June 2021





Drinking Water State Revolving Fund

Helping Protect America's Public Health Since 1997

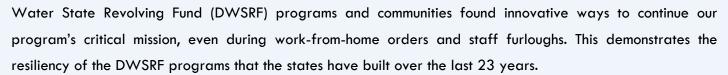
2020 Annual Report

A Message from the Office Director

I am pleased to present the Drinking Water State Revolving Fund's 2020 Annual Report. This report is an opportunity to highlight the past year's accomplishments.

In 2020, we funded more than \$3.6 billion in new drinking water infrastructure projects to communities of all sizes and disbursed \$3.1 billion to communities for ongoing construction projects. We also funded \$183 million for critical activities including water system capacity development, operator certification, and source water protection.

We experienced several impacts related to COVID-19 during 2020. Even through these challenges, we had one of our strongest years as a program. State Drinking



Furthermore, we realize that small and disadvantaged communities face unique challenges maintaining their drinking water infrastructure. We applaud the various mechanisms states use to assist these water systems: additional subsidization, extended-term loans, lower interest rates, priority ranking points, and technical assistance through the DWSRF set-asides. We are committed to working with our state partners to continue addressing challenges and ensuring DWSRF assistance reaches communities in need.

I welcome this opportunity to share our accomplishments with you and thank you for your commitment to the work ahead.

Jennifer L. McLain Ph.D., Director

lenf I Me Lin

Office of Ground Water and Drinking Water

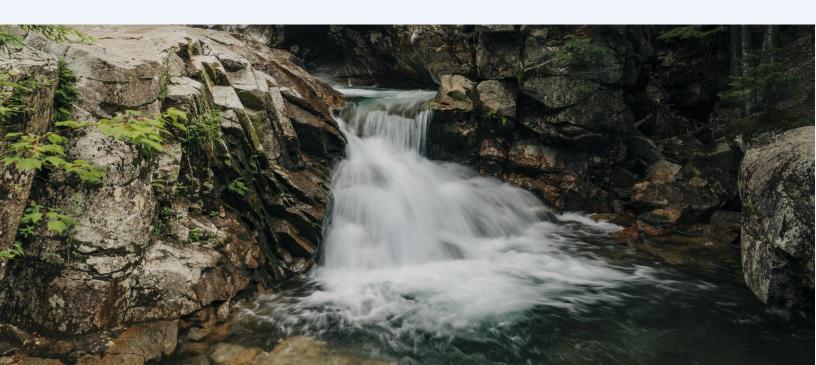
Office of Water

United States Environmental Protection Agency



Table of Contents

l.	About the Drinking Water State Revolving Fund	4
II.	Highlights From 2020	5
III.	How States Used DWSRF Infrastructure Funds	10
IV.	2020 Financial Overview	11
٧.	DWSRF Set-Asides	16
VI.	DWSRF AQUARIUS Project Highlights	18



I. About the Drinking Water State Revolving Fund

The 1996 Amendments to the Safe Drinking Water Act (SDWA) created the Drinking Water State Revolving Fund (DWSRF) to help communities finance infrastructure improvements needed to protect public health and ensure compliance with drinking water standards. Each of the 50 states and Puerto Rico operate their own DWSRF programs and receive annual grants from EPA, which in turn provide low-interest loans and other types of assistance to public water systems. The DWSRF programs are managed or co-managed by the state agencies that oversee drinking water systems and can therefore effectively prioritize infrastructure funding needs to protect public health.

The SDWA directs states to give priority for the use of DWSRF project funds to:

- address the most serious risks to human health,
- ensure compliance with the requirements of the SDWA, and
- assist systems most in need on a per household basis according to state affordability criteria.

Not all drinking water problems, however, can be solved through capital financing of infrastructure improvements. With that in mind, Congress gave states the option to take a portion of their federal





capitalization grant for "set-asides." Set-asides can be used to administer state programs, provide technical assistance and training for water systems, and fund other activities that support achieving the public health protection objectives of the SDWA. The programs and activities supported by set-asides include DWSRF administration, water system capacity development, operator certification, source water protection, small systems technical assistance, and support for the state Public Water System Supervision (PWSS) program. Each state determines appropriate balance between infrastructure projects and set-asides for their unique circumstances.

Through June 30, 2020, more than \$44.7 billion has been signed into approximately 16,300 DWSRF loans by the state programs to water systems to fund critical infrastructure needs. Furthermore, nearly \$3.7 billion has been provided to states and water systems to support the non-infrastructure set-asides programs.

The DWSRF is an exceptionally versatile tool. In 2020, the DWSRF loan program improved the lives of nearly 38 million Americans, returning water systems to compliance and maintaining systems with aging infrastructure, while also focusing on small water systems that are most at risk. Water systems serving fewer than 10,000 people accounted for 75 percent of the loans signed by state programs.

II. Highlights From 2020

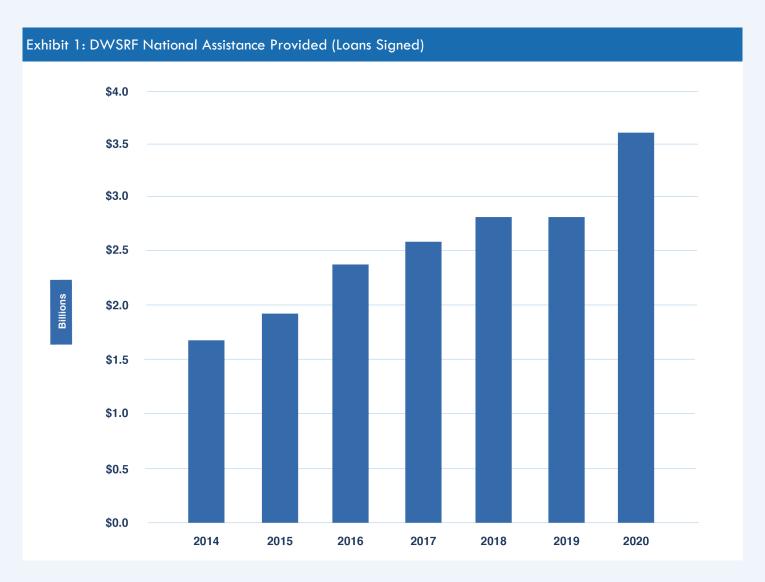
A. Strong Demand, Making Loans of All Sizes

In 2020, states provided over \$3.6 billion in new infrastructure loans, which is a record (with the exception of American Recovery and Reinvestment Act [ARRA] funding) and a 28% increase from last year. This follows an upward trajectory over recent years, as states adopt cash flow management and conduct more effective outreach to water systems. Exhibit 1 demonstrates this trend. Additionally, states disbursed more than \$3.1 billion in 2020. This is a 16% increase from last year and an all-time DWSRF record. This increase in disbursements shows that states provided more lending in the last few years, and those projects are now being constructed and requesting reimbursement.

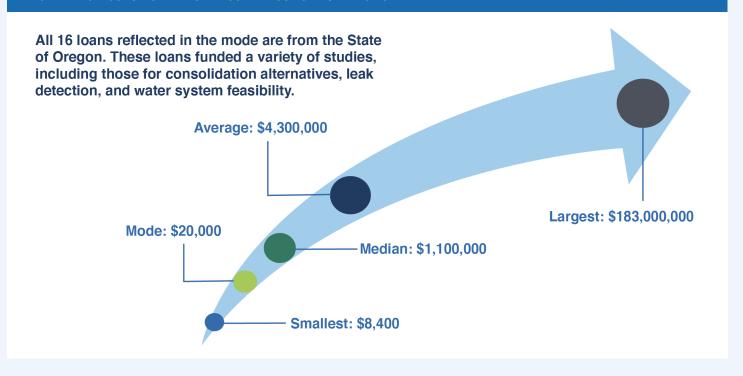
The DWSRF supports water systems and projects of all sizes across the country. While the median loan

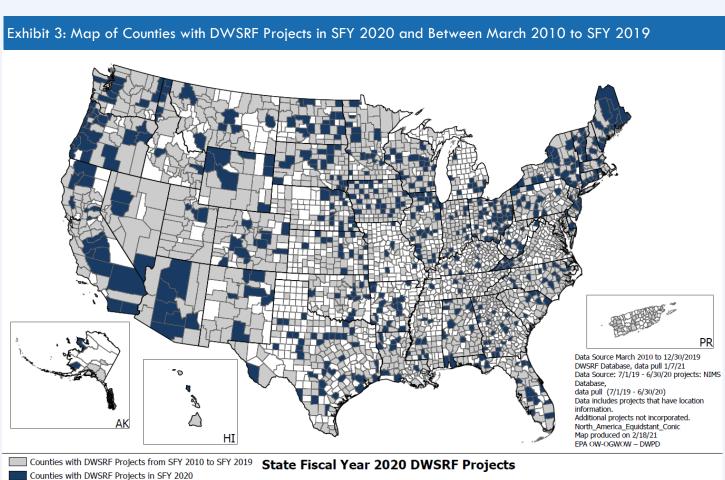
size was about \$1.1 million this year, the program's loans ranged from less than ten thousand dollars to hundreds of millions of dollars (see Exhibit 2). The State of Idaho made the nation's smallest loan, for \$8,400, to Swan Valley Elementary School, with about 500 people served, to address lead contamination. New York made the nation's largest loan, a \$183 million agreement, to New York City for a construction phase of the Croton Filtration Plant. This project will serve nearly 1 million people.

Visually demonstrating the DWSRF program's broad, nationwide reach, Exhibit 3 on the next page shows counties with DWSRF-funded projects in State Fiscal Year (SFY) 2020 (in blue) and between SFY 2010 and SFY 2019 (in gray).









B. Leveraging and Co-Funding Expand Program's Reach

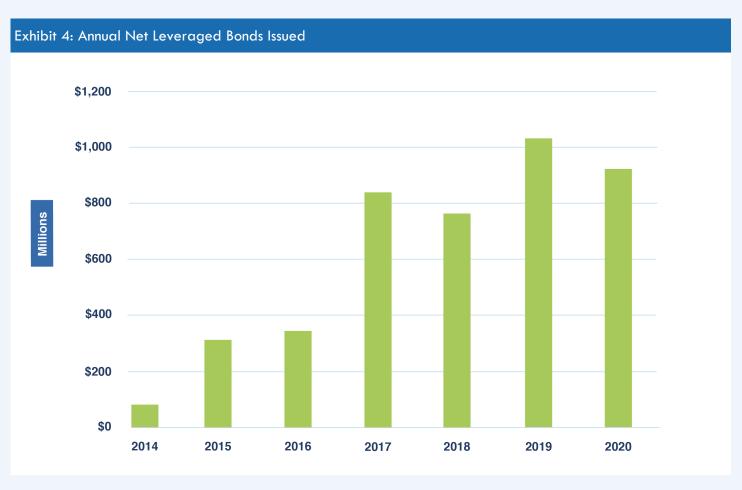
Increasing the amount of money available through the DWSRF is important to meeting our nation's drinking water needs. The state DWSRFs have several ways to quickly raise additional money to meet immediate needs where there are more projects than funds available. The first is for the state DWSRFs to borrow money on the bond market. In 2020, nine state DWSRF programs borrowed \$925 million to assist projects that needed immediate financing. The second way involves borrowing money from EPA's Water Infrastructure Finance and Innovation Act (WIFIA) program.

Exhibit 4 below shows leveraging in the past seven years. Note the significant increase in the last four years. Leveraging is at a state's discretion and must be paired with an effective outreach strategy to increase customer demand. After evaluating cash needs, some states choose to leverage nearly every year, and others episodically. Regardless of approach, state managers must carefully design their leveraging structure to minimize idle funds. Optimally, states will leverage when the amount of cash needed to pay construction invoices is greater

than actual available cash on hand. With the ability to access the bond market when cash is needed in the future, states can confidently make more loans to communities in the near-term, expanding the reach of public health protection from the program.

Another way to expand the DWSRF's reach and benefits is through co-funding. Approximately 16 percent of the 2020 projects were co-funded with another source, including funds from the United States Department of Agriculture's Rural Utilities Service Water and Environmental Programs and other state and private sources.





C. Helping Water Systems Achieve Compliance

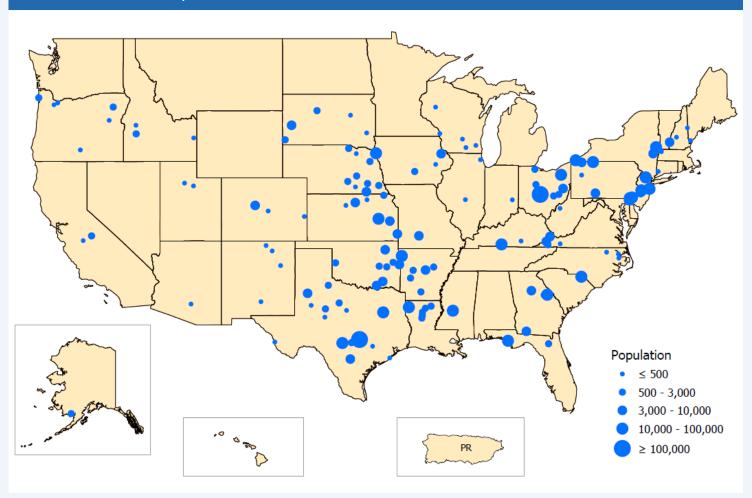
The DWSRF has been instrumental in helping the nation's community water systems achieve and maintain compliance with health-based standards under the SDWA. Of the water systems receiving DWSRF loans in 2020, approximately one-fifth (146) were out of compliance with a health-based SDWA standard in the previous five years. Exhibit 5 below maps the locations of these 146 water systems.

State DWSRF managers, partnering with their state PWSS program colleagues, utilize the program's extraordinary flexibility to tailor assistance through the loan and set-aside portions of the Fund to address a broad array of local needs.

Drinking Water Infrastructure Needs Survey and Assessment

The upcoming Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) will be the seventh since 1995 and will be of the broadest scope to date. For this Survey, EPA will be sampling all sizes of community water systems, as well as tribal systems and not-for-profit non-community water systems. The Survey will include supplemental questions about lead service lines, operator workforce sustainability, and critical iron and steel component needs. EPA conducted numerous DWINSA stakeholder meetings and trainings in 2020 and has now begun data collection through 2021.

Exhibit 5: Public Water Systems with SFY 2020 Loans that had a Health-Based Violation in the Past 5 Years



D. COVID-19 Impacts on the DWSRF Program

The DWSRF programs experienced several impacts from the COVID-19 pandemic. Many state DWSRF staff were furloughed during calendar year 2020. Many DWSRF borrowers were concerned with their customers being able to pay their water bill. Even with these challenges, the DWSRF had one of its most successful years in terms of assistance provided and disbursements.

Furthermore, because of stay-at-home mandates and increased telework options, several states modernized portions of their DWSRF programs to better serve communities during the pandemic. Some of these improved processes include virtual public meetings, electronic signatures for loan documents, and virtual project inspections. These examples show how dedicated the DWSRF programs are to keeping

projects moving and ensuring public health protection throughout their states, even during a pandemic.



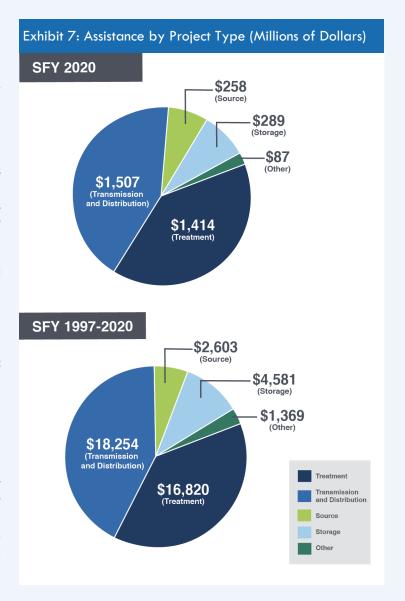


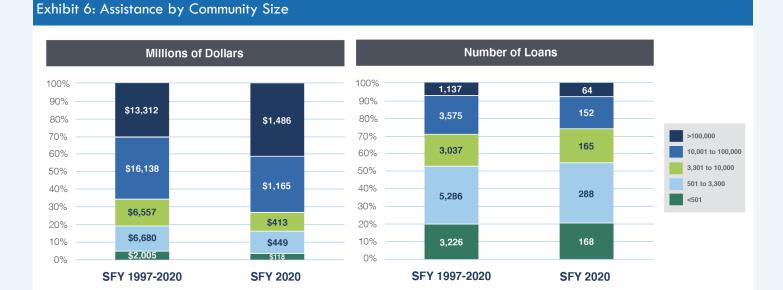
III. How States Used DWSRF Infrastructure Funds

In 2020, the DWSRF provided more than \$3.6 billion in assistance and entered into 837 loans. Since 1997, the DWSRF has provided more than \$44 billion in assistance, and 34 percent of this assistance has been directed to communities with populations of 10,000 or fewer.

In 2020, the DWSRF facilitated loans with a broad diversity of communities, emphasizing a strong focus on communities serving 10,000 individuals or fewer. Approximately 75 percent of the 2020 loans provided were given to these smaller water systems. Principal forgiveness was a key tool utilized in these agreements; approximately 75 percent of water systems serving populations of 500 or fewer received principal forgiveness, with 44 percent of those water systems receiving principal forgiveness for the full loan amount. As the charts in Exhibit 6 show, the proportion of assistance going to small systems in 2020 is similar to historic program values.

For the third consecutive year, nearly half of the DWSRF's funding went to transmission and distribution projects (Exhibit 7). This more closely aligns with water systems' needs demonstrated in the Sixth DWINSA. The Survey confirmed that nearly two-thirds of the nation's drinking water infrastructure needs over the next two decades are for these types of projects. EPA anticipates sustained, growing demand in distribution system projects over the coming years.





IV. 2020 Financial Overview

A. Financial Success

The fundamental purpose of the DWSRF is to provide low-cost capital to finance sustainable, long-term public health protection. The Fund's ability to assist projects that protect public health is dependent on three pillars:

- continued federal capitalization;
- innovative, intelligent, and effective state management; and
- maintaining the Fund's growth and revolving nature.

Since the DWSRF's inception, Congress has appropriated more than \$22 billion into the Fund. These funds have gone both to the revolving loan fund and the state set-asides. Together, the 51 state DWSRF programs have effectively leveraged these funds to provide \$44.7 billion in loans to the nation's water utilities and approximately \$3.7 billion to both states and utilities for set-aside programs to support capacity development, source water protection, and operator training and certification. For the loan

program, this translates into \$2 in disbursements for every \$1 drawn from the U.S. Department of Treasury.

From the 2010 appropriation onward, Congress mandated that a certain portion of the federal capitalization grant be provided to borrowers as additional subsidy. This change allowed states to aid communities most in need and incentivize particular types of projects. Because this subsidy comes from the federal dollars, continued federal support is needed to maintain this benefit and continue growing the fund.

B. Financial Reports

The Single Audit Act designates the threshold for auditing federal programs. Most DWSRF programs receive a program-specific audit in addition to auditing required under the Single Audit Act. Because the 51 DWSRF programs are independent state-level entities, no nationally-audited DWSRF program financial reports are available. Developed using EPA's National Information Management System, national aggregate financial statements, best viewed as non-audited cash flow-based reports, are shown on the following pages.



1. Statement of Fund Activity

As shown in Exhibit 8 below, in SFY 2020, DWSRF programs executed more than \$3.6 billion worth of loans. Overall for SFY 2020, assistance provided as a percent of funds available ("pace of funds provided") was roughly 100 percent, indicating that states have successfully directed federal funding to drinking water infrastructure projects. This robust percentage of funds utilization also demonstrates a high demand for DWSRF funding. A portion of the disbursed funds are used to provide principal forgiveness to disadvantaged communities or to help finance specific water systems meeting the criteria for state priority funding; in SFY 2020, more than \$279 million was provided in the form of principal forgiveness.

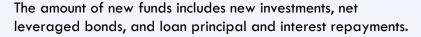




Exhibit 8: Statement of Fund Activity (Millions of Dollars)

SFY 2019	SFY 2020
1,068.5	1,207.5
203.3	224.6
3,262.0	3,588.9
2,831.9	3,638.4
243.9	253.4
2,707.2	3,145.7
787.3	885.8
197.6	182.1
21,069.4	22,276.9
4,109.8	4,334.4
43,144.2	46,733.1
41,101.3	44,739.7
3,464.0	3,3,717.6
35,978.4	39,124.1
17,304.2	18,190.0
3,166.2	3,348.3
(306.4)	(279.9)
	1,068.5 203.3 3,262.0 2,831.9 243.9 2,707.2 787.3 197.6 21,069.4 4,109.8 43,144.2 41,101.3 3,464.0 35,978.4 17,304.2 3,166.2

¹ This includes funds drawn from previous grants.

2. Statement of Revenues, Expenses, and Earnings

This statement, Exhibit 9, is a useful tool to view the sources of funds and the expenses of the DWSRF program nationally, and how those impact net assets. For 2020, interest earnings exceeded expenses, adding to the growth of the program. From 2019 to 2020, operating expenses increased by \$13.9 million, with an increase in DWSRF funds used for refunding. DWSRF net assets increased by approximately \$1.7 billion, reflecting the steady increase in assets since the program's inception.

3. Statement of Cash Flow

This statement (Exhibit 10) is a useful tool to view the impact of DWSRF activities on cash on hand. DWSRF programs require a reserve to maintain their

programs. With the program reaching milestones under the Unliquidated Obligation (ULO) strategy of spending down built up federal funds, it is expected that states will need to draw heavily from state cash reserves in the near future to pay invoices from the high level of lending at which they are operating. State match bond proceeds increased by \$15.2 million while gross leveraged bond proceeds added \$866.5 million to program cash flows. In SFY 2020, states paid \$691.5 million in principal and interest on leveraged bonds and state match demonstrating an increase of \$89.7 million from the previous year. Bond issuance is one method by which states may balance their loan demand with the need to maintain the long-term sustainability of their revolving funds.

Exhibit 9: Statement of Revenues, Expenses, and Earnings (Millions of Dollars)				
Operating Revenues	SFY 2019	SFY 2020		
Interest on Fund Investments	143.8	137.7		
Interest on DWSRF Loans	320.6	332.4		
Total Operating Revenues	464.4	470.0		
Operating Expenses				
Bond Interest Expense	163.1	194.1		
DWSRF Funds Used for Refunding ¹	21.3	4.0		
Amortized Bond Issuance Expense	4.5	4.7		
Total Operating Expenses	188.9	202.8		
Non-Operating Revenues and Expenses				
Cash Draws from Federal Capitalization Grants ²	787.3	885.8		
State Contributions ³	124.7	130.9		
Loan Principal Forgiven	306.4	279.9		
Transfers from (to) CWSRF	(2.0)	165.9		
Total Non-Operating Revenues (Expenses)	1,216.3	1,462.5		
Increase (Decrease) in Net Assets	1,491.9	1,729.7		
Net Assets				
Beginning of Year	21,979.0	23,470.9		
End of Year	23,470.9	25,200.6		

¹ Refunding occurs when outstanding bonds are retired with newly-issued bonds.

² This includes funds drawn from previous grants.

³ This includes state match but excludes state match bonds.

Exhibit 10: Statement of Cash Flow (Millions of Dollars)					
Operating Activities	SFY 2019	SFY 2020			
Loan Disbursements to be Repaid	(2,400.8)	(2,865.8)			
Loan Principal Forgiven	306.4	279.9			
Loan Principal Repayments	1,290.9	1,507.8			
Interest Received on Loans	320.6	332.4			
State Contributions ¹	124.7	130.9			
Cash Draws from Federal Capitalization Grants ²	787.3	885.8			
Total Cash Flows from Operating Activities	429.2	270.9			
Non-Capital Financing Activities					
Bond Issuance Expense	(7.8)	(7.1)			
Interest Paid on Leveraged and State Match Bonds	(163.1)	(194.1)			
DWSRF Funds Used for Refunding ³	(21.3)	(4.0)			
Principal Repayment of Leveraged Bonds	(382.8)	(410.9)			
Principal Repayment of State Match Bonds	(55.9)	(86.5)			
State Match Bond Proceeds	78.5	93.7			
Cash Received from Transfers with Clean Water State Revolving Fund (CWSRF)	(2.0)	165.9			
Gross Leveraged Bond Proceeds	985.5	866.5			
Total Cash Flows from Non-Capital Financing Activities	431.1	423.6			
Investing Activities					
Cash Flows from Capital and Related Financing Activities	0	0			
Interest Received on Fund Investments	143.8	137.7			
Deposits to Debt Service Reserve for Leveraged Bonds	50.6	36.3			
Total Cash Flows from Investing Activities	194.4	174.0			
Net Increase (Decrease) in Cash and Cash Equivalents	1,054.7	868.4			
Cash and Cash Equivalents					
Beginning of Year	8,195.7	9,250.4			
End of Year	9,250.4	10,118.8			

 $^{^{\}rm 1}\,\mbox{This}$ includes state match but excludes state match bonds.

2020 Annual Report

² This includes funds drawn from previous grants.

³ Refunding occurs when outstanding bonds are retired with newly-issued bonds.

4. Statement of Net Assets

Total assets increased by \$2.19 billion, while total liabilities increased by \$292.5 million; therefore, net assets increased by \$2.0 billion, or 6.9 percent of

total 2019 net assets. This reflects the overall health of the DWSRF program, which has shown a net asset growth of at least 5 percent per year over the past 11 years (Exhibit 11).

Exhibit 11: Statement of Net Assets (Millions of Dollars)				
Assets	SFY 2019	SFY 2020		
Cash and Cash Equivalents	9,250.4	10,118.8		
Debt Service Reserve - Leveraged Bonds	545.2	509.0		
Loans Outstanding	19,243.2	20,601.2		
Unamortized Bond Issuance Expenses ¹	68.3	70.8		
Total Assets	29,107.1	31,299.7		
Liabilities				
Match Bonds Outstanding	302.6	309.9		
Leveraged Bonds Outstanding	5,409.7	5,694.9		
Total Liabilities	5,712.3	6,004.8		
Net Assets				
Federal Contributions	20,262.2	21,147.9		
State Contributions	3,001.2	3,132.1		
Transfers - Other SRF Funds	(2.0)	165.9		
Other Net Assets	209.5	754.6		
Total Net Assets	23,470.8	25,200.6		
Total Liabilities & Net Assets	29,183.1	31,205.4		

¹ Unamortized bond issuance expenses are costs that have been incurred but have not been fully recognized (amortized). These costs will be recognized (amortized) over the remaining life of the bonds outstanding, similar to a pre-paid expense.





V. DWSRF Set-Asides

States may reserve a portion of their annual capitalization grants to fund non-infrastructure programs supporting safe drinking water. Set-asides expand the impact of DWSRF by helping to ensure that water systems have the necessary technical, managerial, and financial capacity to get the greatest public health protection from their drinking water infrastructure investments. Each of the four DWSRF set-aside categories has a different health. public Upon receiving focus on capitalization grants, states may reserve funds under each of the four categories at their discretion and up to the maximum allowable limit. This section provides an overview of the four set-asides and a breakdown of set-aside usage in 2020 and cumulatively.

Administration and Technical Assistance (4% Set-Aside)

States may set aside the greatest of \$400,000, 0.2 percent of the current Fund value, or 4 percent of the capitalization grant to administer their DWSRF programs and to provide technical assistance to water systems of any size. For example, states may use these funds to hire staff or to assist water systems with project plans or loan applications.

Small Systems Technical Assistance (2% Set-Aside)

States may reserve up to 2 percent of their annual capitalization grant to fund programs providing assistance to drinking water systems serving 10,000 people or fewer. Small water systems often face greater challenges than larger systems, and they frequently have difficulty obtaining funding. This setaside helps them build their capacity and better align their operations with current population needs.

State Program Management (10% Set-Aside)

This set-aside may be used to fund PWSS programs overseeing all drinking water programs in individual states. Funding from this set-aside can be used for source water protection work, capacity development, operator certification programs, and other activities.

Local Assistance and Other State Programs (15% Set-Aside)

States can use up to 15 percent of their capitalization grant (but no more than 10 percent for any single activity) to provide loans for the purchase of land to support source water protection, to implement voluntary water quality protection activities, or to assist water systems with their capacity development.

Asset Management

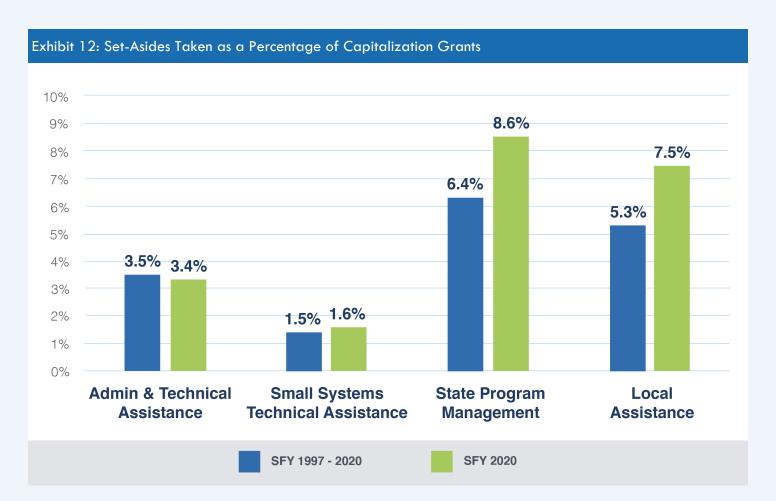
The 2018 America's Water Infrastructure Act (AWIA) requires state drinking water programs to consider and include, as appropriate, asset management into their state capacity development strategies. Consistent with this statutory change, state drinking water programs are expected to revise their capacity development strategies to include a description of how asset management will be promoted. States are expected to submit their revised capacity development strategy to EPA by December 31, 2021. The DWSRF set-asides can be used to assist state drinking water programs in revising their capacity development strategies and to assist drinking water systems with implementing asset management planning.





Recent Set-Aside Usage

In 2020, states took a higher percentage of setasides than their historical average for the State Program Management (10%) and Local Assistance (15%) set-asides (Exhibit 12). Exhibit 13 shows how states used each set-aside account in 2020 and cumulatively since the DWSRF program inception in 1997.



Set-Aside Category	Sub-Category	SF	Y 2020	Cumulative (1997-2020)
Administrative	Administrative Assistance	\$	32.49	\$	704.01
Administrative	Technical Assistance	\$	0.55	\$	4.17
Small Systems	Technical Assistance	\$	13.27	\$	303.82
	PWSS Administration	\$	60.12	\$	943.95
State Program	SWP Technical Assistance	\$	4.56	\$	104.36
Management	Capacity Development	\$	9.86	\$	187.83
	Operator Certification Programs	\$	1.71	\$	46.72
	Loans for SWP Land Acquisition	\$	1.47	\$	10.42
	Loans for Incentive-Based SWP Measures	\$	0.00	\$	7.75
Local Assistance & Other State Programs	SWP Area Delineation/ Assessment	\$	2.81	\$	131.31
	Wellhead and Source Water Protection	\$	21.11	\$	360.80
	Technical or Financial Assistance for Capacity Development	\$	33.59	\$	541.94
All	TOTAL	\$	181.54	\$	3,347.08

VI. DWSRF AQUARIUS Project Highlights

The DWSRF AQUARIUS Recognition Program nationally recognizes DWSRF-funded projects for exceptional focus on sustainability and protection of public health. The projects listed below were recognized as "Exceptional" and are examples of the high level of innovation possible with the DWSRF. To learn more about all the projects recognized in 2020, visit the <u>2020 AQUARIUS Recognition Program website</u>.

Excellence in Innovative Financing

Florence, South Carolina:

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 a US Department of Agriculture—Rural Development (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 be completed 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 reliable drinking water and had positive impacts on the local economy. A large car manufacturing company decided to move forward with a \$45 million-dollar expansion of their Timmonsville facility, resulting in 245 new jobs and helping to stabilize the economy of the Town and Florence County.



Excellence in System Partnerships

South Delaware County Regional Water Authority, Oklahoma:

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 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.



Excellence in Community Engagement

Washington County Service Authority, Virginia:

Residents in a community using private wells and springs for their drinking water supply approached the Washington County Service Authority (WCSA) and asked to connect to their water system after the residents' wells and springs tested positive for bacteria. The WCSA partnered with this disadvantaged community to plan and design a solution and assist in the search of funding options. These entities worked together to collect user agreements, water quality data, and other funding application information. Additionally, the Mount Rogers Planning District Commission, which serves counties in southwest Virginia, assisted in payroll reviews for the Davis Bacon requirements.

The Virginia DWSRF and CDBG programs partnered with the WCSA to fund this \$420,000 project, which included the construction of 6,000 linear feet (LF) of water main and related appurtenances and provided drinking water to 15 homes and a church. The DWSRF program paid for the construction of the water main, the CDBG program paid for the installation of the service lines between the water meters and the homes, and the WCSA funded the project planning and design. This project was completed in September 2019 and is a great example of community engagement resulting in public health protection.



Excellence in Public Health Protection

Cayuga, Indiana:

In 2011, the groundwater well supplying North Vermillion Community School Corporation's drinking water exceeded EPA's nitrate MCL and was unsafe for consumption. By early 2012, the schools began using only bottled water for cooking and drinking purposes, resulting in approximately 1,000 gallons of bottled water used per month and a cost of approximately \$41,000 over a five-year period. In 2016, the School Corporation entered into an Agreed Order with the Indiana Department of Environmental Management because of the ongoing nitrate contamination. The School Corporation's administrators understood that purchasing bottled water was not a viable long-term option and decided to connect to the nearby Town of Cayuga's water system.

The School Corporation selected this alternative because it was the most reliable and cost effective and would bring them into compliance with the Agreed Order. Both entities collaborated on the loan application and arranged for the School Corporation to pay the Town directly over the loan term. This \$1.1 million project consisted of 7,700 LF of water main, two water meters, two service connections, and two booster pumps. This project was completed in August 2017 and allowed the School Corporation to provide safe drinking water to its 750 students and staff.



Excellence in Problem Solving

Pipestone, Minnesota:

The City of Pipestone was facing both public health and environmental challenges. In 2009, the City's drinking water exceeded EPA's gross alpha radiation MCL. In 2014, the City was also issued a chloride limit as part of the National Pollutant Discharge Elimination System (NPDES) permit for their wastewater treatment plant. The chloride limit in the NPDES permit was well below their existing wastewater discharge concentration, which was primarily caused by home water softeners that residents used to address the hardness of the City's groundwater. The City collaborated with the state to discuss potential solutions and funding options to simultaneously address both issues. A lime softening process was selected because it would improve the public health for the community by reducing the gross alpha concentrations in the drinking water, while providing the added benefit of hardness reduction so that home water softeners could be eliminated.

This project was funded with \$8.4 million in DWSRF funds and a \$7 million State Point Source Implementation Grant. The project scope included the construction of a new 1,200 gallon per minute drinking water treatment plant designed to remove gross alpha and soften the water, two new wells, and the associated raw water mains. This project, completed in August 2019, was one of the first in Minnesota to address a wastewater issue by treating the drinking water supply. By taking a holistic approach to solving their problem, the City was able to cost-effectively address both their public health and environmental concerns.



State Agencies Managing the DWSRF

EPA Region 1

Connecticut Department of Public Health

Connecticut Office of the Treasurer

Maine Department of Human Services

Maine Municipal Bond Bank

Massachusetts Clean Water Trust

Massachusetts Department of Environmental Protection

Massachusetts Executive Office of Administration and Finance

New Hampshire Department of Environmental Services

Rhode Island Infrastructure Bank

Rhode Island Department of Health

Vermont Department of Environmental Conservation

EPA Region 2

New Jersey Environmental Infrastructure Bank

New Jersey Department of Environmental Protection

New York State Department of Health

New York State Environmental Facilities Corporation

Puerto Rico Department of Health

Puerto Rico Infrastructure Financing Authority

EPA Region 3

Delaware Department of Health and Social Services

Maryland Water Quality Financing Administration

Maryland Water and Science Administration

Maryland Department of the Environment

Pennsylvania Infrastructure Investment Authority

Pennsylvania Department of Environmental Protection

Virginia Department of Health

Virginia Resources Authority

West Virginia Department of Health and Human Resources

West Virginia Water Development Authority

EPA Region 4

Alabama Department of Environmental Management

Florida Department of Environmental Protection

Georgia Environmental Finance Authority

Georgia Department of Natural Resources

Kentucky Infrastructure Authority

Kentucky Department of Environmental Protection

Mississippi State Department of Health

Mississippi State Tax Commission

North Carolina Department of Environmental Quality

South Carolina Department of Health and

Environmental Control

South Carolina Budget and Control Board

Tennessee Department of Environment and

Conservation

Tennessee Division of Fiscal Services

Tennessee Comptroller of the Treasury

EPA Region 5

Illinois Environmental Protection Agency

Indiana Finance Authority

Indiana State Revolving Fund Loan Program

Michigan Department of Environmental Quality

Michigan Municipal Finance Authority

Minnesota Public Facilities Authority

Minnesota Department of Health

Ohio Environmental Protection Agency

Ohio Water Development Authority

Wisconsin Department of Natural Resources

Wisconsin Department of Administration

EPA Region 6

Arkansas Natural Resources Commission

Arkansas Department of Health

Arkansas Development Finance Authority

Louisiana Department of Health

New Mexico Finance Authority

New Mexico Environment Department

Oklahoma Department of Environmental Quality

Oklahoma Water Resources Board

Texas Water Development Board

Texas Commission on Environmental Quality

EPA Region 7

Iowa Department of Natural Resources

Iowa Finance Authority

Kansas Department of Health and Environment

Kansas Department of Administration

Kansas Development Finance Authority

Missouri Department of Natural Resources

Missouri Environmental Improvement and Energy Resources Authority

Nebraska Department of Environmental Quality



EPA Region 8

Colorado Water Resources and Power Development Authority

Colorado Water Quality Control Division

Colorado Department of Local Affairs

Montana Department of Environmental Quality

Montana Department of Natural Resources and Conservation

North Dakota Department of Health

North Dakota Public Finance Authority

South Dakota Department of Environment and Natural Resources

Utah Department of Environmental Quality

Wyoming Office of State Lands and Investments

Wyoming Department of Environmental Quality

Wyoming Water Development Office

EPA Region 9

Arizona Water Infrastructure Finance Authority
California State Water Resources Control Board
Hawaii Department of Health
Nevada Division of Environmental Protection
Nevada Office of Financial Assistance

EPA Region 10

Alaska Department of Environmental Conservation Idaho Department of Environmental Quality Oregon Health Authority

Oregon Infrastructure Finance Authority, Business Oregon

Oregon Department of Environmental Quality
Washington State Department of Health
Washington Department of Commerce

Assistance Provided for Projects (Millions of Dollars)

	2020	1997-2020
Total, by Project Type	3,631.2	44,710.1
Planning and Design Only	41.8	508.1
Construction		
Treatment	1,414.1	16,818.8
Transmission & Distribution	1,507.0	18,253.4
Source	258.1	2,602.7
Storage	289.1	4,579.5
Purchase of Systems	1.4	297.5
Restructuring	28.4	182.0
Land Acquisitions	4.0	98.8
Other	87.5	1,369.3
Total, by Population Served		
Less than 501	117.9	2,004.8
501 to 3,300	449.3	6,680.2
3,301 to 10,000	413.4	6,557.0
10,001 to 100,000	1,164.8	16,134.3
100,001 and Above	1,485.9	13,312.4
# of Loans, by Population Served		
Less than 501	168	3,226
501 to 3,300	288	5,286
3,301 to 10,000	165	3,037
10,001 to 100,000	152	3,575
100,001 and Above	64	1,137

Funds Available for Projects (Millions of Dollars)

2020	1997-2020
3,588.9	46,733.1
1,207.5	22,276.9
224.6	4,334.4
925.9	12,028.6
1,507.8	14,570.2
332.4	4, 799.1
165.9	592.8
	3,588.9 1,207.5 224.6 925.9 1,507.8 332.4 165.9

Other Key Statistics

- In 2020, every \$1 federal drawn to DWSRF programs resulted in \$2 disbursed.
- The DWSRF average interest rate in 2020 was 1.35%, compared to 2.79% market-value interest rate. This lower interest rate results in over \$600 million in savings to local community ratepayers over the life of these loans.
- States also awarded \$256 million as principal forgiveness to communities in 2020. These grant-like funds help keep water rates affordable for communities.
- 25 states sell bonds to further leverage their DWSRF programs.

For more information about the Drinking Water State Revolving Fund, please contact us at:

Drinking Water State Revolving Fund Program
U.S. Environmental Protection Agency
1201 Constitution Avenue, NW (Mail code 4606M)
Washington, DC 20460

www.epa.gov/dwsrf
Office of Ground Water and Drinking Water
June 2021
EPA 816-R-21-001

