

September 25, 2019

Ms. Stephanie Hammett SRF Section, USEPA Region IV 61 Forsyth Street, SW Atlanta, GA 30303

South Carolina's FY 2019 Re:

Drinking Water SRF Annual Report

Dear Ms. Hammett:

Enclosed is South Carolina's FY 2019 Annual Report for the Drinking Water State Revolving Fund Program.

Please contact Chuck Gorman at 803-898-3993 or me at 803-898-4157 if you have questions.

Sincerely,

Shawn Clarke, P.E.

Ann R Clark

Director, Water Facilities Permitting Division

Charles M. Gorman, P.G.

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Manager, State Revolving Fund

Enclosures

Mike Marcus, Ph.D. Chief, Bureau of Water (e-mail) cc:

Ann Clark, Assistant Bureau Chief, Bureau of Water (e-mail)

Bonnie Ammons, Executive Director, SC Rural Infrastructure Authority (e-mail)

Patricia Comp, SC Rural Infrastructure Authority (e-mail)



DRINKING WATER

South Carolina DWSRF Fiscal Year 2019 Annual Report

September 2019



ANNUAL REPORT

I. Introduction

The South Carolina Department of Health and Environmental Control (DHEC) is submitting the Fiscal Year (FY) 2019 Drinking Water State Revolving Fund Annual Report to the U.S. Environmental Protection Agency (EPA) to report on program activities for the period of July 1, 2018 through June 30, 2019 (i.e., State FY 2019). This report is prepared with the cooperation of the Rural Infrastructure Authority (RIA) Office of Local Government (OLG). The Drinking Water State Revolving Fund (DWSRF) is administered by DHEC, the grantee agency, and RIA/OLG. DHEC is responsible for compliance with federal procedures, project requirements, and manages the technical and environmental permitting aspects of the program. RIA/OLG is responsible for financial functions including setting annual financial loan policies, applicant creditworthiness assessments, funding decisions, preparing loan documents, and carrying out other financial duties related to maintaining the loan portfolio and financial records.

II. Goals of the Intended Use Plan

The State FY 2019 goals of the DWSRF program were first listed in the Federal FY 2018 (State FY 2019) Intended Use Plan (IUP) final version that was published on July 12, 2017. There are two (2) short-term goals and five (5) long-term goals listed that are intended to enhance the protection of public health for the citizens of the state and preserve the financial viability of the DWSRF program. The goals are listed below with an explanation of the State's success in achieving each goal during FY 2019.

A. Short Term Goals

1. Update the State Revolving Fund Operating Agreement between EPA and South Carolina before the end of calendar year 2018.

DHEC worked with RIA/OLG on a draft Operating Agreement and discussed the proposed modifications with EPA. EPA recommended using another state's Operating Agreement as an example for possible improvements. DHEC is working on updating the Operating Agreement as recommended by EPA.

2. Maintain a subcontract with a qualified vendor to provide technical assistance to small systems.

The SRF technical assistance (TA) set-aside continues to fund a TA contract with SC Rural Water Association (RWA) for sustainability assistance to small water systems. This assistance can help systems to be SRF loan eligible. The TA for small systems focuses on implementing an asset management process, reducing water loss, updating system maps and regulatory compliance.

During the period from July 1, 2018 to June 30, 2019, five systems received mapping assistance, 9 systems received specific operational and regulatory compliance help and a total of 102 on-site visits were made to 61 small public water systems for follow-ups about water loss control and regulatory compliance. Also, RWA staff System performed outreach and damage assessments after Hurricane Florence during 3rd and 4th calendar quarters of 2018. And throughout the year, 24 training sessions were held on topics such as asset maintenance, laboratory compliance, sustainable management practices and water system construction principles.

B. Long Term Goals

1. Promote sustainable system capacity through consolidation of systems thereby taking advantage of the economies of scale to address technical, managerial and financial capacity problems.

A special "take-over" interest rate is available when a viable system takes over ownership and operation of a non-viable system, but no systems took advantage of the incentive rate this FY. Principal forgiveness funds continue to be used to for upgrades to the Town of Timmonsville water system, serving 2,221 customers, by making system-wide improvements and consolidation with the City of Florence system.

Assist local communities as they strive to achieve and maintain compliance with federal and state drinking water standards by funding projects that improve drinking water quality and protect public health.

Seven water systems received a "Final Approval to Place into Operation" for projects that were funded by SC DWSRF. A majority of these projects addressed reliable supply and distribution to ensure quality drinking water for system customers as discussed below.

- 1) Anderson Regional Joint Water System –install advanced treatment at the Lake Hartwell water treatment plant to address hazardous algal blooms in the lake and emerging contaminants.
- 2) City of Camden construct new water distribution mains to replace aging pipes and water treatment plant upgrades including a new Powder Activated Carbon feed system to reduce taste and odor issues and construction of a bulk sodium hypochlorite feed system to replace gas chlorine systems.
- 3) Town of Cilo replace 3900 linear feet of old cast iron pipe with PVC and ten fire hydrants to improve water quality in the town.
- 4) City of Dillion construct a new 300,000-gallon storage tank to improve water pressure in an area of the City and line work to allow unrestricted flow from the tank to the rest of the City's system;
- 5) Fripp Island Public Service District replace a ten-inch water line crossing Harbor River due to the construction of a new bridge. The water line being replaced was connected to the old bridge. The new water line was installed beneath the river using directional drilling techniques.
- 6) Town of Olanta construct a 200,000-gallon storage tank to comply with storage requirements in state drinking water regulation.
- 3. Encourage investment in green infrastructure, water and energy efficient improvements and environmentally innovative projects.

A reduced interest rate ("green rate") is available to utilities without a credit rating for green construction components for up to 25% of total project costs (green + non-green). None of the projects with a binding commitment made during FY 2019 took advantage of the rate. EPA's green project reserve (GPR) guidance is posted to the SRF Website so sponsors can ascertain what types of projects or portions of projects are considered green.

4. Maintain a working relationship with other infrastructure funding authorities within the state to coordinate water quality funding.

Representatives from the five state and federal agencies that fund utility infrastructure projects in the state meet regularly to discuss potential projects and applications for loans and/or grants. Open communication among the group continues between meetings so the applicants will be given the best advice for how to proceed with financing potential and ongoing projects. The five state and federal funding agencies that participate in these meetings include DHEC SRF, the S.C. Rural Infrastructure Authority, S.C. Dept. of Commerce - Community Development Block Grant

program, the Economic Development Administration of the U.S. Dept. of Commerce and the U.S. Dept. of Agriculture - Rural Development program.

5. Maintain the fiscal integrity of the DWSRF to ensure the perpetuity of the fund.

DHEC ensures project sponsors are SRF eligible, comply with the requirements of the Safe Drinking Water Act, and meet the technical requirements needed to proceed to construction. RIA/OLG establishes and implements stringent loan policies and loan decisions to promote the perpetuity of the DWSRF. To date, the SRF program has not experienced a loan default or a late loan payment.

C. Environmental Outcomes and Measures

South Carolina will update EPA's web-based project tracking system as required which will be used to gather the necessary information to assess the environmental outcomes and measures for meeting the objectives of the DWSRF program.

DHEC continues to update the federal Drinking Water Projects and Benefits Reporting (PBR) database with applicable project information to ensure that records are complete and current. DHEC also enters the required program information in the National Information Management System (NIMS).

III. Binding Commitments During FY 2019

The SRF finalized six (6) binding commitments during FY 2019 for a total of \$7,759,632. Please refer to Tables 1 and 4 of Exhibit 1 for more information concerning the total amount of assistance provided to include loan terms and construction costs per project category.

IV. Projects Initiating Construction During FY 2019

Three (3) projects initiated construction during FY 2019. Please refer to Table 3 of Exhibit 1 for a list of these projects.

V. Projects Initiating Operation During FY 2019

Six (6) projects were placed into operation during FY 2019. Refer to Table 2 of Exhibit 1 for a listing of these projects.

VI. Source of Funds

The State's DWSRF received funds from the following sources:

- □ federal capitalization grant awards;
- □ 20 percent state match of the capitalization grant award provided by the RIA/OLG with state cash resources;
- □ investment earnings;
- □ loan repayments.

VII. Revenues and Expenses

A. DWSRF Federal Capitalization Grant Award

The FY 2018 DWSRF federal capitalization grant award in the amount of \$14,385,000 was received September 13, 2018. The 20% State match amount of \$2,877,000 was provided by the RIA/OLG through state cash reserves.

B. Sources of DWSRF Funds by Quarter During FY 2019

Refer to Exhibit 2 for sources of funds for the DWSRF by quarter during FY 2019.

- C. Funds Available for FY 2019 Loans—\$29,782,976 (estimated amount from FY2018 IUP)
- D. Financial Statements

Refer to Exhibit 4 for DWSRF Financial Statements for FY 2019.

E. Accounting of Expenditures from Set-Aside Funds During FY 2019

Refer to Exhibit 5 for expenditures from the Drinking Water SRF set-aside funds.

F. Disbursements for Construction Projects

Refer to Exhibit 3 for information concerning the disbursements.

VIII. Provisions of the Operating Agreement/Conditions of the Grant

- A. The DWSRF is administered in accordance with the Safe Drinking Water Act and is in compliance with the terms, schedules, conditions, provisions and assurances of the current fiscal year's Intended Use Plan (IUP), the current approved Operating Agreement between DHEC and EPA, and the Drinking Water SRF Capitalization Grants.
- B. The RIA/OLG deposited the required state match of \$2,877,000 in the DWSRF in accordance with the Operating Agreement.
- C. Project sponsors are required to include in their bid documents "fair share" goals and require that the prime contractor include those "fair share" goals in the bid documents for subcontracts for Disadvantaged Business Enterprises (DBE). Project sponsors and prime contractors are also required to follow the six affirmative steps for ensuring that SRF projects are accessible for disadvantaged businesses and to properly document the steps. Actual Minority Business Enterprise/Woman Business Enterprise (MBE/WBE) participation is reported annually to EPA, Region IV on EPA Form 5700-52A.

The annual reporting period for DBE participation follows the federal fiscal year, percentages are reported on over that time period. The following table shows contracted DBE participation against dollars contacted for construction on equivalency projects over the reporting period October 1, 2017 to September 30, 2018.

Total Value Construction Contracts FFY18	on MBE	MBE %	WBE Dollars	WBE %	Total DBE Dollars	Total DBE %
\$12,798,40	\$0.00	0.0%	\$166,067	1.3%	\$166,067	1.3.%

D. The SRF program reserves the authority to transfer funds between the Clean Water (CW) SRF and the DWSRF as allowed by federal statute. Transfers are executed to meet the loan demand of either program. The maximum amount that can be transferred in any given year is 33% of that year's DWSRF capitalization grant. The monies transferred are required to be non-federal and generated through loan repayments. No transfers were made during FY 2019.

IX. Program Changes, Comparison with Intended Use Plan (IUP)

The SRF program continues unchanged organizationally from last year. DHEC is the primacy agency through which the EPA provides capitalization grants to the state. The Office of Local Government at the Rural Infrastructure Authority manages the loan financial functions of the program. No state law changes affecting the SRF have been enacted since 2010 when the SC program was authorized legislatively to provide additional subsidization for selected SRF project sponsors. An outdated and obsolete state regulation that was enacted in 1988 and only addressed the CWSRF was repealed in FY19.

X. DWSRF Set-Asides

The SRF program can set-aside up to 31% of each year's DWSRF capitalization grant to fund program administration and several programs intended to enhance public health protection and improve the managerial, technical and financial capacities of public water systems. These beneficial programs include: 1) Small Water System Technical Assistance Program; 2) Wellhead Protection Program; 3) Public Water System Supervision (PWSS) Program; and, 4) Source Water Protection Program. The annual reports for these four set-aside programs can be found in Attachments 3 through 6.

XI. Attachments

Attachments 1 through 9 listed below are found at the end of this document and provide additional information about the DWSRF including FY 2019 annual reports for SRF set-aside activities.

<u>Attachment 1</u> – Memorandum from RIA/OLG dated September 16, 2019 with financial information on the DWSRF for State Fiscal Year 2019.

Attachment 2 – SRF Interest Rates for FY 2019

Attachment 3 – Small Water System Technical Assistance, FY 2019 Annual Report - SRF Set Aside

<u>Attachment 4</u> – Implementation of the Wellhead Protection Program, FY 2019 Annual Report – SRF Set Aside

<u>Attachment 5</u> – Public Water System Supervision (PWSS) Program, FY 2019 Annual Report – SRF Set Aside

Attachment 6 – Source Water Protection Program, FY2019 Annual Report – SRF Set Aside

Attachment 7 – South Carolina AWOP Annual Report for 2018

<u>Attachment 8</u> – DHEC Letter to EPA dated June 25, 2018 Certification of FY 2018 Drinking Water State Revolving Fund Capitalization Grant

Attachment 9 - Listing of Equivalency Projects for DW FY 2018 Capitalization Grant

Exhibit 1

Table 1 - DW Binding Comittments FY 2019

		Sponsor & Project	RIA Project #	DHEC (SRF) Project #	Service Population	Binding Commitment (Loan Closing Date)	Interest Rate	Date Loan Matures	Fund Asst. Category (1- 9) Compliance	Construction Start	Total Project Cost	Total SRF Loan Amount	Total Amount of APF Additional Loan Subsidy	Project Description
1	ва	Carlisle, Town of Carlisle Water System Improvements Phase 1	F3-18	4410003-01	436	11/27/2018			7	2/1/2019	\$155,220		\$155,220	Recoating of interior of the water storage tank and installing an improved electronic control system. (7-Maintain)
2	. KF	Clio, Town of Clearwell Abandonment	F3-17	3410002-04	942	6/26/2019			2	Not advertised yet constr starting 10/2019	\$510,000		\$510,000	Install a new well pump and update chemical feed equipment in order to abandon a leaking clearwell that is the subject of a DHEC Consent Order. (2-Achieve)
3		Georgetown, City of Historic District Waterline Improvements	X3-083-16	2210001-03	9,245	11/12/2018	1.60%	1/1/2039	7	7/31/2018	\$1,650,000	\$1,650,000		Replace ~9,000 linear feet of existing water lines with new 6", 8", and 10" water mains including fire hydrants and necessary appurtenances. (7-Maintain)
4		Hemingway, Town of New Well & Water Treatment Plant	F3-17	4510004-01	3,597	6/19/2019			2	Not advertised yet constr starting 10/2019	\$497,900		\$497,900	Install a shallow well and water treatment plant to address a THM issue associated with an older deeper well. (2-Achieve)
5	i KF	Latta, Town of New Water Tank	F3-17	1710002-02	1,880	9/25/2018			5	No permit yet	\$996,625		\$996,625	Construct a new 200,000 gallon water tank to replace an aging 100,000 gallon tank with lead paint, and install a section of 10" water line. (5-Meet) future compliance
6		Rock Hill, City of Rock Hill Water Treatment Plant and Lake Wylie Raw Water Intake Upgrade - DBP reduction	3-082-18	4610002-07	118,000	6/14/2019	2.10%	8/1/2039	7	4/18/2019	\$3,949,887	\$3,949,887		Addition of intank aeration at two water storage tanks, install water line on Mt. Gallant Rd and add chlorine dioxide chemical feed facilities at Lake Wylie to address the formation of disinfection by-products.(7-Maintain)
		DW - Binding Comit	tments	FY 2019							\$7,759,632	\$5,599,887	\$2,159,745	

Sponsor & Project	RIA Project Number	DHEC (SRF) Project #	Binding Commitment (Loan Closing Date)	Interest Rate	Date Loan Matures	Construction Start	Date Approval to Place into Operation Issued	Total Project Cost	Total SRF Loan Amount	Amount of SRF Loan from APF Additional Loan Subsidy	PROJECT DESCRIPTON
Anderson Regional Joint Water System Lake Hartwell WTP Advanced Treatment Process Improvements	X3-079-17	0420011-06	02/16/17	1.90%	4/1/2038	1/16/2017	7/25/2018	\$13,500,000	\$13,500,000		Evaluation of Lake Hartwell Water Treatment Facility with resulting implementation of technological and infrastructure improvements to address emerging contaminents and water quality.
Camden, City of Water System Rehabilitation 2015	X3-074-16	2810001-01	11/23/2016	1.80%	8/1/2037	6/13/2016	10/12/2017	\$5,236,780	\$5,236,780		Construct new water distribution mains to replace aging pipes subject failure and water treatment plant improvements.
Clio, Town of Church and Ivey Street Water Main Replacement	F3-16	3410002-01	11/27/2017			3/12/2018	11/18/2018	\$265,900		\$265,900	Replacement of 3900 LF of cast iron water mains on Church and Ivey Streets and 10 fire hydrants.
Dillon, City of Water System Improvements -Elevated Storage Tank	F3-15	1710001-02	2/15/2017				2/15/2018			\$749,000	Construction of a 300K gal elevated storage tank in an area of low pressure plus line work to allow water to flow unrestricted from the tan the rest of the City's system. Will bring the City system in compliance of DHEC regulations.
Dillon, City of Water System Improvements -Elevated Storage Tank	3-076-16	1710001-02	2/15/2017	1.30%	2/1/2038	4/3/2017	2/15/2018	\$1,139,229	\$390,229		Construction of a 300K gal elevated storage tank in an area of low pressure plus line work to allow water to flow unrestricted from the tan the rest of the City's system. Will bring the City system in compliance DHEC regulations.
Fripp Island PSD Harbor River Waterline Replacement	X3-081-18	0720002-02	6/26/2018	2.1%	1/1/2039	7/30/2018	1/17/2019	\$3,199,654	\$3,199,654		Replace ~3,500 LF of 10" waterline crossing the Harbor River due to l bridge replacement. This line is the only connection to the Island's wat supplier.
Olanta, Town of Water System Improvements	F3-15	2110006-03	6/14/2017	1		9/4/2017	1/31/2019	\$940,634		\$926,000	Construct a 200,000 gallon elevated storage tank to maintain complia with DHEC storage requirements

	Table 3 - DW CONS	TRUCTION	STARTS	FY 20	19										
	Sponsor & Project	RIA Project # DHEC (SRF) Project #		RIA Project # (SRF)		Service Population	Binding Commitment (Loan Closing Date)	Interest Rate	Date Loan Matures	Fund Asst. Category (1-9)	Construction Start	Total Project Cost	Total SRF Loan Amount	Total Amount of APF Additional Loan Subsidy	Project Description
1	Carlisle, Town of Carlisle Water System Improvements Phase 1	F3-18	4410003-01	436	11/27/2018			7	2/1/2019	\$155,220		\$155,220	Recoating of interior of the water storage tank and installing an improved electronic control system.		
3	Georgetown, City of Historic District Waterline Improvements	X3-083-16	2210001-03	9,245	11/12/2018	1.60%	1/1/1939	7	7/31/2018	\$1,650,000	\$1,650,000		Replace ~9,000 linear feet of existing water lines with new 6", 8", and 10" water mains including fire hydrants and necessary appurtenances.		
5	Rock Hill, City of Mt. Gallant Road Waterline and add chlorine dioxide chemical feed facilities at Lake Wylie	3-082-18	4610002-07	118,000	6/14/2019	2.10%	8/1/1939	7	4/18/2019	\$3,949,887	\$3,949,887		Addition of intank aeration at two water storage tanks, install water line on Mt. Gallant Road and add chlorine dioxide chemical feed facilities at Lake Wylie to address the formation of disinfection by-products.		
D	DW - CONSTRUCTION STARTS FY 2019 \$5,755,107 \$5,599,887 \$155,220														

SOUTH CAROLINA DRINKING WATER SRF PROJECTS FY 2019

Table 4 - DW Construction Dollars per Category FY 2019

Sponsor & Project	DHEC (SRF) Project #	RIA Project Number	Service Population	TREATMENT	Transmission & Distribution	SOURCE	STORAGE	TOTAL (must equal loan amount)	Binding Commitment (Loan Closing Date)	Interest Rate	Date Loan Matures	Construction Start	Total Project Cost	Total SRF Loan Amount	Total Amount of APF Additional Loan Subsidy	FUND Cat. # (2,5,7)	Project Description
Carlisle, Town of Carlisle Water System mprovements Phase 1	F3-18	4410003-01	436				\$155,220		11/27/2018			2/1/2019	\$155,220		\$155,220	7	Recoating of interior of the water storage tank and installing an improved electronic control system.
Clio, Town of Clearwell Abandonment	F3-17	3410002-04	942	\$510,000					6/26/2019			Not started yet 10/1/2019 projected	\$510,000		\$510,000	2	Install a new well pump and update chemical feec equipment in order to abandon a leaking clearwel that is the subject of a DHEC Consent Order.
Georgetown, City of Historic District Waterline mprovements	X3-083-16	2210001-03	9,245		\$1,650,000				11/12/2018	1.60%	1/1/39	7/31/2018	\$1,650,000	\$1,650,000		7	Replace ~9,000 linear feet of existing water lines with new 6", 8", and 10" water mains including fire hydrants and necessary appurtenances.
Hemingway, Town of New Well & Water Treatment Plant	F3-17	4510004-01	3,597			\$497,900			6/19/2019			Not started yet 10/1/2019 projected	\$497,900		\$497,900	2	Install a shallow well and water treatment plant to address a THM issue associated with an older deeper well.
Latta, Town of New Water Tank	F3-17	1710002-02	1,880				\$996,625		9/25/2018			Not started yet	\$996,625		\$996,625	5	Construct a new 200,000 gallon water tank to replace an aging 100,000 gallon tank with lead paint, and install a section of 10" water line.
Rock Hill, City of Mt. Gallant Road Waterline and add chlorine dioxide chemical eed facilities at Lake Wylie	3-082-18	4610002-07	118,000		\$3,949,887				6/14/2019	2.10%	8/1/39	4/18/2019	\$3,949,887	\$3,949,887		7	Addition of intank aeration at two water storage tanks, install water line on Mt. Gallant Road and add chlorine dioxide chemical feed facilities at Lake Wylie to address the formation of disinfection by-products.

Exhibit 2

STATE FY 2019 SOURCE BY DRINKING WATER SRF FUNDS BY QUARTER STATE OF SOUTH CAROLINA

EXHIBIT 2: SOURCE OF DWSRF FUNDS BY QUARTER FISCAL YEAR 2019
STATE OF SOUTH CAROLINA

Figures Do Not Include Loan Fee Accounts	2018		201	9	
	July-Sept	Oct-Dec	Jan-March	April-June	TOTAL FY 2019
SOURCE OF FUNDS					
LOC Payments	73,000	3,646,093	3,253,327	653,559	7,625,979
LOC Payments-APF	573,734	291,233	16,668	109,532	991,167
CASH DEPOSITS					
State Match	2,877,000	0	0	0	2,877,000
INTEREST EARNINGS					
Investments Regular	163,386	343,940	222,590	365,525	1,095,441
Investments ARRA	0	0	0	0	0
Accrued Interest During Construction (Paid)	0	0	0	316,562	316,562
Capitalized Interest	0	0	0	488	488
LOAN REPAYMENTS					
Principal	2,771,267	2,795,065	4,506,090	3,114,986	13,187,408
Interest	983,284	1,376,273	1,080,654	1,122,505	4,562,716
TOTAL REPAYMENTS	3,754,551	4,171,338	5,586,744	4,237,491	17,750,124
TOTALS	7,441,671	8,452,604	9,079,329	5,683,157	30,656,761

Reconciliation of Cash to Accrual for Income	Investment Interest*	Loan Interest **	Accrued Interest During Cons	truction
			Beg. Bal. 7/1/18	173,541
General Ledger Balance as of 6/30/19	121,596	700,222	Accrued FY 19	231,208
Add: Earnings During the Year	1,095,441	4,562,716	Total to Account for	404,749
Total to Account For	1,217,037	5,262,938	Accruals for FY 2019	404,749
Subtract Interest Balance as of 6/30/18	25,158	977,919	Paid Interest	316,562
Interest Earned	1,191,879	4,285,019	Capitalized Interest	488
*Includes ARRA			Bal. of Accruals Carried Forward to FY 2020	87,699

^{**} Includes interest on note repayments and interest accrued during construction.

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Exhibit 3

STATE OF SOUTH CAROLINA DRINKING WATER SRF (RECONCILIATION) SELECT DISBURSEMENTS AS OF STATE FY 2019

SELECT DISBURSEMENTS AS OF FY 2019 EXHIBIT 3

**Reconciliation for Drinking Water LOC Balances Receivables

Remaining LOC Balance from 1998 Cap Grant for Loans	0	Ending 2019 LOC Balance	4,614,381
Remaining LOC Balance from 1999 Cap Grant for Loans	0	LOC Payments for Loans - FY 20	1,931,000
Remaining LOC Balance from 2000 Cap Grant for Loans	0	LOC Balance Receivable	6,545,381
Remaining LOC Balance from 2001 Cap	0	-	
Remaining LOC Balance from 2002 Cap Grant for Loans	0		
Remaining LOC Balance from 2003 Cap Grant for Loans	0	Overmatch Reconciliation	
Remaining LOC Balance from 2004 Cap Grant for Loans	0	Total Overmatch to Account For	0
Remaining LOC Balance from 2005 Cap Grant for Loans	0	LOC Cash Draws (Non ARRA)	163,162,754
Remaining LOC Balance from 2006 Cap Grant for Loans	0	State Match	39,372,346
Remaining LOC Balance from 2007 Cap Grant for Loans	0	Less Federally-matched Disbursements	202,535,100
Remaining LOC Balance from 2008 Cap Grant for Loans	0	state match transfer	-
Remaining LOC Balance from 2009 Cap Grant for Loans	0	state match transfer	-
Remaining LOC Balance from 2009 Cap Grant for Loans - ARRA	0	Total Overmatch	0
Remaining LOC Balance from 2010 Cap Grant for Loans	0	Percent of Total Disbursements to Draws	81%
Remaining LOC Balance from 2011 Cap Grant for Loans	0		
Remaining LOC Balance from 2012 Cap Grant for Loans	0		
Remaining LOC Balance from 2013 Cap Grant for Loans	0		
Remaining LOC Balance from 2014 Cap Grant for Loans	0		
Remaining LOC Balance from 2015 Cap Grant for Loans	0		
Remaining LOC Balance from 2016 Cap Grant for Loans	68,750		
Remaining LOC Balance from 2017 Cap Grant for Loans	2,065,890		
Remaining LOC Balance from 2018 Cap Grant for Loans Total	2,479,741 4,614,381		
Total Cap Grants Awarded Actual Federal Draws Set-asides	216,361,732 (181,882,754) (27,933,597)		
LOC Balance Receivable	6,545,381		

STATE FY 2019 DRINKING WATER SRF SELECT DISBURSEMENTS STATE OF SOUTH CAROLINA

SELECT DISBURSEMENTS AS OF FY 2019 EXHIBIT 3

						ſ		FY 20	∩1Q		1
	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	July - Sept	Oct - Dec	Jan - Mar	Apr - Jun	Totals for Program
					·						
Select Disbursements	13,475,418	2,309,884	13,096,827	2,916,244	10,027,106	5,290,491	2,950,000	3,646,093	3,253,327	653,559	192,611,070
Select Disbursements-APF	2,092,998	3,636,609	2,019,968	3,749,212	1,210,911	1,934,733	573,734	291,233	16,668	109,532	18,894,030
Select Disbursements - ARRA APF	79,440										9,750,000
FY 19 Cumulative Disbursements							3,523,734	7,461,060	10,731,055	11,494,146	
Disbursements - Recycled Funds	8,100,254	5,260,116	19,317,088	17,210,140	15,964,328	33,305,061	3,800,456	4,295,445	3,127,528	4,794,151	139,593,630
Cumulative 19 Recycled Funds							3,800,456	8,095,901	11,223,429	16,017,580	
Cumulative 19 Disbursements										27,511,726	
Cumulative Total Disbursements	23,748,110	11,206,609	34,433,883	23,875,596	27,202,345	40,530,285					360,848,730
Beginning LOC Available Balance	7,172,829	7,363,073	7,425,260	4,388,525	4,021,271	3,038,326	1,714,067	2,561,858	341,321	3,854,934	
Payments During Period	12,159,500	6,008,680	8,626,860	4,540,802	8,592,672	4,252,765	1,494,525	1,716,789	6,783,608	1,522,538	186,497,135
Payments During Period - ARRA	-	-	-	-	-		0	0	0	0	
FY 19 Cumulative Payments							1,494,525	3,211,314	9,994,922	11,517,460	
Total LOC Funds to Account For	19,332,329	13,371,753	16,052,120	8,929,327	12,613,943	7,291,091	3,208,592	4,278,647	7,124,929	5,377,472	
Less: LOC Cash Draws in Period	9,796,818	2,309,884	9,643,627	1,158,844	8,364,706	3,642,291	73,000	3,646,093	3,253,327	653,559	144,268,724
Less: LOC Cash Draws in Period - APF	2,092,998	3,636,609	2,019,968	3,749,212	1,210,911	1,934,733	573,734	291,233	16,668	109,532	18,894,030
Less: LOC Cash Draws in Period - ARRA	79,440	-	-	-	-		0	0	0	0	18,720,000
FY 19 Cumulative Cash Draws							646,734	4,584,060	7,854,055	8,617,146	
Ending LOC Balance	7,363,073	7,425,260	4,388,525	4,021,271	3,038,326	1,714,067	2,561,858	341,321	3,854,934	4,614,381	4,614,381
State Deposits	1,795,000	271,000	3,182,200	1,783,800	1,636,000	1,648,200	2,877,000				39,372,346
FY 19 Cumulative State Share							2,877,000	2,877,000	2,877,000	2,877,000	
Draws as % of Disbursements	85%	85%	85%	85%	83%	83%	18%	100%	100%	100%	82%

^

Exhibit 4

STATE OF SOUTH CAROLINA STATE DRINKING WATER REVOLVING LOAN FUND

UNAUDITED FINANCIAL STATEMENTS Fiscal Year 2019 (July 1, 2018 through June 30, 2019)



SOUTH CAROLINA RURAL INFRASTRUCTURE AUTHORITY OFFICE OF LOCAL GOVERNMENT

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Introduction

The following Management's Discussion and Analysis (the MD&A) is designed to offer the reader of the financial statements a narrative overview and analysis of the financial activities of the State Drinking Water Revolving Loan Fund (the Fund), the State of South Carolina's (the State) Drinking Water State Revolving Fund program, for the fiscal year ended June 30, 2019. This section is designed to provide a summary of the Fund's financial activity, identify changes in Fund financial position, and identify individual program issues or concerns. As with other sections of this financial report, the information contained in the MD&A should be considered only a part of a greater whole. The readers of these statements should take time to read and evaluate all sections of this report, including the notes and other supplementary information provided in addition to the MD&A.

Financial Highlights

- The primary source of funding for the Fund's activities are contributions from the U.S. Environmental Protection Agency (the **EPA**), matching contributions from the State, investment interest, loan repayments, and loan closing fees.
- For the year ended June 30, 2019, total contributions from EPA and the State increased \$4.26 million to \$11.49 million compared to total contributions of \$7.23 million for the year ended June 30, 2018.
- Cash and cash equivalents increased \$2.70 million in FY19. The variance was primarily due to the amount of total contributions along with principal and interest payments received from outstanding loans was greater than the disbursements for loan and principal forgiveness.
- Loans receivable balance at June 30, 2019 and 2018 was \$223.68 million and \$210.35 million, respectively. The increase of \$13.33 million was due to an increase in loan disbursements to project sponsors.
- The Fund does not use the issuance of debt to leverage the amount of loans that can be awarded in a given fiscal year or to acquire the required state matching funds for the EPA capitalization grants awarded each year. There is no outstanding debt for the Fund.

Overview of Financial Statements

For EPA presentation purposes, the Fund financial statements are presented as a proprietary fund that includes two separate enterprise funds. The statements provide both short-term and long-term information about the Fund's financial position, which assists the reader in assessing its economic condition at the end of the fiscal year. These statements are prepared using the accrual basis of accounting. However, the State reports the Fund as a special revenue fund in its Comprehensive Annual Financial Report (**CAFR**). Due to this difference in reporting methods, there may be differences between amounts reported in these financial statements and the State general purpose financial statements. The funds and account groups of the Fund are included in the State's CAFR and Single Audit. The financial statements presented for the EPA include the following:

Statement of Net Position

The statement of net position presents information on all the Fund's assets and liabilities with the difference between the two reported as net position. Over time, increases or decreases in net position are expected to serve as a useful indicator of whether the financial position of the Fund is improving or deteriorating.

Statement of Revenues, Expenses, and Changes in Net Position

The statement of revenues, expenses, and changes in net position present information which reflects how the Fund's net position changed during the past fiscal year. Regardless of when cash is affected, all changes in net position are reported when the underlying transactions occur. As a result, there are transactions included that will not affect cash until future fiscal periods.

Statement of Cash Flows

The statement of cash flows presents information showing how the Fund's cash changed as a result of current year's operating activities, noncapital financing activities, and investing activities. The statement of cash flows is prepared using the direct method which includes the reconciliation of operating income to net cash provided by or used in operating activities (indirect method) as required by GASB 34.

Notes to Financial Statements

The notes to financial statements provide additional information that is essential to a full understanding of the data provided in the financial statements. These notes can be found immediately following the financial statements.

Financial Analysis

The Fund's condensed combined statements of net position consist of the following at June 30:

	 2019	2	018	Variance		% Variance	
ASSETS							
Cash and Cash Equivalents	\$ 55,991,093	\$ 5	3,294,703	\$ 2,	696,390	5.06%	
Loans Receivable	223,679,301	21	0,345,663	13,	333,638	6.34%	
All Other Assets	 911,472		902,046	-	9,426	1.04%	
	\$ 280,581,866	\$ 26	4,542,412	\$ 16,	039,454	6.06%	
LIABILITIES							
Current Liabilities	\$ 13,272	\$	12,955	\$	317	2.45%	
NET POSITION							
Unrestricted	 280,568,594	264,529,457		16,039,137		6.06%	
	\$ 280,581,866	\$ 26	4,542,412	\$ 16,	039,454	6.06%	

The \$16.04 million increase in net position reflects the continued strong growth of the Fund. Cash and cash equivalents increased by \$2.70 million due to loan and principal forgiveness disbursements being less than the amount of total contributions along with principal and interest payments received from outstanding loans.

For the year ended June 30, 2019, the Fund collected \$13.19 million on loans receivable, disbursed \$26.52 million in loan funding, and disbursed \$991,167 in principal forgiveness. For the year ended June 30, 2018, the fund collected \$11.06 million in loans receivable, issued \$38.60 million in loan funding, and disbursed \$1.94 million in principal forgiveness.

The Fund's condensed combined statement of revenues, expenses, and changes in net position consist of the following at June 30:

	 2019	 2018		ariance	% Variance
Operating Revenues	\$ 4,494,271	\$ 4,195,826	\$	298,445	7.11%
Operating Expenses	 (170,409)	 (164,775)		(5,634)	3.42%
Operating Income	\$ 4,323,862	\$ 4,031,051	\$	292,811	7.26%
Other Revenues	1,212,296	991,835		220,461	22.23%
Other Expenses	 	 			0.00%
	 1,212,296	 991,835		220,461	22.23%
Contributions	 10,502,979	 5,290,491		5,212,488	98.53%
Change in net position	16,039,137	10,313,377		5,725,760	55.52%
Net position, beginning of the year	 264,529,457	 254,216,080	1	0,313,377	4.06%
Net position, end of the year	\$ 280,568,594	\$ 264,529,457	1	6,039,137	6.06%

The Fund's operating revenues are earned from loan interest payments and loan closing fees assessed at the time of the initial loan.

Other revenues consist of investment earnings on cash held by the State Treasurer. The increase in other revenues is due to the rising interest rate environment and strong market conditions present through June 30, 2019.

Contributions consist of EPA capitalization grants for loans and principal forgiveness and the required state match for those EPA grants.

The Fund disbursed principal forgiveness of \$991,167 and \$1.94 million for the years ended June 30, 2019 and 2018, respectively. The loans made with these funds were forgiven as disbursed and must be repaid only if certain loan conditions are not met by the project sponsor.

Operating expenses consist of salaries and other administrative expenses paid from the Fund's loan fee administrative fund for the operation of the Office of Local Government (**OLG**) which manages the Fund.

Budgetary Information

Each fiscal year, the required state match for the upcoming estimated EPA grant is included in the State's annual appropriation budget. The amount received from the State was \$2.88 million and \$1.65 million for the years ended June 30, 2019 and 2018, respectively. The required state matching funds were disbursed in their entirety in each appropriation year.

Economic and Other Factors

In fiscal year 2019, Fund program revenues continued to support new loan financing activity and administrative expenses. The Fund continues to improve its procedures and evaluate financing terms so it can be an attractive choice compared to other market options. As a result of the recent improving economic conditions, local municipalities, counties and special purpose districts have begun to invest again in their drinking water facilities. The Fund has increased loans outstanding by \$41.06 million since June 30, 2017 and disbursed \$65.12 million in loan funds during this time period.

To ensure that loans are repaid on time and in full, OLG uses a variety of analysis and surveillance measures to reduce the possibility of nonpayment. OLG monitors each loan recipient's financial condition on an annual basis ensuring that dedicated sources of revenues continue to be sufficient to meet debt service obligations. The Fund has not had a late payment (10 days past due) or loan default since its inception.

The Fund expects that next year's results will improve based on several large loans closing in the 2020 fiscal year. The Fund also continues to provide a more cost-effective way for our project sponsors to fund their drinking water facilities. The Fund has sufficient equity from loan receivables that can continue to provide loan funds far above the EPA capitalization grants received annually.

Requests for Information

This report is designed to provide an overview of the Fund's finances for those with an interest in the program. Questions concerning any information found in this report or requests for additional information should be directed to the SC Rural Infrastructure Authority, Office of Local Government, 1201 Main Street, Suite 1600, Columbia, SC 29201. Information about the CWSRF is also available on the Rural Infrastructure's website at https://ria.sc.gov/loans.

State Drinking Water Revolving Loan Fund Statement of Net Position (Unaudited) June 30, 2019

ASSETS	SRF	Loan Fee Administration	June 30, 2019 Total	June 30, 2018 Total	
Current Assets					
Cash and Cash Equivalents	\$ 55,126,355	\$ 864,738	\$ 55,991,093	\$ 53,294,703	
Loan Interest Receivable	787,921	-	787,921	876,454	
Investment Interest Receivable	121,596	1,955	123,551	25,592	
Loans Receivable	12,643,515	<u> </u>	12,643,515	11,678,993	
Total Current Assets	\$ 68,679,387	\$ 866,693	\$ 69,546,080	\$ 65,875,742	
Noncurrent Assets					
Loans Receivable, net of Current Portion	\$ 211,035,786	\$ -	\$ 211,035,786	\$ 198,666,670	
Total Assets	\$ 279,715,173	\$ 866,693	\$ 280,581,866	\$ 264,542,412	
LIABILITIES AND NET POSITION					
Current Liabilities					
Payroll Payable	\$ -	\$ 13,272	\$ 13,272	\$ 12,955	
Net Position					
Unrestricted	\$ 279,715,173	\$ 853,421	\$ 280,568,594	\$ 264,529,457	
Total Liabilities and Net Position	\$ 279,715,173	\$ 866,693	\$ 280,581,866	\$ 264,542,412	

EXHIBIT 4

STATE OF SOUTH CAROLINA

State Drinking Water Revolving Loan Fund Statement of Revenues, Expenses, and Changes in Net Position (Unaudited)

For the Year Ended June 30, 2019

		Loan Fee Administration		June 30, 2019 Total		June 30, 2018 Total	
	 SRF						
Operating Revenues							
Loan Interest	\$ 4,474,671	\$	-	\$	4,474,671	\$	4,071,955
Loan Fees	 <u> </u>		19,600		19,600		123,871
Total Operating Revenue	\$ 4,474,671	\$	19,600	\$	4,494,271	\$	4,195,826
Operating Expenses							
Salaries and Benefits	-		151,701		151,701		153,764
Fixed Charges	-		8,700		8,700		5,175
Contractual Services	-		8,928		8,928		5,247
Supplies and Materials	-		1,000		1,000		589
Travel	 <u>-</u>		80		80		
Total Operating Expenses	\$ -	\$	170,409	\$	170,409	\$	164,775
Operating Income (Loss)	\$ 4,474,671	\$	(150,809)	\$	4,323,862	\$	4,031,051
Nonoperating Revenue (Expense)							
Investment Earnings	1,191,879		20,417		1,212,296		991,835
Total Nonoperating Revenue (Expense)	\$ 1,191,879	\$	20,417	\$	1,212,296	\$	991,835
Income/(Loss) Before Contributions	\$ 5,666,550	\$	(130,392)	\$	5,536,158	\$	5,022,886
Contributions							
EPA Capitalization Grants Received	7,625,979		-		7,625,979		3,642,291
Capitalization Grant - Principal Forgiveness	991,167		-		991,167		1,943,733
Principal Forgiveness	(991,167)		-		(991,167)		(1,943,733)
State Match Contributions	 2,877,000				2,877,000		1,648,200
Total Contributions	\$ 10,502,979	\$		\$	10,502,979	\$	5,290,491
Change in Net Position	\$ 16,169,529	\$	(130,392)	\$	16,039,137	\$	10,313,377
Transfer	-		-		-		-
Net Position, Beginning of Year	 263,545,644		983,813		264,529,457		254,216,080
Net Position, End of Year	\$ 279,715,173	\$	853,421	\$	280,568,594	\$	264,529,457

EXHIBIT 4

STATE OF SOUTH CAROLINA State Drinking Water Revolving Loan Fund Statement of Cash Flows (Unaudited) For the Year Ended June 30, 2019

	SRF	Loan Fee Administration		June 30, 2019 Total	June 30, 2018 Total
Cash Flows From Operating Activities:					
Interest on Loans	\$ 4,562,716	\$	-	\$ 4,562,716	\$ 3,772,938
Loans Disbursed	(26,520,559)		-	(26,520,559)	(38,595,552)
Principal Received on Loans	13,187,408		-	13,187,408	11,062,954
Loan Fees Received	-		19,600	19,600	123,871
Cash Paid to Employees and Vendors			(170,092)	(170,092)	(170,141)
Cash Flows Provided (Used) From Operating Activities	\$ (8,770,435)	\$	(150,492)	\$ (8,920,927)	\$ (23,805,930)
Cash Flows From Noncapital Financing Activities:					
Funds Received from EPA	8,617,146		-	8,617,146	5,577,024
Funds Received from State of South Carolina	2,877,000		-	2,877,000	1,648,200
APF allocation	(991,167)		-	(991,167)	(1,934,733)
ARRA Principal Forgiveness Disbursements	-		-	-	-
Repayments Transferred from Clean Water SRF					
Cash Flows Provided By Noncapital Financing Activitie	★ \$ 10,502,979	\$		\$ 10,502,979	\$ 5,290,491
Cash Flows From Investing Activities:					
Net Investment Income Received	1,095,441		18,897	1,114,338	1,030,241
Cash Flows Provided By Investing Activities	\$ 1,095,441	\$	18,897	\$ 1,114,338	\$ 1,030,241
Net Increase (Decrease) in Cash and Cash Equivalents	\$ 2,827,985	\$	(131,595)	\$ 2,696,390	\$ (17,485,198)
Cash and Cash Equivalents, Beginning of Year	52,298,370		996,333	53,294,703	70,779,901
Cash and Cash Equivalents, End of Year	\$ 55,126,355	\$	864,738	\$ 55,991,093	\$ 53,294,703
Cash Flows From Operating Activities:					
Income From Operations	\$ 4,474,671	\$	(150,809)	\$ 4,323,862	\$ 4,031,051
Adjustments to reconcile income from operations to net cash	, ,		, ,	, , ,	. , ,
required by operating activities:					
Depreciation Expense				-	-
Change in Assets and Liabilities:					
Loans Receivable	(13,333,639)			(13,333,639)	(27,730,874)
Loan Interest Receivable	88,533			88,533	(100,741)
Accrued Expenses			317	317	(5,366)
Cash Flows Provided (Used) From Operating Activities	\$ (8,770,435)	\$	(150,492)	\$ (8,920,927)	\$ (23,805,930)

1. Organization of the Fund

The South Carolina Drinking Water State Revolving Fund (the **Fund**) program was established in May 1997 pursuant to section 1452 (a) of the Safe Drinking Water Act amendments of 1996 and Title 48, chapter 5 of the Code of Laws of South Carolina, 1976, as amended. The purpose of the program is to provide low interest loans to municipalities, counties and special purpose districts for construction of drinking water facilities.

Responsibility for implementing the program is assigned to two agencies. The South Carolina Department of Health and Environmental Control (**DHEC**) was charged with the programmatic and technical aspects of the program. The Office of Local Government (**OLG**) was responsible for the financial and management functions of the Fund. OLG is given responsibility for the Fund on behalf of the SC Water Quality Revolving Fund Authority (the **Authority**), which is comprised of the Governor, the State Treasurer, the Comptroller General, the Chairman of the Senate Finance Committee and the Chairman of the House Ways and Means Committee.

As a result of the SC Restructuring Act of 2014, effective July 1, 2015, OLG was transferred to the SC Rural Infrastructure Authority (**RIA**) and it continues to manage the financial aspects of the Fund. The State Fiscal Accountability Authority now serves as the governing body for the SC Water Quality Revolving Fund Authority and is comprised of the same five members. All loan documents are between the Authority and the project sponsor and all official actions are in the name of and on behalf of the Authority.

DHEC develops an annual Intended Use Plan (IUP), maintains a project priority system, obtains capitalization grants from the U. S. Environmental Protection Agency (the EPA), performs technical project reviews and monitors construction. DHEC also sets aside portions of the capitalization grants to fund certain other drinking water related activities, including the State of South Carolina's (the State) drinking water program administration and management, source water protection, operator certification, capacity development and technical assistance for small water systems. These "set-aside" costs are not part of the Fund. OLG manages the Fund by establishing financial policies governing loans, making final loan decisions, disbursing funds to borrowers, collecting repayments, accounting for the loan funds, and ensuring the state match is deposited in a timely manner. OLG's administrative costs to manage the Fund are paid through loan fees which are accounted for in loan fee administration.

On October 23, 2018, the "America's Water Infrastructure Act of 2018" was enacted into law (PL 115-270) and it contained certain amendments to the Federal Safe Drinking Water Act relative to the Fund. One such provision allows a state to offer all borrowers financing for a term of up to 30 years, not to exceed useful life. The State's Loan Policies were amended to allow 30-year financing to all Drinking Water SRF borrowers.

DHEC's cost of administering the program is charged to the four percent (4%) administrative set-aside. Administrative costs include the salaries and benefits of the employees. Employees are covered by benefits available to State of South Carolina (the State) employees.

2. Summary of Significant Accounting Policies

The accounting policies of the Fund conform to accounting principles generally accepted in the United States of America (GAAP) as applied to governments. The following is a summary of the more significant accounting policies:

Reporting Entity

The Fund is treated by the State as a special revenue fund and reported in the State's general-purpose financial statements using the modified accrual basis of accounting which may result in differences from amounts reported in these financial statements.

Basis of Presentation - Basis of Accounting

For EPA presentation purposes, the activities of the Fund are reports as a proprietary fund. The proprietary fund statement of net position and statement of revenues, expenses, and changes in net position display information about the Fund. Proprietary funds distinguish operating revenues and expenses from nonoperating items. The Fund consists of two enterprise funds: a loan fund to record loan and related activity, and a loan fee administration fund that collects loan closing fees charged to loan recipients, and pays administrative expenses of the OLG related to operation of the Fund. Operating revenues for the Fund's enterprise funds include loan interest received and loan closing fees. Operating expenses for the enterprise funds include loan administration expenses (salaries and benefits; supplies; fixed charges; travel; and depreciation). All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses, including investment earnings.

The Fund reports the following enterprise funds:

<u>State Revolving Fund</u> – The state revolving fund was established to account for the financial position and results of operations relating to the issuance of and collection of loans from project sponsors for drinking water facilities in South Carolina.

<u>Loan Administration Fee</u> – The loan administration fee fund was established to account for the financial position and results of operations relating to OLG's administration of the Fund outside of the State Revolving Fund.

The enterprise funds are reported using the flow of economic resources measurement focus and the accrual method of accounting. Under the accrual method of accounting, revenues are recognized when earned and expenses are recorded at the time the liabilities are incurred. All assets and liabilities associated with operations of the Fund are included on the statement of net position. The Fund has elected to follow the accounting pronouncements of the Governmental Accounting Standards Board (GASB), as well as statements issued by the Financial Accounting Standards Board on or before November 30, 1989, unless the pronouncements conflict with or contradict GASB pronouncements.

Cash and Cash Equivalents

All monies of the Fund are deposited with the State of South Carolina Treasurer's Office (the **Treasurer**) which is responsible for maintaining these deposits in accordance with state law. The Fund considers all such deposits to be cash. Investment earnings on these deposits are received by the Fund on a monthly basis. According to state law, the Treasurer is responsible for maintaining the cash balances and investing excess cash of the Fund, as further discussed in Note 3. Consequently, management of the Fund has no control over the investment of the excess cash. The statement of cash flows considers all funds deposited with the Treasurer to be cash or cash equivalents, regardless of actual maturities of the underlying investments.

Loans Receivable

Loans are funded by federal capitalization grants, state matching funds, investment earnings and loan repayments. The monies are disbursed to borrowers on an evidence of obligation basis, and interest begins accruing when funds are disbursed. When the borrowers have incurred qualifying expenses, they can request a loan disbursement from the Fund (no more often than monthly), which is recorded in the Fund accounting records. The maximum duration for principal and interest deferral is limited to the estimated date of DHEC's final permit to operate for the project or 30 months from the date of the loan agreement, whichever occurs first. The payment initiation date is the first day of the month following the end of the deferral period. The first payment is due on the first day of the third month after the month of the payment initiation date. At the end of the deferral period, the borrower can elect to add the deferral period interest to the loan amount, or they can pay it in full. The loans may have maturities up to 30 years and are repaid in quarterly installments unless the Authority specifies monthly repayments for certain loans. When all or a portion of the project has a term of 30 years, a premium of 20 basis points (0.20%) is added to the applicable rate and applied to the 30-year amount for the entire 30-year term. If a portion of the project also has a term of 20 years, then separate 20-year and 30-year amortizations are merged together into a single repayment schedule. Shorter term loans are also available with the interest rate lowered by 20 basis points (0.20%) for a term of 8 to 14 years and by 40 basis points (0.40%) for a term of up to 7 years when the Standard Rate is used for the entire project.

Net Position

Net position represents the difference between assets, deferred outflow of resources, liabilities and deferred inflow of resources. Net position invested in capital assets, net of related debt consists of capital assets, net of accumulated depreciation, reduced by outstanding balances of any borrowings used for the acquisition, construction or improvement of those assets.

3. Cash and Cash Equivalents

All cash in the Fund is deposited with the Treasurer who is responsible for maintaining and investing the pooled cash balances in accordance with state law. The Treasurer is required to

maintain a mix of investments in order to allow cash to be withdrawn at any time to meet normal operating needs. The Fund's share of the investment income from the local government investment pool (**LGIP**) is based on the average daily balance for the period and is credited to the Fund monthly. Details of the investments can be obtained from the Treasurer's Office.

All cash and investments in LGIP are stated at cost, which approximates fair market value. Investments in the LGIP are not categorized because they are not evidenced by securities that exist in physical or book entry form.

	Carrying Amount	Market Value
Not subject to categorization:		
Local government investment pool	\$ 55,991,093	\$ 55,991,093

4. Deposits and Investments

The following disclosures exclude the State's Pension Trust Funds of the South Carolina Retirement Systems and Other Post-Employment Benefit Trust Funds.

a. Deposits

Deposit Policy

The State's deposit policy, by law, requires all banks or savings and loan associations that receive State funds deposited by the Treasurer, to secure the deposits by deposit insurance, surety bonds, collateral securities, or letters of credit to protect the State against any loss.

Custodial Credit Risk

Custodial credit risk for deposits is the risk that in the event of a depository financial institution's failure, the State will not be able to recover the value of deposits with collateral securities that are in possession of an outside party. Deposits include cash and cash equivalents on deposit in banks and non-negotiable certificates of deposit. All deposits under the control of the Treasurer are fully insured or collateralized.

b. Investments

Investment Policy

The State's investment policy, by law, authorizes investments that vary by fund, but generally include obligations of the United States and government sponsored entities, obligations of the State of South Carolina and certain of its political subdivisions, certificates of deposit, collateralized repurchase agreement, certain corporate bonds, and commercial paper. Substantially all of the State's investments are presented at fair value. Securities are valued at the last reported sales price as provided by an independent pricing service.

Investment income consists of realized and unrealized appreciation (depreciation) in the fair value of investments and interest income earned.

Custodial Credit Risk

Custodial credit risk for investments is the risk that in the event of a failure of the counterparty to a transaction, the State will not be able to recover the value of investments or collateral securities that are in the possession of an outside party. The State's investments that are exposed to custodial risk include investment securities that are uninsured, not registered in the name of the State, and are held by a counterparty. For more information about the State's investment custodial credit risk, please refer to the State's Comprehensive Annual Financial Report (CAFR).

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the State. Credit risk exposure is primarily limited to debt instruments and other hybrid equity securities. The Treasurer's credit risk policy mitigates potential for loss of principal by purchasing only high investment grade debt securities. In the event that the rating of a security falls below investment grade, that security may continue to be held contingent upon an evaluation of the longer-term investment merits of the security. For more information about the State's investment credit risk, please refer to the State's CAFR.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Treasurer's policy does not specifically address interest rate risk. Its objectives for preservation of capital and maintenance of adequate liquidity focus management of interest rate sensitivity on investing in securities with a range of maturities from one day to thirty years. For more information about the State's interest rate risk, please refer to the State's CAFR.

Concentration of Credit Risk

The concentration of credit risk is the risk of loss attributable to the magnitude of a government's investments in a single issuer. The State's policy for reducing this risk is to diversify and limit exposure to any single issuer to no more than 5%, except for United States Treasury and agency obligations. For more information about the State's concentration of credit risk, please refer to the State's CAFR.

5. Loans Receivable

The Fund has made loans to qualified borrowers at interest rates ranging from 1.00% to 4.00%, depending on the fiscal year, the system's population size, income levels and whether the borrower is taking over an entire non-viable water system. However, due to extreme

changes in market interest rates, in FY 2012, the interest rate on any loan in the portfolio exceeding 2.25% was reduced to 2.25% for the remaining term of the loan.

Rates are set prior to October 1st of each year and remain in effect through July 31st of the following year. The Standard Rate for FY19 (2.60%) is based on a 40% discount to the January through August 2018 average of the Bond Buyer Revenue Bond Index, rounded to the nearest 1/10 %. A Small System Rate (2.10%) is set 50 basis points (0.50%) below the Standard Rate. The Hardship Rate is 1.00%. The Takeover Rate is 1.60% for any project sponsor that assumes legal ownership of an entire non-viable water system serving residential customers. The Green Rate (2.10%) is set 50 basis points (0.50%) below the Standard Rate and is available to a qualified borrower (see Note 1) for up to 25% of the total amount to be borrowed meeting the EPA green criteria with the balance at the Standard Rate. For more information, please refer to the Fund's financial policies.

Beginning in FY19, the maximum loan term is 30 years (See Note 1) and loans are repaid on a quarterly basis, unless the Authority otherwise specifies monthly payment for certain loans. When all or a portion of the project has a term of 30 years, a premium of 20 basis points (0.20%) will be added to the applicable rate and applied to the 30-year amount for the entire 30-year term. If a portion of the project also has a term of 20 years, then separate 20-year and 30-year amortizations are merged together into a single repayment schedule. Shorter term loans are also available with interest rates lowered by 20 basis points (0.20%) for a term of 8 to 14 years, and by 40 basis points (0.40%) for a term of up to 7 years and only apply to an entire project using the Standard Rate.

Details of loans receivable as of June 30, 2019 are as follows:

	Cumulative June 30, 2018	2019 <u>Figures</u>	Cumulative June 30, 2019
Loan Disbursements	\$305,684,141	\$ 26,520,559	\$332,204,700
Capitalized Interest	1,912,841	488	1,913,329
Less: Principal Repayments	(97,251,319)	(13,187,409)	(110,438,728)
Total Loans Receivable- June 30	\$210,345,663	\$ 13,333,638	\$223,679,301

There is no provision for uncollectible accounts, as all repayments are current and program management believes all loans will be repaid according to the loan terms. There have been no loan defaults or late payments (10 days past due) in the Fund since its inception.

6. Capital Assets and Depreciation

The only assets purchased since inception of the program is equipment. There were no equipment purchases during fiscal year 2019. All prior equipment purchases were considered immaterial and expensed in prior years.

7. Federal Grants and State Match

Regular Program Funds

The Fund is capitalized by grants through EPA (Catalog of Federal Domestic Assistance (CFDA) 66.468, Capitalization Grants for SRF), and state match is provided by the State equaling 20% of the federal capitalization amount. As of June 30, 2019, EPA has awarded cap grants to the State totaling \$214,430,732 of which \$154,795,465 (including \$8,970,000 of ARRA 0% interest loans) was available to the Fund to be used for loans, \$29,343,930 (including ARRA APF of \$9,750,000) is available to use for principal forgiveness and \$27,933,597 was designated for DHEC to fund "set-aside" activities. The Fund has drawn a total of \$209,816,351 as of June 30, 2019. The State has contributed an amount equal to 20% of the federal capitalization amount, which has been provided through appropriation of State General Funds and other resources. The State has provided matching funds of \$39,372,346 through June30, 2019.

The following summarizes the capitalization grant award, amounts drawn on each grant as of the balance sheet date, and balances available:

	Grant Amount	Grant Amount	Total Grant				Grant Funds
	for Loans	for APF	Amount	Draws	2019	Draws	Available
	Less Set Asides	Less Set Asides	Less Set Asides	June 30, 2018	Draws	June 30, 2019	June 30, 2019
1997	\$ 12,450,144	\$ -	\$ 12,450,144	\$ 12,450,144	\$ -	\$ 12,450,144	\$ -
1998	7,209,236	-	7,209,236	7,209,236		7,209,236	
1999	7,716,768	-	7,716,768	7,716,768	-	7,716,768	-
2000	5,263,083	-	5,263,083	5,263,083	-	5,263,083	-
2001	4,837,107	-	4,837,107	4,837,107	-	4,837,107	-
2002	7,056,350	-	7,056,350	7,056,350	-	7,056,350	-
2003	7,193,088	-	7,193,088	7,193,088	-	7,193,088	-
2004	7,354,914	-	7,354,914	7,354,914	-	7,354,914	-
2005	7,904,080	-	7,904,080	7,904,080	-	7,904,080	-
2006	7,435,542	-	7,435,542	7,435,542	-	7,435,542	-
2007	7,764,420	-	7,764,420	7,764,420	-	7,764,420	-
2008	8,282,416	-	8,282,416	8,282,416	-	8,282,416	-
2009 (1)	15,156,798	9,750,000	24,906,798	24,906,798	-	24,906,798	-
2010	6,534,346	5,517,084	12,051,430	12,051,430	-	12,051,430	-
2011	5,302,835	2,779,185	8,082,020	8,082,020	-	8,082,020	-
2012	6,492,500	1,982,500	8,475,000	8,475,000	-	8,475,000	-
2013	4,646,396	2,419,344	7,065,740	7,065,740	-	7,065,740	-
2014	4,023,798	2,521,502	6,545,300	6,545,300	-	6,545,300	-
2015	4,136,072	2,067,550	6,203,622	6,203,622	-	6,203,622	-
2016 (2)	5,338,237	1,652,615	6,990,852	5,921,150	1,000,952	6,922,102	68,750
2017 (3)	3,620,400	2,065,890	5,686,290	3,547,400	73,000	3,620,400	2,065,890
2018 (4)	9,076,935	946,000	10,022,935	-	7,543,194	7,543,194	2,479,741
		,			-		
	\$154,795,465	\$31,701,670	\$ 186,497,135	\$ 173,265,608	\$ 8,617,146	\$ 181,882,754	\$ 4,614,381

⁽¹⁾ The 2009 cap grant represents the State's normal cap grant \$6,186,798 and a separate ARRA cap grant of \$18,720,000. The ARRA funds did not require a state match.

⁽²⁾ The 2016 cap grant includes \$5,338,237 for loans and \$1,652,615 for principal forgiveness. As of June 30, 2019, \$1,606,865 had been drawn for principal forgiveness.

⁽³⁾ The 2017 cap grant includes \$3,620,400 for loans and \$2,065,890 for principal forgiveness. As of June 30, 2019, \$0 had been drawn for principal forgiveness. The final \$1,494,525 in the awarded 2017 grant amount was not received until the first quarter of FY19.

⁽⁴⁾ The 2018 cap grant includes \$9,076,935 for loans and \$2,877,000 for principal forgiveness. As of June 30, 2019, \$0 had been drawn for principal forgiveness. The final \$1,931,000 in the awarded 2018 grant amount was not received until the first quarter of FY20 and was not included in the grant amount less set-asides as of June 30, 2019.

The 2002 cap grant was amended on September 10, 2002 and \$2,756,853 of the DWSRF cap grant was transferred to the CWSRF. The 2003 cap grant was amended on August 25, 2003 and \$2,768,271 of the DWSRF cap grant was transferred to the CWSRF. For the 2009 cap grant, \$9,750,000 was for ARRA principal forgiveness, \$8,970,000 for 0% ARRA loans, and \$6,186,798 was used for loans and has been included in the grant amount for loans above. The schedule above includes the amended grant amounts.

As of June 30, 2019, State matching contributions were as follows:

	Total Match June 30, 2018	2019 Contribution	Total Match June 30, 2019
South Carolina State Matching Contribution	\$36,495,346	\$2,877,000	\$39,372,346

The 1997 through 2018 cap grants have been fully matched by the State of South Carolina. A total of \$2,877,000 has been deposited for the 2018 cap grant which has all been disbursed as of June 30, 2019.

8. Loan Fees

The Fund charges borrowers a one-time loan closing fee which is currently thirty-five hundredths of a percentage point (0.35%). These fees are deposited in loan fee administration and are used to pay administrative costs incurred by OLG for the Fund. During the year ended June 30, 2019, fees totaling \$19,600 was collected.

9. Risk Management, Commitments and Contingencies, Related Parties, and Subsequent Events

Risk Management

The Fund is exposed to various risks of loss related to torts, thefts of assets, errors or omissions, injuries to state employees while performing business for the Fund, or acts of God. The State maintains insurance for all risks of loss.

Commitments and Contingencies

The Fund participates in a federally assisted grant program. The program is subject to compliance audits by the grantor or their representatives. The amount of program expenditures, which may be disallowed by the granting agency cannot be predicted, although the Fund expects such amounts, if any, to be immaterial.

Related Parties

There are no related party transactions with or related amounts receivable from management of the Fund.

Subsequent Events

The Fund has evaluated all events subsequent to the statement of net position date of June 30, 2019 through September 16, 2019, which is the date these financial statements were issued, and has determined that there are no additional subsequent events that require disclosure.

Exhibit 5

STATE FY 2019 EXPENDITURES FROM DRINKING WATER SRF SET ASIDE FUNDS STATE OF SOUTH CAROLINA

		ADMINISTRATION	ISTRATION TECHNICAL			PWSS			WELLHEAD		SOUR	SOURCE WATER PROTECTION			
EXPENDITURE CATEGORY	FY 2015 CAP GRANT	FY 2017 CAP GRANT	FY 2018 CAP GRANT	FY 2015 CAPGRANT	FY 2016 CAP GRANT	FY 2017 CAP GRANT	FY 2015 CAP GRANT	FY 2017 CAP GRANT	FY 2018 CAP GRANT	FY 2015 CAP GRANT	FY 2016 CAP GRANT	FY 2017 CAP GRANT	FY 2016 CAP GRANT	FY 2017 CAP GRANT	FY 2018 CAP GRANT
Grant/Aims No. >>>>	G906	G708	G709	G926	G717	G718	G956	G728	G729	G966	G737	G738	G747	G748	G749
SALARIES		\$18,847.91	\$184,567.17					\$166,006.11	\$320,305.92		\$168,507.21	\$125,872.47	\$60,147.39	\$90,492.64	
FRINGE BENEFITS		\$6,824.90	\$74,439.10					\$66,070.63	\$125,514.86		\$67,493.96	\$50,517.21	\$22,301.73	\$35,370.92	
TRAVEL		\$290.03	\$366.57				\$1,228.41			\$2,521.81	\$1,896.97				
CONTRACTUAL										\$22,661.00			\$6,250.00		
CONTRACTS					\$70,480.16								\$13,424.96	\$89,087.43	
SUPPLIES	\$16,670.62			\$2,926.98			\$18,969.51							\$1,524.45	
FIXED CHARGES															
EQUIPMENT													\$10,919.67		
OPERATING															
EQC DIV Rate		\$3,157.00	\$30,914.98			\$11,766.71		\$27,805.94	\$53,651.03		\$28,224.69	\$21,083.49	\$10,074.82	\$15,157.61	
OTHER															
(OPERATING) TOTAL DIRECT COST	\$16,670.62	\$29,119.84	\$290,287.82	\$2,926.98	\$70,480.16	\$11,766.71	\$20,197.92	\$259,882.68	\$499,471.81	\$25,182.81	\$266,122.83	\$197,473.17	\$123,118.57	\$231,633.05	
INDIRECT COST		\$4,050.46	\$39,663.39					\$35,674.85	\$68,834.05		\$36,212.09	\$27,049.87	\$12,925.61	\$19,446.74	
TOTAL COST	\$16,670.62	\$33,170.30	\$329,951.21	\$2,926.98	\$70,480.16	\$11,766.71	\$20,197.92	\$295,557.53	\$568,305.86	\$25,182.81	\$302,334.92	\$224,523.04	\$136,044.18	\$251,079.79	
		ADMINISTRATION		TOTAL	TECHNICAL ASSIS	TANCE		PWSS			WELLHEAD		SOURC	CE WATER PROTE	CTION
		\$379,792.13			\$85,173.85			\$884,061.31			\$552,040.77			\$387,123.97	

Rural Infrastructure Authority

Office of Local Government SRF 1201 Main Street, Suite 1600 Columbia, SC 29201

MEMORANDUM

To:	File	
From:	James Absher Office of Local Government	
Date:	September 16, 2019	
Subject:	Financial Information on Drinking Water State Revolving Fund for FY 19	
	1 Total Federal Funds Drawn	
	Regular Program	8,617,146
	2 Total State Funds Transferred	2,877,000
	3 Total Disbursements	27,511,726
	Regular Cap Grant Funds	8,617,146
	State Match Funds	2,877,000
	Recycled Funds	16,017,580
	4 Accrued Interest During Construction as of 6/30/18	173,541
	Interest Accrued in FY 19	231,208
	Total to Account For	404,749
	Accrued Interest Paid in FY19	316,562
	Interest Capitalized During FY19	488
	Accrued Interest During Construction as of 6/30/19	87,699
	Loan Interest Receivable at 6/30/19	700,222
	Loan Interest Received in FY19	4,562,716
	Total to Account For	5,262,938
	Loan Interest Balance at 6/30/18	977,919
	Loan Interest Earned in FY19	4,285,019
	5 Cash Received During FY19	19,162,127
	Loan Principal - Regular	13,187,408
	Loan Interest	4,562,716
	Paid Capitalized Interest	316,562
	Investment Earnings - Regular	1,095,441
	6 Current Portion of Loans Outstanding	12,643,516
	Regular Program	12,643,516
	ARRA	0

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11,517,460

7 Federal LOC Payments for FY 2019

STATE FY 2019 CAP GRANT SUMMARY DRINKING WATER CAP GRANTS WITH QUARTERLY PAYMENTS

ATTACHMENT 1

		AUGUST 19, 2014	SEPTEMBED 17, 2015	SEPTEMBER 27, 2016	AUGUST 28, 2017	SEPTEMBER 13, 2018	
AWARD DATE	1997-2013 Cap Grants		2015 Cap Grant	2016 Cap Grant	2017 Cap Grant	2018 Cap Grant	TOTALS
07/01/97 - 09/30/14	1007 2010 Oup Clarks	2014 Oup Grant	2010 Sup Stark	2010 Cup Clain	2017 Oup Orani	2010 Sup Static	\$151,048,136
10/01/14 - 12/31/14		\$6,545,300					\$6,545,300
01/01/15 - 03/31/15		70,010,000					
04/01/15 - 06/30/15							\$0 \$0
07/01/15 - 09/30/15			\$4,540,802				\$4,540,802
10/01/15 - 12/31/15			. , , ,				\$0
01/01/16 - 03/31/16							\$0
04/01/16 - 06/30/16							\$0
07/01/16 - 09/30/16			\$1,662,820				\$1,662,820
10/01/16 - 12/31/16				\$5,933,952			\$5,933,952
01/01/17 - 03/31/17				\$265,900			\$265,900
04/01/17 - 06/30/17				\$730,000			\$730,000
07/01/17 - 09/30/17				\$38,000			\$38,000
10/01/17 - 12/31/17					\$3,770,265		\$3,770,265
01/01/18 - 03/31/18					\$421,500		\$421,500
04/01/18 - 06/30/18							\$0
07/01/18 - 09/30/18					\$1,494,525		\$1,494,525
10/01/18 - 12/31/18						\$1,716,789	\$1,716,789
01/01/19 - 03/31/19						\$6,783,608	\$6,783,608
04/01/19 - 06/30/19						\$1,522,538	\$1,522,538
07/01/19 - 09/30/19						\$850,222	\$850,222
10/01/19 - 12/31/19						\$500,000	\$500,000
01/01/20 - 03/31/20						\$580,778	\$580,778
LOANS	\$151,048,136				\$5,686,290		\$188,405,135
SET ASIDES	\$16,743,596	\$2,299,700	\$2,583,378	\$1,344,148	\$2,554,710	\$2,431,065	\$27,956,597
TOTAL	#167 701 700	#0.04E.000	#0.707.000	#0.010.000	#0.041.000		#016 061 700
TOTAL	\$167,791,732	\$8,845,000	\$8,787,000	\$8,312,000	\$8,241,000	1	\$216,361,732



Interest Rates for FY 2019

Clean Water SRF and Drinking Water SRF

2.60%	Standard Rate	Applies to all borrowers with population greater than 10,000 and Median Household Income (MHI) greater than State MHI (\$45,483).
2.10%	Small System Rate	 Incentive rate for small systems meeting the following criteria: Borrower population less than 10,000. Borrower MHI less than State MHI. Optional extension of term to useful life, up to 30 years.
1.00%	Hardship Rate	 Available to systems that meet <u>all</u> of the following criteria: Borrower population less than 10,000. Borrower MHI less than 80% of State MHI. Extension of term to useful life, up to 30 years, required. Sewer LOE* at least 1.50% for CWSRF. or Water LOE* at least 1.30% for DWSRF.
2.10%	Green Rate	Applies to costs meeting EPA Green criteria up to 25% of total project costs, with balance at Standard Rate. Eligibility limited to borrowers without a credit rating on utility system.
1.60%	Takeover Rate	Takeover of entire non-viable wastewater system serving residential customers, or non-viable community water system, regardless of population size or MHI.

Clean Water SRF – Additional Rate Category

2.10% Nonpoint Source Available for up to \$4 million of eligible project when at least 50% of the costs are used on best management practices.

Refer to FY 2019 Loan Policies for additional provisions that govern interest rates.

For Further Information:

Trish Comp ◆ (803) 737-3808 ◆ tcomp@ria.sc.gov



^{*} Level of Effort (LOE) is annual cost of service based on 5,000 gallons monthly usage divided by system MHI.

ATTACHMENT 3

SMALL WATER SYSTEM TECHNICAL ASSISTANCE FY 2019 ANNUAL REPORT - SRF SET-ASIDE September 2019

Introduction

An amount up to or equal to 2% of each annual DWSRF capitalization grant may be set-aside to fund eligible technical assistance (TA) activities. A total of \$230,160 was set-aside for TA activities in the 2018 DWSRF capitalization grant. The activities performed under this set-aside are largely performed by a TA contractor. Technical assistance provided by DHEC staff is now primarily funded and reported under the Public Water System Supervision (PWSS) set-aside.

Objective

Assistance to small public community water systems (systems serving less than 10,000 people) to improve their daily operations, which in turn will help increase their sustainability, regulatory compliance, and ability to qualify for SRF project assistance. The goal is to help small water systems achieve improved technical, managerial and financial capacities and maintain compliance with the Safe Drinking Water Act and the State Primary Drinking Water Regulations.

Program Activities

The South Carolina Rural Water Association (RWA) is currently the TA contractor funded by this set-aside. RWA staff provide a number of different services and training opportunities for small water systems statewide. They also work with small systems who have applied for SRF funding but need to improve their sustainability scores to become SRF eligible. This work is often one-on-one and on-site with the system. RWA frequently consults and collaborates with DHEC Drinking Water Compliance staff. DHEC is pleased with the outcomes being derived from the RWA contract and will continue the technical assistance contractual relationship with RWA through (state) FY 2020.

RWA educates systems about water loss control, provides regulatory compliance and system mapping assistance, and presents training opportunities on system operation and sustainability topics. Specifically, during the past year, RWA performed the following activities:

- 6 water systems received initial contacts or a revisit due to staff changes to explain water loss audit techniques.
- 102 follow-up visits were made to 61 public water systems during the year on water loss control and general sanitary survey assistance.
- Phone consultation with 35 systems.
- 9 systems received specific operational and regulatory compliance assistance.
- System outreach and damage assessments after Hurricane Florence during 3rd and 4th calendar quarters of 2018.

- Five small systems were assisted through the GIS mapping program offered by RWA in FY 19. RWA staff mapping activities include: instruction on use, and loan of SCRWA equipment for systems to collect their own data; collection of data on infrastructure locations; digitizing existing maps; creating draft maps for systems to QA/QC; and, delivering finished maps to the systems in hard copy and in digital format. Systems are encouraged to be actively involved in the data gathering process and final review of system maps.
- RWA sponsored 24 training classes with 418 attendees as follows: 1) 3 sessions Basic Water Quality; 2) 3 sessions Basic Pump Maintenance; 3) 1 session Hydrant and Gate Valve Maintenance; 4) 3 sessions Laboratory Compliance Basics; 5) 3 sessions Underground Locate and Bore; 6) 1 session Reducing Electrical Costs; 7) 3 sessions Water Construction Method and Components; 8) 3 sessions Water Pipe Rehabilitation; and 9) 4 sessions Sustainable Utility Management.

ATTACHMENT 4

FY 2019 REPORT on the SRF SET-ASIDE IMPLEMENTATION of the WELLHEAD PROTECTION PROGRAM September 2019

A. Introduction

Section 1452 (k) of the Federal Safe Drinking Water Act allows states to set-aside funds from their annual Drinking Water State Revolving Fund (DWSRF) capitalization grants to assist public water systems in developing and implementing their wellhead protection programs. No funds were set-aside from the 2018 DWSRF capitalization grant to assist South Carolina public water systems in developing and implementing their wellhead protection programs. The wellhead protection activities discussed below were funded with well protection funds set-aside from previous DWSRF capitalization grants.

B. Goals and Objectives of the Wellhead Protection Program

- 1. For new community and non-community public water systems, DHEC will perform a complete wellhead assessment which includes the delineation of the protection area, inventory of potential contamination sources, a susceptibility analysis and preparation of an assessment report that will be made available to the public.
- 2. Provide technical assistance to public water systems that are beginning their voluntary wellhead protection programs.
- 3. Provide technical assistance to public water systems that have a known and existing drinking water quality problem or that just learned of an emerging drinking water quality problem.
- 4. Conduct studies and collect data to evaluate groundwater resources in the state. This information is used to better manage groundwater resources in the state, especially in areas of the state where groundwater overuse or saltwater intrusion threaten the long-term viability of the resource.

C. Delineation of Wellhead Protection Areas

During FY 2019, DHEC delineated protection areas for 20 proposed wells serving public water systems.

D. Susceptibility Determination

During FY 2019 department staff completed 20 new susceptibility analyses.

E. Technical Assistance to Public Water Systems

During FY 2019, DHEC staff created preliminary wellhead protection maps for 20 proposed wells serving public water systems. Staff also prepared technical memorandums for these wells for the water supply permitting section that either conclude the new well location is acceptable or recommend changes such increased monitoring frequency, increased depth of grouting or relocation of well if the original location is susceptible to contamination.

On a monthly basis, DHEC staff review the listing of public wells showing contaminants that are approaching or have already exceeded maximum contaminant levels to identify possible new sources of contamination that may need to be addressed by DHEC groundwater clean-up programs.

Water availability, both surface water and groundwater, continue to be a concern in South Carolina. During FY 2019, the wellhead protection set-aside was used to fund staff that evaluate and manage groundwater resources in the state. Evaluations focus on areas of the state where large groundwater withdrawals have or will cause water levels to drop in key water supply aquifers. In areas where groundwater resources are vulnerable to overuse and the long-term sustainability of the local water supply is a concern, DHEC staff evaluate data and work with local governments to determine if the area should be designated a Capacity Use Area. In FY 2019, seven counties in the coastal plain of SC were designated as the Western Capacity Use area. Entities that use a large amount of groundwater in a Capacity Use Area must apply for a groundwater withdrawal permit from DHEC and demonstrate that their water use is reasonable and will not adversely impact other groundwater users in the area. Also, in Capacity Use Areas, DHEC staff develop and implement management plans to protect the long-term viability of the groundwater resources in the area.

F. Prioritizing SRF Loan Applications

During FY 2019, twenty-six (26) Clean Water SRF loan applications (referred to as a Project Questionnaire) were evaluated for eligibility determinations for a 20-point bonus where the project's location is within a Source Water Protection Area that has a documented source-water protection plan.

ATTACHMENT 5

FY 2019 Report on the SRF Set-Aside PUBLIC WATER SYSTEM SUPERVISION (PWSS) PROGRAM September 2019

A. Introduction

The Public Water System Supervision Program (PWSS) incorporates several Bureau of Water activity areas whose overall responsibility is to ensure all public water systems are permitted, constructed, monitored, operated and maintained in compliance with the federal Safe Drinking Water Act and the State Primary Drinking Water Regulations R.61-58 so the health and well-being of all citizens is protected.

The funds allocated to PWSS are taken as set-asides from the annual Drinking Water State Revolving Fund (DWSRF) capitalization grant. A total of \$1,050,105 was set-aside from the 2018 DWSRF capitalization grants to fund the PWSS activities.

Activities that are managed through the PWSS program are construction permitting, the capacity development/new water system permitting and operating permit program, the AWOP (area-wide optimization) program, technical assistance, drinking water enforcement, water quality permitting, water quantity permitting, drinking water protection/surface water system sanitary surveys and groundwater protection.

B. Goals and Objectives

- 1. Ensure that each new public water system (PWS) and additions or modifications to an existing PWS are designed and constructed in compliance with all permitting regulations so each PWS is capable of consistently complying with all federal and state drinking water standards.
- 2. Ensure that each PWS is properly monitored in accordance with federal and state regulations and that compliance with those federal and state regulations, or any violation thereof, is identified in a timely manner so proper corrective actions can be instituted, if required, to return the PWS to compliance.
- 3. Ensure that each PWS is routinely inspected at a frequency that satisfies federal requirements and state guidelines. These inspections, known as sanitary surveys, are necessary to ensure that each PWS is properly operated, maintained and meet state and federal standards to protect public health.
- 4. Ensure that timely and effective enforcement action is taken whenever a PWS is found to be out of compliance with federal and/or state regulations. The goal of any enforcement action is to quickly return the PWS to compliance.
- 5. After permitting a new community, non-transient non-community or transient PWS with a surface water source, delineate the source water protection area for use by other regulatory programs, such as the state's NPDES program.
- 6. Provide useful technical assistance to any PWS interested in starting its voluntary source water protection program.
- 7. Rank each PWS having a surface water treatment system annually as stipulated by the standard Status Component of the Area Wide Optimization Program (AWOP), increase the number of PWSs meeting their AWOP goals, and improve the scores of those systems already in the program.

C. Program Activities

A construction permit application, whether for new system construction or modifications to an existing system, must be accompanied by approvable plans and specifications before any construction permit can be issued to the applicant. The application along with its plans and specifications will be reviewed and approved by a permitting engineer prior to the construction permit being issued. Inspections will be made periodically during the construction process. When construction is completed, a final inspection will be made to ensure the system will provide drinking water capable of meeting state and federal requirements. The final inspection is made by the DHEC region engineer to document the project was completed in compliance with the approved plans and specifications. Approvals to operate cannot be issued until the engineer determines that all completed construction followed the approved plans and specifications.

A longstanding BOW goal is to issue operating permits for all federally defined PWSs. Before issuance, an engineer reviews the system's capacity to determine if it is adequate for the current number of customers and how many additional services (taps) may be added. When issued, an operating permit will contain standard special conditions plus any needed system-specific special conditions. An enforcement referral may be made if the system doesn't comply with any of the special conditions. As of August 2019, operating permits had been issued to 1280 or 91.5% of the 1399 active federally defined water systems. The majority of active federally defined waters systems not have operating permits are transient systems.

A database is maintained for PWSs that includes drinking water parameters above the Maximum Contaminant Level (MCL) or that may be approaching the MCL. These MCL incidences are forwarded to other DHEC divisions or bureaus responsible for regulating potential contamination sources.

Although not required by the 1996 SDWA amendments, the implementation of source water protection activities is an agency goal to better serve regulated PWSs and the public. DHEC welcomes any opportunity to assist a regulated PWS, local governments, environmental organizations and members of the public to implement local source water protection programs. Actions may include best management practices or instituting zoning restrictions to prevent certain activities that could present an adverse risk to the water supply.

A component of the PWSS program that continues to be vital in protecting the health of the citizens of this state is the sanitary survey program. As part of the sanitary survey, DHEC staff perform on-site inspections of water systems to assess their technical and managerial capacities to be able to consistently supply their customers with drinking water that meets state and federal standards. Sanitary surveys for community systems are performed annually, non-transient non-community systems have a survey once every two years, and transient non-community systems have a survey once every three years.

When compliance deficiencies (items rated unsatisfactory or needs improvement) are noted in a sanitary survey, the system may receive technical assistance or an enforcement referral, or both, to address the deficiencies. Usually a follow-up survey is completed when technical assistance is provided to address a deficiency. Significant deficiencies will result in an automatic enforcement referral. Examples of this type of deficiency include the lack of protection from contamination at the source, treatment/chemical feed problems, water quality issues in the distribution system, lack of protection from contamination in storage facilities, the lack of reliable capacity information from pump facilities and controls, inadequate monitoring and record keeping, and uncorrected deficiencies from a previous survey. In State Fiscal Year (SFY) 2019, sanitary surveys were done on 708 federal defined systems and 8 of those were rated unsatisfactory. The percentage of unsatisfactory rated systems during this period is 1.1% of all systems surveyed during the year.

Water systems compliance deficiencies noted on their sanitary survey and other regulatory compliance issues may be referred to Drinking Water Enforcement Section for resolution. During SFY 2019, a total of 40 referrals were sent to the Enforcement Section for disposition. Referrals for reasons other than a poor sanitary survey rating include starting construction without a construction permit, operating a PWS or components of a PWS without a DHEC-issued approval to place into operation, maximum contamination level exceedances, or the PWS employed an operator who does not have the correct operator certification for that PWS. The 40 referrals were addressed by issuing 12 warning letters, 28 consent orders and zero (0) administrative orders.

Chemical and radionuclide monitoring compliance is 99% for all state public water systems. A big reason this compliance percentage continues to be high is legislation passed in 1993 made it mandatory for all PWSs to be monitored. The monitoring is funded by annual fees paid by PWSs.

The most recent annual report for the Area Wide Optimization Program (AWOP) can be found in Attachment 7 of this SRF annual report. More information detailing the outcomes and successes of AWOP are found there.

This past year the PWSS program set-aside was used to fund DHEC staff in the Office of Rural Water (ORW) to provide technical assistance to small drinking water systems on a variety of technical, managerial and financial issues. The ORW was established by DHEC in May 2016 to seek innovative solutions and collaborative partnerships to resolve long-standing drinking water and wastewater issues for small rural systems. The Office is non-regulatory in nature but is often asked to assist entities that have regulatory compliance issues. ORW projects originate with referrals from DHEC management, regional offices, or the drinking water enforcement team. In addition, assistance and referrals are requested and obtained from state and federal funding partners and even entities themselves.

In summary, the PWSS program set-aside continues to fund important drinking water programs and activities in South Carolina. These programs and activities are beneficial in helping to ensure that the citizens of the state are served by a PWS that has an adequate water supply and their drinking water meets state and federal standards.

ATTACHMENT 6

FY 2019 ANNUAL REPORT SOURCE WATER PROTECTION PROGRAM September 2019

A. Introduction

Many programs within DHEC contribute to the monitoring, protection, restoration and enhancement of source waters in South Carolina. DHEC set aside \$719,250 of the FY2018 Drinking Water State Revolving Fund (DWSRF) capitalization grant for source water protection programs and projects. These funds are being used for the following: 1) the development of a nutrient Total Maximum Daily Load (TMDL) model for the Catawba River Basin, 2) the development of watershed based plans for watersheds that have Source Water Protection Areas (SWPAs) within the watershed, 3) support for water resource studies and programs to protect and preserve source waters in the state including groundwater or surface water resources, and 4) monitoring for Hazardous Algal Blooms in South Carolina lakes, especially lakes that have drinking water intakes or are heavily used for primary contact recreation.

B. Goals and Objectives

Surface water monitoring and assessment have determined that some waters within SWPAs are impaired in accordance with Section 303(d) of the Clean Water Act. To address these impairments in SWPAs, TMDLs need to be developed, watershed-based plans need to be prepared, and restoration activities implemented (e.g. 319 projects). Population growth and increased economic development in the state are placing more demands on available water resources. It is important to be able to understand, monitor and manage the water resources in the state so source waters will be protected and preserved. To protect public health, DHEC will monitor for Hazardous Algal Blooms in South Carolina lakes, especially lakes that have drinking water intakes or are heavily used for primary contact recreation.

C. Program Results

DHEC used the funds set aside from the 2018 DWSRF capitalization grant and previous capitalization grants to support the four source water protection initiatives during SFY2019, as described below:

- 1) <u>Catawba River Nutrient TMDL Model</u> In response to stakeholder requests, DHEC began conducting intensive special monitoring in the Catawba basin to support development of new watershed, river and lake water quality models and establishing site-specific numeric nutrient criteria in the lower Catawba lakes. Grant funds were used to purchase continuous monitoring buoys, five continuous nitrate sensors, one weather station, and related lab and field items. The data collected will be used to support development of a nutrient TMDL for the Catawba River.
- 2) <u>Watershed Based Plans</u> A request for proposals was issued in September of 2018 for the development of watershed-based plans as mandated by the EPA's watershed-based plans development guidance document. The plans address ambient surface water pollutants and their impacts on surface water bodies that are also drinking water sources. Proposals are accepted from SRF-eligible borrowers, watershed organizations, soil and water conservation districts, regional planning commissions, and

The first watershed-based plan development project is for the Back River and Foster Creek watersheds in Berkeley County. These watersheds contain a source water intake for Charleston Water System, which is the lead organization for the project. Drinking water from the intake serves portions of Dorchester, Berkeley, and Charleston Counties. The project addresses bacteria, nitrogen, and phosphorus. Cooperating organizations include Cadmus and the Naval Weapons Station – Joint Base Charleston. This watershed has an approved TMDL.

The second project is for the Keowee River – Lake Keowee and Little River – Lake Keowee watersheds in Oconee and Pickens counties. The watersheds include source water intakes for Greenville Water and the City of Seneca. The project addresses bacteria, sediment, nitrogen, and phosphorus. It is led by the Lake Keowee Source Water Protection Team. Cooperating organizations include: Upstate Forever, the Friends of Lake Keowee Society (FOLKS), Seneca Light & Water, Greenville Water, Pickens County, Advocates for Quality Development, Clemson University Center for Watershed Excellence, and Anderson and Pickens Counties Stormwater Partners. This watershed has an approved TMDL.

The third project is for the South Saluda River watershed in Greenville and Pickens counties. The watershed includes source water intakes for Easley Combined Utilities and Greenville Water System. The project addresses aquatic life and sediment. It is led by Save Our Saluda. Cooperating organizations include: Clemson Cooperative Extension, Easley Combined Utilities, Furman University, Greenville County Soil and Water Conservation District, Natureland Trust, Pickens County, Powdersville Water, Renewable Water Resources, South Carolina Rural Water Association, Mountain Bridge Trout Unlimited, and Upstate Forever. This watershed has an approved TMDL.

- 3) Water Resources Studies SRF funds were used to collect and evaluate water use data for surface water and groundwater to better manage water resources in the state. Staff worked on groundwater management plans for areas of the state designated as Capacity Use Areas. Capacity Use Areas are areas within the state where the groundwater aquifers are vulnerable to overuse and/or salt water intrusion. Seven counties in the coastal plain of SC were designated as the Western Capacity Use Area in November 2018. A state-wide surface water models continues to be developed and refined to better manage surface water resources in the state. The surface water model also is used for the development and implementation of surface water withdrawal permits in the state.
- 4) <u>Hazardous Algal Bloom Studies</u> DHEC staff collected and analyzed samples were taken from 27 lakes across South Carolina from August to November of 2018. The study was continued in 2019 starting in May with sampling continuing until the end of October. The same sampling plan from 2018 is being conducted again in 2019. These samples are analyzed for microcystins and cylindrospermopsin via Enzyme Linked Immunosorbent Assay (ELISA). Out of the four months of sampling in 2018, only one station had quantifiable amounts of cylindrospermopsin present (>0.040 ug/L). However, approximately 50% of the samples analyzed for microcystins showed quantifiable amounts present (>0.100 ug/L). The highest concentration of samples analyzed for microcystins in 2018 was approximately 0.371 ug/L from Lake Whelchel. We are still in the middle of the sampling season but

of the samples analyzed from May to June, approximately 70% show quantifiable amounts of Microcystin and 10% show quantifiable amounts of Cylindrospermopsin. We have identified multiple blooms during the 2019 season where we have identified toxin producing species such as Anabaena, Oscillatoria, Lyngbya, and Microcystis. Specifically, we have identified the presence of Microcystis in Lake Wateree via tow net. We analyzed that water sample, which is nearby the Lugoff-Elgin drinking water intake, and received our highest Microcystin values from our entire sampling period, of around 4 ug/L. We also were able to identify Anabaena on Lake Rabon as being a potential cause for their taste and odor issues.

South Carolina AWOP Annual Report for 2018

March 2019

Prepared For:

U.S. EPA Region 4 Multi-State Area Wide Optimization Program

Prepared By:

SC DHEC Bureau of Water
Drinking Water Protection Division
2600 Bull Street
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Maintaining the Program

Since 1997, South Carolina Department of Health & Environmental Control's (SCDHEC's) Drinking Water Protection Division has participated in the Environmental Protection Agency's (EPA's) National Area-Wide Optimization Program (AWOP). The goal of the program is to maximize public health protection by optimizing water treatment plant performance and reducing disinfection byproducts in water distribution systems. As consumers demand more scrutiny of their drinking water presence of lead and copper, pharmaceuticals, and other contaminants of concern, AWOP adapts to accept these challenges.

Identify & Address Institutional Challenges

During 2018, there continued to be increased interest and regulatory agency focus on lead in drinking water. Using procedures, critical thinking, and other analysis skills developed through involvement in the AWOP, the Department spent much of 2018 studying and analyzing lead and copper in schools and childcare facilities. Many non-traditional AWOP activities were completed by our AWOP team and are being continued. Because of the success of the AWOP process, the National Optimization Leadership Team (NOLT) continually looks for potential optimization areas within the treatment operations and distribution processes.

Regulatory implementation continues to be an ongoing activity for our team. Stage 2 Disinfection By-Product (DBP) sampling has been ongoing for several years. Water systems that exclusively purchase their water continue to require a significant amount of technical assistance. These water systems account for numerous violations. Many of these systems have exceeded both the operational evaluation level (OEL) and the maximum contaminant level (MCL). Several of these systems have had and are having difficulties determining effective corrective action to return to compliance. Strategies that have worked include: reducing the amount of total organic carbon (TOC) through the wholesale provider's surface water plant, optimizing disinfection strategies, and collaborating and partnering with water providers to approach the challenge from a combined distribution system standpoint. Many systems have installed tank mixers and aeration as a corrective action.

Our enforcement process requires a correction action plan be completed for non-compliance. This plan is produced by the water system with technical assistance from consulting engineers, SCDHEC, and other partners. This approach enables

water systems to learn what does and does not work and then select the right solution for their situation. After this process, most water systems return to compliance.

Internal Support

Internal support for the program remains high. SCDHEC's Environmental Affairs Director, Myra Reece, participates in our AWOP awards program annually and continues to have positive comments about the program and the water systems that achieve the optimized performance goals. After helping to distribute the awards to the water systems, she made several comments complimenting staff and encouraging SCDHEC and water system staff to continue our efforts. She also had many positive comments to share with the regulated systems about the importance of clean water and thanked them for their efforts. Even though EPA Region 4 wasn't able to attend, Region 4 provided a statement that was read to the attendees. After the program, the statement was shared in its entirety with our management and a blog post was written by our media relations office. Many water systems publish their own media stories and share pictures of their receipt of the award. Most water plants proudly display the award and poster.

Optimization continues to be encouraged in all water program areas. This has recently been used in our review of the lead and copper program. Optimization has been applied via data reviews and analysis, sampling protocol reviews, assessing potential for special studies, and sampling more than the minimum required in the regulation.

One notable AWOP technical assistance activity will be upcoming in April 2019. For the past several years, one small water system, although remaining in full regulatory compliance, has had numerous customer complaints and has drawn much media scrutiny. SCDHEC senior management have requested and arranged to have a comprehensive performance evaluation (CPE) performed by a 3rd party. Using the optimization process, it is hoped that the water system's challenges will be solved.

Most of the funding for South Carolina's program comes from the State Revolving Fund (SRF) program. An annual report to EPA Region 4 and tri-annual report to the Governor, compiled through the SRF program, includes a large AWOP section.

Core Team Structure & Capacity

South Carolina's Core AWOP Team Members

AWOP Team Member	Position	CPE Training Status
Doug Kinard, PE	Division Director	Complete
Richard Welch, Jr., PE	Section Manager	Complete
Lindsey Bounds	Environmental Engineer	Complete
Tracy Scott	Environmental Engineer	1 CPE's remaining
Rene Chavis	Environmental Engineer	3 CPE's remaining
Mohammad Korkzan	Environmental Engineer	3 CPE's remaining
Kyle Maurer, Sr, PE	Environmental Engineer	3 CPE's remaining
Fred Taylor*	Environmental Scientist	Complete
Debra Boston*	Environmental Scientist	3 CPE's remaining

^{*}Certified water treatment and/or wastewater plant operator.

AWOP Vision

Drinking water optimization in South Carolina has been a priority of our agency since the program's inception in 1997 and has been part of our agency's Strategic Plan for several years. The high standards and goals set by the program have created a more technically capable regulated community in our state.

The vision for our program is to have 95 percent of our population served by plants optimized for both microbial and disinfection byproducts. Several challenges face our utilities in their quest for DBP optimization. Through research, regulation, technical assistance, and targeted training, we are becoming more capable of helping with this challenge.

Water System Status

Microbial Ranking Criteria & Optimization

The SCDHEC AWOP team has developed a priority ranking system to facilitate surface water systems prioritization with respect to public health risk potential. This system has been very successful and has been reevaluated several times since its development. The prioritization allows the team to apply resources and optimization tools where the need is greatest. The scoring worksheet used to

evaluate each plant considers a 2-year regulatory compliance (MCL, treatment technique), sanitary survey results from a 2-year period, and operational data (turbidity measurements) taken over a 1-year period. Using this worksheet has allowed the team to focus on those systems that have the greatest need for optimized performance.

Microbial Ranking Criteria Worksheet

2-year regulatory Po		Results of last 2	Points
compliance (Per #)		Sanitary Surveys	(Per #)
# Acute MCL violations	40	# Overall unsatisfactory surveys	40
# MCL violations	20	# Overall needs improvement surveys	20
# Treatment technique	20	# Individual items unsatisfactory	10
violations	20	# Individual items need improvement	5

Operational Data based on 1-year									
Filtered Turbio	lity	Settled Turbid	lity	Raw Turbidity					
# days > 1 NTU	20	# days > 10 NTU	5	# days > 250 NTU	5				
# days > 0.5 NTU	10	# days > 5 NTU	2	# days > 100 NTU	2				
# days > 0.3 NTU	2	# days > 2 NTU	0.5	# days > 50 NTU	1				
# days > 0.1 NTU	1			# days > 25 NTU	0.5				

Is plant operated 24/hr day?	No = 20 points
Does plant have more than one clearwell?	No = 20 points

Prioritized List of Plants

As demonstrated with past annual reports, South Carolina continues to show microbial optimization success at our surface water treatment plants. The table below shows the current list of the worst performing plants and performance numbers for 2018. In addition, the table shows the corresponding water system ranking in 2017.

Microbial Status Component

2018 Rank	PWS	Status Notes	Ongoing or Planned Action	2017 Rank	2018 AWOP
1	Florence	95 th % Settled = 2.77 NTU 95 th % Filtered = 0.19 NTU	Compliance/ Enforcement action; Instrument issues	3	Ν
2	Bennettsville	95 th % Filtered = 0.24 NTU Ave. Filtered = 0.15 NTU	Met Settled AWOP goal; Enforcement	NR	Ν

			action related to hurricane		
3	York	95 th % Settled = 2.33 NTU 95 th % Filtered = 0.23 NTU	Ongoing technical assistance; plans to purchase water; closing plant within 6 months	1	N
4	Batesburg- Leesville	95 th % Settled = 2.69 NTU 95 th % Filtered = 0.15 NTU	No action planned or taken	2	N
5	Whitmire	Turbid Raw Water (207.5 points)	Routine Compliance Inspections	8	Υ
6	Carlisle Finishing ¹	95 th % Filtered = 0.11 NTU Turbid Raw Water (192 points)	Met Settled AWOP goal	6	N
7	Walhalla	95 th % Settled = 3.08 NTU 95 th % Filtered = 0.16 NTU "Needs Improvement" on 2 most recent surveys	New plant & intake under construction; New source with better water quality	5	N
8	Cheraw	Turbid Raw Water (151 points)	Routine Compliance Inspections; O&M issues caused by hurricane (lost source temporarily)	10	Υ
9	Pickens	95 th % Settled = 2.40 NTU 95 th % Filtered = 0.14 NTU	Technical Assistance	NR	Z
10	VC Summer ¹	95 th % Filtered = 0.15 NTU Ave. Filtered = 0.11 NTU	Met Settled AWOP goal; New plant online within 3 months	4	Z

^{1.} Industry

During 2018, 41 of the 51 surface water treatment plants were optimized for turbidity. The optimization program continues to be discussed during the annual sanitary survey at each surface water treatment plant. Charts and data for the time since the last survey of that water system are presented and discussed. The sanitary survey report also contains an in-depth section on the optimization and reporting of plant performance.

DBP Optimization

The DBP goals used to determine optimization were developed by the EPA Technical Support Center. DBP data is collected by the team and input into spreadsheets. To determine optimization with respect to the DBP goals, locational running annual averages (LRAA's) are calculated and the maximum LRAA is taken from each location for a 1-year period. All of the maximums are averaged and the average of these maximums must be less than 60 ug/l for trihalomethanes (THMs) and less than 40 ug/l for haloacetic acids (HAAs).

Average of Maximum LRAA Determination Worksheet (example data)

	Sample		20	13			2	014	
	Site	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
	1	27	69	101	44	24	59	120	35
	2	30	75	95	53	35	90	128	55
ne	3	29	52	78	41	21	50	98	37
Name	4	25	79	105	53	21	36	90	26
Ε	LRAA 1	4 Quarters are for site 1			60	60	57	62	60
System	LRAA 2		<i>11 11</i>		63	65	68	77	77
Sy	LRAA 3		<i>11 11</i>		50	48	48	53	52
	LRAA 4		" "		66	65	54	50	43
	MAX LRAA	Max	from any	/ site	66	65	68	77	77
	Avg of Max L	RAA's							71
	DBP Goal								60

South Carolina continues to show DBP optimization success at our surface water treatment plants and the distribution systems they serve. The tables below show the number and percent of surface water treatment plants and distribution systems they serve that were optimized for DBPs in 2018.

DBP Status Component (Surface Water Plants, *n*=51)

Optimization	20	18	2017		
Metric	Count	Percent	Count	Percent	
Met THM Compliance	50	98%			
HAA Compliance	51	100%			
THM Goal	46	90%			
HAA Goal	41	80%			
TOC Goal	40	78%	25	49%	
ALL Goals	31	61%	25	49%	

DBP Status Component (Surface Water Purchase Systems, *n*=157)

Optimization	20	18	2017		
Metric	Count	Percent	Count	Percent	
Wholesalers in compliance	156	99%	157	100%	
Wholesalers met goals	95	61%	60	38%	
THM Compliance	156	99%	157	100%	
HAA Compliance	157	100%	157	100%	
THM Goal	138	88%	142	90%	
HAA Goal	150	96%	141	90%	
ALL Goals	136	87%	130	83%	

TPI Implementation

List of Activities

During the past 12 months, SCDHEC's AWOP team has facilitated and participated in numerous technical assistance and optimization activities. The table below represents some of the major achievements during this time.

Date	Activity	Topics/Results		
March 2018	Multi-State Planning Meeting	Program Exposure		
March 2019	Multi-State Flaming Meeting	Awareness & Recognition		
March 2018	State of South Carolina Annual AWOP	Program Exposure, TPI,		
	Report 2017	Impact/Lesson Learned		
May 2018	SC Turbidity & DBP Summary Submission	Program Exposure, TPI,		
	to NOLT	Impact/Lesson Learned		
June 2018	SCAWOP Workplan for SRF Cap Grant	Program Exposure		
	Application	Awareness & Recognition		
June 2018	South Carolina's FY 2017 Report – PWSSP	Program Exposure		
Julie 2016	(AWOP)	Awareness & Recognition		
	Presentation on SC AWOP program at	Program Exposure		
December 2018	the Annual Surface Water Meeting with	Awareness & Recognition		
	AWOP awards			

Description of Tools & Site Selection

The SCDHEC AWOP team has completed several Level 2 assessments related to the Revised Total Coliform Rule (RTCR). A Level 2 assessment is an evaluation to identify sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment. AWOP tools have been used in several recent projects including: special sampling investigations, Lead and Copper Rule (LCR) implementation, construction permit reviews, and general drinking water program administration.

Building Awareness & Recognition

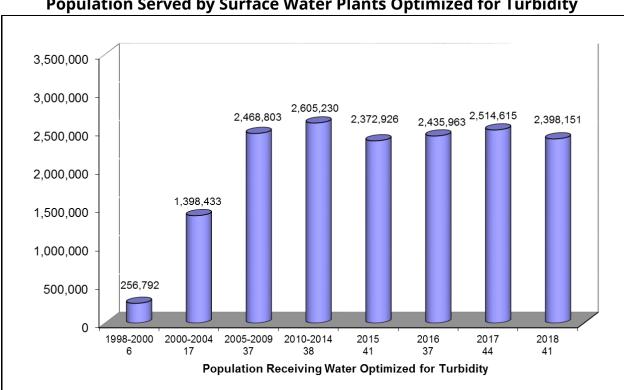
Since the beginning of AWOP in South Carolina, our team has worked to continually build awareness of the importance for optimized performance. Though the team members have changed, the importance of optimization has not diminished. With the advent of disinfection byproducts optimization, the program focus has broadened with the addition of more technical aspects and new tools for improving optimized performance.

The AWOP awards and recognition program, initiated in 2001, was held in 2018 in conjunction with our annual surface water meeting. Both SCDHEC's Director of Environmental Affairs and Chief of the Bureau of Water attended the program and were complimentary of the program. In the past, EPA Region 4 and EPA's TSC in Cincinnati have attended the meetings. Many water systems that receive an award have accompanying press releases afterwards to share their accomplishments.

AWOP Impacts

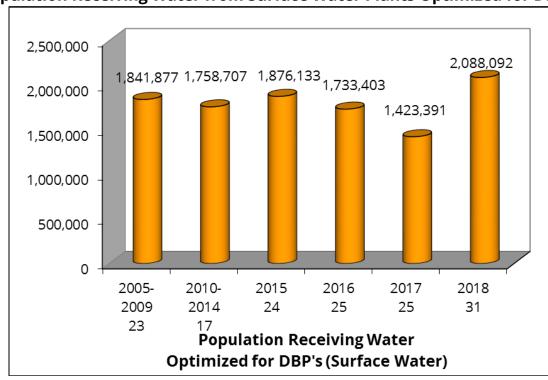
Tangible Impacts from Targeted Activities

There were three less plants that met the microbial optimization goals during 2018 than in 2018. As such, the number of citizens who receive water from a microbial optimized plant also decreased.



Population Served by Surface Water Plants Optimized for Turbidity

The above chart shows the population served by optimized plants. The population served by optimized plants (met settled & filtered goal) was 48,799 in 1998 and approximately 2.4 million in 2018. In 2018, approximately 3.0 million people in South Carolina were supplied with drinking water from surface water plants (State population 4.5 million). Approximately 80% of those people received drinking water from a plant optimized for microbial protection.



Population Receiving Water from Surface Water Plants Optimized for DBP's

The above chart shows the population receiving water from a DBP-optimized plant. Most water systems in South Carolina do not have trouble meeting the TOC or THM goals. Of the 3 million people statewide supplied by surface water, 2.09 million, or 69% were served drinking water by DBP-optimized plants in 2018.

Due to compliance monitoring transition period as previously stated, the graph that shows population served by DBP-optimized plants cannot be completed from 2011 to 2014 because of insufficient data to determine which plants achieved the optimization goals.

Intangible Impacts from Targeted Activities

Inspiring Innovation:

Since the beginning of the program, SCDHEC's AWOP team has been recognized as a national leader in the program. Team members are routinely called upon to present at national meetings and regional workshops. The worksheets and innovative approaches to data management and collection have been shared with and adopted by other states. Our staff is often asked by other states to assist with their inspections and comprehensive water plant and distribution system evaluations.

Embracing Service:

Our team has found that the regulated community wants to exceed the present regulatory requirements to prevent violations and enforcement actions. AWOP has been very helpful in South Carolina by reducing non-compliance, developing a better relationship with the regulated community, and helping build expertise in both our staff and water treatment professionals.

Relationships with the regulated community:

In South Carolina, the regulated community continues to respond to the raised scrutiny on public health protection. Through the optimization efforts, most drinking water operators view themselves as professionals responsible for their customers' well-being. With the implementation of each new federal drinking water regulation, the water systems learn to adjust operations and to think of regulatory requirements as minimums, not targets.

We have found that the regulated community wants to exceed the present regulatory requirements to prevent violations and enforcement actions. AWOP has been very helpful in South Carolina by reducing non-compliance, developing a better relationship with the regulated community, and building the expertise of our staff and water treatment professionals.

AWOP Testimonials:

"The South Carolina Area Wide Optimization Program has aided us in producing water that is at a greater level of public health protection by exceeding regulatory requirements for particle removal. Twice a year, we host citizen awareness groups called "Inside Rock Hill". During the tours, we show these citizens our live SCADA data. Most citizens are amazed and appreciative when they can witness the turbidity levels decreasing as it moves throughout treatment to our finished product."

Susan Featherstone, Water/Wastewater Superintendent, City of Rock Hill

"The EPA Region 4 AWOP Team wants to acknowledge the tremendous leadership of DHEC in supporting AWOP both in South Carolina and nationally. From the support of

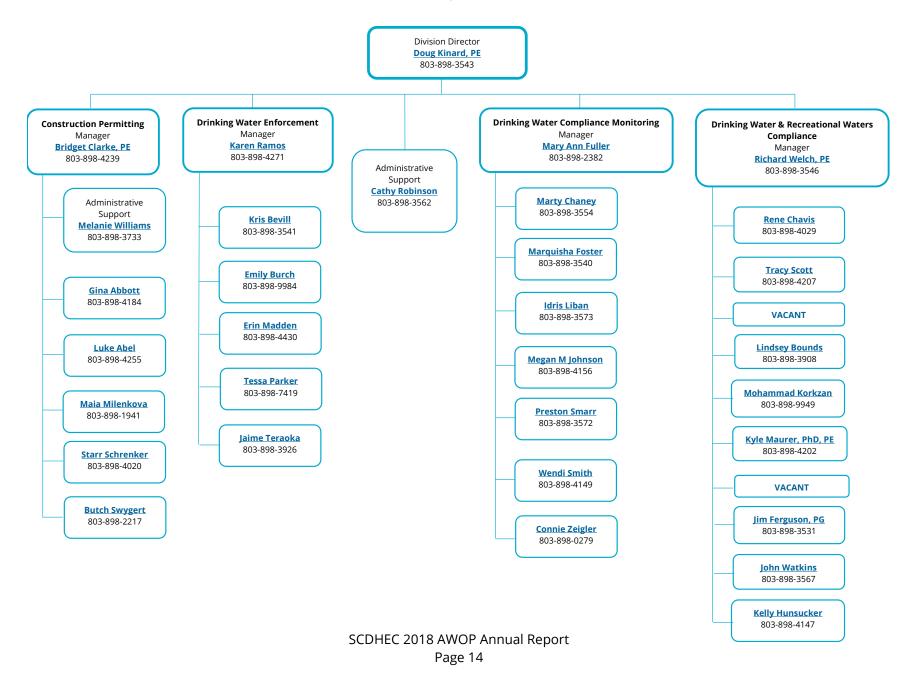
senior levels of management right through to the ranks of staff in DHEC's Drinking Water Protection Division, the continued commitment shown by this agency is second to none among states involved in the program. SC AWOP staff here represent your work very effectively to the national network. We at EPA count them as national leaders of this program."

EPA Region 4 AWOP Team, Drinking Water Section, Atlanta, GA

Lessons Learned

SCDHEC's AWOP program continues to serve as a model for other programs to do more with less (i.e. getting the most out of what you have). "Optimization thinking" has been encouraged in other program areas. Because South Carolina AWOP bridges across several sections (compliance, monitoring, permitting, SRF), managers and staff in the other programs have been exposed to AWOP and made aware of the successes.

Division of Drinking Water Protection





June 25, 2018

The Honorable Trey Glenn Regional Administrator U.S. Environmental Protection Agency, Region IV 61 Forsyth Street, S.W. Atlanta, GA 30303

Re: Certification of FY 2018 Drinking Water State Revolving Fund Capitalization

Grant

Dear Mr. Glenn:

As the designee of the South Carolina Attorney General, I am providing the certification required by 40 CFR §35.3545(d). The certification requires confirmation that the legislation establishing the South Carolina Drinking Water State Revolving Fund (DWSRF) and the powers it confers are consistent with state law, that the State of South Carolina may legally bind itself to the terms of the capitalization grant agreement, and that an agency of the State is authorized to enter into capitalization agreements with the EPA, accept grant awards, and "otherwise manage the Fund" as required.

I have reviewed the legislation and provide the following certification.

Legislation Establishing DWSRFs Consistent with State Law

I certify that South Carolina Code Annotated §§ 48-5-10 through 180, entitled "The South Carolina Water Quality Revolving Fund Authority Act" (the "Act") authorizes the South Carolina Department of Health and Environmental Control (the "Department") to perform those functions required by 40 CFR §35.3545. As originally promulgated by 1992 Act No. 513, the Act addressed only authorization for the Clean Water State Revolving Fund, and was thereafter amended to include similar authority for the DWSRF. See 1997 Act No. 41. The Act has been further amended four times by the South Carolina General Assembly. See 1994 Act No. 305; 2005 Act No. 164; 2010 Act No. 185; 2014 Act No. 121. The amendments to the Act do not alter or impair the authority granted to the Department. I have found no court determinations which affect this certification.

Authority Conferred by State Revolving Fund Legislation is Consistent with State Law

It is my opinion, and I hereby certify, that the powers conferred by South Carolina Code Annotated §§ 48-5-10 through 180, as amended, are consistent with South Carolina statutory and constitutional law.

Ability of the State to Bind Itself to Terms of the Grant

In regard to whether the State may legally bind itself to the terms of the grant agreement, the Act provides that "[t]here is created the South Carolina Water Quality Revolving Fund Authority. The authority is a public instrumentality of this State and the exercise by it of a power conferred in this chapter is the performance of an essential public function." S.C. Code Ann. §48-5-30 (Supp. 2017). The Authority is composed of members of the State Fiscal Accountability Authority and is a "public body corporate" of the State. S.C. Code Ann. §48-5-40(1) (2008). In the exercise of its powers and functions, the Authority has the power to "enter into agreements with a department, agency, or instrumentality of the United States or of this State for the purpose of planning and providing for the financing of projects." S.C. Code Ann. §48-5-40(13) (2008).

Similarly, the Department has the authority to "enter into binding agreements with the agency as necessary to effect the implementation of [the Act]." S.C. Code Ann. §48-5-60(6) (Supp. 2017). "Agency" is defined to mean the United States Environmental Protection Agency. S.C. Code Ann. §48-5-20(1) (2008).

I therefore certify that the State of South Carolina may legally bind itself through the Authority and the Department to the terms of the capitalization grant agreement, which awards funds to South Carolina for the purpose of operating the South Carolina DWSRF.

Please let me know should you have any questions or require any further information.

yen of

Yours truly,

cc:

W. Marshall Taylor, Jr.

General Counsel

Charles M. Gorman, P.G.

SOUTH CAROLINA DRINKING WATER SRF PROJECTS FEDERAL FY 2018 EQUIVALENCY PROJECT LISTING

Attachment 9 - Drinking Water Equivalency Projects

Sponsor & Project	DHEC (SRF) Project #	RIA Project Number	Service Population	Binding Commitment (Loan Closing Date)	Interest Rate	Date Loan Matures	Fund Asst. Category (1-9)	Construction Start	Total Project Cost	Total SRF Loan Amount	Total Amount of APF Additional Loan Subsidy	Project Description
Winnsboro, Town of Raw Water Intake and Raw Water Line	2010001-02	3-078-17	14,265	11/22/2017	1.90%	11/1/2038	7	12/4/2017	\$13,213,842	\$13,213,842	\$0	Construct an intake and raw water pump station and install ~67,000 linear feet of 24" raw water pipe from the Broad River to the town's existing raw water reservoir.
DWSRF Equivalency ProjectsTotal Amount Credited toward the FY 2018 Capitalization Grant of \$14,385,000								\$13,213,842	\$13,213,842	\$0		