Dakota Rural Water Districts & Associations (Source: [North Dakota Water Resources](#))

Ohio

Ohio Environmental Protection Agency (Ohio EPA)
Division of Drinking and Ground Waters (DDAGW)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION AND PRINCIPAL FORGIVENESS OF CONSOLIDATION PROJECTS

The consolidation and regionalization of small PWSs is a long-term goal of the Ohio Drinking Water Assistance Fund (DWAFF) program. Consequently, the Small Systems Technical Assistance Account is one of five accounts that compose the DWAFF. DWAFF's priority ranking includes a category for regionalization. Projects that will eliminate and/or tie-in a PWS that has a signed commitment letter(s) to tie in or an ordinance mandating tie-in will receive one priority point per system and up to 10 priority points overall. Ohio also offers the lesser of 50 percent of project costs or \$4 million in principal forgiveness to systems with demonstrated capabilities when they regionalize with smaller, less capable systems. The Water Supply Revolving Loan Account (WSRLA) is another one of the five accounts within the DWAFF. All applications for water treatment plant design and nominations for construction funding through the WSRLA must include an Ohio EPA Director approved general plan. As part of the general plan, applicants must discuss alternatives to the proposed project. A regionalization alternative must be included for projects for new water treatment plants, major plant rehabilitations or plant expansions. A feasible regionalization alternative must be eliminated before evaluating other alternatives.



OPERATOR SHARING

Ohio EPA maintains a list of contract operators on their website. These contract operators are available for the operation and treatment of PWSs, and when contracted can become the "operator of record" at each water system.



ENCOURAGING SYSTEM CONSOLIDATION

During sanitary surveys and other interactions, DDAGW encourages water systems to network with similar water systems, training providers, technical, funding and planning assistance providers, and governmental agencies such as funding agencies, health departments, county engineers, Ohio Department of Natural Resources, and Ohio Emergency Management Agency. DDAGW works with the Ohio Section of the American Water Works Association, Rural Community Assistance Program, Ohio Rural Water Association, regional planning agencies, Small Communities Environmental Infrastructure Group and other industry organizations (such as the Manufactured Housing Association, Ohio Water Quality Association, and the Homebuilders Association) to encourage networking with and outreach to water systems.



EMERGENCY RESPONSE

Utilities may sign the Ohio Water-Wastewater Agency Response Network (OHWARN) mutual aid agreement to facilitate the exchange of staff, resources, and equipment between water systems in the event of an emergency. The network of participating systems can help streamline access to needed help, foster mutually beneficial relationships between participating utilities, and protect public health.

Helpful Links to State Resources

- ◆ Ohio Drinking & Groundwater Page: <https://epa.ohio.gov/divisions-and-offices/drinking-and-ground-waters/drinking-and-ground-waters>
- ◆ Security and Emergency Preparedness: <https://epa.ohio.gov/divisions-and-offices/drinking-and-ground-waters/public-water-systems/security-and-emergency-preparedness>
- ◆ Water and Wastewater System Operator Resources: <https://epa.ohio.gov/divisions-and-offices/drinking-and-ground-waters/certified-operators/operator>
- ◆ Certified Operators: <https://epa.ohio.gov/divisions-and-offices/drinking-and-ground-waters/certified-operators/ddagw-certified-operators>
- ◆ OHWARN: <http://www.ohwarn.org/>

Oklahoma

Oklahoma Department of Environmental Quality (DEQ)
Oklahoma Water Resources Board (OWRB)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION AND PRINCIPAL FORGIVENESS OF CONSOLIDATION PROJECTS

Oklahoma's DWSRF program offers subsidization through principal forgiveness loans for consolidation or regionalization projects. Projects which result in the consolidation, interconnection, or improvement of services for two or more water systems may receive 20 project priority points for consolidation, 10 for interconnection, and 10 for improvement of services such as back-up or emergency supply. In SFY 2023, Oklahoma's DWSRF program used General Supplements funds to offer up to 100 percent loan forgiveness for Disadvantaged and Severely Disadvantaged Communities seeking funding for regionalization and consolidation projects, with the maximum loan forgiveness amount determined on a case-by-case basis. Additionally, Oklahoma's Department of Commerce offers CDBGs through a special set-aside to projects involving the consolidation of water and wastewater systems. Figure 9 describes barriers to regionalization and consolidation in Oklahoma that this assistance is intended to address.



ENCOURAGING SYSTEM CONSOLIDATION

The Capacity Development program identifies new and existing water systems that may benefit from regionalization and/or consolidation into larger water systems and encourages them to consider consolidation. Systems are considered good candidates for regionalization and consolidation if they have source water capacity limitations such as drought; are undergoing DEQ enforcement proceedings; are considering giving away, selling, or abandoning the system; or have expressed interest in consolidation. DEQ continues to seek out small water systems whose compliance issues may be solved through consolidation. Additionally, the Water for 2060 Act, passed in 2012, sets a goal of consuming no more fresh water in the year 2060 than was consumed statewide in the year 2012. The Act created a Water for 2060 Advisory Council, one of whose goals is to encourage consolidation and regionalization of smaller systems to utilize limited resources efficiently.



REGIONAL PLANNING

The OWRB Oklahoma Comprehensive Water Plan (OCWP), contains state-wide information on hydrology, water planning and management, and water quality. This includes Watershed Planning Region Reports that contain detailed information for each of the 13 identified watershed planning regions in the state. Figure 10 is a map of Oklahoma's 13 watershed planning regions.



EMERGENCY RESPONSE

SOONERWARN is Oklahoma's Water and Wastewater Agency Response Network. The organization provides water and wastewater utilities with a Mutual Aid Agreement and process for sharing staff and resources statewide in the event of an emergency, in addition to a forum for developing and maintaining emergency contacts and relationships. The Oklahoma Rural Water Association administers SOONERWARN.

Oklahoma's 2021 Revision to its Capacity Development Strategy identifies the following barriers to water system consolidation and regionalization, and recommended strategies to address these issues:

- *Barrier: Loss of local managerial control of the entity being acquired, merged or consolidated and potential loss of jobs by having another entity assume the day-to-day operations of the facilities.*
 - *Recommended Strategy: Encourage the formation of regional authorities with equal representation of each water system involved in management of the water system. Encourage the acquiring utility to employ the existing employees of the utility being merged so that they can bring their knowledge of the system and add to the existing workforce.*
- *Barrier: Extensive legal requirements to establish a new regional water system.*
 - *Recommended Strategy: Develop model regionalization/consolidation agreements to assist water system attorneys in drafting necessary documents.*
- *Barrier: The mechanisms to help pay for the up-front costs to investigate and implement regionalization and consolidation strategies are unclear, creating a considerable disincentive for investigating these opportunities.*
 - *Recommended Strategy: Institute a multi-agency engineering report review. Most funding agencies have a mechanism for reimbursement for these costs if the project is a viable project. Also consider principal forgiveness funding for regionalization/consolidation studies.*
- *Barrier: Lack of encouragement to investigate public-private partnerships or cooperative agreements with other entities for outsourcing specific services, such as meter reading, billing, and data processing, and plant operations.*
 - *Recommended Strategy: Develop model contracts and mutual assistance agreements to facilitate outsourcing of essential services.*
- *Barrier: Inadequate incentives in funding agency priority systems to promote consolidation.*

Figure 9: Barriers Impeding Water System Consolidation and Regionalization in Oklahoma (Source: [Oklahoma's 2021 Revision to its Capacity Development Strategy](#))

Helpful Links to State Resources

- ◆ Oklahoma Department of Environmental Quality: <https://www.deq.ok.gov/>
- ◆ Oklahoma Water Quality Division: <http://www.deq.state.ok.us/divisions/wqd/>
- ◆ Oklahoma Operator Certification: <https://www.deq.ok.gov/water-quality-division/operator-certification/>
- ◆ Oklahoma's 2021 Revision of the Capacity Development Strategy: https://www.asdwa.org/wp-content/uploads/2022/03/Oklahoma-DEQ_Capacity-Development-Strategy.pdf
- ◆ Oklahoma Water for 60 Advisory Council Background Report: <https://oklahoma.gov/content/dam/ok/en/owrb/documents/water-planning/2060/BackgroundReport.pdf>
- ◆ SOONERWARN: <https://soonerwarn.org/>



Figure 10. Oklahoma Watershed Planning Regions (Source: [Oklahoma Water Resources Board](#))



State Policies and Programs Regarding Water System Partnerships



DWSRF PRINCIPAL FORGIVENESS OF CONSOLIDATION PROJECTS

Oregon's DWSRF program awards priority points for consolidation projects, with 20 points awarded to projects that involve a physical connection of two or more systems where a single system remains, 10 points awarded to projects that involve the purchase of water from another system that meets drinking water standards and requirements and 5 points awarded to projects that involve management consolidation with no physical connection of two or more systems. Consolidation projects are eligible for the lesser of \$150,000 or 25 percent of project costs in loan forgiveness. Deviations (increases or reductions) to the forgivable loan categories may be made based on the restructuring, consolidation, or regionalization potential of a project.



DWSRF SUSTAINABLE WATER INFRASTRUCTURE PROJECT PROMOTION

Through the DWSRF, planning activities that promote sustainable water infrastructure can receive 100 percent forgivable loan funding up to \$20,000 for the following project categories: feasibility studies, asset management planning, system partnership studies, water rate analysis, leak detection studies, water system master planning for water systems with fewer than 300 connections, and seismic risk assessment and mitigation planning. The system partnership studies category includes studies to evaluate the potential for system consolidation or regionalization. Priority is given to systems that serve fewer than 300 service connections.



DWSRF JOINT SOURCE WATER PROTECTION PROJECTS

Through the DWSRF loan program, loans up to \$100,000 per water system and grants up to \$50,000 per water system are made available annually to water systems for source water protection projects or activities. Awards fund projects for individual water systems and joint projects involving multiple water systems. Joint projects can be funded with grant money up to \$50,000 per each participating water system, thus encouraging water systems to collaborate on source water protection strategies that target regional risks to drinking water quality.



TRAINING AND TECHNICAL ASSISTANCE

Oregon's Capacity Development program encourages partnerships between PWSs to enhance TMF capacity through training, education, and outreach. The benefits of partnerships and the sharing of information for emergency operations to gain capacity and stay in compliance are key topics during TA outreach and manager/operator training programs.



REGIONAL PLANNING (BY COUNTY)

Oregon Revised Statutes allow counties to develop a water service plan in which small systems are encouraged to "combine management functions and...consolidate where possible" (ORS 448.165). In addition, the many different types of water entities in Oregon (i.e., domestic water supply districts, people's utilities districts, water authorities or joint water and sanitary authorities, and water control and improvement districts) can enter into cooperative agreements with each other and can merge and consolidate. Mergers, consolidations, and annexations must be approved by the governing body of the districts and in general, the rights, responsibilities, obligations, and liabilities of the districts survive the merger, consolidation, or annexation and flow to the newly created entity.



AREA- WIDE REGIONALIZATION PROGRAM

OHA-DWS participates with EPA and Region 10 states to implement Oregon's AWOP. This program works toward increasing operator technical capacity at surface water plants, while also promoting managerial capacity. Current activities include one-day training classes for surface water plant operators, implementation of Oregon's Comprehensive Performance Evaluation process for identified system issues, and implementation of AWOP "strike team" tools to assist systems with immediate needs as they arise. Trainings also include water treatment activities that optimize treatment beyond regulatory standards and use data to monitor performance and identify areas for improvement.



EMERGENCY RESPONSE

The Oregon Water/Wastewater Agency Response Network (ORWARN) is composed of member utilities providing voluntary assistance to each other during an emergency incident. ORWARN facilitates rapid, short-term deployment of emergency services, in the form of personnel, equipment, and materials, which are required to restore critical operations to utilities that have sustained damages from natural or man-made events.

Helpful Links to State Resources

- ◆ Oregon Health Authority – Drinking Water Services:
<http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/Pages/index.aspx>
- ◆ Oregon DWSRF:
<http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/SRF/Pages/index.aspx>
- ◆ Oregon Operator Certification:
<https://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/OperatorCertification/Pages/index.aspx>
- ◆ ORWARN: <http://www.orwarn.org/>

Pennsylvania

Pennsylvania Department of Environmental Protection (DEP)
Pennsylvania Public Utility Commission (PUC)
Pennsylvania Capability Enhancement Program (CEP)
Pennsylvania Infrastructure Investment Authority (PENNVEST)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

PENNVEST incorporates Economy of Scale principles into the DWSRF Program and resulting funding decisions. These principles include:

- Looping multiple small water systems together to form one larger and more sustainable water system.
- Upsizing or extending the service of a capable water system to eliminate a distressed water system.
- Upsizing or extending service of a capable water system to serve an unserved area that does not have water that meets state and federal Safe Drinking Water Standards.

In support of these principles, PENNVEST awards five priority points to projects for which implementation will result in consolidated ownership and management (administrative and technical) of what were previously two separate drinking water systems. In addition, PENNVEST awards three priority points to projects that propose to increase available water, provide water conservation, improve aesthetic water quality, and improve the applicant's ability to operate and maintain the facility or increase the reliability of service by means other than water system consolidation.



CAPACITY DEVELOPMENT ASSISTANCE

Pennsylvania CEP provides assessments and on-site assistance with consolidation and regionalization planning, shared services, and joint purchasing alternatives. In addition, the CEP utilizes DWSRF set-aside funding to contract with private consultants for engineering expertise, legal assistance, and to facilitate regionalization and consolidation. The CEP also includes an Outreach Assistance Program (OAP) that provides both direct assistance to system operators or management and assistance via small-group workshops and trainings. In 2019, OAP piloted a collaborative effort to assist parent and consecutive water systems to complete nitrification control plans. The joint training enabled parent and consecutive systems to not only discuss their individual challenges in maintaining water quality in their distribution systems but also determine how they could work together to achieve their individual goals through coordinated flushing and storage tank management. Additionally, DEP has a Professional Engineering Services Contract program which provides engineering and consulting services for capability enhancement identified systems. A DEP-contracted private firm provides these services at no cost to the system. One of the services this firm offers is financial planning and legal services to promote consolidation with another water system.



TMF ASSESSMENTS

Systems are evaluated for their capability prior to DWSRF funding by Capability Enhancement Facilitators first reviewing the system's Priority Ranking System (PRS) score. If a system is above the PRS threshold, they are required to complete the Self-Assessment Tool and are evaluated on-site. A capability check list is given to the system outlining any TMF weaknesses that must be addressed prior to them being considered for DWSRF funding. One possible strategy for addressing this weakness may be consolidation with another system.



ENCOURAGING CONSOLIDATIONS THROUGH PRICING INCENTIVES

Pennsylvania Code 69.711 encourages the consolidation of existing non-viable small systems to foster regionalization. The Pennsylvania PUC facilitates the rate process to provide financial assistance to projects that involve a viable system acquiring a small, non-viable system. In addition, acquisition incentives include additional rate of return basis points, acquisition cost, credit and debt adjustments, and a phased-in rate recovery for improvement costs. Additional surcharges are allowed to offset various operating costs, such as state tax adjustment, distribution system improvement, purchase power, and purchase water.



EMERGENCY RESPONSE

Pennsylvania utilities may participate in the voluntary statewide Water and Wastewater Agency Response Network (PaWARN) to promote statewide mutual aid in the event of natural and human-caused events. Participating utilities sign a mutual aid agreement which allows swift exchange of staff, resources, or equipment after a disaster, and improves the resiliency of water and wastewater services statewide.

Helpful Links to State Resources

- ◆ Pennsylvania Infrastructure Investment Authority: <https://www.pennvest.pa.gov/Pages/default.aspx>
- ◆ Department of Environmental Protection Bureau of Safe Drinking Water: <http://www.dep.pa.gov/Business/Water/BureauSafeDrinkingWater/Pages/default.aspx>
- ◆ Pennsylvania DWSRF: <http://www.pennvest.pa.gov/Information/Funding-Programs/Pages/Drinking-Water-State-Revolving-Fund.aspx>
- ◆ Pennsylvania Operator Certification: <http://www.dep.pa.gov/Business/Water/BureauSafeDrinkingWater/OperatorCertification/Pages/default.aspx>
- ◆ Capability Enhancement Program: <http://www.dep.pa.gov/BUSINESS/WATER/BUREAUSAFEDRINKINGWATER/CAPABILITYENHANCEMENT/Pages/default.aspx>
- ◆ PaWARN: <http://www.pawarn.org>

Puerto Rico

Puerto Rico Department of Health (DOH)



Commonwealth Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF AND PRINCIPAL FORGIVENESS FOR CONSOLIDATION PROJECTS

One of Puerto Rico's DWSRF program's short-term goals is to coordinate a mechanism or processes for consolidating or eliminating existing non-viable small systems. To support this goal, Puerto Rico's DWSRF priority ranking system awards 100 priority points to projects involving the interconnection or consolidation of water systems to comply with the SDWA and 25 points to projects that involve the consolidation of systems to improve TMF capacity. Additionally, Puerto Rico offers additional subsidization funds for projects that eliminate or consolidate a small system. These funds are also available for projects that support sustainable systems and help build or maintain the TMF capacity of the recipient, including through consolidation.



TRAINING AND TECHNICAL ASSISTANCE

One of the goals of Puerto Rico's Capacity Development strategy is to prevent the formation of new, small, non-viable PWSs, and to assist and encourage the consolidation, collaboration, and regionalization of existing non-viable systems. Assistance for existing systems is provided through Puerto Rico's Capacity Development, Area-Wide Optimization, and Circuit Rider Programs.



AREA-WIDE OPTIMIZATION PROGRAM

The DOH's AWOP provides TA for treatment operators to identify performance issues and improve public health protection. The program works in concert with other Technical Assistance Support efforts to provide TA and guidance to communities to help improve their TMF capacity.

Helpful Links to State Resources

- ◆ Puerto Rico Department of Health: <https://www.puerto-rico-agencies.com/department-of-health/>
- ◆ Puerto Rico Infrastructure Financing Authority: <https://www.aafaf.pr.gov/puerto-rico-issuers/puerto-rico-infrastructure-financing-authority-prifa>

Rhode Island

State of Rhode Island Department of Health (RIDOH) – Center for Drinking Water Quality (CDWQ)
Rhode Island Public Utility Commission (Rhode Island PUC)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

RIDOH incentivizes consolidation projects through its DWSRF priority ranking criteria. Projects involving the consolidation of two PWSs, one of which lacks the proper TMF capacity to maintain compliance with the SDWA, receive 5 priority points. The result of the consolidation must ensure compliance with the SDWA. Additionally, RIDOH administers a Small Water System Engineering Assistance Program. The purpose of this program is to provide engineering services to assist small drinking water systems with the design and implementation of solutions to technical issues. Eligible activities include but are not limited to new construction, renovation or replacement of existing systems, and system consolidations.



SYSTEM INITIATED MERGERS OR CONSOLIDATIONS

The Public Water Supplies Systems Act of 1995 states that “economy and efficiency dictate the desirability to combine small public water supply systems with other public water supply systems” RI Gen L § 46-30-2 (2014). In addition, the law provides water suppliers the authority to petition an adjacent supplier for the purpose of merging or annexing, as long as they have consent of the governing board of both entities [RI Gen L § 46-30-2 (2014)]. The Rhode Island PUC has the authority to approve user charges, fees, or rate changes as a result of the merger. An annexation fee of any amount between 10 percent and 100 percent of the pre-annexation rate can be imposed for up to 30 years, or until the loan that funded the merger is paid off [RI Gen L § 46-30-4 (2014)].



DIRECT OUTREACH THROUGH MAILCHIMP

RIDOH sends mass emails via the Mailchimp platform to provide direct outreach, to introduce new documents and webpages, and to pass along capacity development opportunities. Mailchimp generates a report for each email “campaign” sent that shows the open rate for the email and the click rate for the hyperlinks to documents and webpages within the email, including a performance comparison against the average RIDOH campaign as well as against other government agencies using Mailchimp. Direct and constant collaboration with drinking water program staff during outreach development ensures critical information is accurately conveyed to PWSs.



EMERGENCY RESPONSE

CDWQ helps PWSs plan for emergencies by developing partnerships with academic, business, trade, and political communities to support best practices for utility security and emergency preparedness. CDWQ also collaborates with EPA and other associations to plan and implement effective water security practices.



EMERGENCY RESPONSE

Rhode Island's Water/Wastewater Agency Response Network (RiWARN) is a water/wastewater agency response network that allows water and wastewater systems in Rhode Island to receive rapid mutual aid and assistance from other systems in RI to restore facilities damaged by natural or man-made incidents. Utilities sign the RiWARN standard agreement, which then allows them to share resources with any other system in Rhode Island that has also signed the standard agreement. During an emergency, the process and procedures to give and receive mutual aid and assistance are governed by the articles in the RiWARN agreement. The agreement covers issues such as requesting assistance, giving assistance, reimbursement, worker's compensation, insurance, liability, and dispute resolution.

Helpful Links to State Resources

- Public Drinking Water Program: https://health.ri.gov/programs/detail.php?pgm_id=158
- Rhode Island Operator Certification: <http://health.ri.gov/licenses/detail.php?id=273>
- Rhode Island DWSRF: https://health.ri.gov/programs/detail.php?pgm_id=127

South Carolina

South Carolina Department of Environmental Sciences (SCDES)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

The South Carolina DWSRF program offers loan incentives for regionalization and consolidation projects. Additional priority ranking points range from 10 points for two or more systems joining together and up to 40 additional points if a viable system is willing to take over a non-viable system to correct operational, maintenance, and/or financial issues that are causing the non-viable system to be out of compliance with safe drinking water regulations. In addition, the DWSRF program offers a 1.2 percent loan rate to fund some or all construction costs needed to upgrade a non-viable system's infrastructure to support take over by a viable system.

The DWSRF program may bypass projects on the comprehensive priority list to fund a project that corrects violations of primary drinking water standards through consolidation or regionalization, or to fund projects that support consolidation or regionalization of systems to enhance the sustainability, regulatory compliance and/or quality of service of the systems involved. The DWSRF program also utilizes additional subsidy funds, provided as principal forgiveness, for projects that include correcting violations of primary drinking water standards and potential health concerns through consolidation or regionalization. Projects that do not include consolidation of water systems when consolidation or regionalization is the most feasible alternative are ineligible for DWSRF funding.



NEW, SMALL NON-COMMUNITY SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEM

When a small business water system applies for a construction permit, they must provide the name of and distance to the nearest publicly owned water system. They may also be required to submit a cost estimate for connecting to this system. In addition, they must agree to connect to a PWS whenever the water line from such a system becomes contiguous to the business' property.



EMERGENCY RESPONSE

The South Carolina Water/Wastewater Agency Response Network (SCWARN) is a network of utilities helping other utilities. SCWARN supports and promotes statewide emergency preparedness, disaster response, and mutual aid assistance for public and private water and wastewater utilities. SCWARN's members are made up of large and small utilities, rural and urban, public and private, and there is no cost to join.

Helpful Links to State Resources

- ◆ South Carolina Drinking Water Compliance: <https://des.sc.gov/programs/bureau-water/drinking-water/complying-drinking-water-laws>
- ◆ South Carolina DWSRF: <https://des.sc.gov/programs/bureau-water/state-revolving-fund-srf-program/>
- ◆ South Carolina Capacity Development Strategy: <https://des.sc.gov/programs/bureau-water/drinking-water/capacity-development-strategy-public-water-systems>
- ◆ South Carolina Operator Certification: <https://www.llr.sc.gov/env/examinfo.aspx>
- ◆ SCWARN: <https://scwarn.org/>

South Dakota

South Dakota Department of Agriculture and Natural Resources (DANR)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

South Dakota's DANR's Division of Financial and Technical Assistance offers several tools to support and encourage partnerships. One objective of the DWSRF program is to promote regionalization and consolidations of water systems, where mutually beneficial, as a practical means of addressing TMF capacity. To support this goal, the DWSRF program awards 50 priority points for projects involving the regionalization or consolidation of drinking water facilities.



GRANTS FOR CONSOLIDATION PROJECTS

South Dakota's Consolidated Grant Funds are used to complement DWSRF or other funds with preference given to drinking water projects. DANR has a Small Community Planning Grant program which provides an 80 percent grant up to \$8,000 to allow systems serving 2,500 people or fewer to hire an engineer to develop the required facility plan needed to apply for state funding opportunities. Narrative descriptions of source and distribution alternatives, including regional management or consolidation of systems, are one required component of this plan.

Additionally, DANR offers a Very Small System Compliance Grant. This grant provides up to \$50,000 in funding for projects whose total cost is \$100,000 or less and is only available to systems serving less than 50 connections. Consolidation is one of the potential methods for very small systems receiving this grant to achieve compliance.



TMF ASSESSMENTS

South Dakota's Capacity Development program has developed self-assessments for PWSs to determine their TMF capacity. In the "emergencies" section of the assessment, PWSs are asked if their Emergency Response Plan has a contingency for emergency interconnections to neighboring systems and whether the emergency connections are functional.



OPERATOR SHARING

South Dakota allows small systems to contract with a certified operator. The Board of Operator Certification can approve arrangements where a certified operator not under direct employment of a system can work as the system's certified operator. The contract operator must work a minimum number of hours per week and be in direct responsible charge of all operation and maintenance of the system.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

In order to receive a certificate of approval to begin operations, new PWSs must complete a business plan. As part of this business plan, the new PWS must provide a description of the alternatives to forming a new water system that they considered, including consolidations or interconnections with existing water systems, and the reason why forming a new system is preferable to these alternatives.



EMERGENCY RESPONSE

South Dakota encourages water systems to participate in the state's Water and Wastewater Agency Response Network (SDWARN). SDWARN prepares and responds to natural and human-caused emergencies. It is a utility created mutual aid agreement which water systems may sign in order to access and distribute staff, equipment, and resources between water systems in the event of an emergency. This tool can be used by member utilities in the event of a flood, ice storm, blizzard, fire, or human-caused event.

Helpful Links to State Resources

- ♦ South Dakota Department of Agriculture and Natural Resources Drinking Water Program: <https://danr.sd.gov/OfficeOfWater/DrinkingWater/default.aspx>
- ♦ South Dakota DWSRF: <https://danr.sd.gov/Funding/EnvironmentalFunding/DWRevolvingFunding.aspx>

- ◆ South Dakota Capacity Development: <https://danr.sd.gov/OfficeOfWater/DrinkingWater/CapacityDevelopment.aspx>
- ◆ South Dakota Operator Certification: <https://danr.sd.gov/OfficeOfWater/OperatorCert/default.aspx>
- ◆ Drinking Water Security: <https://danr.sd.gov/OfficeOfWater/DrinkingWater/DrinkingWaterSecurity.aspx>
- ◆ SDWARN: <http://www.sdwarn.org>



State Policies and Programs Regarding Water System Partnerships



OPERATOR SHARING

Tennessee's Rules Governing Water and Wastewater Operator Certification state that it is permissible for one certified operator to have the responsibility for more than one water and/or wastewater system where two or more systems are involved in reasonable proximity to one another, and where the duties of operation are such that the work time of one person may properly be divided among two or more systems, or where a certified operator may adequately supervise the work of others in more than one system (TCA 68-221-909). Additionally, several regional and statewide "management" groups have emerged in Tennessee, which offer their services to water systems for which it is neither possible to retain certified operators nor interconnect with nearby systems.



REGIONAL PLANNING

In 2011, the Water Resources Technical Advisory Committee (WRTAC) and TDEC partnered with the U.S. Army Corps of Engineers and other regional planning experts to initiate a water resources planning pilot program in two regions: North Central Tennessee and Southern Cumberland (see Figure 11). The pilot study was conducted to establish a statewide process for regional water supply planning process and to identify potential interconnections. Principles developed through the two pilot studies are published in the Regional Water Resources Planning Guidelines for Tennessee, which provide regional planning recommendations for other regions across the state. Recommendations include methods for accessing existing sources and systems, projecting future unmet needs in the region, and evaluating alternative water sources.



AREA-WIDE OPTIMIZATION PROGRAM

Tennessee participates in EPA's AWOP. This program provides tools and approaches to be utilized to aid systems in achieving/maintaining compliance and providing improved water quality to the public through optimization. AWOP is also an important component of efforts to assist systems build capacity and provide enhanced levels of public health protection. The AWOP approach includes performing Comprehensive Performance Evaluations, Performance Based Trainings, Distribution System Optimization Training, Data Integrity Workshops, and Targeted Technical Assistance. AWOP is a voluntary program whose primary goal is to maximize public health protection without major capital expenditure, through optimization of existing water treatment and distribution facilities. Optimization of the water system is achieved through enhanced process monitoring and control using existing staff and facilities.



STATE PRESCRIBED MERGERS AND CONSOLIDATIONS

The Tennessee Board of Utility Regulation (TBOUR) and the Division of Local Government Audit conduct financial reviews of water systems. TBOUR can order the merger or consolidation of a financially distressed utility district with another utility district under the following circumstances: if TBOUR orders the financially distressed utility district to obtain a study from a qualified expert on the feasibility and benefit of the merger or consolidation; if a TBOUR representative holds a hearing on the merger or consolidation within the utility district's service area when the study favors a merger or consolidation; if TBOUR concludes, after an informal hearing, that the merger or consolidation is in the best interest of the public served by the financially distressed utility district and does not harm the public being served by the surviving utility district; or if the utility districts voluntarily enter into a merger or consolidation agreement approved by TBOUR or such an agreement is compelled by a local chancery court when no agreement can be reached. When an agreement is reached, TBOUR will enter a merger or consolidation order similar to the merger or consolidation order issued by a county mayor. County mayor approval of TBOUR's merger or consolidation order is not required. Tennessee has authorized the creation of the utility district revitalization fund to mitigate the negative financial impact of such a merger or consolidation to the surviving utility district.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

Tennessee regulations state that PWSs shall be connected with a municipal, county, regional, or other existing and approved water system, if feasible. Each system should also be designed to facilitate potential connection to an expanding municipal, county, or regional system, and to provide service to all anticipated or projected service areas [Rule 0400-45-01-.05 (9)].



EMERGENCY PLANNING AND RESPONSE

New CWSs in Tennessee must submit a Capacity Development Plan for review and approval by TDEC. As part of this plan, CWSs must establish and submit an Emergency Operations Plan (and Drought Management Plan if appropriate) for review and approval. The system may enter into an agreement indicating the intent to cooperate with another water system in the event of an emergency that interrupts water service and convey its willingness to supply alternative potable water during a state of emergency if needed.



EMERGENCY PLANNING

Tennessee's Water and Wastewater Agency Response Network (TnWARN) provides water system members with emergency planning, response and recovery information and mutual aid. Participation in this program includes a mutual aid agreement for sharing emergency resources among members, an emergency equipment database and forum for developing and maintaining emergency contacts.

Helpful Links to State Resources

- ◆ Drinking Water Program:
<http://www.tennessee.gov/environment/topic/wr-wq-dw-drinking-water>
- ◆ Water Supply Program:
<https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality.html>
- ◆ Tennessee Operator Certification:
<https://www.tn.gov/environment/program-areas/wr-water-resources/fleming-training-center/op-cert.html>
- ◆ Tennessee DWSRF:
<https://www.tn.gov/environment/program-areas/wr-water-resources/srfp/srf-home/drinking-water-state-revolving-fund.html>
- ◆ Regional Water Supply Planning Guidelines for Tennessee:
https://www.tn.gov/content/dam/tn/tacir/commission-meetings/2013-february/Tab9_Presentation.pdf
- ◆ South Cumberland Regional Water Resources Planning Study:
<https://www.tn.gov/content/dam/tn/tacir/documents/scrwrps2011.pdf>
- ◆ TnWARN: <http://tnwarn.org/>

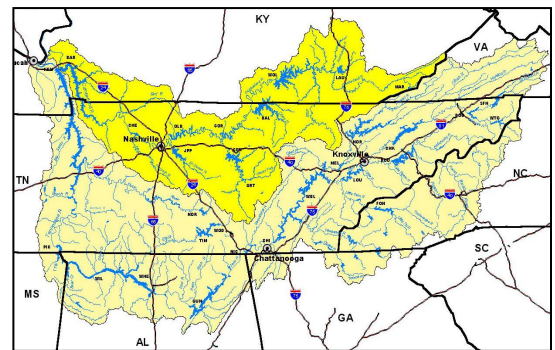


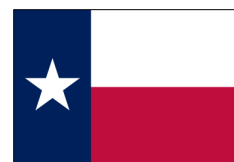
Figure 11. North Central and South Cumberland Regions (Source: [USACE Nashville District Source Water Planning](#))

Texas

Texas Commission on Environmental Quality (TCEQ)

Texas Water Development Board (TWDB)

Public Utility Commission of Texas (PUC)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

TWDB incentivizes consolidations through its DWSRF Rating Criteria. The Rating Criteria includes a Consolidation Factor that is added to each project's priority ranking. The Consolidation Factor is equal to the sum of all priority points for all PWSs being consolidated. The Consolidation Factor is divided by two for projects that will enable PWSs to receive water from a wholesaler. The Rating Criteria also awards two priority points under the Effective Management category for projects that are consistent with a regionalization or consolidation plan.



FUNDING CONSOLIDATION WITH STATE AGENCIES AND ORGANIZATION

Numerous state and federal regulatory, funding, and assistance agencies are members of the Texas Water Infrastructure Coordination Committee (TWICC). TWICC meets regularly with entities who operate PWSs and that are interested in receiving funding and other assistance including forming regional partnerships. TWICC members include representatives from Texas Department of Agriculture, EPA, TWDB, Texas PUC, USDA Rural Development, Texas Section of the AWWA, North American Development Bank, Communities Unlimited Incorporated, General Land Office, Federal Emergency Management Agency (FEMA), and Texas Rural Water Association (TRWA). In FY 2023, attendees of TWICC meetings seeking funding included a court appointed receiver looking for funding for system improvements and a rural water district seeking funds to interconnect a smaller neighboring system.



TECHNICAL ASSISTANCE FOR SYSTEM CONSOLIDATION

TCEQ contracts with TRWA to provide a free, on-site consolidation assessment to help systems investigate opportunities for regionalization, new ownership, restructuring, or other partnerships. If consolidation or another form of partnership is determined to be feasible and recommended, the contractor discusses consolidation with the water system officials and stakeholders.



TECHNICAL ASSISTANCE FOR SYSTEM CONSOLIDATION

TMF staff within TCEQ identify, assist, and work to restructure at risk PWSs by coordinating with staff throughout TCEQ, the regulated community, PUC, assistance providers, EPA, and funding agencies. The financial, managerial, and technical (FMT) program and TCEQ staff assist at-risk systems to explore consolidation, restructure or to form new entities, seek funding, and address compliance issues. In addition to the TMF assistance, TCEQ staff participate in frequent conference calls with PWS owners and directors to discuss restructuring and mergers and coordinate with TCEQ regional offices, litigation division, office of attorney general, Texas PUC, and funding agencies to help struggling water and wastewater systems.



RECOGNITION FOR PARTNERSHIP ACTIVITIES

TCEQ awards the *Water Partners: Water Systems Helping Water Systems Award* to recognize PWSs that help other PWSs. This award was developed to recognize voluntary efforts on the part of PWSs around the state to help each other. Another goal of establishing the award was to collect examples of partnerships to share with other PWSs. The subcategories of this award include mentoring, emergency response, sharing assets, consolidations, and mergers. In 2023, TCEQ gave the award to Pharr, Texas for assisting two neighboring PWSs during Winter Storm Uri by processing their bacterial samples at no charge so those systems could expedite lifting their boil water notices.



ENFORCEMENT AND RECEIVERSHIP

The TCEQ Utility Regulation Ch. 291 291.142 states that after providing the utility a notice and an opportunity for a hearing, TCEQ may authorize a willing person to temporarily manage and operate a utility if it violates a final order of the TCEQ, or allows any property owned or controlled by the utility to be used in violation of a final order of the TCEQ; fails to provide adequate service or notice of public health hazards; fails to maintain facilities such that a potential public health hazard may result; or, displays a pattern of hostility toward or repeatedly fails to respond to the TCEQ or its customers. The court can also appoint a receiver if it is necessary to collect fees, penalties, or interest. The receiver can apply to transfer the required certificate of convenience and necessity and can seek to acquire, sell, or otherwise dispose of the system's facilities. The court, after a showing of good cause by the system, can dissolve the receivership and return the assets to the system.



CONSOLIDATION IS A STATUTORY PRIORITY

The Texas Health and Safety Code requires TCEQ to “encourage and promote the development and use of regional and area wide drinking water supply systems” (THSC §341.0315[b]). To help meet that end, TCEQ requires that all new PWSs evaluate the feasibility of regionalization before submitting plans, specifications, and a business plan to the TCEQ. The TCEQ’s policy is that regionalization is feasible unless one of these three exceptions applies: there are no PWSs within a half mile; service has been requested from a neighboring utility and the request has been denied; or, if the nearby PWS approved the request for service, a proposed PWS must successfully demonstrate that an exception based on costs, affordable rates, and FMT capabilities of the proposed system should be granted.



EMERGENCY PLANNING

TCEQ’s Office of Compliance and Enforcement, Critical Infrastructure Division, and Water Supply Division support water systems in emergency response. TCEQ provides systems with emergency Homeland Security activities, training, and outreach materials on how to respond to and recover from disasters or other water supply safety threats. TCEQ also reviews Emergency Preparedness Plans to increase water system resiliency and encourages systems to participate in the Texas Water/Wastewater Agency Response Network (TXWARN), a mutual aid program.



EMERGENCY RESPONSE

The mission of TXWARN is to support and promote statewide emergency preparedness, disaster response, and mutual aid assistance for public and private water and wastewater utilities. Working closely with the TCEQ and the state emergency operations center, TXWARN is prepared to assist water and wastewater utilities in response and recovery during major system outages and increase utilities’ preparedness by providing new tools and proven practices that can enhance utility’s readiness to recover should disaster strike.

Helpful Links to State Resources

- 💧 Texas DWSRF: <https://www.twdb.texas.gov/financial/programs/DWSRF/>
- 💧 TCEQ TMF Assistance: <https://www.tceq.texas.gov/drinkingwater/fmt#consolidation-assessment>
- 💧 TRWA TMF Assistance: <https://www.trwa.org/general/custom.asp?page=FMT>
- 💧 Texas Water Infrastructure Coordination Committee: <http://www.twicc.org/>
- 💧 TXWARN: <https://www.txwarn.org/>

Utah

Utah Department of Environmental Quality (DEQ)
Division of Drinking Water (DDW, The Division)



State Policies and Programs Regarding Water System Partnerships



PRIORITIZING REGIONALIZATION THROUGH STATE FUNDS

The Division encourages water systems to investigate and implement regionalization or consolidation efforts to the extent possible. The Utah State Revolving Fund (separate from the Federal DWSRF program) incentivizes regionalization by offering prioritization points under the Financial Considerations criteria for projects that create or enhance a regionalization plan.



TMF ASSESSMENTS

Eligible systems for DWSRF funding must submit TMF self-assessments for review by the Capacity Development program. The TMF assessment includes the following questions:

- Does your long-term planning include an analysis of alternative strategies that might offer cost saving to customers, such as consolidation with other nearby systems or sharing of operations and management expenses with other nearby systems?
- Is there a contingency for making emergency interconnections to neighboring systems, and do you know they will work if needed?

Systems that lack capacity may still be eligible if the loan will address the non-compliance or the system agrees to undertake feasible and appropriate changes (e.g., restructuring).



OPERATOR CERTIFICATION-CAPACITY DEVELOPMENT PROGRAMS PARTNERSHIP

Staff from the Division work in partnership with drinking water systems, TA partners, and other division staff from various program areas to reach water operators and system owners to improve compliance, enhance water quality, protect public health, and better position a system technically, managerially, and financially, to meet future needs. Training is provided to PWSs in both one-on-one and group workshops to help strengthen system's ability to supply safe drinking water to the public and to protect their source water.



THE UTAH WATER QUALITY ALLIANCE

The Utah Water Quality Alliance consists of the largest surface water suppliers in Utah, as well as small- and medium-sized systems that operate water treatment plants. The Alliance meets quarterly and provides training to water system staff as well as networking opportunities for PWSs. The Alliance's goals include assisting drinking water utilities with water quality optimization projects, updating utilities on regulatory updates and new regulations, and a commitment to continuous drinking water quality enhancement. Alliance members work together to find ways to improve monitoring source water and treated water quality, optimize water treatment processes, and enhance treatment plant performance in removing contaminants, evaluate new technologies, participate in drinking water research, provide input in the federal and state regulations, and assist smaller water utilities to produce drinking water of the best quality for the citizens of the State of Utah.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

Utah Drinking Water Rule R309-800 outlines the conditions of the Capacity Development program and requires that new water systems demonstrate they have adequate TMF capacity before they may be approved as a PWS. New systems are required to submit a capacity development business plan and asset management plan. In some cases, the Capacity Development program has discouraged application follow-through by would-be water system operators with suspect business plans. Strict TMF requirements dissuade non-viable water system creation. In many cases, the projects move forward but the developers opt to consolidate with, or annex into, existing water systems.



EMERGENCY PLANNING

The Utah Water/Wastewater Agency Response Network (Utah WARN) supports and promotes statewide emergency preparedness, disaster response, and mutual assistance for public and private water systems. The Utah WARN website provides members with emergency planning, contact, and recovery information, before, during, and after an emergency. Members of Utah WARN can also promote and encourage asset management programs as a means to mitigate emergency situations as well as enhance all utility's ability to quickly and fully recover from emergency situations.

Helpful Links to State Resources

- ◆ Utah Department of Environmental Quality: <https://deq.utah.gov/>
- ◆ Division of Drinking Water: <http://www.drinkingwater.utah.gov/>
- ◆ Utah State Revolving Fund: <https://deq.utah.gov/drinking-water/state-revolving-fund-srf-drinking-water>
- ◆ Utah DWSRF: <https://deq.utah.gov/drinking-water/federal-state-revolving-fund-srf-program-drinking-water>
- ◆ Division of Drinking Water's Operator Certification Program: <https://deq.utah.gov/drinkingwater/operator-certification>
- ◆ Utah WARN: <https://www.utwarn.org/>

Vermont

Vermont Drinking Water and Groundwater Protection Division



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION AND PRINCIPAL FORGIVENESS OF CONSOLIDATION PROJECTS

A long-term goal of the Vermont DWSRF program is to provide funding assistance to eligible PWSs for eligible projects associated with the improvement and maintenance of water treatment, storage, and distribution facilities, and for consolidation or interconnection of water systems to improve service or develop capacity. Additionally, Vermont encourages the consolidation of small water systems to increase the capability of small systems to protect public health and comply with regulations. Vermont's project priority ranking system awards points for the three types of consolidation projects: 20 points are awarded for projects involving the interconnection of community water supplies that result in declassification of a regulated public CWS, 15 points are awarded for interconnection of community water supplies where the systems involved remain separate regulated public CWSs, and 10 points are awarded for the interconnection of a non-community system. Projects may only receive points in one of three categories. The DWSRF program also administers a Planning Loan Program, which offers funding and principal forgiveness for engineering studies and plans, including for consolidation and system acquisition.



REGIONALIZATION

The Capacity Development program is involved in assisting publicly owned CWSs restructure through the formation of fire districts. Fire districts are municipal corporations. Their purpose is to manage certain functions of town government that either are not available throughout the entire town, or are better administered by a distinct, special-purpose entity. Fire districts have been formed to manage community sewer systems, sidewalks, street lighting, fire departments, and water systems. A fire district may be formed to acquire a privately-owned system, assisting with a merger between two municipal entities. A fire district has the power to vote a tax upon a taxable estate only for the acquisition, construction and maintenance of water works, water companies and equipment and real estate used in connection including reservoirs and dams, and for other lawful purposes. To help small systems, the Drinking Water and Groundwater Protection Division developed the guidance document "How to Form a Fire District".



EMERGENCY PLANNING

Vermont Water/Wastewater Agency Response Network (VtWARN) allows water and wastewater systems in Vermont to receive rapid mutual aid and assistance from other systems to continue providing services if they are impaired by unforeseen staff absences, materials shortages, or equipment failures. VtWARN is available to all water and wastewater systems, public or private, big or small, in Vermont. Water and wastewater service providers are invited to register with VtWARN, indicating that they would like to join the request-and-response network, and sign a standard agreement. In the event that staffing, materials, or equipment problems occur, systems can request help or share resources with any other system in Vermont that has also signed the standard agreement. Participation is free and voluntary and not mandated by any local, state, or federal regulation.

Helpful Links to State Resources

- ◆ Drinking Water and Groundwater Protection Division: <https://dec.vermont.gov/water/drinking-water>
- ◆ Vermont Capacity Development: <http://dec.vermont.gov/water/drinking-water/capacity-dev>
- ◆ Vermont Operator Certification: <http://dec.vermont.gov/water/drinking-water/pwso>
- ◆ Vermont DWSRF: <https://dec.vermont.gov/water-investment/water-financing/dwsrf>
- ◆ How to Form a Fire District:
<https://dec.vermont.gov/sites/dec/files/dwgwp/capacitydev/pdf/How%20to%20Form%20a%20Fire%20District.pdf>
- ◆ VtWARN: <https://dec.vermont.gov/VTWARN>

Virginia

Virginia Department of Health (VDH) – Office of Drinking Water (ODW)
Virginia State Corporation Commission (SCC)



State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF CONSOLIDATION PROJECTS

The Virginia DWSRF program is comprised of the Financial and Construction Assistance Programs (FCAP), which oversees construction-funded activities, and the Capacity Development Program (Cap Dev), which oversees the implementation of the capacity building functions of ODW at VDH. ODW manages two funding sources under FCAP: DWSRF funding and the Water Supply Assistance Grant (WSAG) Fund Program, which offers grants fully funded by the State of Virginia. The DWSRF priority ranking criteria contains a regionalization section. Projects can receive points for one of the following categories: 300 points for taking over or providing service to customers of an abandoned waterworks, 200 points for consolidating multiple non-complying waterworks, 110 points for consolidating one non-complying waterworks, 110 points for consolidating or interconnecting complying waterworks, or 200 points for providing service to areas with individual homes having quality/quantity problems.



STATE FUNDING FOR CONSOLIDATION PROJECTS

In 2022, the Virginia General Assembly allocated \$1 million to establish the Equitable Access to Drinking Water Program within ODW. This funding supports small community waterworks with operation and maintenance expenses associated with regionalization and consolidation. The Fund is intended to help reduce health violations, improve economies of scale, and address resilience and reliability at small and disadvantaged systems. ODW manages and utilizes the Fund for recalcitrant, poorly performing, or small community waterworks that can be consolidated to improve economy of scale.



ENCOURAGING SYSTEM CONSOLIDATION

ODW staff assess TMF capacity through compliance data, sanitary surveys, and managerial and financial capacity data. ODW continues to encourage small water systems with TMF deficiencies to consider consolidation as a method of addressing TMF capacity issues.



STATE ORDERED RECEIVERSHIP

Both the VDH and SCC have receivership statutes. According to Virginia regulations, the SCC Commissioner “may, either upon petition of two-thirds of the affected customers or upon petition of its staff or upon petition of the Board of Health, appoint a receiver to operate a small water system... which is unable or unwilling to provide adequate service to its customers.” (Va. Code §56-265.13:6.1). Similarly, the State Health Commissioner “may petition the circuit court for... the appointment of a receiver... any time that the Commissioner finds that the waterworks is unable or unwilling to provide adequate and safe service for any of the following reasons:... the waterworks can no longer be depended on to furnish pure water... has inadequate capacity... has failed to comply with an order... has abandoned the waterworks... or the Commissioner has issued an emergency order because there is an imminent danger to the public health” (Va. Code §32.1-174.3).



STATE ORDERED INTERCONNECTION

Va. Code § 15.2-2146 authorizes localities to acquire waterworks. The regulations states that “for the purpose of providing an adequate water supply or of acquiring, maintaining or enlarging a waterworks system, including chronically noncompliant waterworks... any locality, in addition to other powers conferred by law, may acquire... within or outside or partly within and partly outside the limits of the locality, the property, in whole or in part, whensoever acquired, of any private or public service corporation operating a waterworks system or chartered for the purpose of acquiring or operating such a system.” Similarly, the SCC “may require a public utility to transfer to another public utility... whenever the public health, welfare, or safety shall be found to so require” (VA Code § 56-249.1). The transferring public utility is compensated at a rate fixed by the SCC.



NEW SYSTEMS MUST CONSIDER INTERCONNECTION TO EXISTING SYSTEMS

Virginia regulations state it is “unlawful for any public utility to construct, enlarge or acquire, by lease or otherwise, any facilities for use in public utility service, except ordinary extensions or improvements in the usual course of business, without first having obtained a certificate from the Commission that the public convenience and necessity require the exercise of such right or privilege.” (Va. Code § 56 – 265.2.A.1). It is the utility’s responsibility to file for approval. The regulations define a public utility as every corporation (other than municipality), company, individual or association of individuals or cooperative ... that... own, manage or control any plant or equipment... for the conveyance of... water... to the public” (Va. Code § 56-232).



EMERGENCY RESPONSE

Virginia Water and Wastewater Agency Response Network (VA WARN) is a Mutual Aid Response Network for Virginia Water and Wastewater Systems. The mission of VA WARN is to provide a method whereby Virginia water and wastewater utilities that have sustained damages from natural or manmade events could obtain emergency assistance in the form of personnel, equipment, materials, and other associated services as necessary from other water and wastewater utilities. The objective is to provide rapid, short-term deployment of emergency services to restore the critical operations of the impacted utility.

Helpful Links to State Resources

- ◆ Virginia Department of Health Financial & Construction Assistance Programs: <https://www.vdh.virginia.gov/drinking-water/fcap/>
- ◆ Virginia Department of Health Drinking Water Funding Program Details & Application: <https://www.vdh.virginia.gov/drinking-water/fcap/drinking-water-funding-program/>
- ◆ Capacity Development Strategy: https://www.vdh.virginia.gov/content/uploads/sites/14/2022/02/APPROVED_Virginia-Capacity-Development-Strategy_Mar-1-2021.pdf
- ◆ Information for Waterworks Operators: <http://www.vdh.virginia.gov/drinking-water/information-for-waterworks-operators/>
- ◆ Virginia DWSRF: <https://www.vdh.virginia.gov/drinking-water/dwsrf/>
- ◆ VA WARN: <https://www.vawarn.org/>

Washington

Washington State Department of Health (DOH)
Office of Drinking Water (ODW)



State Policies and Programs Regarding Water System Partnerships



DWSRF INCENTIVES FOR CONSOLIDATION PROJECTS

Washington's DWSRF program offers multiple incentives for consolidation projects. First, PWSs are eligible for principal forgiveness for restructuring and consolidation projects that involve a change of ownership or inactivation due to consolidation. Eligible projects involve the consolidation of noncompliant, failing, or struggling PWSs that have water quality problems or deteriorated infrastructure into systems that demonstrate a history of sound drinking water utility management. The DWSRF program also awards "bonus" priority points to consolidation or restructuring projects. Additionally, Washington DOH offers support to PWSs that need additional support to become eligible for DWSRF loans, including attending meetings to evaluate consolidation or restructuring and providing tailored third-party TA.



DWSRF LOANS FOR CONSOLIDATION STUDIES

Washington offers Consolidation Feasibility Study Grants. The primary objective of this consolidation grant is to assist not-for-profit CWSs and municipalities with restructuring or consolidation infrastructure projects. Eligible consolidation activities include, but are not limited to, water system planning, feasibility studies, public outreach and meetings, engineering design, and studies that identify infrastructure improvements necessary to address or prevent violations of applicable federal, state, and local drinking water requirements. The maximum grant available per project is \$50,000 and the minimum is \$10,000.



ENCOURAGING SYSTEM CONSOLIDATION

ODW's planning program works with PWSs to develop their Water System Plan, Small Water System Management Program, Coordinated Water System Plan, or Satellite Management Program, depending on the type of system. Planners lead and facilitate meetings preparing short- and long-range water system planning, on a wide variety of topics, including asset management, budgeting, funding, governance, rates, resiliency and preparedness, source water protection, regional collaboration and consolidation, receivership, and water use efficiency.



OPERATOR SHARING

Washington allows PWSs to employ contract operators. Contract operators are certified operators in responsible charge of three or more PWSs, must be certified as a Cross-connection Control Specialist, and at the highest classification of the water treatment plant or distribution system operated. Contract Operators are required to submit one copy of each PWS operations contract within 30 days of the effective date of the contract. They are also required to notify the DOH within 30 days of starting operation or ending operation of a PWS. Washington regulations place no limit on the number of water systems that a contract operator can manage. However, contract operators must be available onsite or able to be contacted immediately by telephone 24 hours per day, every day, and initiate appropriate action within two hours of contact.



COLLABORATION TO SUPPORT SMALL SYSTEM CAPACITY

The Washington Department of Commerce operates the Small Communities Initiative (SCI). The SCI provides technical advice and facilitation services to small PWSs to develop infrastructure projects, make strategic decisions, and identify and access appropriate funding sources. This program is a collaborative effort among the DOH and Departments of Ecology and Commerce. All three agencies fund this program to support upgrades for community drinking water or wastewater systems. The SCI program helps local leaders, staff, and residents to define, prioritize, and identify links between public health, environmental protection, and local development issues. The program aids communities in the development and implementation of necessary infrastructure improvement action plans.



REGIONAL PLANNING

The PWS Coordination Act (PWSCA) of 1977 establishes a process whereby water systems identify existing and future service areas. Identifying service areas and directing water systems seeking restructuring and new water applicants to existing water systems for service has helped prevent the creation of new isolated systems within the service area of existing water systems.



STATE ORDERED CONSOLIDATION OR RECEIVERSHIP

When a PWS is unable to achieve compliance, the state may petition the court to take temporary control of a failing PWS and direct that PWS to a receiver. Receivers are authorized to operate and maintain the PWS, make needed system improvements, impose reasonable assessments on PWS customers, and receive reasonable compensation for the cost of providing service. When no receiver is available, the local county is the receiver. PWSs in receivership are returned to their original owner only with the approval of DOH.



SATELLITE MANAGEMENT AGENCIES FOR NEW WATER SYSTEMS

Approved Satellite Management Agencies (SMAs) are entities authorized by the DOH to own and/or manage and operate PWSs. Washington drinking water regulations require that all PWSs approved on or after July 23, 1995, be owned or operated by a SMA in perpetuity unless one is not available. The SMA requirement was established based on the proliferation of small water systems in Washington State and to ensure that small systems have TMF oversight and are providing safe drinking water. The goal of the SMA program is to allow all communities to care for their investments through strong, viable utilities that demonstrate long-term capacity.



EMERGENCY RESPONSE

The Washington Water/Wastewater Agency Response Network (WAWARN) is a network that allows water and wastewater systems to receive rapid mutual aid and assistance from other systems during an emergency. Utilities sign the WARN standard agreement, which allows them to share resources with other Washington systems that have signed the agreement.

Helpful Links to State Resources

- ◆ Washington Department of Health Drinking Water Information: <http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater.aspx>
- ◆ Washington Operator Certification: <https://doh.wa.gov/community-and-environment/drinking-water/regulation-and-compliance/waterworks-operator-certification>
- ◆ Washington Capacity Development: <https://doh.wa.gov/community-and-environment/drinking-water/water-system-assistance/capacity-development>
- ◆ Washington DWSRF: <https://doh.wa.gov/community-and-environment/drinking-water/water-system-assistance/drinking-water-state-revolving-fund-dwsrf>
- ◆ Receivership for Drinking Water Systems: <https://doh.wa.gov/community-and-environment/drinking-water/regulation-and-compliance/enforcement/receivership>
- ◆ Small Communities Initiative: <https://www.commerce.wa.gov/serving-communities/serving-rural-communities/small-communities-initiative-sci/>
- ◆ Regional Water Supply Report from King County Region: <http://www.govlink.org/regional-water-planning/docs/process-synthesis.htm>
- ◆ WAWARN: <https://www.wawarn.org/>

West Virginia

West Virginia Office of Environmental Health Services (OEHS)
West Virginia Bureau for Public Health (BPH)
West Virginia Department of Health & Human Resources (DHHR)
Public Service Commission (PSC) of West Virginia
West Virginia Infrastructure and Jobs Development Council (IJDC)



State Policies and Programs Regarding Water System Partnerships



DWSRF AND OTHER STATE FUND PRIORITIZATION OF CONSOLIDATION PROJECTS

One component of West Virginia's strategy to address capacity impairment is to strengthen the encouragement of the consolidation or merger option through funding of infrastructure. All West Virginia drinking water projects using any state agency funding, including the DWSRF, are reviewed and approved by the West Virginia IJDC. The IJDC approval process includes reviewing all viable alternatives, including consolidation. Projects where consolidation is the most cost-effective alternative are referred to the IJDC Consolidation Committee. The BPH and PSC are two of the five Consolidation Committee voting members. When the Consolidation Committee and IJDC determine consolidation is the most viable, cost-effective alternative, only this alternative will be approved for funding.



ENCOURAGING SYSTEM CONSOLIDATION

The Capacity Development program continues to discourage the creation of new, small water systems and encourages these proposed systems to connect or become part of existing, larger, more viable, and sustainable water systems. The Capacity Development New Systems program is effectively preventing the formation of new, unsustainable PWSs when they can connect to or partner with existing systems. West Virginia aims to address capacity impairment by strengthening the encouragement of consolidation or mergers through enforcement and compliance actions. As part of this strategy, the PSC can order water systems to approach their local county commission and request consolidation to create larger, more viable water systems.



STATE ORDERED RECEIVERSHIP

Any public service district, investor owned, or municipal water system currently serving or proposing to construct facilities also falls under the regulatory jurisdiction of the WV PSC. The PSC regulates public service districts (PSDs) and water systems to ensure systems provide adequate and reliable service at reasonable rates. The PSC may require service improvements if necessary. Additionally, systems that fail to comply with PSC regulations may be placed into a receivership. The PSC has the authority to review, and approve or deny County Commission PSD orders, including orders related to creation or modification of PSDs to prevent the creation of new, nonviable PSDs.



EMERGENCY RESPONSE

The West Virginia Water/Wastewater Agency Response Network (WVWARN) provides water and wastewater utilities a process for sharing emergency resources statewide. This mutual assistance program allows utilities to respond and recover more quickly from a natural or manmade disaster. There is no cost of commitment to join WVRWA and assistance is strictly voluntary. As a member of WVWARN, utilities are eligible for FEMA disaster reimbursement in a federally declared disaster and are provided access to a database of utilities and resources.

Helpful Links to State Resources

- Infrastructure and Capacity Development Program: <https://oehs.wvdhhr.org/eed/infrastructure-capacity-development/>
- Drinking Water Treatment Revolving Fund: <https://oehs.wvdhhr.org/eed/infrastructure-capacity-development/west-virginia-drinking-water-treatment-revolving-fund-dwtrf/>
- WVWARN: <https://wvrwa.org/wvwarn>

State Policies and Programs Regarding Water System Partnerships



DWSRF PRIORITIZATION OF AND PRINCIPAL FORGIVENESS FOR CONSOLIDATION PROJECTS

The Safe Drinking Water Loan Program is Wisconsin's DWSRF program. Wisconsin DNR awards 10 priority points for projects where the applicant has executed a new agreement between two or more water systems to improve TMF capacity. This incentivizes water systems struggling with TMF capacity to pursue partnerships with nearby and higher capacity water systems. Partnerships can range from informal resource sharing and staff to formal consolidation of infrastructure and distribution systems.

Additionally, projects in which a water system facing emerging contaminants issues consolidates with another water system that does not have emerging contaminants present or has removal capability are eligible for Emerging Contaminant principal forgiveness. Projects involving the creation of a new CWS or extension of a distribution system to address unsafe drinking water provided by individual (i.e., privately-owned) wells or surface water sources are also eligible for Emerging Contaminant principal forgiveness.



CAPACITY DEVELOPMENT ASSISTANCE

Wisconsin utilizes a variety of activities to help PWSs build TMF capacity including drinking water coalitions, self-assessments, training and workshops, guidance documents, targeted quarterly TA priority lists, improved DNR staff training, and interagency communication.

The DNR Capacity Development program facilitates the establishment of "coalitions" of municipal and other PWS owners and operators throughout the state. The intent of the coalitions is to create forums where owners and operators can discuss issues in an informal setting, network with other communities in the same area to share ideas and possibly equipment and receive information on the new regulations from EPA and review their implications.

Additionally, organizations like the Wisconsin Water Well Association, the Wisconsin Section of the AWWA, and the Wisconsin Rural Water Association provide TA and training that often focuses on small PWSs. Their TA activities include helping with the consolidation or restructuring of current water supply services.



OPERATOR SHARING

The Wisconsin Operator Certification program maintains a list of contract operator service providers in the state to facilitate operator sharing and maintain system operations. This resource states that companies on this list provide contract certified operator services to PWSs in Wisconsin and that businesses on the list must comply with all the requirements in Wisconsin Administrative Code Chapter NR 114. These listings are compiled from information provided by the businesses. The resource further states that Inclusion on this list does not constitute an endorsement of any companies, and Wisconsin DNR does not hold any liability for the businesses listed.



EMERGENCY RESPONSE

The Wisconsin Water and Wastewater Agency Response Network (WIWARN) is comprised of "utilities helping utilities" in Wisconsin that can respond to and recover from emergencies by sharing resources with one another. WIWARN's mission is to support and promote statewide emergency preparedness, disaster response, and mutual assistance matters for public and private water and wastewater utilities for natural and man-made events. Wiwarn is governed by a common mutual aid and assistance agreement. This mutual aid and assistance network provides water and wastewater utilities with the means to quickly obtain help in the form of personnel, equipment, materials and associated services from other utilities to restore critical operations impacted during any type of emergency.

Helpful Links to State Resources

- ◆ Drinking Water Program: <https://dnr.wisconsin.gov/topic/DrinkingWater>
- ◆ Wisconsin Capacity Development: <https://dnr.wisconsin.gov/topic/DrinkingWater/CapacityDevelopment.html>

- ◆ Wisconsin Operator Certification: <https://dnr.wisconsin.gov/topic/opcert/program.html>
- ◆ Contract Certified Operator Services for PWSs in Wisconsin:
<https://dnr.wisconsin.gov/sites/default/files/topic/OpCert/ContractOps.pdf>
- ◆ Public Water Supply Partnerships SDWLP PERF Requirements:
<https://dnr.wisconsin.gov/sites/default/files/topic/Aid/loans/SDWLP/publicWaterSysPartnerPFpoints.pdf>
- ◆ WIWARN: <https://www.wiawwa.org/general/custom.asp?page=WIWARN> Homepage

Wyoming

Wyoming Department of Environmental Quality (DEQ)

Wyoming Public Service Commission (PSC)

Wyoming Water Development Commission (WWDC)



State Policies and Programs Regarding Water System Partnerships



FUNDING REGIONALIZATION WITH STATE FUNDS

The WWDC finances projects involving the conservation, storage, transmission, supply, and use of water, necessary to develop and preserve Wyoming's water and related land resources. The WWDC funds regional water system projects and prioritizes projects that will provide service to regional areas or connect multiple existing water systems. The WWDC Operating Criteria states that funding preference will be given to water supply projects that involve more than one entity coming together to provide water to a regional service area, and for subdivisions or rural domestic projects that are proposing to connect to another existing public water supply system. The WWDC utilizes income generated from non-renewable resource development to fund the sustainable development of water resources. Some of the regional water systems that the commission has funded are the Gillette Regional Pipeline Project, connecting the City of Gillette and Campbell County; the Bighorn Regional Water Supply System, supplying water to multiple entities; and the Shoshone Municipal Water Supply District, among others.



ENCOURAGING SYSTEM CONSOLIDATION

The Water Quality Division in Wyoming DEQ promotes and develops partnerships among multiple drinking water systems to create regional systems. The Water and Wastewater Program requires all new or modified PWSs or PWSs applying for a construction permit to submit a Capacity Assessment. The Capacity Assessment includes the following question designed to encourage PWSs to consider partnerships and consolidation: "Does your long-term planning incorporate analysis of alternative strategies that might offer cost saving to customers, such as consolidation with other nearby systems or sharing of operations and management expenses with other nearby systems?"



EMERGENCY RESPONSE

Wyoming Water and Wastewater Agency Response Network (WYOWARN) is a network of Wyoming water and wastewater utilities that cooperatively prepare for the next natural or man-made disaster by bridging political and jurisdictional boundaries through training, protocols and mutual aid agreements so that the utilities can respond to events beyond their control by sharing personnel, tools and equipment.

Helpful Links to State Resources

- ◆ Wyoming Drinking Water Program: <https://www.epa.gov/region8-waterops/about-us>
- ◆ Wyoming Water Development Commission: <https://wwdc.state.wy.us/>
- ◆ Wyoming Operator Certification: <http://deq.wyoming.gov/wqd/operator-certification/>
- ◆ Wyoming DWSRF: <https://deq.wyoming.gov/water-quality/water-wastewater/state-revolving-loan-fund/>
- ◆ Wyoming PSC Rules: <http://psc.state.wy.us/pscdocs/AdoptedRules.html>
- ◆ WYOWARN: <https://wyowarn.org/>

Appendix A: Resources

- **EPA's** Building the Capacity of Drinking Water Systems homepage: <https://www.epa.gov/dwcapacity>
- **EPA's** webpage on Mutual Aid and Assistance for Drinking Water and Wastewater Utilities: <https://www.epa.gov/waterutilityresponse/mutual-aid-and-assistance-drinking-water-and-wastewater-utilities>
- **Association of State Drinking Water Administrators' (ASDWA)** State Definitions of Disadvantaged Communities: <https://www.asdwa.org/environmental-justice/>

	Drinking Water Page	DWSRF
Alabama	https://adem.alabama.gov/programs/water/drinkingwater.cnt	https://adem.alabama.gov/programs/water/srf.cnt
Alaska	http://dec.alaska.gov/eh/dw/	https://dec.alaska.gov/water/technical-assistance-and-financing/state-revolving-fund/
Arizona	https://www.azdeq.gov/WQD	https://www.azwifa.gov/programs/funding-type/dwsrf
Arkansas	https://healthy.arkansas.gov/programs-services/public-health-safety/drinking-water-safety/	https://www.agriculture.arkansas.gov/natural-resources/divisions/water-development/
California	http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/publicwatersystems.shtml	http://www.waterboards.ca.gov/drinking_water/services/funding/SRF.shtml#
Colorado	https://cdphe.colorado.gov/drinking-water	https://www.cwrpda.com/drinking-water-revolving-fund
Connecticut	https://portal.ct.gov/dph/drinking-water/dws/drinking-water-section	https://portal.ct.gov/DPH/Drinking-Water/DWS/Drinking-Water-State-Revolving-Fund-Program
Delaware	http://www.dhss.delaware.gov/dhss/dph/hsp/odw.html	http://www.dhss.delaware.gov/dph/hsp/dwsrf.html
Florida	http://www.dep.state.fl.us/water/drinkingwater/	https://floridadep.gov/wra/srf/content/dwsrf-program
Georgia	https://epd.georgia.gov/watershed-protection-branch/drinking-water	http://gefa.georgia.gov/drinking-water-state-revolving-fund
Hawaii	http://health.hawaii.gov/sdwb/	http://health.hawaii.gov/sdwb/drinking-water-state-revolving-fund/
Idaho	http://www.deq.idaho.gov/water-quality/drinking-water/	https://www.deq.idaho.gov/water-quality/grants-and-loans/construction-loans/
Illinois	https://epa.illinois.gov/topics/drinking-water.html	https://epa.illinois.gov/topics/grants-loans/state-revolving-fund.html
Indiana	http://in.gov/idem/cleanwater/2381.htm	http://www.in.gov/ifa/srf/
Iowa	http://www.iowadnr.gov/InsideDNR/RegulatoryWater/DrinkingWaterCompliance.aspx	https://www.iowasrf.com/drinking-water-loan-program/
Kansas	https://www.kwo.ks.gov/	https://admin.ks.gov/offices/accounts-reports/citizens--suppliers/state-revolving-fund

	Drinking Water Page	DWSRF
Kentucky	https://eec.ky.gov/Environmental-Protection/Water/Drinking/Pages/Drinking%20Water.aspx	https://eec.ky.gov/Environmental-Protection/Water/Funding/DWSRF/Pages/default.aspx
Louisiana	http://new.dhh.louisiana.gov/index.cfm/page/963	http://new.dhh.louisiana.gov/index.cfm/page/431/n/285
Maine	https://www.maine.gov/dhhs/mecdc/environmental-health/dwp/index.shtml	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/srf.shtml
Maryland	https://health.maryland.gov/phpa/OEHFP/CHS/Pages/DrinkingWater.aspx	https://mde.maryland.gov/programs/water/wqfa/pages/drinking_water_fund.aspx
Massachusetts	https://www.mass.gov/topics/drinking-water	https://www.mass.gov/info-details/drinking-water-state-revolving-fund-srf-program
Michigan	http://www.michigan.gov/deq/0,1607,7-135-3313_3675---,00.html	http://www.michigan.gov/deq/1,1607,7-135-3307_3515_3517---,00.html
Minnesota	https://www.health.state.mn.us/communities/environment/water/dwp.html	https://www.health.state.mn.us/dwrf
Mississippi	http://msdh.ms.gov/msdhsite/_static/30,0,76.html	http://msdh.ms.gov/msdhsite/_static/44,0,127.html
Missouri	https://dnr.mo.gov/water/how-water/water-we-drink	https://dnr.mo.gov/water/business-industry-other-entities/financial-opportunities/financial-assistance-center
Montana	https://deq.mt.gov/water/Programs/dw	https://dnrc.mt.gov/Conservation/Grant-and-Loan-Programs/Loans/State-Revolving-Fund-Loans
Nebraska	http://dee.ne.gov/NDEQProg.nsf/OnWeb/DWO	http://deq.ne.gov/NDEQProg.nsf/OnWeb/DWSRLF
Nevada	https://ndep.nv.gov/water/drinking-water	https://ndep.nv.gov/water/financing-infrastructure/state-revolving-fund-loans
New Hampshire	https://www.des.nh.gov/water/drinking-water	https://www.des.nh.gov/business-and-community/loans-and-grants/drinking-water-state-revolving-fund
New Jersey	http://www.nj.gov/dep/watersupply/	http://www.nj.gov/dep/watersupply/dws_loans.html
New Mexico	https://www.env.nm.gov/drinking_water/	https://www.nmfinance.com/water-project-fund/drinking-water-state-revolving-loan-fund/
New York	https://www.nyc.gov/site/dep/water/drinking-water.page	https://www.health.ny.gov/environmental/water/drinking/water.htm
North Carolina	https://www.deq.nc.gov/about/divisions/water-resources/drinking-water	https://www.deq.nc.gov/about/divisions/water-infrastructure/i-need-funding/drinking-water-state-revolving-fund
North Dakota	https://deq.nd.gov/mf/DWP/	https://deq.nd.gov/MF/DWSRF/
Ohio	https://epa.ohio.gov/divisions-and-offices/drinking-and-ground-waters/drinking-and-ground-waters	http://epa.ohio.gov/ddagw/financialassistance.aspx

	Drinking Water Page	DWSRF
Oklahoma	https://www.deq.ok.gov/water-quality-division/public-water-supply/	https://www.deq.ok.gov/water-quality-division/public-water-supply/dwsrf/
Oregon	http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/Pages/index.aspx	http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/SRF/Pages/index.aspx
Pennsylvania	http://www.dep.pa.gov/Business/Water/BureauSafeDrinkingWater/Pages/default.aspx	http://www.pennvest.pa.gov/Information/Funding-Programs/Pages/Drinking-Water-State-Revolving-Fund.aspx
Puerto Rico	https://www.puerto-rico-agencies.com/departament-of-health/	https://www.aafaf.pr.gov/puerto-rico-issuers/puerto-rico-infrastructure-financing-authority-prifa
Rhode Island	https://health.ri.gov/programs/detail.php?pgm_id=158	https://health.ri.gov/programs/detail.php?pgm_id=127
South Carolina	https://des.sc.gov/programs/bureau-water/drinking-water	https://des.sc.gov/programs/bureau-water/state-revolving-fund-srf-program/
South Dakota	http://denr.sd.gov/des/dw/dwhome.aspx	https://danr.sd.gov/Funding/EnvironmentalFunding/DWRevolvingFunding.aspx
Tennessee	http://www.tennessee.gov/environment/topic/wr-wq-dw-drinking-water	https://www.tn.gov/environment/program-areas/wr-water-resources/srfp/srf-home/drinking-water-state-revolving-fund.html
Texas	https://www.tceq.texas.gov/drinkingwater	https://www.twdb.texas.gov/financial/programs/DWSRF/
Utah	http://www.drinkingwater.utah.gov/	https://deq.utah.gov/drinking-water/federal-state-revolving-fund-srf-program-drinking-water
Vermont	https://dec.vermont.gov/water/drinking-water/public-drinking-water-systems	https://dec.vermont.gov/water-investment/water-financing/dwsrf
Virginia	http://www.vdh.virginia.gov/drinking-water/	https://www.vdh.virginia.gov/drinking-water/fcap/
Washington	http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater.aspx	https://doh.wa.gov/community-and-environment/drinking-water/water-system-assistance/drinking-water-state-revolving-fund-dwsrf
West Virginia	https://oehs.wvdhhr.org/eed/certification-training/public-drinking-water/	https://oehs.wvdhhr.org/eed/infrastructure-capacity-development/west-virginia-drinking-water-treatment-revolving-fund-dwtrf/
Wisconsin	http://dnr.wi.gov/topic/drinkingwater/	http://dnr.wi.gov/aid/eif.html
Wyoming	https://www.epa.gov/region8-waterops/about-us	https://deq.wyoming.gov/water-quality/water-wastewater/state-revolving-loan-fund/

Note: The URLs in this table are valid as of September 2024