

# Virginia Drinking Water State Revolving Fund Program (DWSRF)

Submitted to:  
**U.S. Environmental Protection Agency  
Office of Infrastructure & Assistance**

**Report for State Fiscal Year 2019  
July 1, 2018 through June 30, 2019  
Under CFDA 66.468**



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This project is funded wholly or in part by the United States Environmental Protection Agency under assistance agreement 66.468 to VDH. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does the EPA endorse trade names or recommend the use of commercial products possibly mentioned in this document.

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## I. INTRODUCTION

This report covers July 1, 2018 through June 30, 2019 (Virginia Fiscal Year 2019). The Virginia Department of Health (VDH) Office of Drinking Water (ODW) activities for this year build on prior success. Virginia received the first Drinking Water State Revolving Fund (DWSRF) loan offer in June 1998 and the U.S. Environmental Protection Agency (EPA) has awarded 21 twenty-one capitalization grants (excluding the American Recovery and Reinvestment Act of 2009, or “ARRA”) since then. The Commonwealth of Virginia supports the program with the required 20% state matching dollars. This report highlights the status of the DWSRF Program by detailing progress made toward long-term and short-term goals, the sources and uses of funds, financial status of the DWSRF Program, and compliance with federal requirements.

ODW made significant progress with program objectives as approved in the annual Intended Use Plan that funds construction projects and other set-aside activities. ODW closed 34 SRF construction projects totaling \$19.3 million during this reporting period. As of June 30, 2019, Virginia’s program has closed funding/financing agreements for 387 projects (DWNIMS item 124 less 17 ARRA projects) which total \$374,975,936 (DWNIMS item 122 less \$20,138,170 for ARRA).

Year	State Fiscal Year	# of Binding Commitments (DWNIMS item 124)	Amount (DWNIMS item 122)
1	1998	1	\$ 4,000,000
2	1999	3	\$ 8,000,000
3	2000	15	\$ 15,114,517
4	2001	20	\$ 24,584,781
5	2002	30	\$ 33,827,968
6	2003	19	\$ 19,875,065
7	2004	16	\$ 11,667,041
8	2005	17	\$ 10,654,508
9	2006	17	\$ 16,833,000
10	2007	15	\$ 12,124,046
11	2008	12	\$ 6,193,126
12	2009	18	\$ 13,707,176
13	2010	17*	\$ 13,503,089*
14	2011	16	\$ 15,496,322
15	2012	16	\$ 18,330,972
16	2013	15	\$ 26,077,006
17	2014	19	\$ 28,182,614
18	2015	20	\$ 16,262,052
19	2016	24	\$ 16,912,070
20	2017	20	\$ 17,435,147
21	2018	23	\$ 26,938,449
22	2019	34	\$ 19,256,987
	<b>SubTotal*</b>	<b>387*</b>	<b>\$374,975,936*</b>
	ARRA	17	\$20,138,170
	<b>Grand Total</b>	<b>404</b>	<b>\$395,114,106</b>

\* The amounts do not include 17 ARRA projects that totaled \$20,138,170.

ODW's set aside activities enhance the ability of waterworks in Virginia to provide safe water. ODW contracts with various organizations to provide technical assistance and source water protection. ODW scholarships for operator and management training, professional development seminars, and other training efforts provide knowledge at the local level to increase technical, managerial and financial capacity to successfully operate waterworks over the long term.

Virginia has reduced the number of waterworks with a health violation by about 25% over the past 12 months, which can be attributed to the monitoring and cleaning up of old violations, the proactive work of ODW, and the financial support provided by the DWSRF and Public Water System Supervision grants. Staff continue to use the Enforcement Targeting Tool (ETT) to identify and waterworks in need of capital improvements. The ETT score remains a factor in the rating and ranking of project reviews for funding. ODW knows to apply additional subsidy, minimum loan amount requirement to grants within one year of the grant award.

ODW continues to address staffing. The DWSRF Director and Supervisor departed from the program in May, 2019 and October, 2019, respectively. The program showed significant resilience during this time period by actively recruiting to fill positions and start a cross-training program. The program also added one full-time employee (FTE) and brought in additional support to the program from business operations (known as Environmental Offices Shared Administrative Services, or "EOSAS"). This new influx of support and resources has helped the program maintain its commitments.

ODW submitted its application for the 2019 capitalization grant on June 28, 2019. EPA awarded the 2019 grant on September 20, 2019, which was after the end of SFY 2019 (the reporting period of this report). ODW uses these funds to protect public health by ensuring drinking water provided to the public by waterworks complies with water quality and quantity standards and is sustainable over the long run. Below are two examples of the public health benefits that Virginia provided:

#### **A. Highlighted Projects**

ODW highlights the Lee County Public Service Authority System-wide Improvements Project Phase IB (formally a St. Charles Water Authority project, FY2014 DWSRF project) and the Town of Mt. Jackson Wells #7 & #8 Project (a FY2013 DWSRF project), both of which closed during the reporting period.

#### **WSL-010-14 Lee County Public Service Authority – System-wide Water Improvements Project Phase IB**

The Lee County Public Service Authority (LCPSA) is located in Lee County, Virginia, the western most county in the Commonwealth of Virginia. Lee County is west of Scott and Wise Counties in Virginia and surrounded by Kentucky to the northwest and Tennessee to the south. LCPSA owns and operates two membrane filtration plants and several consecutive water systems.

When this project began, the water system was owned and operated by the St. Charles Water Authority (SCWA). The SCWA owned and operated this consecutive system which purchased water from the Town of Pennington Gap. The system consisted of two atmospheric storage tanks and served approximately 400 SCWA connections plus two consecutive systems that were owned and operated by the LCPSA (Ely & Puckett Creek and Robbins Chapel). The system was limited to 160,000 gallons per day based on the contract between SCWA and the Town of Pennington Gap.

The proposed improvements included replacing and upgrading approximately 8,500 linear feet of existing 6-inch water line with 8-inch water line and all associated appurtenances. The project was advertised for construction bids in late 2017. However, the project was not awarded immediately after because it appeared the discussions for LCPSA to take ownership of SCWA system were soon becoming a realization. The

contractor held bid prices until the change in ownership moved forward. SCWA dissolved and LCPSA took ownership of this consecutive system in early 2018. In July 2018, the project was awarded to the low bidder of the project.

The final project budget was \$1,259,248.00 and included \$330,000 for a transferring ownership of two existing SCWA DWSRF loan debts to LCPSA. The funding included \$655,248.00 in low interest 30-year loan and \$604,000 in principal forgiveness. The Drinking Water State Revolving Fund loan was closed on September 27, 2018.

Construction began on the project in late September 2018 and continued through January 2019. Construction of the water line replacement portion of the original project is complete. However, we approved LCPSA to utilize remaining project funds to purchase and install new service meters for the former SCWA service area. These meters will match existing LCPSA service meters, allowing LCPSA to read and bill these customers as they do their other customers. Upon completion, former SCWA customers will benefit from:

- Less water loss and higher water accountability from replaced water line and new meters
- Transitioning into a larger Authority with additional customers and resources to meet current and future water system needs.

This project is a great example of system consolidation of a struggling waterworks and regionalization.

### **WSL-30-13 Town of Mt. Jackson Wells #7 & #8 Project**

The Town of Mount Jackson is located in Shenandoah County, Virginia, about 85 miles west of Washington, DC, along the I-81 corridor. The Town is noted for its water tower painted as a basket of apples, which is easily visible from I-81. The Town's permitted water system consists of five drilled wells and three elevated storage tanks, providing approximately 1.48 MG of storage. The Town is permitted to treat 699,200 gallons per day and averages about 361,000 gallons per day, serving approximately 1,860 people through 894 total connections.

Though five wells are permitted, the Town routinely operates on only two wells. Mechanical problems, turbidity issues, and elevated nitrate levels have prevented the use of the remaining three permitted wells. Over the years, the Town has attempted to develop other wells, but elevated nitrate and iron levels, and other issues have prevented the use of these wells. Because of the reduced source capacity, the Town periodically would have trouble meeting demands, and there was a lack of redundancy if one well was non-operational.

To resolve these issues, the Town proposed the construction of nitrate treatment facilities and a chlorine contact tank to serve Wells 4 and 7, iron removal facilities to serve Well 8, and a SCADA system expansion and upgrade to serve all three wells. As Wells 4 and 7 are two of the Town's highest producing wells and are currently inactive, the proposed improvements would make a significant impact in ensuring adequate capacity for the Town. For this project, the Town was awarded \$1,726,434, which includes a 30-year loan of \$1,173,975 at 2.5% interest.

Recently, the Town has requested to add an additional \$159,421 to cover the replacement of the existing waterline from Well 4 that would convey water to the new treatment building. During construction, this main was found to be in poor condition and failed pressure testing. Without repairs to this line, Well 4, the Town's second highest producing well, would remain inactive. The Town is working with VDH to ensure this vital work is completed.

After many hardships, including the death of the original consulting engineer, the Town began construction in November 2018. Construction is expected to be complete by the end of 2019 if the additional waterline work is approved. Upon completion, the Town and its customers will benefit from:

- Increased system capacity and redundancy
- Improved monitoring and control of water sources through the upgraded SCADA system

This project highlights the sustainability of a waterworks to provide safe drinking water with nitrate and iron levels below the MCL.

## II. GOALS AND ACCOMPLISHMENTS

ODW developed the long-term goals discussed below for the Intended Use Plan (IUP). The long-term goals provide a framework that guide management decisions for the DWRSF Program. The short-term goals support the implementation of the program's long-term goals. The overall goal of ODW in administering the capitalization grant is to provide a comprehensive and integrated technical and financial assistance program to waterworks owners through a balanced approach of using set-aside funding and construction loan funds.

### A. Long-Term Goals

1. Protect the public health and welfare by supporting activities that ensure adequate water quality and quantity are provided to users of waterworks,
2. Ensure the sustainability of the DWSRF program to benefit Virginians to the maximum extent possible, the DWSRF (the Fund) is maintained in perpetuity for providing financial assistance as authorized and limited by the SDWA.
3. Assist waterworks owners in complying with federal and state mandated drinking water regulations through programmatic, technical, and construction assistance,
4. Assist waterworks owners to develop strategies for sustainable infrastructure (managerial, technical, and financial capability) to provide safe drinking water,
5. Assist waterworks owners in the protection of their source waters by supporting source water protection programs, and,
6. Make technical and financial assistance available to waterworks owners and consumers through effective outreach programs.

### B. Progress Toward Long-Term Goals

**Progress Toward Long-Term Goals 1, 2, and 3:** ODW developed a Program that utilizes the capitalization grant in two distinct categories; (i) non-project funds, or set-asides, and (ii) project funds to be used for construction of public drinking water systems (waterworks). Set-aside funds were used to enhance the ability of the state and owners of waterworks to ensure a waterworks' long-term capacity to produce safe drinking water and to protect construction loan investments. Specific set-asides are discussed later in this report. Construction funds for waterworks are targeted to address public health problems and to ensure compliance with the provisions of the SDWA.

ODW prioritizes construction projects in accordance with an EPA-reviewed and approved methodology that gives the highest priority in the following order: acute, chronic, public health, then all other eligible projects last. ODW affords the public the opportunity to review and provide meaningful comment on the prioritization methodology and project lists. ODW has noted that the number of applications related to acute and chronic public health issues have declined over the past few years. This is also coincident with the decline in the number of Virginia systems on the Enforcement Targeting Tool (ETT) list (formerly referred to as the *significant non-compliers* list).

Starting in CY 2018 ODW implemented a Capacity Building Program and Expedited Loan Closing Program. Construction projects may be eligible for an additional interest reduction of **0.2%** under either programs. To qualify for the Capacity Building Program VDH required a commitment to adjust rates to ensure minimum compound revenue increases of 2%<sup>1</sup> each year for the next five years. To qualify for the Expedited Closing Program VDH required loan closings completed within 12 months of the initial offer letter. ODW believes the Capacity Building Program will help to build financial capacity at waterworks and the Expedited Loan Closing Program will help to speed up the loan closing schedules.

In addition, the SDWA authorized Virginia to establish a special demonstration project to loan funds to a regional endowment to "...finance new drinking water facilities..." in Southwest Virginia. The Coalfield Water Development Fund, Inc. (CWDF) was established for this purpose and a total of \$10 million has been provided to the endowment.

**Progress Toward Long-Term Goal 2:** To ensure the long term financial sustainability of the Program ODW adopted three initiatives in 2015. These were:

- Increased the admin fee on interest bearing loans from fifty to one hundred fifty basis points. Revised its policy of providing zero-percent interest on all loans to disadvantaged waterworks.
- Zero-percent interest loans will only be provided in extreme situations. Typically, a subsidized rate of 2 to 3% interest will be applied.
- Began charging a \$6000 closing fee on all interest bearing loans to waterworks that are not considered disadvantaged to help defray the upfront loan costs.

In the long term, these actions reduced the reliance on the 4% set-aside for funds to administer the Program and promote the long-term sustainability of the Program. Through these initiatives, ODW was able to move VRA charges from the 4% Set-Aside funding (subject to the grant amount) to the Admin Fee funding that is longer term and less volatile.

**Progress Toward Long-Term Goal 4:** ODW continues to provide technical, managerial, and financial (TMF) assistance to waterworks owners. This assistance is focused on priority waterworks identified through several tools, such as: EPA Enforcement Targeting Tool (ETT), state violations list, recommendations from Field Offices, new waterworks operations permitting and the triennial assessment. Capacity Development is primarily delivered to waterworks serving less than 10,000 persons. The Division of Capacity Development works closely with the Financial, Construction and Planning (FCAP) Division to assure that all applicants are eligible for funding by either having capacity or utilizing funds to develop capacity. Assistance is provided by development of Waterworks Business Operation Plans, Small Project Engineering assistance, on-site technical assistance, Planning and Design Funding Agreements, classroom training, and financial assistance provided through the Division of Capacity Development or one of EPA's Technical Assistance Providers (TAPs). ODW continues to fully implement its Capacity Development Strategy. Please refer to the Annual Capacity Development Report for more detailed information regarding this Goal.

***Building Financial Sustainability (Implemented in CY2016)*** To promote financially sustainable waterworks ODW recommended waterworks self-evaluate their financial positions using a ***Building Financial Sustainability/Financial Health Indicators*** guide developed by ODW to ensure they were able to provide for financial sustainability. As part of the application/offer process VDH recommended all owners use the

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<sup>1</sup> Alternatively owners may commit to using an inflationary linked index such as the Consumer Price Index (CPI) or the Personal Consumption Index (PCE).

guidance information to evaluate the current financial health of their waterworks, to evaluate their ability to accept new debt, and to affect changes needed to grow revenues. The guide is available on our website.

**Building Financial Sustainability (Implemented CY2018):** One DWSRF Program Requirements is for waterworks to build long-term financial sustainability and have adequate financial capacity for additional debt for needed projects. As a condition of funding VDH reserved the right to require the implementation of rate changes including but not limited to annual rate increases in an effort to build long-term financial sustainability at the waterworks. To build waterworks financial capacity VDH offered reduced interest rates (up to 20 bps) for recipients that commit to compound annual rate increases of at least 2% a year for five years as long as any additional funds generated are for the use of the waterworks.

**Readiness to Proceed and Timely Use of Funds (Implemented CY2018):** To promote readiness to proceed and timely use of funds ODW offered reduced interest rates of up to 20 bps for recipients that can close loans within 12 months of ODW's offer letter date.

**Progress Toward Long-Term Goal 5:** ODW has the responsibility to conduct assessments of public water sources, that includes: source water protection area delineations, inventories of potential sources of contamination (PSC), and susceptibility determinations. ODW has been refining the source water assessment procedures, GIS database layers and toolset to improve the Source Water Assessment Reports to waterworks.

ODW continued to manage contract services and grants to assist small community waterworks and localities with development and implementation of source water protection plans. ODW continued to provide well development data of new public wells to DEQ for use in their groundwater characterization and management programs.

Additionally, ODW continued to collaborate with source water protection partners. Examples include DEQ's Non-Point Source (NPS) Management Plan and Report, and our Interagency Environmental Review (IER) process. The purpose of the IER process is to evaluate projects for potential environmental and public health risks. VDH, the Department of Environmental Quality (DEQ), the Virginia Department of Transportation (VDOT) and other state agencies participate in this process. VDH review focused on potential public health impacts; ODW continued to concentrate on potential impacts to public drinking water sources.

**Progress Toward Long-Term Goal 6:** In addition to the annual postings of applications/application announcement for construction funds and set-aside suggestions, the Planning and Design Funding Agreements and the 1452(k) loans for source water protection applications were posted. All of the Planning District Commissions (PDCs) are provided information concerning the program and other forums (VRA conference, etc.) are used to promote the program. In addition, an on-line webcast was held in February 2019 to promote the DWSRF program and discuss how to complete the various applications. The presentation slides and recording are also made publically available.

ODW field offices provided information on specific waterworks to target for various aspects of the Program. EPA's ETT was also used to identify specific waterworks that may benefit from the program. The FCAP and Cap Dev staff make additional outreach efforts during conferences and training events to ensure waterworks are aware of the many opportunities available to them under the DWSRF programs. Due to additional outreach/marketing efforts ODW was able to increase applications by an additional \$25 million over the previous 5 year running annual average.

ODW placed the various applications, checklists, and related items web site: <http://www.vdh.virginia.gov/drinking-water/financial-construction-assistance-programs/drinking-water-funding-program-details/>



## C. Short-Term Goals

1. Allocate DWSRF funds efficiently so that Virginians are provided clean, safe drinking water.
2. Assist waterworks owners through innovative and effective technical assistance programs.
3. Promote consolidation and regionalization of water supplies and waterworks through both programmatic and construction assistance. Consolidation allows waterworks to leverage economies of scale, share resources, reduce expenses, and share costs among a larger user base. Consolidation of small waterworks has been shown to increase reliability and affordability.
4. Provide a source of low cost financing for drinking water needs.
5. Require that all new Community and Nontransient Noncommunity water systems beginning operation after October 1, 1999, demonstrate the technical, financial, and managerial capacity required to operate a waterworks.
6. Ensure that state operator certification regulations meeting EPA national requirements are applied. Ensure that training courses are provided that meet the needs of the lower classifications of licensed operators at the smaller waterworks.
7. Demonstrate compliance with the Federal Capacity Development Program, Virginia's Capacity Development Strategy and operator certification program provisions in order to avoid withholdings. Where appropriate utilize the DWSRF Funding to assist in promoting the capacity building objectives of the Program.
8. Apply for the full amount of the DWSRF Grant in the first year of Congressional appropriation.
9. Maintain unliquidated obligations (ULOs) at or below the national average of 10%. The ULO is the unexpended balance remaining from the amount of federal funds EPA obligated to an individual state/recipient which has not yet been "drawn down".
10. Maintain program pace at or above the EPA Region III and national averages of 95% and 96% respectively. Program pace is a ratio of the dollar value of closed loans/binding commitments to the total dollars available for projects in the Fund. For the next SFY VDH will use 97% for an overall pace target.

## D. Progress Toward Short-Term Goals

**Progress Toward Short-Term Goals 1 and 8:** ODW timely submitted its 2019 grant application to EPA in June 2019 for 17,954,000. To promote efficient fund utilization ODW reserves the right to by-pass any project that has not executed the assistance agreements/initiated construction within 12 months of the original award letter.

**Workshop by Webcast (Implemented CY 2018):** VDH offered our first DWSRF informational meeting via webcast on February 20<sup>th</sup>, 2018. The workshop was recorded for future play back. This allowed waterworks the ability to attend the workshop at their convenience. Previously only one workshop in-person was scheduled for each Field Office. Attendance was mandatory and those that could not attend their local workshop had to travel to another part of the state.

**Progress Toward Short-Term Goal 2:** ODW continued the Planning and Design Award Program. The Planning dollars have benefited the small, rural, financially stressed waterworks or waterworks in need of small amounts of grant money (up to \$35,000 per project) to develop preliminary engineering reports, plans and specifications, and source water studies. Many of these grants have allowed them to expedite the preparation of applications for DWSRF Program, USDA Rural Development, and other construction funding programs.

ODW continued our Small Scope Engineering Services: ODW solicits for engineering services through consulting engineering firm(s) to provide small scope (each approximately \$10,000 or less) project engineering directly to small water systems that do not have the financial, technical and or managerial capacity to retain an engineer. These projects address compliance and/or capacity issues of small public community systems serving less than 10,000 persons.

**Progress Toward Short-Term Goal 3:** The DWSRF Program's construction assistance was designed to encourage regionalization by providing points for projects that consolidate waterworks. The Waterworks Business Operations Plan package encourages waterworks to consider consolidation in the planning process. Preliminary engineering reports require that feasible alternatives be evaluated to ensure the possibility of consolidation has been considered. Regional waterworks that consolidate to eliminate smaller, failing waterworks are eligible for 100% principal forgiveness or reduced interest rates.

During this reporting cycle, ODW assisted in consolidating two challenged waterworks. The St. Charles Water and Sewer Authority was consolidated into the Lee County Public Service Authority (LCPSA) as part of project WSL 010-14. The project funded the replacement of leaking waterlines, the payoff of debt, and transfer of assets to the LCPSA. The total funding was for \$1,259,248 with \$604,000 as principal forgiveness.

During this reporting cycle, ODW also awarded funding to the Tazewell County Public Service Authority (TCPSA) to purchase the Town of Pocahontas water system as part of project WSL 001-19. The project funded the purchase and transfer of assets to the LCPSA. The total funding is for \$1,904,000 with \$952,000 as principal forgiveness. The loan closed on May 10, 2019.

**Progress Toward Short-Term Goal 4:** ODW designed a loan package where the maximum interest rate is 1% less than the AA municipal 20-year revenue bond rate. ODW incorporated affordability criteria into the construction assistance ranking system. Special consideration is given for disadvantaged communities. Under the proposed project priority list a range of a minimum of 20% and a state option to add an additional maximum of 30% principal forgiveness will be provided to eligible projects serving disadvantaged communities. The Planning and Design awards will further reduce the municipalities' financial burden for projects proceeding to construction.

**Progress Toward Short-Term Goal 5:** ODW developed a Capacity Development Strategy originally in May 2000 and subsequently revised in May, 2014, later approved by EPA, which described the authority and procedures used to ensure new Community and Nontransient Noncommunity waterworks have TMF capacity prior to beginning operation. New waterworks are required to develop a Waterworks Business Operations Plan to demonstrate full TMF capacity prior to the issuance of an Operation Permit. The Commonwealth of Virginia Capacity Development Strategy is published on the Virginia Department of Health's website at: <http://www.vdh.virginia.gov/drinking-water/capacity-development/>

**Progress Toward Goal 6:** EPA approved Virginia's Operator Certification Program (OCP) in July 2001. EPA awarded the full award of \$3,598,800 to Virginia for the Operator Certification Expenditure Reimbursement Grant (ERG). ODW submitted the final financial status report in April 2008. EPA determined that VDH continued to successfully implement Virginia's OCP under the SDWA Section 1419(b) guidelines. ODW submits an annual OCP report for EPA's review and approval as required.

**Progress Toward Short-Term Goal 7:** EPA's review and approvals of ODW's Program/reports confirms compliance with the Federal Capacity Development Program, Virginia's Capacity Development Strategy and operator certification program provisions. Where appropriate ODW has leveraged funding offers with rate adjustments its efforts to build financial capacity for waterworks. Starting in 2018 ODW is requiring asset management plans (AMPs) from all DWSRF construction funding recipients that do not have one. ODW

believes the AMPs will help waterworks determine the condition of their assets and a schedule for replacement. This will further advance Virginia's response to the issue of aging infrastructure.

**Progress Toward Short-Term Goal 8:** ODW has applied for the full amount appropriated for Virginia under the DWSRF Grant in the first year for all recent grant appropriations.

**Progress Toward Short-Term Goal 9:** An ongoing concern of EPA's has been the national amount of unliquidated obligations (ULOs) under the DWSRF Program. DWSRF ULOs are unspent cap grant funds provided by EPA and are measured as the ratio of funds provided to funds available. These include all project and set-aside funds. As of June 30, 2019 ODW achieved a ULO of 13.2% for the DWSRF program, which is consistent with the EPA Region III average. This included set-aside funds and project funds. EPA has encouraged states to reduce and maintain their ULOs to as low a level as feasibly possible. Through funding several large projects in the next SFY ODW believes we will reduce our ULOs significantly below the RIII average.

**Progress Toward Short-Term Goal 10:** Program Pace data is specific to project funds and is calculated/derived from the DWNIMS Database. It is calculated as a ratio of cumulative binding commitments to total funds available for construction projects. It can be an indication of how well/quickly a program makes funds available for projects. The data for Virginia reflects an overall program pace of 89.1% (DWNIMS line #397) that is less than the national average. However, the Program achieved an **annual** pace for SFY2019 of over 68.0% (DWNIMS line #396) based on an EPA grant of \$17.954 M. ODW established a stretch goal of 225% for the annual pace and is expected to close approximately \$60 M in SFY2020 that will raise our overall pace to 97.8% that will exceed the current national average.

ODW believes the following two program revisions will also help to speed projects to loan closing.

**PER Requirement Revised (Implemented CY 2017):** The requirement to have a Preliminary Engineering Report (PER) drafted and submitted with the construction application was revised in 2017. The submission (or waiver) of the PER may be made a condition of the award. VDH believes this will allow greater flexibility in the Program and may allow the funding of the PER as part of the construction award. A Preliminary Engineering Conference (PEC) is required for all projects. VDH expects the PEC to be scheduled before February 15.

**Design Build (Implemented CY 2017):** : In an effort to better serve our waterworks owners the DWSRF Program has made revisions to accommodate Design Build and other alternative project delivery methods.

### III. DWSRF PROGRAM SET-ASIDE AND LOAN PROJECTS ACTIVITIES

#### A. Sources of DWSRF Program Funds

As of June 30, 2019, ODW has received capitalization grants totaling \$332,805,822 (DWNIMS item 3). The 2019 capitalization grant was excluded as a source of funds in this report since it was not received during the reporting period.

ODW is required to provide state matching funds equal to 20% of the each SRF capitalization grant. ODW has a cumulative state match appropriation of \$69,302,507 million (DWNIMS item 35). Beginning with the 2004 capitalization grant, administrative loan fees are being collected on projects that lose with an interest rate greater than zero. The administrative loan fees are currently one-hundred and fifty basis points (1.50%) per

annum and are included as part of the interest rate. **Appendix A - Table 1** shows the capitalization grant awards and other sources of funding received during this reporting period.

## **B. Uses of DWSRF Program Funds**

### **1. Allocation of DWSRF Program Funds**

The capitalization grant is allocated between two categories: (1) project loan funds, which are to be used for construction of public drinking water systems, and (2) non-project funds, or set-asides. For each capitalization grant award, ODW develops an Intended Use Plan (IUP) which describes how Virginia intends to use the available DWSRF program funds for the year. The IUP also describes the amount of funds that will be used for these various activities. The IUPs were made available to the public for review and comment prior to being submitted to the EPA.

The SDWA establish the capitalization grant percentage limits that can be spent for project loans and the four individual set-aside activity areas. The 20% state match is for use in awarding project loans. Up to 31% of the capitalization grant can be allocated to the four set-aside activities. The set-aside activities include up to 4% for administrative expenses, up to 10% for state program management, up to 2% for small system technical assistance, and up to 15% for local assistance and other state programs

Appendix B – Table 2 shows the actual Virginia Fiscal Year 2018 disbursements and cumulative disbursements.

### **2. Set-Aside Activity Status**

#### 4% DWSRF Administration and Technical Assistance

The administrative expense set-aside is used for administration of the DWSRF Program and general technical assistance. ODW has eight employees to assist in administering the DWSRF Program; however, four of these employees are paid from other funding sources.

The administration of the DWSRF Program activities also includes: banking type services of the project loans performed by the Virginia Resources Authority (VRA), annual audits performed by the State Auditor or their agent, and travel/training costs. The State’s Auditor of Public Accounts (APA) conducts an annual statewide single audit for the Commonwealth of Virginia in accordance with OMB Circular A-133.

VRA was reimbursed in the amount of \$492,614.46 for credit evaluation, loan servicing, and loan monitoring in accordance with the VRA-VDH cost allocation agreement. VRA funding was charged to the admin fee account. A private CPA firm is engaged by the State’s APA to perform an annual audit of the construction State Loan Fund. Clifton Larson Allen , LLP Certified Public Accountants conducted an independent audit of VRA financial records for the year ending June 2019. The draft version expressed an unmodified opinion, disclosed no audit finds, no instances of noncompliance, and no significant deficiencies. The auditors determined VRA was a low-risk auditee. A final version is still pending review. The Attorney General’s Office has provided legal advice on agreements and contracts.

During this reporting period, ODW and VRA have completed the following administrative activities:

- Solicitation of applications, through public announcements and ODW Field Office input,
- Conduct webcast funding workshops and met with prospective recipients,
- Project evaluation, selection, and prioritization in accordance with the Program Design Manual
- Development of comprehensive list of projects, and Intended Use Plan,
- Evaluation of waterworks for TMF capacity,

- Establish the terms of the offers and award funding assistance,
- Ensure completion of all required activities required for loan closing and close loans,
- Monitor/Administer project construction,
- Credit Analysis, Loan Servicing, and Fund Administration.
- Preparation of Capitalization Grant Application,

Indirect costs were recovered in fiscal year 2018.

2% Small Systems Technical Assistance

ODW used these funds to six part-time data keying and 3 full-time inspector positions in field offices.

10% PWSS State Program Management

ODW used these funds to supplement the State Public Water Supply Supervision (PWSS) Program.

a. State Program Management: Source Water Protection Program Administration

ODW's Special Project Engineer continued to coordinate the efforts needed by the state to oversee source water activities. Contracts are in place to provide groundwater and surface water community systems serving less than 50,000 persons with technical assistance for developing and implementing Source Water Protection Plans. Surface water systems receive technical assistance through the Capacity Development 15% set-aside.

For the current State Fiscal Year (SFY), the collective efforts of the source water protection are presented in the current Capacity Development Report.

b. State Program Management: Public Water Supply Supervision (PWSS) Program

See statistics from the PWSS Semiannual Report submitted.

c. State Program Management: Capacity Development

ODW completed the following activities in ensuring a successful implementation of the Capacity Development Strategy:

- Completed Field Office Reviews – FY2019 projects
- Completed Capacity (TMF) Review of FY2019 projects
- Conducted SRF Debarment Searches
- On-going review of waterworks through sanitary surveys (monthly).
- Review SRF cash flow worksheets
- Collaborate on SRF Initial Meetings
- Mailed out SRF Construction Target Letters (use ETT & FOs)
- Continue funding of a full time Capacity Development Manager position.
- Funding three Sustainability Coordinator positions
- Held the Capacity Development 3½-day workshop Management, Methods, and Money through Virginia Tech.
- Held the 3½-day workshop Establishing a Successful and Sustainable Waterworks through Virginia Tech.
- Continue to fund and implement the Small Project Engineering Program
- Further details will be addressed in the Annual Capacity Development Report

15% Local Assistance and Other State Programs

Virginia used funds from its local assistance set-aside for capacity development.

- a. Local Assistance and Other State Programs - Source Water Delineation and Assessment  
ODW continued refining the SWAP procedures, GIS database layers and the VDH ArcGIS toolset to render a better product for waterworks and their consultants.
- b. Local Assistance and Other State Programs - Operator Certification  
Virginia has had a waterworks operator licensure law and regulations since 1971. Licensure is generally accepted as being more stringent than certification. The Department of Professional and Occupational Regulation administers the licensure program for the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals. The Director of the Office of Drinking Water is a member of this licensure Board. For information on: Virginia's Operator Certification Program, VDH's operator training, and other provider's trainings; please refer to the current Annual Operator Certification Report submitted to EPA on June 28, 2018.
- c. Local Assistance and Other State Programs – Capacity Development  
ODW continues to offer planning and design funding agreements to private and public owners of community waterworks as part of the general technical assistance. Funding is for up to \$35,000 per project. This program is for small, rural, financially stressed, community waterworks serving fewer than 10,000 persons. Eligible costs may include preliminary engineering reports, design of plans and specifications, performance of source water quality and quantity studies, drilling test wells to determine source feasibility, or other similar technical assistance projects.  
  
For details regarding the Capacity Development Program, please refer to the Annual Capacity Development Report submitted in November 16, 2017. The next Capacity Development Report will be submitted in November, 2018.
- d. Local Assistance and Other State Programs - Land Acquisition for Source Water Protection  
No funding from this set-aside was provided for loans to public water systems for the purchase of land or conservation easements and for incentive-based voluntary protection measures.
- e. Local Assistance and Other State Programs – Source Water Protection  
Efforts of the source water protection are presented in the current Capacity Development Report.

### 3. Construction Project Loan Assistance Status

ODW entered into loan agreements (binding commitments) with 34 public water systems totaling \$19,256,987 during this reporting period. The typical loan terms range from 20 to 30 years, with interest rates from 2.00 to 2.65 percent. The loan term may be reduced to match the life of the asset being funded or at the request of the recipient. The amount of DWSRF Program project loans ODW disbursed during this reporting period was \$24,427,284. **Appendix E** lists the new loan agreements for this reporting period and provides a brief description of each project.

#### Binding Commitments:

##### SRF – Program Pace

For the report period ODW achieved a program pace (funds provided to funds available) of 101.3%. On a cumulative basis, ODW closed the dollar value of loans shown in Part I, which is 89.7% of \$392 million in DWSRF Funds available for Projects.

#### Disbursements for Projects:

For this reporting period, ODW disbursed \$22,162,149 million for projects in Federal and State funds. A total of \$3,774,884 in state matching funds is included in the disbursements. In addition second generation repayment funds were disbursed in the amount of \$2,265,135

Project By-pass:

In response to our DWSRF FY2019 solicitation ODW received and evaluated 38 construction projects requesting a total of \$67.2 million. Of these, 21 applications were for small projects less than \$300,000.

ODW completed our preliminary review of these small projects and made the following determination based on project readiness. ODW will not be offering funding to any waterworks owner with more than two open/incomplete DWSRF projects.

ODW requested that the applicants focus their efforts on completing the open DWSRF projects that were already awarded to them. ODW also reminded the applicants that we reserve the right to by-pass any open project that has not executed the assistance agreements/initiated construction within 12 months of the original award date. Finally, ODW urged them to pursue a timely completion of your existing open DWSRF Projects and consider re-applying next year for the by-passed projects.

ODW agreed to award by-passed projects if the applicant took actions to reduce the number of open projects to less than three by completing the open projects or withdrawing already awarded projects to pursue the new application if they consider it a higher priority.

ODW subsequently by-passed 6 projects that did not complete program requirements within the 12-month period.

Small Systems That Will Benefit:

ODW has awarded approximately \$27.5 million of the project funds from the 2019 IUP to small systems. The status of assistance to disadvantaged waterworks has been provided below:

1999	\$ 14,563,600	\$ 4,369,080	30% Maximum	\$ 4,369,080	30.0%
2000	\$ 15,135,800	\$ 4,540,740	30% Maximum	\$ 4,540,740	30.0%
2001	\$ 15,198,400	\$ 4,559,520	30% Maximum	\$ 4,559,520	30.0%
2002	\$ 11,127,600	\$ 3,338,280	30% Maximum	\$ 3,338,280	30.0%
2003	\$ 11,060,700	\$ 3,318,210	30% Maximum	\$ 3,318,210	30.0%
2004	\$ 11,473,900	\$ 3,442,170	30% Maximum	\$ 3,442,170	30.0%
2005	\$ 11,449,600	\$ 3,434,880	30% Maximum	\$ 2,845,909	24.9%
2006	\$ 8,761,500	\$ 2,628,450	30% Maximum	\$ 2,379,730	27.2%
2007	\$ 9,841,124	\$ 2,952,337	30% Maximum	\$ 2,221,208	22.6%
2008	\$ 8,679,899	\$ 2,603,970	30% Maximum	\$ 2,034,068	23.4%
2009	\$ 8,672,999	\$ 2,601,900	30% Maximum	\$ 2,521,764	29.1%
2010	\$ 23,008,000	\$ 6,902,400	30% Minimum	\$ 11,090,720	48.2%
2011	\$ 15,965,000	\$ 4,789,500	30% Minimum	\$ 7,326,717	45.9%
2012	\$ 15,215,000	\$ 4,564,500	30% Maximum	\$ 3,104,412	20.4%
2013	\$ 14,275,000	\$ 4,282,500	30% Maximum	\$ 3,531,344	24.7%
2014	\$ 14,654,000	\$ 4,396,200	30% Maximum	\$ 3,901,000	26.6%
2015	\$ 14,557,000	\$ 4,367,100	30% Maximum	\$ 3,411,210	23.4%
2016	\$ 13,771,000	\$ 4,131,300	30% Maximum	\$ 2,754,200	20.0%
2017	\$ 13,654,000	\$ 4,096,200	30% Maximum	\$ 3,680,222	27.0%
2018	\$ 18,123,000	\$ 8,286,745	50% Maximum	\$ 8,286,745	45.7%
<b>Total</b>	<b>\$ 312,524,822</b>	<b>\$ 96,607,292</b>		<b>\$ 95,293,696</b>	<b>30%</b>

Figures in Table do not include ARRA funding or the FY2019 grant award as it was received after the reporting period. During this reporting period, ODW closed 34 loans totaling \$19.3 million in SRF construction projects.

#### 4. Coalfield Water Development Fund

The Coalfield Water Development Fund, Inc. (CWDF) is a non-profit charitable organization that provides grant assistance for waterworks construction in Planning Districts 1 and 2 which includes the counties of: Lee, Scott, Wise, Dickenson, Russell, Tazewell, Buchanan, and the City of Norton. Four loans totaling \$10 million have been made to the CWDF to set up a regional endowment using funds from Virginia's DWSRF Program. The loans to CWDF are at an interest rate of 0% for 30 years with a balloon payment of principal due at the end of the period. The loan principal is held in trust to earn dividends and interest and the endowment income is used to make construction grants in Planning Districts 1 and 2 of Southwest Virginia. An independent audit was completed for the fiscal year ending June 30, 2018. The audit report contained unqualified opinions with no audit findings. An independent audit will be completed for the fiscal year ending June 30, 2019 by November 2019.

ODW performed an on-site review of the CWDF on October 16-18, 2018 covering the reporting period ending June 30, 2018. ODW determined the CWDF was operating in compliance with the Program for Implementation for the fiscal year. ODW will perform our next on-site review on December 3-5, 2019.

## IV. FINANCIAL SUMMARY

The following information is provided to delineate the financial health of Virginia's DWSRF program.



**A. Status of Loans**

ODW has closed 34 SRF construction projects in amounts shown in Part I in SRF loans as of June 30, 2019

**B. Loan Disbursements/Cash Draw Proportionality**

ODW expended \$3,774,884 in state match during this reporting period.

**C. Set-Aside Disbursements**

ODW disbursed \$4,314,434million in SRF set-aside funds during this reporting period. **Appendix D** breaks out the disbursements by set-aside activity.

**D. Annual Repayment/Aging of Account**

The DWSRF program received 8,686,451, in principal repayments (DWNIMS item 281), \$1,588,833 in interest repayments (DWNIMS item 282), and \$814,999 in administrative fees (DWNIMS item 300) during this reporting period. The DWSRF program received \$1,862,793 in investment income (DWNIMS item 296), net of fees for the period ended June 30, 2019.

**E. Financial Statements**

The 2019 audited financial statements of our “State Loan Fund,” the Virginia Water Supply Revolving Fund, which is maintained at the Virginia Resources Authority, was issued in September 2019. EPA will receive a copy of the audit report electronically.

## V. COMPLIANCE WITH AGREEMENTS

ODW has complied with the conditions in the Grant Agreement, unless noted otherwise. ODW has met and continues to be in compliance with the following conditions:

- Establish and maintain state authority,
- Comply with applicable state laws and procedures,
- Review technical, financial, and managerial capacity of assistance recipients,
- Establish State Loan Fund account, set-aside account, and administration account,
- Deposit all funds in appropriate accounts,
- Follow state accounting and auditing procedures,
- Require loan recipient accounting and auditing procedures,
- Submit IUP and use all funds in accordance with the plan,
- Comply with enforceable requirements of the Act,
- Establish capacity development authority,
- Implement/maintain system to minimize risk of waste, fraud, abuse, and corrective action, and
- Develop and submit project priority ranking system.

A detailed discussion of the following conditions includes:

**A. Binding Commitments within One Year**

ODW entered into binding commitments within one year of receipt of the Automated Clearing House payments for all four quarters during this reporting period.

**B. Deposit State Matching Funds**

ODW contributed \$3,624,600 in state match (DWNIMS item 34) during this reporting period. Cumulative state match appropriation as of June 30, 2019 was \$69,302,507 (DWNIMS item 35).

**C. Submit Biennial SRF Report and Annual Audit**

ODW has submitted all required reports. For ease of reporting ODW has elected to submit its report annually. The State's Auditor of Public Accounts conducts an annual statewide single audit for the Commonwealth of Virginia in accordance with OMB Circular A-133. There were no reported findings pertaining to the DWSRF program the audit report issued for the fiscal year ending June 30, 2019.

**D. Assure That Borrowers Have Dedicated Source of Repayment**

Detailed financial analyses and credit summaries are performed for each applicant prior to entering into a loan commitment. Each loan recipient must also establish one or more dedicated sources of revenue for repayment of the loan. Dedicated sources of revenue can be water and/or sewer revenue pledges, general tax pledges, or a combined pledge of revenues and full faith and credit.

**E. Ensure Recipients Compliance with Applicable Federal Cross-Cutting Authorities**

VDH has established monitoring methods to ensure compliance with federal cross-cutting requirements. In addition, administrative/financial reviews are conducted during the course of each project at specified intervals. ODW continues our routine monitoring efforts to ensure compliance.

For the 1998 grant award, the MBE goal was 2% and the WBE goal was 1.5%. Beginning with the 1999 grant award, ODW studied the availability of contractors in this field to establish the MBE and WBE goals. ODW approved goals are in the range from 0.6% to 2.8% for MBE and 0.2% to 2.6% for WBE effective July 1, 2018 through June 30, 2021. The results of ODW performance in this area are captured in our MBE quarterly reports. ODW will reconvene the MBE/WBE state workgroup in the fall of 2020 to update our goals for the next three-year period.

**F. Conduct Environmental Reviews**

The 23 public water systems receiving assistance during Virginia Fiscal Year 2018 were reviewed and approved using the state's environmental review procedures. It was determined that no Environmental Impact Statements were necessary.

**G. Implement Capacity Development Strategy**

ODW continues to implement the EPA approved Capacity Development Strategy. This strategy includes requirements for new waterworks, existing waterworks, and potential DWSRF recipients. In accordance with reporting requirements, ODW submitted the 2017 Capacity Development Report to EPA on November 16, 2017. In a letter dated March 5, 2018, EPA stated that Virginia's Program continues to meet the requirements of the Sections 1420(a) and (c) of the SDWA. The Annual Capacity Development Report for 2018 will be submitted to the EPA on or before November 30, 2018.

## APPENDIX A

**APPENDIX A**

<b>DWNIMs # Table 1: ALLOCATION OF FUNDS - DWSRF</b>				
<b>I. SOURCES OF FUNDS</b>		<b>2019</b>	<b>Previous Cumulative</b>	<b>Current Cumulative</b>
14 & 15	Capitalization Grant	\$18,123,000	\$314,682,822	\$332,805,822
34 & 35	20% State Match	\$3,624,600	\$65,677,907	\$69,302,507
	State Funds - Deferred Match	\$0	\$5,888,480	\$5,888,480
	Additional State Funds	\$0	\$5,053,720	\$5,053,720
281 & 284	Principal Repayments	\$8,686,451	\$75,919,594	\$84,606,045
282 & 285	Interest Repayments	\$1,588,833	\$14,786,735	\$16,375,568
296 & 297	Interest Earned on Investments	\$1,862,793	\$4,060,523	\$5,923,316
43 & 44	Transfer from Water Facilities Revolving Funds (CWSRF)	\$0	\$1,000,000	\$1,000,000
303 & 304	Administrative Loan Fees, Interest & Earnings	\$841,191	\$2,516,105	\$3,357,296
	<b>Total:</b>	<b>\$34,726,868</b>	<b>\$489,585,886</b>	<b>\$524,312,754</b>
	EPA In-Kind Amount:	\$0	\$480,000	\$480,000
	EPA In-Kind Recapture Amount:	\$0	\$8,596	\$8,596
<b>II. USES OF FUNDS</b>				
<b>A. DWSRF LOAN ACCOUNT BINDING COMMITMENTS</b>				
137, 138, 139 - disadvantaged	Small Systems 1452a (2) Standard	\$0	\$42,447,452	\$42,447,452
	Disadvantaged Communities 1452d	\$15,286,317	\$253,796,567	\$269,082,884
185 & 186	Small Systems Subtotal	\$15,286,317	\$296,244,019	\$311,530,336
140 + 141	Large Systems Standard Loans 1452a	\$3,970,670	\$47,056,550	\$51,027,220
	Endowment - Coalfield Water Development Fund	\$0	\$10,000,000	\$10,000,000
121	Subtotal Loan Funds:	\$19,256,987	\$353,300,569	\$372,557,556
<b>III. SET-ASIDE ACCOUNT WORK PLAN COMMITMENTS</b>				
	<b>1. Administration and Technical Assistance (max 4%) 1452(g)2</b>			
	Administration	\$572,023	\$10,697,910	\$11,269,933
	Technical Assistance	\$0	\$1,869,428	\$1,869,428
48 & 49	Administration and Technical Assistance Subtotal:	\$572,023	\$12,567,338	\$13,139,361
58 & 59	<b>2. Technical Assistance (max 2%) 1452(g) 2</b>	\$312,515	\$4,961,809	\$5,274,324
	<b>3. State Program Management (max 10%) 1452(g)2</b>			\$0
See prior FY workplan for breakdown	PWSS Program	\$2,329,511	\$21,614,592	\$23,944,103
	Source Protection	\$0	\$650,624	\$650,624
	Operator Certification	\$0	\$756,058	\$756,058
	Capacity Development	\$0	\$215,594	\$215,594
68 & 69	State Program Management Subtotal:	\$2,329,511	\$23,236,868	\$25,566,379
See prior FY workplan for breakdown	<b>4. Local Assistance/Other State Programs (max 15%) 1452(k)</b>			
	Source Water Delineation and Assessment	\$0	\$2,944,240	\$2,944,240
	Source Water Land Acquisition	\$0	\$0	\$0
	Capacity Development	\$2,152,192	\$18,020,621	\$20,172,813
	Wellhead Protection	\$310,000	\$2,417,468	\$2,727,468
84	Local Assistance/Other State Programs Subtotal:	\$2,462,192	\$23,382,329	\$25,844,521
111 & 112	Set-Asides Subtotal	\$5,676,241	\$64,148,344	\$69,824,585
	<b>Total (S/A subtotal plus Loan Funds subtotal)</b>	<b>\$24,933,228</b>	<b>\$417,448,913</b>	<b>\$442,382,141</b>

## APPENDIX A

DWNIMs # Table 1: ALLOCATION OF FUNDS - DWSRF				
<b>I. SOURCES OF FUNDS</b>		<b>2018</b>	<b>Previous Cumulative</b>	<b>Current Cumulative</b>
14 & 15	Capitalization Grant	\$13,654,000	\$301,028,822	\$314,682,822
34 & 35	20% State Match	\$2,730,800	\$62,947,107	\$65,677,907
	State Funds - Deferred Match	\$0	\$5,888,480	\$5,888,480
	Additional State Funds	\$0	\$5,053,720	\$5,053,720
281 & 284	Principal Repayments	\$8,674,130	\$67,245,464	\$75,919,594
282 & 285	Interest Repayments	\$1,558,867	\$13,227,868	\$14,786,735
296 & 297	Interest Earned on Investments	\$574,571	\$3,485,952	\$4,060,523
43 & 44	Transfer from Water Facilities Revolving Funds (CWSRF)	\$0	\$1,000,000	\$1,000,000
303 & 304	Administrative Loan Fees, Interest & Earnings	\$646,386	\$1,869,719	\$2,516,105
	<b>Total:</b>	<b>\$27,838,754</b>	<b>\$461,747,132</b>	<b>\$489,585,886</b>
	EPA In-Kind Amount:	\$0	\$480,000	\$480,000
	EPA In-Kind Recapture Amount:	\$3,524	\$5,072	\$8,596
<b>II. USES OF FUNDS</b>				
<b>A. DWSRF LOAN ACCOUNT BINDING COMMITMENTS</b>				
137, 138, 139	Small Systems 1452a (2) Standard	\$0	\$42,447,452	\$42,447,452
	Disadvantaged Communities 1452d	\$12,438,449	\$241,358,118	\$253,796,567
185 & 186	Small Systems Subtotal	\$12,438,449	\$283,805,570	\$296,244,019
140 + 141	Large Systems Standard Loans 1452a	\$14,500,000	\$32,556,550	\$47,056,550
	Endowment - Coalfield Water Development Fund	\$0	\$10,000,000	\$10,000,000
121	Subtotal Loan Funds:	\$26,938,449	\$326,362,120	\$353,300,569
<b>III. SET-ASIDE ACCOUNT WORK PLAN COMMITMENTS</b>		<b>2018</b>	<b>Previous Cumulative</b>	<b>Current Cumulative</b>
	1. Administration and Technical Assistance (max 4%) 1452(g)2			
	Administration	\$506,984	\$10,190,926	\$10,697,910
	Technical Assistance	\$0	\$1,869,428	\$1,869,428
48 & 49	Administration and Technical Assistance Subtotal:	\$506,984	\$12,060,354	\$12,567,338
58 & 59	2. Technical Assistance (max 2%) 1452(g) 2	\$293,988	\$4,667,821	\$4,961,809
	3. State Program Management (max 10%) 1452(g)2			
See prior FY workplan for breakdown	PWSS Program	\$1,671,443	\$19,943,149	\$21,614,592
	Source Protection	\$0	\$650,624	\$650,624
	Operator Certification	\$0	\$756,058	\$756,058
	Capacity Development	\$0	\$215,594	\$215,594
68 & 69	State Program Management Subtotal:	\$1,671,443	\$21,565,425	\$23,236,868
	4. Local Assistance/Other State Programs (max 15%) 1452(k)			
See prior FY workplan for breakdown	Source Water Delineation and Assessment	\$0	\$2,944,240	\$2,944,240
	Source Water Land Acquisition	\$0	\$0	\$0
	Capacity Development	\$1,783,100	\$16,237,521	\$18,020,621
	Wellhead Protection	\$265,000	\$2,152,468	\$2,417,468
84	Local Assistance/Other State Programs Subtotal:	\$2,048,100	\$21,334,229	\$23,382,329
111 & 112	Set-Asides Subtotal	\$4,520,515	\$59,627,829	\$64,148,344
	<b>Total (S/A subtotal plus Loan Funds subtotal)</b>	<b>\$31,458,964</b>	<b>\$385,989,949</b>	<b>\$417,448,913</b>

## APPENDIX B

**APPENDIX B**

<b>Table 2: DISBURSED DWSRF PROGRAM FUNDS BY STATE FISCAL YEAR</b>				
<b>DWNIMs #</b>		<b>2019</b>	<b>Previous Cumulative</b>	<b>Current Cumulative</b>
<b>USES OF DISBURSED FUNDS</b>				
<b>I. PROJECT LOAN ACCOUNT</b>				
	1. Large Systems			
	Standard Loans 1452(a)	\$6,581,080	\$22,907,889	\$29,488,969
	Disadvantaged Communities 1452 (d)	\$865,598	\$1,522,392	\$2,387,990
	<i>Large Systems Subtotal:</i>	\$7,446,678	\$24,430,281	\$31,876,959
	2. Small Systems			
	Standard Loans	\$1,621,796	\$52,002,120	\$53,623,916
	Disadvantaged Communities 1452 (d)	\$15,358,810	\$245,727,034	\$261,085,843
	<i>Small Systems Subtotal:</i>	\$16,980,606	\$297,729,153	\$314,709,759
	3. Endowment - Coalfield Water Development Fund	\$0	\$10,000,000	\$10,000,000
<b>275 &amp; 276</b>	<b>Project Loan Subtotal:</b> (Including Repayment Funds \$2,265,135)	\$24,427,284	\$332,159,434	\$356,586,718
<b>II. SET-ASIDE ACCOUNT</b>				
	1. Administration and Technical Assistance (max 4%) 1452(g)2			
<b>50</b>	Administration	\$495,646	\$10,327,267	\$10,822,913
	Technical Assistance	\$0	\$1,631,544	\$1,631,544
	<i>Administration and Technical Assistance Subtotal:</i>	\$495,646	\$11,958,811	\$12,454,457
	2. Technical Assistance (2%) 1452(g) 2	\$256,039	\$4,686,970	\$4,943,009
	3. State Program Management (max 10%) 1452(g)2		\$0	
<b>70</b>	PWSS Program	\$1,887,737	\$20,663,132	\$22,550,869
	Source Protection	\$0	\$379,486	\$379,486
	Operator Certification	\$0	\$862,796	\$862,796
	Capacity Development	\$0	\$185,857	\$185,857
	<i>State Program Management Subtotal:</i>	\$1,887,737	\$22,091,271	\$23,979,008
	4. Local Assistance/Other State Programs (max 15%) 1452(k)			
	Source Water Delineation and Assessment	\$0	\$2,940,313	\$2,940,313
	Source Water Land Acquisition	\$0		\$0
<b>102</b>	Capacity Development	\$1,512,359	\$14,161,008	\$15,673,367
<b>98</b>	Wellhead Protection	\$162,653	\$2,006,412	\$2,169,065
	<i>Local Assistance/Other State Programs Subtotal:</i>	\$1,675,011	\$19,107,733	\$20,782,744
	<b>Set-Asides Subtotal:</b> (may vary slightly due to rounding)	\$4,314,434	\$57,844,785	\$62,159,219
	<b>Grand Total (S/A subtotal + Project Loan Funds subtotal)</b>	\$28,741,718	\$390,004,219	\$418,745,937

**APPENDIX B**

<b>Table 2: DISBURSED DWSRF PROGRAM FUNDS BY STATE FISCAL YEAR</b>				
<b>DWNIMs #</b>		<b>2018</b>	<b>Previous Cumulative</b>	<b>Current Cumulative</b>
<b>USES OF DISBURSED FUNDS</b>				
<b>I. PROJECT LOAN ACCOUNT</b>				
	1. Large Systems			
	Standard Loans 1452(a)	867,940	22,039,949	22,907,889
	Disadvantaged Communities 1452 (d)	0	1,522,392	1,522,392
	<i>Large Systems Subtotal:</i>	867,940	23,562,341	24,430,281
	2. Small Systems			
	Standard Loans	2,504,018	49,498,102	52,002,120
	Disadvantaged Communities 1452 (d)	10,596,970	235,130,063	245,727,034
	<i>Small Systems Subtotal:</i>	13,100,988	284,628,165	297,729,153
	3. Endowment - Coalfield Water Development Fund	0	10,000,000	10,000,000
<b>275 &amp; 276</b>	<b>Project Loan Subtotal:</b> (may vary slightly due to rounding)	13,968,929	318,190,506	332,159,434
<b>II. SET-ASIDE ACCOUNT</b>				
	1. Administration and Technical Assistance (max 4%) 1452(g)2			
	Administration	428,961	9,898,306	10,327,267
	Technical Assistance	0	1,631,544	1,631,544
	<i>Administration and Technical Assistance Subtotal:</i>	428,961	11,529,850	11,958,811
	2. Technical Assistance (mas 2%) 1452(g) 2	300,627	4,386,343	4,686,970
	3. State Program Management (max 10%) 1452(g)2			
	PWSS Program	1,744,083	18,919,049	20,663,132
	Source Protection	0	379,486	379,486
	Operator Certification	0	862,796	862,796
	Capacity Development	0	185,857	185,857
	<i>State Program Management Subtotal:</i>	1,744,083	20,347,188	22,091,271
	4. Local Assistance/Other State Programs (max 15%) 1452(k)			
	Source Water Delineation and Assessment	0	2,940,313	2,940,313
	Source Water Land Acquisition	0	0	0
	Capacity Development	1,956,752	12,204,256	14,161,008
	Wellhead Protection	175,784	1,830,628	2,006,412
	<i>Local Assistance/Other State Programs Subtotal:</i>	2,132,536	16,975,197	19,107,733
	<b>Set-Asides Subtotal:</b>	4,606,207	53,238,578	57,844,785
	<b>Grand Total (S/A subtotal + Project Loan Funds subtotal)</b>	18,575,136	371,429,084	390,004,219



**APPENDIX C: FINANCIAL STATUS REPORTS**

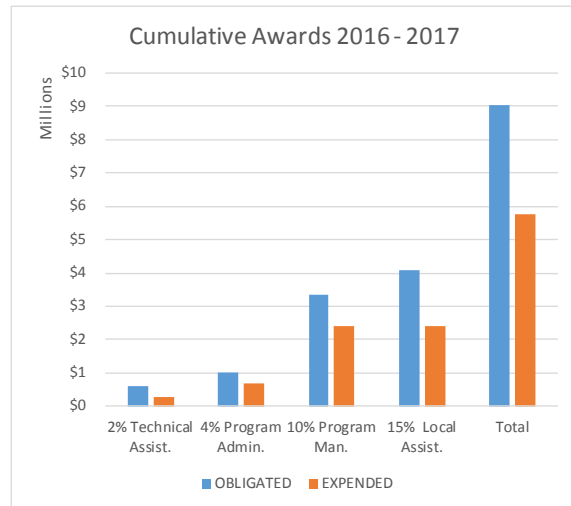
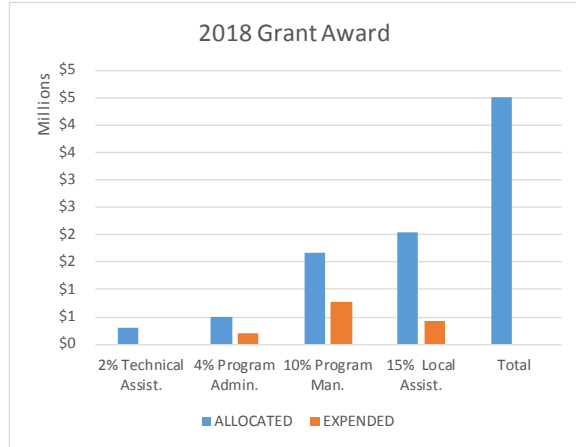
**Note: FFR's for 2017-2018 were sent as separate documents.**

## APPENDIX D: Set Aside Utilization Report

2017 GRANT AWARD					
	2% Technical Assist.	4% Program Admin.	10% Program Man.	15% Local Assist.	Total
ALLOCATED	\$293,988	\$506,984	\$1,671,443	\$2,048,100	\$4,520,515
OBLIGATED	\$293,988	\$506,984	\$1,671,443	\$2,048,100	\$4,520,515
% OBLIGATED	100%	100%	100%	100%	100%
EXPENDED	\$275,188	\$503,401	\$1,628,377	\$1,965,325	
% EXPENDED	94%	99%	97%	96%	0%

2018 GRANT AWARD					
	2% Technical Assist.	4% Program Admin.	10% Program Man.	15% Local Assist.	Total
ALLOCATED	\$293,988	\$506,984	\$1,671,443	\$2,048,100	\$4,520,515
OBLIGATED	\$293,988	\$506,984	\$1,671,443	\$2,048,100	\$4,520,515
% OBLIGATED	100%	100%	100%	100%	100%
EXPENDED	\$0	\$200,134	\$769,452	\$431,523	
% EXPENDED	0%	39%	46%	21%	0%

Cumulative (2017 to 2018) Grant Award					
	2% Technical Assist.	4% Program Admin.	10% Program Man.	15% Local Assist.	Total
ALLOCATED	\$587,976	\$1,013,968	\$3,342,886	\$4,096,200	\$9,041,030
OBLIGATED	\$587,976	\$1,013,968	\$3,342,886	\$4,096,200	\$9,041,030
% OBLIGATED	100%	100%	100%	100%	100%
EXPENDED	\$275,188	\$703,535	\$2,397,829	\$2,396,848	\$5,773,400
% EXPENDED	47%	69%	72%	59%	64%



**APPENDIX E: LOAN AGREEMENTS FOR REPORTING PERIOD** *Projects Funded by Capitalization Grant Only*

**APPENDIX E: LOAN AGREEMENTS FOR REPORTING PERIOD** *Projects Funded by Capitalization Grant Only*

Priority Ranking	Project Name	Binding Commitment Date	Loan Amount	Grant Amount	Total Amount	Interest Rate	No. of Years	Project Description	Pop Served	Community System	Disad. Com	Pvte PWS	New PWS
Projects Identified in 2013 IUP													
01	Town of Hillsboro Water System Improvements	6/28/19	\$0	\$665,000	\$665,000			Improvements to the Town's water system and the development of an Asset Management Plan.	101	Yes	Yes	No	No
30	Town of Mount Jackson Wells #7 and #8	9/13/18	\$1,173,975	\$552,459	\$1,726,434	2.50%	30	Improvements to Wells #7 and #8 in the Town's water system.	2000	Yes	Yes	No	No
36	Town of Exmore Well Development Project	3/12/19	\$800,000	\$578,600	\$1,378,600	2.50%	30	Two new wells, a filtration facility, two backwash holding tanks, a backwash force main, a pumping station, and installation of an emergency generator.	1450	Yes	Yes	No	No
Projects Identified in 2014 IUP													
010	Lee Co. PSA St. Charles W&S Authority-System-wide Water System Improvements Phase IB & Consolidation	9/27/18	\$655,248	\$604,000	\$1,259,248	2.00%	30	Replacement of undersized lines, the addition of gate valves to the line, associated appurtenances, and the purchase of the St. Charles Water & Sewer Authority water system.	855	Yes	Yes	No	No
Projects Identified in 2015 IUP													
037	Town of St. Paul Downtown Water Rehabilitation	12/20/18	\$541,465	\$144,185	\$685,650	2.25%	30	Rehabilitation of the existing water infrastructure within the downtown area of the Town's water system.	97	Yes	Yes	No	No
042	Lee Co. PSA St. Charles W&S Authority Storage Tank & Access Road Improvements	6/26/19	\$0	\$173,200	\$173,200			Abandonment of one of the two existing 100,000-gallon water storage tanks, the restoration and repair of the other existing 100,000-gallon water storage tank, access road grading and repairs, the installation of 240 linear feet of 24-inch culverts, tree trimming, and the stabilization of the access road with gravel.	1350	Yes	Yes	No	No
Projects Identified in 2016 IUP													
002	Town of Appalachia Tanks Replacement	11/29/18	\$0	\$188,000	\$188,000			Replacement of the Town's four existing water storage tanks and related expenses.	1477	Yes	Yes	No	No

Priority Ranking	Project Name	Binding Commitment Date	Loan Amount	Grant Amount	Total Amount	Interest Rate	No. of Years	Project Description	Pop Served	Comm. System	Disad. Com.	Pvte PWS	New PWS
Projects Identified in 2017 IUP													
006	Dryden Water Authority Chris Barney WL Replacement	8/6/18	\$0	\$89,571	\$89,571			Replacement of approximately 878 linear feet of 4-inch and 2-inch waterline, replacement of approximately 380 linear feet of 1-inch and ¾-inch service line, reconnection of seven residential connections, and the installation of one fire hydrant assembly in the Chris Barney Road area.	20	Yes	Yes	No	No
007	Dryden Water Authority Wolfe Gilbert Road WL Replacement	8/6/19	\$0	\$100,000	\$100,000			Replacement of approximately 965 linear feet of 4-inch waterline, replacement of approximately 480 linear feet of ¾-inch service line, reconnection of 12 residential connections, and the installation of one fire hydrant assembly in the Wolfe Gilbert Road area.	25	Yes	Yes	No	No
011	E. L. Goddard Greenfield Harbor I	1/31/19	\$0	\$100,000	\$100,000			Installation of a 6,000-gallon nominal storage tank with two booster pumps, a chlorination feed system, and the installation of 32 water meters.	44	Yes	Yes	No	No
018	Town of St. Paul Raw Water Emergency Power Generator	11/20/18	\$208,176	\$0	\$208,176	2.00%	20	Acquisition and installation of a 35KW generator at the raw water grit and building to power the necessary equipment to transmit raw water to the water treatment plant.	1500	Yes	No	No	No
021	Town of Gate City WTP Upgrades and Meter Replacement	8/28/18	\$416,340	\$153,990	\$570,330	2.65%	30	Upgrades to the water treatment plant and replacement of four commercial water meter replacements.	2057	Yes	Yes	No	No
022	Town of Pamplin Water Tank Repair Project	8/6/18	\$0	\$210,279	\$210,279			Repairs and re-coating of the Town's existing above ground water storage tank.	219	Yes	Yes	No	No
028	Scott Co. PSA Panoramic Lane WL Extension	8/21/18	\$0	\$95,810	\$95,810			Extension of public water service to 13 new connections in the Panoramic Lane area, installation of 6,000 linear feet of 4-inch water main and appurtenances, installation of 13 residential service meters, and the installation of one 2-inch master meter.	30	Yes	Yes	No	No
035	Town of Coeburn Crab Orchard and Beech Avenue WL Replacement Phase II	6/19/19	\$0	\$230,492	\$230,492			Installation of approximately 2,800 linear feet of 4-inch and 2-inch waterline, reconnection of 15 existing water service meters, and installation of three 4-inch and seven 2-inch gate valves.	36	Yes	Yes	No	No

Priority Ranking	Project Name	Binding Commitment Date	Loan Amount	Grant Amount	Total Amount	Interest Rate	No. of Years	Project Description	Pop Served	Comm. System	Disad. Com.	Pvte PWS	New PWS
Projects Identified in 2018													
002	Washington Co. SA Rich Valley Road WL Extension	4/11/19	\$1,663,900	\$180,000	\$1,843,900	2.50%	30	Extension of approximately 56,000 linear feet of 8-inch and 12-inch water line, installation of fire hydrants, and replacement of smaller and older lines along Route 19.	112	Yes	Yes	No	No
006	Washington Co. SA Rattle Creek Road WL Extension	4/11/19	\$164,780	\$59,000	\$223,780	2.50%	30	Extension of approximately 6,000 linear feet of 8-inch waterline, related appurtenances, and the installation of fire hydrants along Rattle Creek Road.	27	Yes	Yes	No	No
017	Town of Marion WL Replacement Phase III	2/26/19	\$549,000	\$108,000	\$657,000	2.50%	30	Replacement of approximately 10,120 feet of water line and appurtenances on Terrace Street, Catron Street, Broad Street, Cherry Street, Clark Street Graybeal Street, Prescott Avenue, Sprinkle Avenue and Poston Street.	259	Yes	Yes	No	No
018	Town of Marion WL Replacement Phase IV	2/26/19	\$600,000	\$119,000	\$719,000	2.50%	30	Replacement of approximately 7,875 feet of water line and appurtenances on Copenhaver Street, Cemetery Street, Culbert Drive, Greer Avenue, Holston Street, Lincoln Avenue, Miller Avenue, Orange Street, Park Boulevard and Park Street.	304	Yes	Yes	No	No
019	Wise Co. PSA Rock Switch Road WL Replacement	11/14/18	\$0	\$160,897	\$160,897			Replacement of existing water line on Rock Switch Road, railroad and stream crossing and appurtenances that include valves, tees and reducers.	1608	Yes	Yes	No	No
024	Tazewell Co. PSA Capital Improvements Plan Phase I	6/27/19	\$3,034,870	\$544,000	\$3,578,870	2.25%	30	Upgrade of seven pump stations, addition of one new pump station, installation of meter transmitters and/or new meters, and the replacement of computer and billing software.	16195	Yes	Yes	No	No
030	Town of Big Stone Gap Shelby Avenue WL Replacement Phase I	12/12/18	\$0	\$100,143	\$100,143			Replacement of approximately 1,100 linear feet of 2-inch waterline, replacement of 200 linear feet of ¾-inch service line, reconnection of eight residential connections, and the installation of one fire hydrant assembly.	24	Yes	Yes	No	No
031	Woodway Water Authority State Route 641 WL Replacement Phase I	9/14/18	\$0	\$102,915	\$102,915			Replacement of approximately 1,100 linear feet of 2-inch and 6-inch waterlines, replacement of approximately 150 linear feet of ¾-inch service line, reconnection of six residential connections, and the installation of two fire hydrant assemblies.	16	Yes	Yes	No	No
032	Town of Pennington Gap Town-wide Meter Replacement Phase I	2/27/19	\$0	\$218,591	\$218,591			Replacement of half of the Town's radio read water meters, replacement of 400 ¾-inch meters, six 1-inch meters, 15 2-inch meters, one 4-inch meter, 1129two 6-inch meters, and the High School 6" meter and vault.	1129	Yes	Yes	No	No

Priority Ranking	Project Name	Binding Commitment Date	Loan Amount	Grant Amount	Total Amount	Interest Rate	No. of Years	Project Description	Pop Served	Comm. System	Disad. Com.	Pvte PWS	New PWS
Projects Identified in 2018 IUP (cont'd)													
033	Woodway Water Authority State Route 932 WL Replacement Phase I	9/14/18	\$0	\$101,025	\$101,025			Replacement of approximately 1,250 linear feet of 4-inch and 2-inch waterline, replacement of approximately 100 linear feet of ¾-inch service line, reconnection of five residential connections, and the installation of one fire hydrant assembly.	14	Yes	Yes	No	No
034	Town of Big Stone Gap Fishers Road WL Replacement Phase I	12/12/18	\$0	\$100,710	\$100,710			Replacement of approximately 1,250 linear feet of 4-inch waterline, replacement of 200 linear feet of ¾-inch service line, reconnection of six residential connections, and the installation of one fire hydrant assembly.	24	Yes	Yes	No	No
035	Town of Coeburn Town-wide Water Meter Replacement Phase I	12/21/19	\$0	\$150,078	\$150,078			Replacement of 488 of the Town's residential ¾-inch radio read meters.	1181	Yes	Yes	No	No
036	Town of Coeburn Star Branch Road WL Extension	5/16/19	\$0	\$107,888	\$107,888			Installation of approximately 900 linear feet of 4-inch waterline, 300 linear feet of 2-inch waterline, 200 linear feet of ¾-inch service line, and seven water service meters.	16	Yes	Yes	No	No
037	City of Norton Josephine WL Replacement Phase I	3/22/19	\$0	\$295,200	\$295,200			Replacement of approximately 3,800 linear feet of 6-inch waterline, 1,220 linear feet of 2-inch waterline, 640 linear feet of ¾-inch waterline, 11 gate valves, 13 fire hydrants, and associated appurtenance necessary to reconnect 33 existing services along Norton Road and Roosevelt Road.	60	Yes	Yes	No	No
038	City of Norton Clear Creek WL Replacement Phase I	3/22/19	\$0	\$276,400	\$276,400			Replacement of approximately 2,950 linear feet of 6-inch waterline, 750 linear feet of ¾-inch waterline, eight gate valves, four fire hydrants, and associated appurtenance necessary to reconnect 33 existing services along Liberty Street and Orender Street.	64	Yes	Yes	No	No
039	Lee Co. PSA Blue Springs WTP Improvements Phase I	10/10/18	\$0	\$144,000	\$144,000			Installation of a computer workstation, software, a PLC master control panel, a UPS backup system, turbidimeters, flow meters, and pneumatic valve actuators at the Blue Springs Water Treatment Plant.	1816	Yes	Yes	No	No
045	Wise Co. PSA Flocculator Replacement	2/12/19	\$97,800	\$294,000	\$391,800	2.50%	30	Replacement of three flocculators, eight slide gates, four 14-inch mud valves, the addition of two 14-inch mud valves, and the installation of up to 76 additional ports in each stiling wall at the Carfax Water Treatment Plant.	10464	Yes	Yes	No	No

Priority Ranking	Project Name	Binding Commitment Date	Loan Amount	Grant Amount	Total Amount	Interest Rate	No. of Years	Project Description	Pop Served	Community System	Disad. Com	Pvte PWS	New PWS
Projects Identified in 2019 IUP													
<b>001</b>	Tazewell Co. PA System Improvements and Pocahontas System Purchase	5/10/19	\$952,000	\$952,000	\$1,904,000	0.00%	30	System improvements and the purchase of the Town of Pocahontas distribution lines, pump stations and storage tanks, along with the customer connections.	4328	Yes	Yes	No	No
<b>018</b>	Henry Co. PSA Fieldale Lead Line Replacement Phase II	1/29/19	\$0	\$500,000	\$500,000			Replacement of approximately 2,400 linear feet of existing lead-jointed cast iron and galvanized steel water mains and replacement of lead galvanized steel service lines for approximately 34 residential customers in the Fieldale community.	68	Yes	Yes	No	No
	<b>Total Loan Agreements</b>		\$10,857,554	\$8,399,433	19,256,987				48,970				