

# Building Program Demand through Outreach & Engagement

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A DWSRF Handbook for States  
**November 2019**

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Created by the 1996 Amendments to the Safe Drinking Water Act (SDWA), the Drinking Water State Revolving Fund (DWSRF) is an important part of the national initiative to ensure that water systems provide sustainable, long-term public health protection and an adequate supply of drinking water. The DWSRF is an incredibly flexible program capable of addressing water system infrastructure financing challenges. Promoting strong awareness of the DWSRF program will help maximize its use and result in increased public health protection and system reliability benefits.

State DWSRF personnel are stewards of this powerful resource. Strategic outreach will help the DWSRF program connect available funds with water systems that need them the most and will build relationships for future use of the fund. Increased use of the DWSRF also supports maintenance of robust funding availability.

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## **This handbook is organized into four strategies for improving the success of the DWSRF program by increasing awareness of its flexibility and value:**

- Communicating benefits of the DWSRF program
  - Communicating state priorities and specific DWSRF opportunities
  - Identifying perceived barriers and helping potential borrowers overcome them
  - Proactively reaching out to potential borrowers, design and construction communities, and other partners
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# 2

## Communicating the Benefits of the DWSRF Program

The DWSRF program offers many benefits to water systems as they address their infrastructure needs. These benefits can help states improve public health sooner and at a lower cost than alternative financing options. Developing a compelling business case for using the DWSRF can be an important element of increasing interest in the fund. This section addresses three benefits that states may find helpful when building a business case for DWSRF financing.

### Addressing Near-Term Infrastructure Needs

Water systems often struggle with the question of whether to plan and implement projects now or to defer them. A fundamental goal of the DWSRF program is to support water systems in identifying and addressing near-term infrastructure needs, which can avoid higher long-term costs. Information and materials that describe the benefits of investing in infrastructure projects sooner rather than later can be an effective way to encourage water system project planning. Some examples are:

- Addressing near-term infrastructure needs helps avoid emergency situations that disrupt water service to customers and that can have significant repair and environmental damage costs. Infrastructure failure and service disruptions also erode public confidence in the water system and can have a detrimental effect on the economy of the community.
- Consequences of infrastructure failure, such as a water main break, also include diversion of water system personnel from preventive maintenance and operations tasks to emergency response tasks. Lapses in preventive maintenance and operations activities can lead to premature infrastructure failure and unrecognized problems in other

areas of the water system. These, in turn, can result in increased health risks, compliance issues, and additional costs.

- Allowing critical infrastructure, such as a storage tank, to remain in service after reaching the end of its useful life can increase the risk for contaminants to enter the system. These water quality problems pose public health risks and regulatory compliance issues that may require significant time and cost to address.
- Postponing replacement of broken or inoperable valves can prevent water system personnel from being able to isolate specific areas of the distribution system during main break repair or pipe replacement. This can result in significantly more water loss, service disruption, and damage caused by the released water. Near-term investment in valve replacement can help maintain distribution system controls and avoid or reduce the consequences of water main breaks in the future.



- In an emergency, last-minute financing options may be more expensive than strategically-planned improvements.
- Investment in other infrastructure in the near term can improve operational efficiency and reduce the risk of disruptive events in the future. For example, a Supervisory Control and Data Acquisition (SCADA) system is an automated control system that monitors the water system and alerts staff to potential issues. This system can provide real-time information and reduce the reliance on visual inspections of wells, storage tanks, and other water system infrastructure.

DWSRF loans can be an important resource for water systems to meet their near-term capital infrastructure needs. The DWSRF set-asides can support technical assistance and help water systems identify and prepare for infrastructure projects.

## Economical Financing

The DWSRF offers low-cost financing. Loans are made at or below market rates and additional subsidy may be available through principal forgiveness and negative interest loans.

For example, the DWSRF program average interest rate in 2016 was 1.7 percent compared to the 3.5 percent market-value interest rate. The average DWSRF loan size is about \$2 million. As shown in the table below, a water system could save over \$227,000 over the life of a \$2 million loan by using the DWSRF.

Grants are also available, though they are less common and come with more requirements than loans with principal forgiveness.<sup>1</sup>

A useful resource that water systems can use to compare the lifecycle cost of multiple financing options is EPA's *Financing Alternatives Comparison Tool*, or FACT. DWSRF funds can also be combined with financing from other sources as part of a comprehensive and cost-effective financing package.

## Key Resources

Use EPA's [Financing Alternatives Comparison Tool \(FACT\)](#) to compare lifecycle costs of multiple financing options.

Use EPA's [DWSRF Eligibility Handbook](#) to learn about the program, understand eligibilities, and see examples of DWSRF-funded projects.



Interest rate	1.5%	2.5%	3.5%
Repayment for 20 Year Loan	\$2,316,218	\$2,543,534	\$2,783,807
Savings Using a 1.5% Rate	_____	\$227,316	\$467,589

<sup>1</sup>Grants are available only under the Congressional Appropriation subsidy authority, not the SDWA §1452(d) disadvantaged community subsidy authority.



## Broad Project Eligibilities

The DWSRF program is designed to meet the wide variety of infrastructure needs of water systems. Water systems have used the DWSRF to modernize treatment facilities, improve distribution, reduce water losses, install new meters, and install emergency power systems, among other project types.

The loan fund can finance all types of water system infrastructure that are necessary for the provision of safe drinking water. There are a few exceptions to project eligibility for DWSRF funding. EPA considers deviations to the DWSRF regulations on a case-by-case basis and will evaluate proposals that exclusively address a compelling and imminent public health threat.

By communicating DWSRF project eligibilities, state staff can emphasize to water systems that the program can be a one-stop shop for many of their

drinking water infrastructure improvement needs. The *DWSRF Eligibility Handbook* is a key resource for learning about the program and seeing how water systems have already utilized DWSRF funds. But these examples are only a starting point: the DWSRF is extremely flexible and the program promotes innovation. States are encouraged to communicate that to water systems and seek out and introduce new project ideas.

### Incentivizing Borrowers in Texas

The Texas DWSRF program provides loans with principal forgiveness to small systems but also ensures large systems receive some additional subsidy to encourage the borrowers to return to the DWSRF for future projects.



# 3

## Communicating State Priorities and Specific DWSRF Opportunities

Every state has its own public health priorities, as do the individual water systems. States have considerable flexibility to tailor their DWSRF programs and outreach to these priorities. Promoting these state-specific goals may help water systems view the DWSRF as directly relevant to their local needs. States can also use their goals and priorities to help water systems identify potential projects for DWSRF assistance.

Although immediate risks to public health, at-risk sources and compliance issues are typically prioritized, prospective borrowers might not be aware that general infrastructure replacement and improvement projects are also welcomed and funded. Furthermore, water systems might not know that risks to public health are not limited to regulated contaminants only; unregulated substances such as per- and polyfluoroalkyl substances (PFAS) or contaminants resulting from harmful algal blooms (HABs) are also eligible.

A state's Intended Use Plan (IUP) contains a list of projects that have already been approved for DWSRF eligibility. The list could be used to provide examples of the types of DWSRF projects and variety of water systems that are eligible for DWSRF funds.

States can also inform potential borrowers of the additional opportunities supported by set-aside activities. The DWSRF set-asides can assist water systems with non-infrastructure needs, including:

- Development of technical, managerial, and financial capacity of water systems
- Water operators' training and continuing education
- Technical assistance to water systems, including studies such as water audits, leak detection, pressure optimization, and energy management
- Project planning

- Project design development
- Development of asset management programs

Set-asides are an important resource that water systems can use to improve their ability to serve the public. Addressing non-infrastructure needs like those listed above can also help them achieve and maintain SDWA compliance.

### Key Resources

Share EPA's DWSRF factsheets on [PFAS](#) and [HABs](#) with water systems to encourage them to consider ways they can address emerging contaminants with DWSRF assistance.

### DWSRF Set-Asides in Action

When planning and designing projects, small systems in New Jersey can use a pool of consulting engineering firms that the state provides free of charge through the Small System Technical Assistance (2-percent) set-aside.

In 2014, Virginia offered grants of up to \$50,000 to help small systems design projects and conduct studies on source water quality and quantity and other technical assistance projects. These were funded through the Local Assistance (15-percent) set-aside.



# 4 | Identifying Perceived Barriers and Helping Applicants Overcome Them

## What are the factors affecting program demand?

Water systems may be hesitant to apply for a DWSRF loan for a variety of reasons: they do not know enough about how the program can help them, they have misconceptions about the requirements for funding, or they are unprepared for the application process. Each state will have its own set of challenges regarding program perceptions and project demand. Open communication with prospective borrowers during and after the loan application and implementation process can help

identify what worked well and potential areas of improvement. Opportunities for enhanced program support for loan recipients could also be identified. The federal DWSRF program has few implementation requirements and states may find that there are ways to reduce the burden on prospective borrowers and the DWSRF program. For example, a state might have specific requirements for preliminary engineering reports, engineering design review, or environmental assessments that could be modified or streamlined for relatively simple infrastructure replacement projects.

## Streamlining DWSRF Requirements in Hawaii

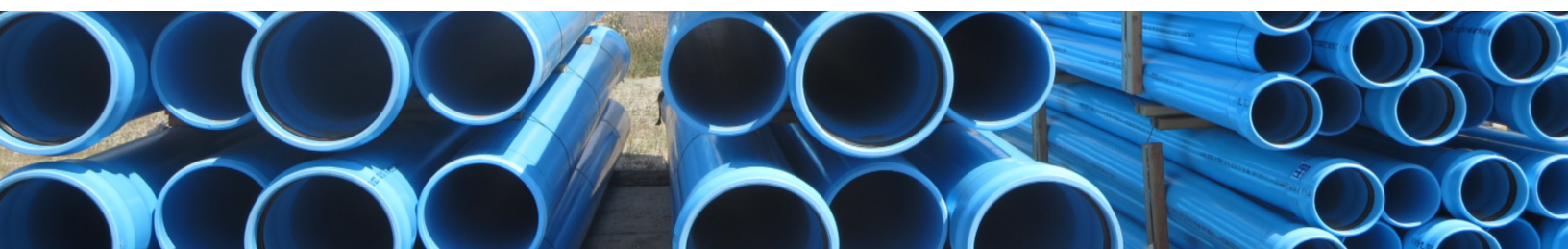
“The Hawaii DWSRF has worked hard over the years to streamline the program, eliminating as many unnecessary steps as possible, while still meeting federal requirements and maintaining the integrity of the program. Our long-time borrowers have recognized our efforts to improve and have said that the Hawaii DWSRF is, hands-down, one of the easiest federally-funded loan programs to work with.

We recently expanded the DWSRF to provide loans to privately-owned public water systems and have received great response. We have done a lot of outreach, including presentations at local conferences, notifications on the DWSRF website and the Hawaii regulated community newsletter, and site visits to educate systems and their board

members about the program. Private borrowers expressed their gratitude in having the DWSRF available to them and in feeling that the program truly cares about them.

The Hawaii DWSRF emphasizes customer service, sending the message that we want to support water systems in maintaining and/or achieving SDWA compliance, and are available to help them in any way we can because they are important and what they do is important. Our borrowers appreciate that we see them as more than just regulated entities, but as partners, as *ohana*, in providing the public with one of our most precious resources – safe drinking water.”

*- Joan Corrigan, Hawaii DOH*





## How can states address system concerns?

As the financing authority, states can clarify program misconceptions that may discourage water systems from applying for DWSRF loans. States can emphasize to water systems that they are available to help them overcome perceived barriers they might encounter. Some potential perceived barriers and possible solutions are identified below:

Misconception	What states and water systems should know
<p><i>“The application process or the management of the loans itself is too daunting, complicated, or time-intensive.”</i></p>	States may be able to offer technical assistance through their set-aside program to help water systems manage the application process.
	The DWSRF allows states to work the administrative costs of implementing the loan into the financing itself.
	Many states have templates or combined funding applications to streamline the application process.
<p><i>“Some of the federal requirements (e.g. Davis Bacon (DB) or American Iron and Steel (AIS) requirements) are difficult or costly to comply with.”</i></p>	When water systems complete a cost comparison, the DWSRF may still be the most affordable option due to its low interest rates and additional forms of subsidy.
	Resources are available to help them comply with the requirements. For example, EPA provides several resources and staff that can help with navigating AIS requirements, including providing product research when domestic products are difficult to locate or reviewing product certification letters. These services are provided at no cost to the water system. See the Key Resources box below for more information.
	Some states provide resources to help with DB compliance or offer small amounts of additional subsidies to offset any increases in cost for administration of DB. They may also provide access to tracking software to make documentation for meeting the requirements easier.

Reminding water systems that state DWSRF program staff are available to discuss these issues and establishing open communication with the water systems and their consultants can help address concerns head-on.

### Key Resources

EPA Headquarters offers numerous resources to help states and water systems navigate American Iron and Steel requirements.

Visit EPA's [AIS website](#) for training materials, Q&As, and other information.

Refer to EPA's [American Iron and Steel Implementation Memo](#) for detailed information on how to comply with AIS requirements.

Contact EPA DWSRF program staff at [SRF\\_AIS@epa.gov](mailto:SRF_AIS@epa.gov)

# 5

## Proactive Outreach to Potential Borrowers, Design and Construction Communities, and Other Partners

A critical element in building program demand is to apply a proactive approach to identifying water systems that could benefit from the DWSRF and building a relationship with them to encourage program participation. There are many resources available to help state DWSRF programs identify water systems that are eligible and in need of DWSRF funds.

**The Drinking Water Infrastructure Needs Survey and Assessment** provides information on DWSRF-eligible projects already identified by water systems as infrastructure needs.<sup>2</sup> Though state participation varies, the survey captures the needs of a representative sample of systems serving more than 3,300 people in most states. For systems reporting needs to the survey, there are project-specific descriptions of needs. Although some of these descriptions are based on a general understanding of water infrastructure needs, such as an indication of how much pipe needs to be replaced in a 20-year period, they can be used to prompt a conversation about timing and scope for future projects.

**The Public Water System Supervision Program (PWSS) Sanitary Surveys** collect information about water system infrastructure, including existing system deficiencies, and are a useful source for identifying potential borrowers and projects. The purpose of sanitary surveys is to assess the capability of a public water system to supply safe drinking water. Those who conduct the surveys in each state, along with PWSS managers and capacity development coordinators, may know of project needs at eligible water systems that could be the focus of DWSRF outreach. Understanding

the sanitary survey cycle and type of information collected can help state DWSRF programs identify how the sanitary survey program can be used to build project demand. Below are some examples of ways in which state DWSRF programs can use sanitary surveys to encourage water system interest in the DWSRF program:

- State DWSRF programs can request copies of sanitary surveys and use the information to start a conversation with water systems about future needs. While helping water systems to look beyond immediate problems, state programs can offer assistance with asset management planning and identifying what may need to be replaced in the near term and in the future.
- State programs can offer DWSRF assistance to address deficiencies found during the sanitary surveys. If a water system lacks the technical capacity to develop capital improvement projects, DWSRF set-asides can provide support for planning and design.

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### Key Resources

Training events and conferences of water utility associations

Other state-specific events for water system managers and operators

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<sup>2</sup>More information about the Drinking Water Infrastructure Needs Survey and Assessment can be found here: <https://www.epa.gov/dwsrf>. The national summary breaks down 20-year needs by state and by category, including improvements to distribution and transmission, treatment, storage, source, and other project types. Water system-specific survey results may be available through the DWSRF state coordinator.



- Some water systems may want to address infrastructure needs sooner rather than later but are hesitant about committing to a large capital improvement project. In these cases, state DWSRF programs can suggest implementing the project in smaller, more manageable phases.

**Consulting engineers** can be valuable partners in program outreach and generating project demand for the DWSRF, particularly if they have successfully used the program. Consulting engineers that work on water infrastructure projects can provide valuable communication opportunities. Equipping these engineers with information can help them speak knowledgeably to clients about the benefits the DWSRF program can provide. These partners can also provide valuable feedback to the DWSRF

program on perceived barriers to using DWSRF funding so that they can be addressed. State staff can connect with consulting engineers directly, as well as at local technical and engineering conferences.

**Past loan recipients** may have suggestions for new projects or know of water systems that face similar challenges to their own. Many states have found it useful to offer DWSRF assistance to communities that are already receiving Clean Water State Revolving Fund (CWSRF) funds, and vice versa. Upon completing a CWSRF-funded project, a community is often prepared to move on to a drinking water project.



# 6

## EPA Region and Headquarters Support

DWSRF staff at EPA Regions and Headquarters are always eager to provide support and information to state DWSRF programs. They keep informed about what other states are doing, and can easily share best practices. EPA is available to help state efforts to improve project demand for their program. A list of EPA Regional Project Officer contacts by state and territory is available at <https://www.epa.gov/dwsrf>.







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[www.epa.gov/dwsrf](http://www.epa.gov/dwsrf)