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Executive Summary

The State of Tennessee, Department of Environment and Conservation (TDEC) has developed its Annual Report for State Fiscal Year (SFY) 2022 (July 1, 2021 - June 30, 2022). This report describes how the State of Tennessee met the goals and objectives of its Clean Water State Revolving Fund (CWSRF) Loan Program identified in the Intended Use Plan (IUP) and assisted public wastewater systems with wastewater infrastructure loans. This report details the actual use of funds, state match and principal forgiveness, among other information. A full list of all state FY 2022 loan recipients and the assistance amounts can be found in the Appendix of this report.

Goals and Accomplishments

The U.S. Congress gives state CWSRF programs flexibility to design a program tailored to meet the needs of the state, local communities, and public water systems. Tennessee's CWSRF program has developed long and short-term goals as a framework for decisions Tennessee makes in the CWSRF program.

	Table 1: Long- and Short-Term Goals, Objectives and Results Clean Water SRF Program for SFY 2022						
	Goals	Objectives	Results				
als	Provide local governments with low-cost financial	Ensure financial stability of loan recipients	Fiscal responsibilities are coordinated with TDEC, the Comptroller's Office and the Dept. of Finance and Administration to ensure appropriate internal controls and proper accounting procedures Revised operating budget, internal audit,				
9	assistance	Ensure use of GAAP	and end of year fiscal reporting				
Long Term Goals		Obligate funds in a timely manner	Ongoing, including development of new database for tracking funds and project progress				
Protect and enhance water quality in TN by ensuring the technical integrity of funded projects		Ensure adequate and efficient project planning, design, and construction	Ongoing, including development of SOPs, financial sufficiency process, new database for tracking projects, documentation, and integration with other TDEC programs				



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		Maintain and award high ranking projects on the PRL	Ongoing, including updating solicitation process, created a marketing and outreach campaign, instituting new allocation of principle forgiveness; increase in solicitation response by 60%; All projects reviewed for compliance with federal crosscutting authorities and an approved SERP prior to loan award.	
		Apply for CAP grant and submit IUPs	Complete, including redesign of the IUP format	
Maximize funds available through cooperation with EPA How Manage an effective		Work with all potential borrowers that have eligible projects	Ongoing including innovative pilot projec strategy to strengthen and grow types of effective SRF projects	
		Submit Annual Report to EPA	Ongoing, including redesign of Annual Report format	
Shor	Manage an effective and efficient CWSRF Loan Program	Prepare and update admin policies, guidance, and standard operating procedures	Developed new SOPs for technical and financial review process, developed a streamlined contacts database	

Financial Summary

Source and Use of Funds

The Clean Water Act allows each state flexibility establishing how much of the Capitalization Grant will be used for infrastructure loans, assistance to financially disadvantaged communities, green projects, and other technical assistance activities. The State, in turn, has the responsibility to best direct the funds to address wastewater infrastructure problems.

In state fiscal year (SFY) 2022, CWSRF received a federal fiscal year (FFY) 2021 Capitalization Grant for \$23,082,000 and state matched those dollars in the amount of \$4,616,400. This total of \$27,698,400 represents the FY 2022 appropriated dollars used for clean water projects and other approved technical assistance activities.

Financial Overview

During this fiscal year the CWSRF program awarded eighteen (18) loans totaling \$82,825,220 (Table 2). Eight (8) entities submitted request to either return unused portions of their loans or all of its funding totaling the amount of \$3,107,278. The State's beginning balance for SFY 2022 was \$251,414,735. During the SFY 2022, the State received \$60,212,413 in principal repayments, \$9,964,376 in interest income from repayments, and \$796,464 in treasury



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income. The State's expended \$1,114,529 in administrative cost for associated programmatic activities. The ending Clean Water unobligated fund balance is \$269,253,917 for FY 2022. The CWSRF does not have an unliquidated obligation balance for FY 2021. The details for the financial summary of CWSRF can be found in Table 3. Cumulatively, the CWSRF has received \$1,026,601,421 in principal repayments, \$283,863,242 in repayment interest income, and \$104,485,213 in treasury interest. Please see the details in Table 1 and Table 2. TDEC CWSRF obligated \$82,825,220 in SFY 2022 from the State Revolving Fund (see table 4).

Table 2: Annual Highlights from Clean Water SRF				
State Fiscal Year (SFY) 2022 and Federal Fiscal Year (FFY) 2021				
Eighteen (18) new loans awarded	\$82,825,220			
Eight (8) projects requested a decrease in assistance	(\$3,107,278)			
CWSRF Binding Obligations	\$82,825,220			
Five (5) new loans awarded from Cap Grant	\$9,970,000			
Thirteen (13) loans awarded from the SRF revolving base	\$72,855,220			
Fourteen (14) total construction starts	\$115,138,716			
Twelve (12) projects-initiated operations	\$66,578,716			

Table 3: Financial Summary for Clean Water SR State Fiscal Year S(FY) 2022 and Federal Fiscal Year (F	
Financial Summary	Amount
Carry Over from FY 2021	\$251,414,735
Capitalization Grant Award Available for Projects	\$23,082,000
State Appropriations	\$4,616,400
Administrative Costs	(\$1,114,529)
Binding Obligations	(\$82,825,220)
Loan Decrease	\$3,107,278
Principal Repayments	\$60,212,413*
Loan Interest	\$9,964,376*
Treasury Interest Income	\$796,464*
Unobligated Balance as of June 30, 2022	\$269,253,917

^{*}Preliminary numbers from unaudited financial statements.



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An administrative loan fee, eight (8) basis points (.008%), is charged by the Comptroller's Office to process loan documents and payments associated with SRF loans since October 1, 2009. This year, the Comptroller's Office collected fees in the amount of \$579,467. The administrative fee collected was used to process pay requests, create financial journals, process incoming payments, correspond with borrowers, review deposits and borrower balances for correctness, complete audit confirmations, assist with year-end reports, audits by the state, assist with SRF programmatic administration, and assist with TLDA board meetings.

Types of Assistance

CWSRF provided new assistance for a variety of systems based on project needs. There were two (2) projects, totaling \$20,614,550, funded to address secondary treatment at wastewater plants and five (5) projects totaling \$34,037,000 addressing advanced treatment at centralized wastewater plants. There were six (6) new projects funded to arrest infiltration and inflow issues totaling \$23,413,670. CWSRF funded two (2) sewer system rehabilitation projects at \$500,000, two (2) new force main/interceptor project totaling \$2,500,000 and one (1) collection system expansion project at \$1,760,000. Further information on types of assistance and funding amounts can be found in the Appendix.

Financing Rates

The interest rate is based on a community's Ability to Pay determined through the State of TN Ability to Pay Index (ATPI). Interest rates can vary from zero to 100 percent of the interest rate reported on the 20-year Bond Buyer Index and the Municipal Market Data General Obligation Yields published every Thursday. The SRF program provides an updated interest rate weekly each Monday. The State may also recommend a reduction of the interest rate to incentivize Green Project Reserve and sustainable & resilient projects, but not below zero percent. Disadvantaged communities, as determined by the ATPI, are eligible for a lower interest rate or principal forgiveness. Communities, utility districts, and wastewater authorities may also be eligible for lower interest rates or principal forgiveness if they agree to pilot new and innovative techniques or agree to in-kind efforts that benefit the public through providing templates, education, or other actions that can broadly assist other communities in Tennessee to achieve high priority water quality goals. The interest rates for utility districts and wastewater authorities that have service areas in more than one county



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will be evaluated and ranked by utilizing the lowest ATPI for the county or city that directly benefit from the project(s) associated with the loan. The term of the loan is a maximum of 30 years or the useful life of the project whichever is shorter.

Program Assistance Contracts

Ability to Pay Index (ATPI)

TDEC SRF is required by the EPA to use an appropriate ATPI in order to administer SRF clean water and drinking water loans. In addition, the Water Resources Reform and Development Act (WRRDA) of 2014 requires that all state SRF programs use relevant data associated with population trends, income, unemployment, and "other" metrics in the determination of priority ranking and project scoring, tiered interest rates, distribution of additional subsidy, and eligibility for planning and design loans or other benefits for disadvantaged communities. TDEC SRF has contracted with the University of Tennessee Institute of Agriculture (UTIA) Department of Agriculture and Resource Economics Development to update the ATPI annually for all TN counties, cities, and municipalities. The CWSRF used \$45,000 in administrative funding from SFY 2022 for this purpose. The ATPI is a database of socioeconomic and financial data which serves as the foundation for an index used to help make decisions regarding determination interest rates, allocation of subsidy, and identification of options intended to benefit communities that need it the most. Through this contract, a consistent, transparent, and annually updated index is provided to improve decision making in loan and grant administration by TDEC. The ATPI will also enhance coordination between TDEC, ECD, and Tennessee USDA Rural Development regarding potential use of resources to best serve disadvantaged communities.

Targeted Technical Assistance and Training for Small and Disadvantaged Communities

TDEC SRF has contracted with the Tennessee Association of Utility Districts (TAUD) to develop a consolidated technical assistance program to provide targeted technical assistance to distressed or disadvantaged communities. CWSRF allocated \$100,000 from its eligible administrative funding to

focus on technical assistance needs for both public water and wastewater systems; managerial, financial, and technical capacities for systems; assist in reducing occurrence of health-based drinking water violations; optimize resources and support to small and disadvantaged communities and systems across the state; develop new capacity to make full use of Federal



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Capitalization Grant set asides for drinking water; and implement priorities under TNH2O. Technical assistance will be provided at no cost to eligible communities.

Water Loss Training for Tennessee Communities

TDEC SRF developed a contract focused on water loss training for Tennessee communities, utilities, and commissions using a unique water loss data collection system and training methodology with a basic foundation in AWWA methods. This effort allocated \$103,000 from CWSRF program and is intended to aid utilities to determine the origin of their water loss and assist them to identify mitigation actions specifically for their systems. TDEC SRF will work directly with a contractor to develop a customized training system based on the priorities of the Water and Wastewater Financing Board and the Utility Management Review Board of the Treasury to specifically address priorities related to water loss in the State of Tennessee, and to ensure objective and reproducible results that can be used to measure water loss in Tennessee. The developed training program is tailored to issues researched by TDEC to address the needs of the State and incorporate the priorities of TNH₂0.

Provisions of the Operating Agreement and Conditions of the Capitalization Grant

State Match

CWSRF state matching funds for FY 2022 is \$4,616,400 to match the FFY 2021 Capitalization Grant award of \$23,082,000. These funds were available for the match and expended at the 80% federal and 20% state rate in FY 2022. To date, Tennessee has received \$758,990,402 in capitalization grants from EPA. The total amount of state match required for these funds is \$140,621,227. This is slightly less than 20% due to the additions of American Recovery and Reinvestment Act funding (2009) to CWSRF that did not require a state match.

Binding Commitments

TDEC had eighteen (18) binding commitments to provide assistance equal to 120% of the amount for each quarterly grant payment pursuant to 35.3135(c). The FFY 2021 Capitalization Grant including the state match totaled \$27,698,400. The potential loan awards for FY 2022 Intended Use Plan proposed projects totaled \$173,776,067.



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Binding commitments by quarter:

First Quarter (July 1, – September 30, 2021) \$15,587,000 Second Quarter (October 1, – December 31, 2021) \$44,614,550 Third Quarter (January 1, – March 31, 2022) \$19,000,000 Fourth Quarter (April 1, – June 30, 2022) \$3,623,670

Project Assistance, Subsidy, and Loan Terms

The CWSRF Operating Agreement requires reporting of loan terms annually for new assistance projects. Table 4 details the loan terms established in the CWSRF binding commitments from FY 2022.

	Table 4: Binding Commitments a	nd Loan Terms f	or Clea	an Wateı	r SRF		
	State Fiscal Year (FY) 2022 a	nd Federal Fiscal	Year ((FFY) 202			
	Loan	Loan	Loan	Interest	Loan	Base	Loan
	Recipient	Number	Term	Rate	Amount	Dase	Forgive
7/22/2021	Alexandria	SRF 2021-456	5 yrs	0.17%	\$50,000	\$50,000	\$0
7/22/2021	Carthage	CW7 2020-445	5 yrs	0.18%	\$470,000	\$235,000	\$235,000
7/22/2021	Waverly	SRF 2021-462	20 yrs	0.90%	\$580,000	\$580,000	\$0
7/22/2021	Westmoreland	CW8 2021-457	20 yrs	0.65%	\$2,500,000	\$2,000,000	\$500,000
7/22/2021	Westmoreland	SRF 2021-458	20 yrs	0.65%	\$3,987,000	\$3,987,000	\$0
7/22/2021	White House	SRF 2021-449-01	20 yrs	1.09%	\$8,000,000	\$8,000,000	\$0
10/25/2021	City of Franklin	SRF 2017-398-01	30 yrs	1.28%	\$19,500,000	\$19,500,000	\$0
10/25/2021	Dayton	SRF 2021-454	20 yrs	0.37%	\$18,114,550	\$18,114,550	\$0
10/25/2021	Dayton	CW8 2021-453	20 yrs	0.37%	\$2,500,000	\$2,000,000	\$500,000
10/25/2021	Athens UD	CW8 2021-459	20 yrs	0.57%	\$2,000,000	\$2,000,000	\$0
12/20/2021	Metro Lynchburg Moore County UD	CG8 2022-463	20 yrs	1.03%	\$2,500,000	\$2,500,000	\$0
2/23/2022	Chattanooga	SRF 2020-440-01	20 yrs	0.88%	\$19,000,000	\$19,000,000	\$0
6/15/2022	Smyrna	SRF 2022-472	5 yrs	1.21%	\$1,760,000	\$1,760,000	\$0
6/15/2022	Hamilton County Water & Wastewater Treatment Authority	SRF 2022-464	5 yrs	0.79%	\$500,000	\$500,000	\$0
6/15/2022	Hamilton County Water & Wastewater Treatment Authority	SRF 2022-465	5 yrs	0.79%	\$350,000	\$350,000	\$0
6/15/2022	Hamilton County Water & Wastewater Treatment Authority	SRF 2022-466	5 yrs	0.79%	\$150,000	\$150,000	\$0
6/15/2022	Hamilton County Water & Wastewater Treatment Authority	SRF 2022-467	5 yrs	0.79%	\$587,000	\$587,000	\$0
6/15/2022	Hamilton County Water & Wastewater Treatment Authority	SRF 2022-468	5 yrs	0.79%	\$276,670	\$276,670	\$0
					\$82,825,220	\$81,590,220	\$1,235,000

Timely Expenditure of Funds

The State of Tennessee's CWSRF program provides timely disbursements of funds for projects. This assists the state to reduce unliquidated obligations. When a loan is executed, the date is set



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for the first repayment based on the scheduled completion date for project construction. The fixed repayment date is rarely revised to accommodate project delays and serves as incentive for timely construction of the project.

TDEC generally processes disbursement requests within the required timeline, which is thirty (30) calendar days of receipt. This requirement is per 2 CFR §200.305 (Payment) which states, "reimbursement is the preferred method when the requirements in paragraph (b) cannot be met, when the Federal awarding agency sets a specific condition per §200.207 Specific conditions, or when the non-Federal entity requests payment by reimbursement. This method may be used on any Federal award for construction or if the major portion of the construction project is accomplished through private market financing or Federal loans, and the Federal award constitutes a minor portion of the project. When the reimbursement method is used, the Federal awarding agency or pass-through entity must make payment within 30 calendar days after receipt of the billing, unless the Federal awarding agency or pass-through entity reasonably believes the request to be improper."

TDEC CWSRF disbursed a total of \$117,703,045 to loan recipients in SFY 2022. This is included \$116,588,047 in SRF base funds and cap grants funds, and in loan forgiveness in the amount of \$1,114,998. Each disbursement to loan recipients the State provided the necessary match. This activity occurred in the 4th Quarter. The table below provides details of disbursement totals by project through FY 2022.

Disbursement Totals for CWSRF in FY 2022

Table 5: Disbursement Totals from Clean Water SRF State Fiscal Year (SFY) 2022 and Federal Fiscal Year (FFY) 2021					
Loan Recipient	Loan Number	Disbursements	Principal Forgiveness Disbursements		
Alexandria	SRF 21-456	26,350.00	0.00		
Brownsville	SRF 21-452	223,000.00	0.00		
Carthage	CW7 20-445	37,595.50	37,595.50		
Caryville - CJUC	CW8 20-444	18,907.20	2,100.80		
Chapel Hill	CW6 18-399	94,640.40	10,515.60		
Chattanooga	SRF 16-357	10,130,173.00	0.00		
Chattanooga	SRF 18-406	1,004,433.00	0.00		



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Chattanooga	CW7 19-428	2,280,710.70	253,412.30
Chattanooga	SRF 19-429	4,513,433.00	0.00
Chattanooga	SRF 18-406-01	2,094,334.00	0.00
Chattanooga	SRF 20-440	429,057.00	0.00
Cleveland	SRF 18-417	2,086,021.00	0.00
Cleveland	SRF 18-417-01	1,488,286.00	0.00
Dyersburg	CG7 20-439	602,425.60	150,606.40
Franklin	SRF 17-398	10,876,964.00	0.00
Franklin	SRF 17-398-01	7,223,818.00	0.00
Goodlettsville	SRF 18-420	521,932.00	0.00
Hamilton County WWTA	SRF 20-443	1,315,090.00	0.00
Humboldt	CW7 19-432	364,997.70	40,555.30
Humboldt	SRF 19-433	436,292.00	0.00
Humboldt	SRF 19-433-01	1,043,424.00	0.00
Huntland	CG6 19-426	577,962.90	64,218.10
Johnson City	SRF 20-441	10,274,980.00	0.00
Lebanon	CW7 19-435	1,613,566.00	0.00
Memphis	SRF 15-355	593,904.00	0.00
Memphis	SRF 18-409	1,402,475.00	0.00
Memphis	SRF 19-434	25,731,248.00	0.00
Memphis	SRF 21-451	2,859,430.00	0.00
Nashville	SRF 20-446	1,717,207.00	0.00
Oliver Springs	CW7 19-437	0.00	60,800.00
Smyrna	SRF 20-438	719,707.00	0.00
Smyrna	SRF 20-438-01	10,788,288.00	0.00
Springfield	SRF 19-422	201,327.00	0.00
Springfield	SRF 20-447	3,004,024.00	0.00
Waverly	CW7 19-436	277,612.20	30,845.80
Waverly	SRF 21-461	580,000.00	0.00
Westmoreland	CW8 21-457	1,857,393.60	464,348.40
Westmoreland	SRF 21-458	24,505.00	0.00
White House	SRF 21-449	7,552,533.00	0.00
Total Disbursements for FY 2022		\$ 116,588,046.80	\$ 1,114,998.20



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The CWSRF pace of 94 percent, decreased from TDEC's previous year of 98 percent and is slightly lower than the national average of 97 percent. The program continues to update its programmatic processes and modernize the program. The program has undergone significant changes, including recent vacancies of several team members on both the financial and technical teams. This change required the program to re-evaluate its current processes. CWSRF expects that in the next fiscal year, that the pace will improve toward the national average.

First Use of Funds for Enforceable Requirements

Since FY 1992, the State of Tennessee certifies that the "first use" requirement of the Clean Water Act §602(b)(5) has been fulfilled. All National Municipal Policy projects are on compliance schedules to meet the enforceable requirements of the Clean Water Act.

Assurances of Compliance

TDEC SRF ensures all activities in the Clean Water program comply with all state and federal requirements. This includes requiring recipients of funds directly made available by capitalization grans to comply with applicable federal authorities. The State attests adherence to the rules of cash draws. All cash draws for administrative assistance were made after costs had been incurred and in compliance with federal rules. The State attests to complying with state and federal requirements concerning grant payments and expenditures. TDEC SRF certifies state laws regarding commitments and expenditure of revenue is followed. Further, the state attests to accepting grant payments in accordance with the negotiated payment schedule.

TDEC SRF ensures each financial assistance recipient provides assurances of compliance with all applicable federal and state requirements. These assurances include all financial requirements, adhering to generally accepted accounting principles, government accounting standards, and compliance with the federal Single Audit Act. These assurances shall be incorporated into the loan or bid documents (where applicable) to assure compliance with all state and federal regulations.

State Environmental Review Process

During FY 2022, the TDEC SRF program conducted environmental reviews on all §212 funded projects in accordance with the State Environmental Review Process. It was determined

that no Environmental Impacts Statements (EIS) were necessary, instead an Environmental



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Assessment (EA) / Finding of No Significant Impact (FNSI) or Categorical Exclusion (CE) were issued for each project.

Additional Requirements

Disadvantaged Business Requirements

TDEC negotiated with EPA Region 4 an overall fair share objective of 2.60% for construction and 5.20% for supplies, services and equipment for Minority Business Enterprise (MBE) and 2.60% for construction and 5.20% for supplies, services, and equipment for Women's Business Enterprise (WBE) participation on CWSRF projects. During FY 2022 a total of \$5,540,490 in procurement contracts was awarded. See the tables below for the details.

SFY 2022 SRF Fair Share Goal			
EPA Requirements	SRF Total Numbers for SFY 2022		
MBE Construction 2.6%	MBE Construction 6.84%		
WBE Construction 2.6%	WBE Construction .59%		
MBE Supplies, Services, Equipment 5.2%	MBE Supplies, Services, Equipment .06%		
WBE Supplies, Services, Equipment 5.2%	WBE Supplies, Services, Equipment .28%		
Total fair share goal percentage FY 2022	Total fair share goal percentage FY 2022 7.77%		

SFY 2022 SRF Fair Share Goal				
Total MBE Construction	\$ 5,540,490	6.84%		
Total WBE Construction	\$ 476,650	0.59%		
Total MBE Supplies	\$ 0	0%		
Total WBE Supplies	\$ 220,370	0.27%		
Total MBE Services	\$ 50,000	0.06%		
Total WBE Services	\$ 9,635	0.01%		
Total MBE Supplies	-	-		
Total WBE Supplies	-	-		
Grand Totals MBE	\$ 5,590,490	-		
Grand Totals WBE	\$ 706,655	-		



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Davis Bacon Wage Rate

The FFY 2021 CWSRF Capitalization Grant requires the Davis-Bacon Act wage rules to apply to all assistance agreements made in whole or in part with funds appropriated under the FFY 2021 Capitalization Grant. The SRF Loan Program along with the Department of Labor provides all pertinent information related to compliance with labor standards, including prevailing wage rates and instructions for reporting.

American Iron, Steel, and Manufactured Goods

TDEC SRF attests to the adherence of projects by loan recipients for the requirements of the American Iron and Steel (AIS) provision. The AIS provision requires Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) assistance recipients to use iron and steel products that are produced in the United States. This requirement applies to projects for the construction, alteration, maintenance, or repair of a public water system or treatment works and if the project is funded through an assistance agreement executed beginning January 17, 2014.

The AIS provision is a permanent requirement for all CWSRF projects. The America's Water Infrastructure Act of 2018 extends the AIS provision for DWSRF projects through Fiscal Year 2023.

Green Project Reserve

The FFY 2021 CWSRF Capitalization Grant requires a portion of the funds to be allocated towards subsidy for green projects. The amount allowed for subsidization is a minimum of \$2,308,200, or 10% of the grant award. The state did not have any projects that received subsidization in the form of principal forgiveness for GPR designated projects.

Additional Subsidization (Principal Forgiveness)

In SFY 2022 TDEC SRF was able to award projects with subsidization in the form of principal forgiveness. The total amount of subsidization was \$1,235,000 of the obligated FFY 2021 Capitalization Grant. Tennessee's CWSRF Loan Program has developed a new initiative. The small and disadvantaged community principal forgiveness initiative is a process that portions funds for disadvantaged communities with an ability to pay index (ATPI) of less than 50. These communities are eligible for a range of principal forgiveness from a portion of the project through the total project receiving principal forgiveness.



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Environmental Results

Projects are entered into the Public Water Benefits Reporting System database quarterly. This database is current for all projects funded in Tennessee during FY 2022. Reports are electronically available to the USEPA for all Drinking Water SRF loans.

Performance Evaluation Reports (PER) Recommendations and Findings

The USEPA Region 4 SRF program conducted a Financial and Compliance Audit Report of the TDEC CWSRF program in the Summer of 2022. The audit resulted in no observations of findings and no recommendations.

Spotlight on Communities

City of Chattanooga

The City of Chattanooga, located in Hamilton County in southeast Tennessee, has a population of approximately 181,400. Chattanooga provides sewer service to the city and nine other regional customers in Tennessee and Georgia. The Moccasin Bend Wastewater Treatment Plant (MBWWTP) became operational in 1962 and has a treatment capacity of 230 MGD. During the years of 1979 through 2022, the MBWWTP went through several modifications/renovations including the addition of an equalization basin, headworks, sludge handling facilities, power modifications, new lab facilities, disinfection system, and clarifier upgrades. The Combined Sewer Overflow (CSO)/wet weather treatment at the MBWWTP consists of fine screening, grit removal, primary clarification, chlorine disinfection and dechlorination.

The City of Chattanooga's wastewater collection system was originally installed over 100 years ago. The City's wastewater collection system consists of approximately 1,300 miles of 6-inch through 96-inch diameter gravity sewers of which 70 miles are combined sewers; 70 pump stations with a capacity range from 0.072 to 120 MGD; 32 miles of 2-inch through 48-inch diameter force main, eight CSO facilities, and approximately 30,000 manholes. Over time, old and deteriorated sewer lines in the City of Chattanooga's wastewater collection system have become susceptible to infiltration and inflow (I/I) and have led to excessive sanitary sewer overflow (SSOs). The SSOs can be associated with several causes, such as aging, deterioration, blockages, and broken sewer lines. The city received a Consent Decree (CD) from the United States Environmental Protection Agency (USEPA) on April 24, 2013, requiring the City of Chattanooga to correct I/I, improve system capacity, and develop/implement plans to eliminate SSOs within the wastewater treatment and collection system.



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The construction of the equalization station and wetweather pump station will assist in reducing SSOs by collecting and storing extraneous wastewater from the city's wastewater collection system. The Hamm Road **Equalization Station** project consisted of the construction of two 10 million gallon, pre-stressed concrete



wastewater storage tanks, one cast-in-place pump station with four new 10 million gallon per day submersible pumps; one cast-in-place diversion structure; one electrical building with motor control center, variable frequency drives, one standby power generator with automatic switchgear; restroom facilities and heating, ventilation, and air conditioning; and two carbon adsorption odor control units. The project also included improvements to the MBWWTP to include the rehabilitation of the gravity thickeners, thickener pumping station, and grinder units; replacement of the digester pumps; rehabilitation of the dewatering building; construction of a new 1.1 MG sludge holding tank; and installation of additional centrifuges. The City of Chattanooga received three CWSRF loans totaling \$47,100,000 with \$100,000 in principal forgiveness. These improvements were beneficial to the community and enabled the City of Chattanooga to reduce SSOs from the City's wastewater collection system, protect the public health and environment, and improve the water quality conditions in the area. The city states that it is operating as designed and eliminates major overflows to the Tennessee River, the West Bank SSO, other upstream areas.

https://www.local3news.com/local-news/wet-weather-equalization-station-protecting-the-tennessee-river-from-wastewater-overflow/article_912ae7d0-45bb-11ed-a532-274e047ae81f.html

Project Highlights

Replacement/Rehabilitation of aging infrastructure
Protection of public health and the environment
Reduction of SSOs
Principal forgiveness
Improved water quality
Front page today of Region News in the Chattanooga Times Free Press:

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https://www.timesfreepress.com/news/2022/oct/06/milestone-reached-in-sewer-upgrade-atmoccasin/



City wrecker board seeks to double tow rates

Smith's sentence won't be decided until'24



Rainy day funded



Needed sewer upgrade reaches milestone at Moccasin Bend



Chattanooga, Hamilton County mayors mark Domestic Violence Awareness month





December 2022

Westmoreland

The City of Westmoreland is located in northeast Sumner County in middle Tennessee with a population of approximately 2,600. The City of Westmoreland owns and operates a 0.3 MGD WWTP that was original constructed in 1979 and currently consists of a bar screen, oxidation ditch, clarifier, chlorination/de-chlorination, and step aeration. The existing WWTP has not



been able to consistently meet the discharge limitations required by the National Pollutant Discharge Elimination System (NPDES) permit since 2010 because of the age of the treatment facilities. The WWTP has violated parameters for carbonaceous biochemical oxygen demand, nitrogen, and phosphorus. Violations have reoccurred in 2014 and 2018. The WWTP also struggles to meet its limits during high flows. This project consists of the demolition of the existing 0.3 MGD split-

flow extended aeration/oxidation ditch WWTP and the construction of a new 0.3 MGD sequencing batch reactor WWTP. The new WWTP will include a new headworks, equalization basin, disk filtration, ultraviolet disinfection, digester, and sludge treatment facilities. The City of Westmoreland has received four loans totaling \$7,793,445 with \$719,289 in principal forgiveness.

Project Highlights

- Replacement of aging infrastructure
- Better quality effluent into an impaired receiving stream than the current plant discharges
- Improvement of water quality
- Protection of public health and the environment
- Principal Forgiveness for a small and disadvantaged community



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Appendix

See Attachments