Addressing Water Affordability with the Drinking Water State Revolving Fund

The Drinking Water State Revolving Fund (DWSRF) provides cost-saving opportunities for communities to address water affordability for their drinking water customers.

BACKGROUND

Drinking water affordability refers to a drinking water system’s effort to provide reasonably priced water to the community while still receiving revenue needed to maintain water system operations. On average, U.S. households pay less for drinking water than other developed countries as a percentage of household income\(^1\). However, if a water system raises their rates to account for the high cost of building and maintaining infrastructure, households, especially low-income households, may face affordability issues and other associated hardships.

Through the benefits of the DWSRF program, water systems can keep operation and construction costs down and pass the savings onto their customers – potentially alleviating affordability hardships.

While the information provided below is not exhaustive, it will equip decision makers with some best practices and implementable ideas for how to use the DWSRF program to maintain drinking water affordability for their communities and water systems.

Additional EPA Water Affordability Resources:

- \(https://www.epa.gov/waterfinancecenter/financial-technical-assistance-and-tools-water-infrastructure#affordability\)
- \(https://www.epa.gov/dwsrf/how-drinking-water-state-revolving-fund-works#tab-3\)

\(^1\)https://19january2017snapshot.epa.gov/sustainable-water-infrastructure/pricing-and-affordability-water-services_.html
**DWSRF ASSISTANCE**

The DWSRF can provide financial assistance to publicly owned and privately owned community water systems (CWS) and non-profit non-community water systems for drinking water infrastructure projects. Projects must either facilitate the system’s compliance with national primary drinking water regulations or significantly further the health protection objectives of the Safe Drinking Water Act (SDWA).

Each of the 50 states and Puerto Rico operates its own DWSRF program. They receive annual capitalization grants from the U.S. Environmental Protection Agency (EPA), which they use to provide low-interest loans and other types of assistance to water systems. Repayments of DWSRF loans begin up to 18 months after project completion, with loan terms up to 30 years for most communities, or up to 40 years for disadvantaged communities.

Additionally, states may use a portion of their capitalization grant from EPA as “set-asides” to help communities build the technical, managerial, and financial capacities of their systems. With an emphasis on small systems, these funds help ensure sustainable infrastructure and public health investments.

**Consolidation**

Water systems facing compliance or long-term financial issues can consider physical, technical, and/or managerial consolidation with neighboring water systems. Financial benefits of the consolidation of water systems include reducing costs, achieving greater economies of scale through shared services, and increasing a system’s access to funds through new partnerships. In addition, systems that consider consolidation or restructuring may receive higher priority for DWSRF loans in some states.

**Interest Rates**

Through the DWSRF, states can provide below-market interest rate loans for necessary infrastructure improvements.

Under the DWSRF program, states may establish separate eligibility criteria and special funding options for economically disadvantaged communities.

In 2020, the average DWSRF interest rate for a loan was 1.35 percent, while the average AAA State Bond interest rate for a loan was 2.79 percent. Using $4,300,000 (the average amount of a DWSRF loan in 2020) as an example, the water system would save over $700,000 for a 20-year loan with the current average DWSRF interest rate.

**Additional Subsidization**

As of 2021, State DWSRF programs are required to provide 14 percent of their annual capitalization grant as additional subsidy to communities. DWSRF programs must also provide 6 percent to 35 percent of their capitalization grant as additional subsidy to state-defined disadvantaged communities, resulting in 20 percent to 49 percent of capitalization grants provided as additional subsidies to local communities. These additional subsidies can be provided in the form of grants, principal forgiveness, or negative interest rate loans. A high percentage of the loans receiving additional subsidization serve populations of 10,000 or fewer people and disadvantaged communities, allowing these small and disadvantaged communities to afford critical water infrastructure.

**Extended Term Financing**

Extended term financing (ETF) is a valuable tool to protect public health and address drinking water infrastructure investment needs. Extending the length of a repayment period reduces a water system's annual repayment cost, making projects more affordable for those communities. ETF may be used in combination with additional subsidization as a supplementary method of reducing the impact on ratepayers. When strategically managed, ETF may result in a significant increase in the volume of lending by DWSRF programs.

**LEARN MORE ABOUT FUNDING:**

Water systems receive DWSRF assistance directly from state agencies. Each state has its own application procedure. Contact information for each state is available at [https://www.epa.gov/dwsrf/state-dwsrf-website-and-contacts](https://www.epa.gov/dwsrf/state-dwsrf-website-and-contacts).

For more information, visit: [epa.gov/dwsrf](https://www.epa.gov/dwsrf)
**Drinking Water State Revolving Fund Case Studies: Affordability in Action**

How communities are using the Drinking Water State Revolving Fund to address affordability in their drinking water systems.

**SOUTH DELAWARE COUNTY, OK**

Several communities in northeastern Oklahoma were struggling to address various drinking water challenges, including exceeding various EPA maximum contaminant levels (MCL) and sulfur-smelling water. To address these challenges, the communities decided to create a regional water provider who could provide safe, reliable drinking water; this led to the creation of the South Delaware County Regional Water Authority (SDCRWA). Once created, the SDCRWA moved forward with construction of a new surface water treatment plant to enhance service for its current customers and extend service to other nearby communities experiencing drinking water system challenges. The Oklahoma DWSRF program partnered with the United States Department of Agriculture-Rural Development (USDA-RD), Indian Health Services, the Cherokee Nation, and the South Delaware County Regional Water Authority (SDCRWA) to provide over $15 million in funding for the SDCRWA’s new surface water treatment plant.

This project was completed in December 2019 and allows SDCRWA to continue providing safe, reliable drinking water to several disadvantaged communities in northeastern Oklahoma. This project is a good example of utilizing the DWSRF to assist disadvantaged communities and create sustainable partnerships for systems in need.
FLORENCE, SC

The Town of Timmonsville received several deficiencies and Consent Orders (CO) for its public water system between 2006-2013. The town eventually realized their best option was to connect to the nearby City of Florence. At that time, the town was in default on USDA-RD loan of $6 million; this prevented the town from receiving further grant assistance. The city took on the town’s debt so this consolidation project could proceed. This project was funded by the DWSRF program, the city’s revenues, the US Department of Housing and Urban Development’s Community Development Block Grant (CDBG) program, the Economic Development Administration, USDA-RD, the South Carolina Rural Infrastructure Bank, and the State Transportation Infrastructure Bank. These seven entities worked together to fund this $7.2 million project.

This project achieved its intended goals, which were to complete the project within the approved five-year time provided for by the CO, obtain regulatory compliance, gain community trust for service provided, and maintain customer rates. This successful consolidation project, completed in October 2019, provided the town’s residents with access to safe and affordable drinking water and had positive impacts on the local economy.

NEW YORK ETF

In November 2020, EPA met with the New York State Environmental Facilities Corporation (EFC) and the New York State Department of Health (DOH) regarding the state’s use of ETF for DWSRF projects. New York’s proposal, to grant ETF to certain disadvantaged communities up to 40 years (but no longer than the design life of the project), falls within current DWSRF law.

This action taken by New York will allow the state to increase its ability to provide affordable loans for the local water systems and water affordability to their communities.

PORT ROYAL, VA

In May 2019, Port Royal completed a $1.4 million dollar project to address aging infrastructure by using multiple sources of funding, leveraging partnerships, and emphasizing collaboration amongst all parties. The project substantially decreased water loss, increased efficiency of the system, and was affordable for the 126 residents of the small, rural town. The project involved replacing leaking water mains, installing service meters, and replacing an elevated storage tank with ground level storage paired with bladder tanks and booster pumps. This project was financed with a combination of loan and principal forgiveness funds from USDA-RD and the DWSRF program. Principal forgiveness through DWSRF was available due to the system meeting disadvantaged criteria, based on median household income. In addition to raising water rates, Port Royal also undertook a boundary adjustment to gain a larger tax base to help provide revenue for the project. This project’s innovative financing resulted in water affordability with a more sustainable water rate structure.

LEARN MORE ABOUT FUNDING:

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For more information, visit: epa.gov/dwsrf