SFY2024 Massachusetts State Revolving Fund Annual Report

Office of the State Treasurer
Massachusetts Department of Environmental Protection
Executive Office for Administration and Finance

MASSACHUSETTS
CLEAN WATER TRUST

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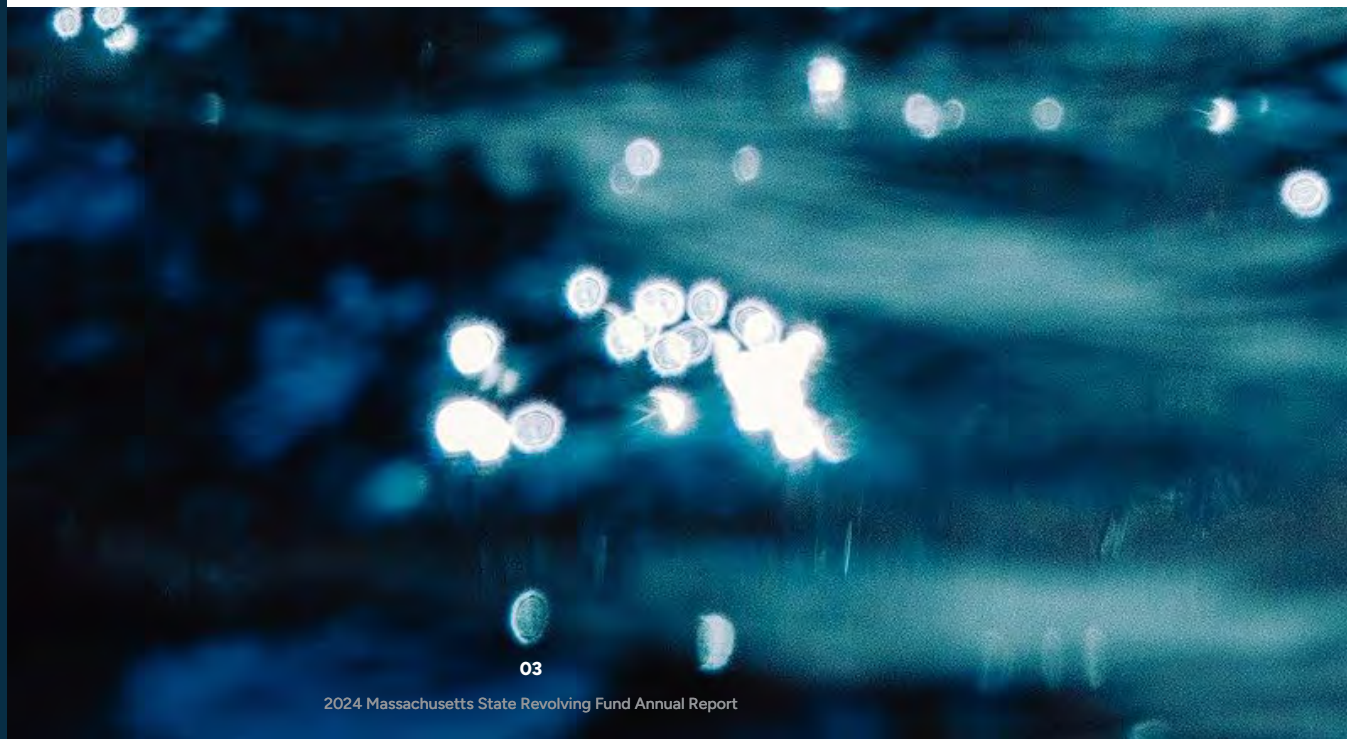

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Message from the Chair

The The Massachusetts Clean Water Trust (the Trust) is pleased to submit our Clean Water and Drinking Water State Revolving Fund (SRF) Annual Report for State Fiscal Year (SFY) 2024. The Trust's loan and grant programs are a collaborative effort between the State Treasurer's Office, the Executive Office for Administration and Finance, the Massachusetts Department of Environmental Protection (MassDEP) and communities across the state.

The SRF finances essential infrastructure projects that enhance ground and surface water resources, ensure the safety of drinking water, protect public health, and develop resilient communities. In a state with aging infrastructure and rising environmental and public health challenges, access to below-market rate financing makes a critical difference for funding improvements to water infrastructure, while reducing the overall budgetary impact on communities and ratepayers.

In SFY 2024, the Massachusetts SRF Programs provided communities approximately **$619.8 million** in low or no-interest rate loan commitments or grants for **194** projects, which will support an estimated **3,725** construction and engineering jobs, stimulating the economy while improving the environment and public health. To date, approximately **$3.3 billion** in federal grants and state matching funds have supported over **$9.1 billion** in water infrastructure planning and construction projects through a leveraged financing program.

SFY 2024 Highlights:

Bipartisan Infrastructure Law (BIL): The federal grant funding continues to expand the annual SRF funding and programs. These grants have resulted in a tremendous increase in loan forgiveness for projects that are vital to the health and safety across Massachusetts. This report reflects the impact on Lead and PFAS mitigation and expanded funding for both the Clean Water SRF and Drinking Water SRF.

American Rescue Plan Act (ARPA) Funds: The Trust received nearly **$201.9 million** of ARPA funding from the Massachusetts Legislature in SFY 2023. During SFY 2024, the Trust committed the full amount, well in advance of the December 31, 2024, deadline. The Trust is providing these funds as loan forgiveness to communities which will provide substantive cost savings for critical water infrastructure. The Trust also disbursed **$84.1 million** in ARPA funds, bringing the total cumulative amount of ARPA funds disbursed to **$171.4 million.**

Lead Service Line (LSL) Planning Programs: The two planning programs continue into their second year and provide grant funds or direct technical assistance to communities to create LSL inventories and LSL replacement programs. The Trust committed to **79** projects providing approximately **$20.0 million** in grants: bringing the two-year cumulative commitment total to **142** projects providing **$34.6 million** in grants. **96** of these projects, accounting for nearly **$23.2 million**, went to Disadvantaged Communities. These investments are critical to help identify LSLs in water systems as the first step towards removing all LSLs in Massachusetts.

Zero Percent Interest LSL Construction Loans: To further the state's goal of removing all lead from water systems, the Trust currently offers LSL construction loans with no interest. During this past fiscal year, the Trust committed **$31.0 million** to **5** LSL construction projects. It is estimated that these projects will save an estimated **$6.7 million** in interest over the life of their loans.

Zero Percent Interest PFAS Mitigation Loans: Massachusetts has continued its commitment to assisting communities by reducing financing costs of PFAS mitigation projects. The program committed funding to **10** projects totaling **$64.0 million**, saving communities an estimated **$14.8 million** in loan interest beyond the already below-market rate offered for all projects. The Trust has committed **$357.1 million** to **43** PFAS construction projects. This has saved communities an estimated **$79.8 million** in interest.

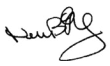
Asset Management Planning (AMP) Grants: The AMP Grant program assists communities in gathering information on the current condition of their existing infrastructure. The Trust entered into **33** grant agreements resulting in over **$3.4 million** in SFY24, supporting **$5.7 million** in total project costs. Since the beginning of the program in 2019, the Trust has committed nearly **$13.0 million** in grants, supporting over **$21.3 million** in total project costs for **124** projects.

School Water Improvement Grants (SWIG): This program continues to offer support to public and private schools, early education facilities and non-residential daycares. In SFY 2024, the Trust committed to provide **$171,000** in grants to **27** organizations to replace **57** fixtures with detectable lead. The Trust has provided nearly **$1.8 million** in grants to replace **615** fixtures with detectable lead in **261** facilities serving **117,000** children in Massachusetts.

I am proud to say the activities of the Trust and MassDEP have been constant, committed, and innovative. The prompt and thorough use of BIL and ARPA funding, and additional support programs have provided extensive additional funding that has been leveraged to improve and innovate the state's SRF programs. These investments will have a long-term impact for Massachusetts that pays dividends in the years to come.

I would like to express my appreciation for the EPA Region 1 staff for their efforts during SFY 2024, and congratulations to the Trust and MassDEP for a job well done. To communities in Massachusetts, thank you for your commitment to this vital mission. I look forward to continuing this critical work together.

Thank you,



Deborah B. Goldberg
Chair, Massachusetts Clean Water Trust
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Introduction to the Report

The Massachusetts Clean Water Trust (the Trust), in collaboration with the Massachusetts Department of Environmental Protection (MassDEP), helps communities build or replace water quality infrastructure that enhances ground and surface water resources, ensures the safety of drinking water, protects public health, and develops resilient communities.

It accomplishes these objectives by providing low-interest loans and grants to cities, towns, and water utilities through the Massachusetts State Revolving Funds (SRFs). The SRF programs are partnerships between the United States Environmental Protection Agency (EPA) and the Commonwealth of Massachusetts. SRFs function like an environmental infrastructure bank by financing water infrastructure projects in cities and towns across the Commonwealth.

The Trust and MassDEP administer the two SRFs, the Clean Water SRF (CWSRF) and Drinking Water SRF (DWSRF). The Trust manages the flow of funds to borrowers while MassDEP manages the development and oversight of projects. The SRFs receive funding from the EPA in the form of annual capitalization grants, supplemented by state matching grants, and the repayment of loans. When loans to local governments are repaid, the funds are then loaned out again, which is how the fund "revolves."

The Trust uses a "leveraged financing model," which allows the Trust to finance projects more than the funding from the federal and state grants. Bonds are issued in the capital markets and secured by borrower repayments, reserve funds and contract assistance payments from the Commonwealth. The proceeds from the bonds provide capital for new, below-market rate loans to borrowers for water infrastructure projects. This model has allowed the Trust to finance approximately **$9.1 billion** in water infrastructure projects from approximately **$3.3 billion** in federal grants and state matching funds.

The Trust is administered by a three-member Board of Trustees that is chaired by the Treasurer and Receiver General of the Commonwealth. The Secretary of the Executive Office for Administration and Finance and the Commissioner of MassDEP serve as Trustees. During monthly meetings, the Board of Trustees approves all financial commitments and program decisions. All Board of Trustees materials can be found on the Trust's website, along with all pertinent information for borrowers, investors, and residents of Massachusetts.

About this Report

The EPA requires reporting on both programs through the CWSRF Annual Report and the DWSRF Biennial Report. The federal reporting requirements for the two programs have been combined into this report, which covers the state fiscal year 2024 (SFY 2024), ending June 30, 2024. The content of this report is divided into three sections. To comply with the federal reporting requirements, each section will label reported information by the specific SRF program.

Directly after the *Introduction to the Report*, the Trust included a summary of the SRF's annual activities and a discussion of the programs and initiatives for SFY 2024 in **Section I**, the *Clean Water and Drinking Water SRF - Year in Review*. **Section II** of this report is the *SRF Financial Report,* separated into two parts. **Part 1**, *SRF Commitments*, covers loans made and financial assistance provided through both the CWSRF and DWSRF programs throughout the SFY, while **Part 2**, *State Revolving Fund Financial Summary*, explains how the Trust finances these projects. **Section III**, *Grant and Incentive Programs*, provides updates on programs the Trust is proud to offer Commonwealth communities. **Section IV,** *Program Specific Reporting,* discusses EPA grant requirements and outlines how the Trust and MassDEP meet those federal requirements.

Since 2021, the Massachusetts SRF programs have rapidly leveraged expanded federal funding to provide loans and grants to communities throughout the Commonwealth. The Trust committed to approximately **$619.8 million** in project financing, permanently financed **$470.9 million** in loans and disbursed **$562.3 million** to projects under construction.

Beyond the growth in loans and loan forgiveness provided by the additional funding from the Bipartisan Infrastructure Law (BIL) and the American Rescue Plan Act (ARPA), (**$201.9 million** in 2021 and 2022), the Massachusetts SRF has continued to innovate and provide targeted support.

Bipartisan Infrastructure Law (BIL)

In the Trust's 2023 Annual Report, the Trust noted that due to implementation delays certain aspects of BIL funding could not be reported. This information is now contained within the 2024 report. The Trust has used these funds to provide additional loans, loan forgiveness, and make significant progress on lead removal planning well beyond traditional capacity and is proud to report on the progress.

Supporting Our Communities

Asset Management Planning (AMP) Grants

AMPs provide utilities with information about the condition of their infrastructure and projected costs of maintenance and repair. In some cases, AMP grant recipients upgrade the utilities system for tracking and managing their infrastructure. In SFY 2024 the Trust provided over **$3.4 million** in grants supporting **$5.7 million** in total project costs. The success of this initiative shows the importance of and demand for detailed planning and the expanded adoption of asset tracking technology.

Lead Service Line Planning Program

Two newly developed programs provide grant funds or direct technical assistance to communities to create LSL inventories and LSL replacement programs. One program provides grants to communities for LSL identification and removal planning projects to assist public water suppliers (PWSs) in complying with the Lead and Copper Rule Revisions (LCRR). Through the second program, MassDEP provides direct technical assistance to PWSs to ensure they reach compliance with the LCRR. In SFY 2024, the Trust committed **$20.0 million** in grants to **79** PWS and MassDEP, helped **129** PWSs in **79** communities.

Federal Requirement Support

MassDEP and the Trust deployed several new initiatives and continued supporting existing programs. By providing LSL inventory and replacement program planning grants directly to cities and towns, a need arose to provide support to grantees in meeting generally accepted accounting standards (GAAP) to comply with federal grant requirements. The Trust voted to provide funds expressly for this purpose in June of 2023. To date, the Trust has provided **$45,000** in funding to assist communities that do not meet the necessary audit standards to hire auditors to ensure these systems are following GAAP.

Additionally, the Trust and MassDEP initiated the CWSRF *Small System Technical Assistance Program*. This program allows small, rural and tribal communities that have 10,000 or fewer people and an average daily wastewater flow of less than 1 million gallons to receive technical assistance. The main priority is the development of a needs assessment that will consider the physical infrastructure, along with the ongoing technical, managerial, and financial capacity of the system. This program was designed to promote participation in the CWSRF loan program by assisting communities with identifying current and long-term needs and helping with the CWSRF project application process.

FIG 1.1 | 2024 Year in Review Summary

SFY 2024 *Dollar amounts in millions*	CWSRF		DWSRF	
	Amount	Number	Amount	Number
Loans Committed	$404.2	51	$192.2	32
Grants Committed	2.6	23	20.8	89
Total Project Commitments	406.8	74	213.0	121
Projects Financed	338.8	53	132.1	20
Funds Disbursed	381.4	198	170.4	88
Loan Forgiveness Committed	88.3	40	85.5	39
Weighted Average Interest Rate	1.60%		0.89%	
Federal Grants Received[1]	100.0		106.1	
State Matching Funds Received	$12.1		$6.6	

[1] *Grants received is limited to grant funding received by the Trust in SFY 2024.*

The School Water Improvement Grant (SWIG) Program

The goal of the SWIG program is to reduce lead in school drinking water to the lowest levels possible by incentivizing public and private schools, early education facilities and non-residential daycares to test their drinking water fixtures then remediate any lead exceedances that are detected. It accomplishes this by providing funds to purchase and install point-of-use filtered water bottle filling stations to replace drinking water fixtures that tested above the remediation lead action level of 1 part per billion. As of the end of SFY 2024, the Trust has provided nearly **$1.8 million** in grants to replace **615** fixtures with detectable lead in **261** facilities serving **117,000** children in the Commonwealth.

Disadvantaged Communities

The CWSRF and DWSRF programs provide additional subsidies through loan forgiveness to designated Disadvantaged Communities. The Trust utilizes its annual Disadvantaged Community calculation to provide loan forgiveness to reduce the financial impact of these critical infrastructure projects. Under this program, in SFY 2024, the Trust committed to **$46.5 million** in loan forgiveness for 2022 Intended Use Plan (IUP) projects to **36** communities in the Commonwealth.

Environmentally Disadvantaged Communities

To ensure all communities in Massachusetts could eliminate LSLs from their drinking water systems at the lowest cost possible, the Trust introduced an additional designation for communities. Environmentally Disadvantaged Communities

are defined as PWSs that have lead in the water supply and/or LSLs in the system, as designated by MassDEP. Environmentally Disadvantaged Communities completing LSL replacement projects are eligible for loan forgiveness. In SFY 2024, the Trust committed **$17.0 million** in loan forgiveness to LSL remediation projects in the 2022 and 2023 IUPs.

Investing with the Trust

In SFY 2024, the Trust issued its Series 25A Green Bonds, Series 25B Sustainability Bonds, and Series 2023 Refunding Green Bonds, its eighth and ninth series of Green Bonds, its first series of refunding Green Bonds, and its third series of Sustainability Bonds. These **AAA** rated series of bonds are highly sought after and competitively purchased by investors in Massachusetts and across the country. The Trust received over **$2.5 billion** in orders for approximately **$400.0 million** in bonds. This allowed the Trust to adjust its pricing and obtain the best value possible. There were orders placed by **59** institutional investors and **27** Massachusetts investors, in addition to over **$13.0 million** in retail orders placed by individuals. The successful issuances of bonds is crucial for the Trust to leverage funds to increase lending capacity. To learn more about these innovative bonds, see **Appendix G** for the *Trust's Annual Green and Sustainability Bond Report.*

Concern for Future Capacity

Congressionally Delegated Spending (CDS)

In 2021, the United States Congress re-introduced CDS, which are funds allocated to specific projects in the annual appropriations bills. In the past, when Congress was providing earmarks, these local investments have been a separate appropriation from the SRF appropriation. However, this is no longer the case, and the CDS funds are being deducted from the annual SRF appropriation. **Fig 1.2** below demonstrates the impact on the annual appropriation for state SRF funding. The impact is especially detrimental for the DWSRF because the grants are lesser dollar amounts and approximately 30% is used as set-a-sides for administering state Drinking Water programs.

FIG 1.2 | Annual SRF Appropriation by FFY and CDS Spending
Dollar amounts in millions

Clean Water SRF			
FFY	**Total Appropriation**	**CDS**	**Available for SRF**
2022	$1,638.8	$444.6	$1,194.2
2023	1,638.9	863.1	775.8
2024	$1,638.9	$794.8	$844.1
Drinking Water SRF			
FFY	**Total Appropriation**	**CDS**	**Available for SRF**
2022	$1,126.1	$397.8	$728.3
2023	1,126.1	609.3	516.8
2024	$1,126.1	$637.8	$488.3

This impact has been minimized by the additional BIL funding, but if this trend continues, the traditional SRF capitalization grants will be diminished. This will equate to less funding available for loans and reduce the capacity of the state drinking water program to aid public water suppliers to continue to meet public health requirements in the Commonwealth.

FIG 1.3 | Annual Massachusetts Allotment
Dollar amounts in millions

Reduction in Massachusetts' BIL LSL Replacement Grants

While While the BIL does provide historic funding, the reallocation of the national allotment of the BIL LSL grant has reduced the total funding available to the Trust. These cuts were due to a change in the allocation of funds methodology that is captured every four years by the Drinking Water Needs Survey by including a count of LSLs which proved to be unreliable and inaccurate according to the EPA's Office of Inspector General.

Many states across the country saw dramatic and unexpected change in their annual LSL grant funding. The Trust, as displayed in **Fig 1.4** below, saw a 49% decrease in capitalization grant funds available for LSL projects. This reduced funding from $65.8 million in SFY 2022 to $33.7 million in SFY 2023. Through coordinated state action and updated data, the Trust's allotment was increased to $50.1 million for SFY 2024 but still represents a 24% cut from its initial year funding level. These reductions, along with the CDS grants being taken from the annual SRF Base capitalization grants, will reduce the capacity of the Massachusetts SRF to provide loans and grants to communities for vital LSL identification and removal.

FIG 1.4 | BIL LSL SRF Base Grants and Reduction from FY 2022
Dollar amounts in millions

2022	2023	2024
$65.8	$33.7 *-49%*	$50.1 *-24%*

State Revolving Fund Goals

Annually, SRFs are required to provide a list of short- and long-term goals in their annual Intended Use Plans (IUPs) and then address the progress of those goals in their Annual Reports. To provide a richer context to these Goals, the Trust has developed a themed mapping system to track the individual goals to relevant sections of the report and provides discussion on the goals. The icons will appear in their respective sections. Each goal discussion is color coded by SRF program and represented by an icon as listed below. To find a full list of the goals, please see **Appendix F.**

CLEAN WATER STATE REVOLVING FUND

Good Program Governance
Operate an efficient, dynamic program that is resilient and responsive to state needs.

Stormwater
Fund projects and activities that address or mitigate stormwater runoff and nutrient loading.

Green Investment
Fund projects and activities that reduce energy use and mitigate pollution of natural resources.

Utility Sustainability
Fund projects and activities that assist systems with planning and sustainable practices.

Community Support
Prioritize funding, loan relief and technical assistance to communities defined as disadvantaged or identified as small.

DRINKING WATER STATE REVOLVING FUND

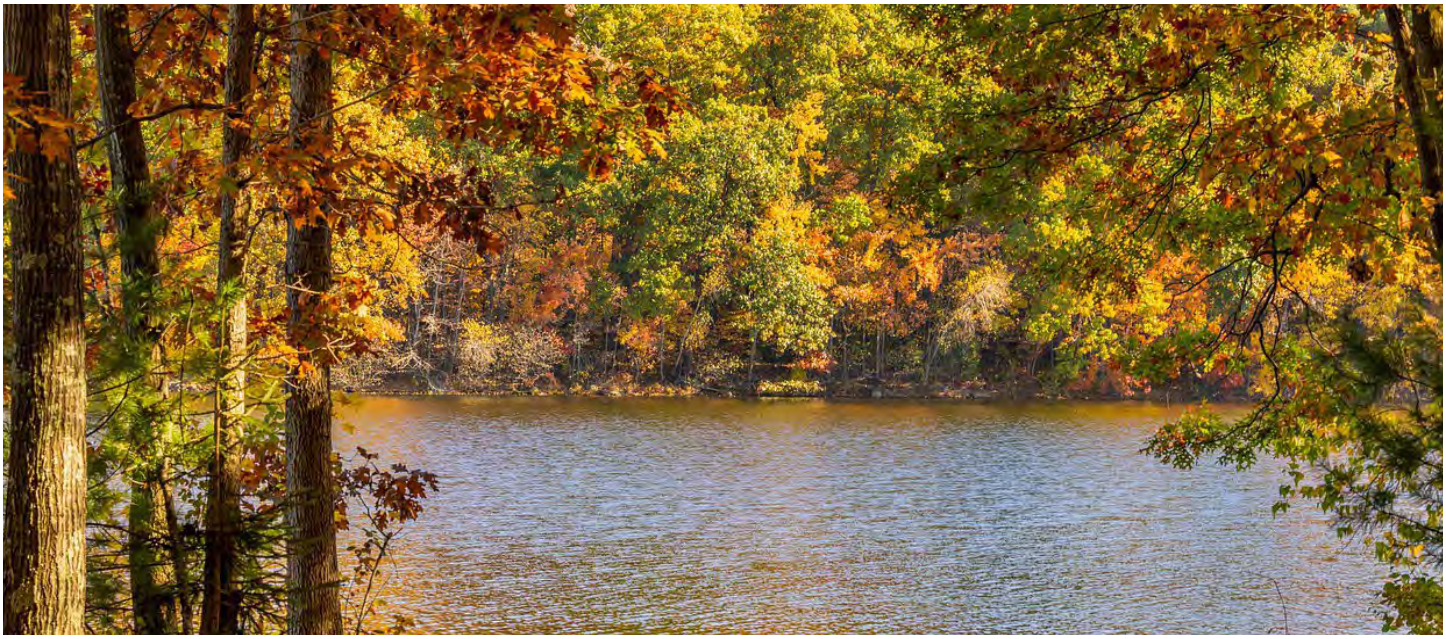
Good Program Governance
Operate an efficient, dynamic program that is resilient and responsive to state needs.

Lead Service Lines (LSL) Planning and Removal
Prioritize funds for projects or activities that assist communities with eliminating LSLs and complying with updated Lead and Copper Rule Revisions (LCRR).

PFAS Remediation
Prioritize funds for projects or activities that assist communities with eliminating or mitigating PFAS from drinking water sources.

Utility Sustainability
Fund projects and activities that assist systems with planning and sustainable practices.

Community Support
Prioritize funding, loan relief and technical assistance to communities defined as disadvantaged or identified as small.



Part 1. SRF Commitments

The following section covers the Trust's financing and is divided into two parts. **Part 1** covers the commitment of funds to projects, loan forgiveness, and provides a brief overview of the Trust's loan programs. **Part 2** covers the Trust's financing programs. The commitment of funds and the long-term financing of loans are an integral part of the Trust's successful financing programs and important for ensuring the health of the Massachusetts SRF programs.

Programs

Most of the Trust's loans are subsidized at a **2%** rate of interest, as set by statute. However, the Commonwealth has identified priority projects or priority policy goals to award a higher amount of subsidy through offering reduced interest rates or a **0%** rate of interest. The subsidies used for interest rate reduction have been funded by the Commonwealth through contract assistance and are not counted as additional subsidies for the purposes of federal reporting.

The following programs work to further various environmental, health, and state goals by incentivizing projects to move forward by providing interest rates below the currently subsidized **2%** interest rate. For SFY 2024, the weighted average interest rate for CWSRF loans was **1.60%** and **0.89%** for DWSRF loans.

Subsidy Programs

PFAS Remediation Loans

The Board of Trustees approved a **0%** interest rate loan program for projects that remediate PFAS in public water supplies. These CWSRF and DWSRF loans help communities that have identified PFAS in their water system or surrounding environment to complete the remediation projects that are vital to providing clean drinking water to residents.

Lead Removal Construction Loans

The DWSRF offers **0%** interest financing for construction projects that remediate lead, a critical action in mitigating lead exposure and protecting public health. LSL construction loan applications are accepted on a rolling basis to provide greater program flexibility.

Nutrient Enrichment Reduction Loans

This loan program is for CWSRF loans. Due to Massachusetts' geographic location and population distribution, many communities are coastal or on rivers that flow into saltwater bodies. This leads to wastewater pollution and additional nitrogen being deposited into saltwater areas. An increase in nitrogen in affected saltwater bodies can create algal blooms which negatively affect animal habitats, cause fish kills, and cause a reduction in shellfish. The decrease in water quality is both an environmental and economic issue for coastal communities. This **0%** interest rate loan program helps further incentivize communities to move forward with these projects by providing access to low-cost financing.

Housing Choice Community Loan Reduction

The Commonwealth has focused on creating affordable housing throughout the state. The Trust has joined with other state agencies in providing financial incentives to communities that participate in the Housing Choice Initiative, which promotes housing development. The Trust reduces the loan interest rate by **0.50%** for both CWSRF and DWSRF loans in communities with the Housing Choice designation.

Interim Loans

Through the Trust's interim loan program, funds are available to projects throughout the year to provide construction financing. Borrowers can enter a short-term loan with the Trust that enables projects to proceed prior to a Trust bond sale. To make Trust financing even more appealing to borrowers, the Board of Trustees removed the interim loan interest rate and any associated fees. This change to the program makes interim loans from the Trust the least expensive way for local communities to access capital during construction.

Grant Programs

In addition to subsidized loans the Trust offers grants targeted at community specific issues. See **Section III** for additional program details.

LSL Planning Grant Programs

This program was launched to assist PWSs with completing planning projects for LSL inventories and developing LSL replacement plans for compliance with the LCRR.

PWS Cybersecurity Improvements Grant Program

The DWSRF, in partnership with the MassDEP's Drinking Water Program, offers grants funds of up to **$50,000,** to PWSs that have a cybersecurity risk assessment and use operational technology equipment with an identified cybersecurity risk.

AMP Grant Program

These grants fund **60%** of the project cost, up to **$150,000,** to assist communities with completing or updating asset management plans for wastewater, drinking water, stormwater utilities, or any combination of the three to ensure the operational integrity of the water utility.

CWSRF Small System Technical Assistance Program

Designed to promote participation in the CWSRF loan program by assisting eligible communities with identifying current and long-term needs and helping with the CWSRF project application process.

Loan Forgiveness Programs

To ensure that Massachusetts is meeting its additional subsidy obligations and to reduce the financial impact of project cost on communities, the Trust offers Loan Forgiveness to communities through the following programs.

Disadvantaged Communities
This status is determined by an annual affordability calculation ranking communities into affordability tiers. Communities identified as disadvantaged receive a fixed percentage of loan forgiveness based on the affordability tier and SRF program.

Environmentally Disadvantaged Communities
Environmentally Disadvantaged Communities are defined as PWSs that have lead in the water supply and/or LSLs in the system but are not eligible for disadvantaged loan forgiveness.

Cape Cod & Islands Water Protection Trust Fund (CCIWPTF)
This fund was created to help communities on Cape Cod utilize the tourist economy to raise revenue to pay for a portion of their wastewater loans from the Trust. It provides additional loan forgiveness for qualifying projects as approved by the CCIWPTF Board. Additional details can be found in **Section III** of this report.

The Bipartisan Infrastructure Law (BIL)

BIL created five new SRF-specific grants that are available each year from 2022 and continuing until 2026. The report will show all loan and grant projects receiving financing in SFY 2024. Below are the BIL grants for Massachusetts. The federal investment over the five grants years is substantial, allowing the Trust to finance more projects and provide more loan forgiveness to eligible projects.

The BIL created two new CWSRF federal grants:
- **CWSRF Supplemental Grant |** The grant functions like the base CWSRF grant. **49%** of the grant must be given away as loan forgiveness to Disadvantaged Communities.
- **CWSRF Emerging Contaminants (EC) Grant |** Funds must be used for projects that remediate known EC under the Clean Water Act. The Trust's Board of Trustees has opted to transfer the full amount of the 2022 grant funds to the DWSRF EC Grant to help meet the increasing demand from EC projects on the DWSRF. **100%** of the grant must be given away as loan forgiveness.

The BIL created three new DWSRF federal grants:
- **DWSRF Supplemental Grant |** This grant functions like the base DWSRF grant. **49%** of the grant must be given away as loan forgiveness to Disadvantaged Communities.
- **DWSRF LSL Replacement Grant |** The grant funds are dedicated for the replacement of LSL, and the identification and planning for removal of LSL. **49%** of the grant must be given away as loan forgiveness to Environmentally Disadvantaged Communities.
- **DWSRF Emerging Contaminants (EC) Grant |** Funds must be used for projects that remediate known EC under the Safe Drinking Water Act. These funds are specifically utilized for remediation of Per- and polyfluoroalkyl substances (PFAS). **100%** of the grant must be given away as loan forgiveness and **25%** of the loan forgiveness must be directed to Disadvantaged Communities.

FIG 2.1 | BIL Annual CWSRF Appropriation and State Match

CWSRF	Base [b]		Supplemental		EC (PFAS) [c]
FFY	Appropriation	State Match	Appropriation	State Match	Appropriation
2022 [a]	$39,285,000	$7,857,000	$60,428,000	6,042,800	$3,175,000
2023 [a]	25,469,000	5,093,800	70,769,000	7,076,900	7,220,000
2024 [a]	27,717,000	5,543,400	77,212,000	15,442,400	7,285,000 [d]
2025	53,946,000	10,789,200	91,272,859	18,254,572	7,220,000
2026	53,946,000	10,789,200	91,272,859	18,254,572	7,220,000
Total	**$200,363,000**	**$40,072,600**	**$390,954,718**	**$65,071,244**	**$32,055,000**

[a] Amounts reflect actual grant allotments received by the Trust through SFY 2024.
[b] Amounts for Base grants beyond FFY2024 are estimated and subject to change and do not account for CDS reductions.
[c] Emerging Contaminant Grant does not require state matching funds.
[d] EC (PFAS) reflects an $65,000 increase due to a federal reallocation.

See **Fig 2.2** on the following page.

The Bipartisan Infrastructure Law (BIL) continued

FIG 2.2 | BIL Annual DWSRF Appropriation and State Match

DWSRF	Base [b]		Supplemental		EC (PFAS) [c]	LSL
FFY	Appropriation	State Match	Appropriation	State Match	Appropriation	Appropriation
2022 [a]	$16,260,000	$3,252,000	$41,750,000	$4,175,000	$17,531,000	$65,783,000
2023 [a]	10,602,000	2,120,400	45,206,000	4,520,600	16,404,000	33,700,000
2024 [a, d]	10,078,000	2,015,600	49,350,000	9,870,000	16,404,000	50,095,000
2025	25,526,000	5,105,200	58,336,989	11,667,398	16,404,000	50,095,000
2026	25,526,000	5,105,200	58,336,989	11,667,398	16,404,000	50,095,000
Sub-Total	**$87,920,000**	**$17,584,000**	**$252,979,978**	**$41,900,396**	**$83,147,000**	**$249,768,000**

[a] *Amounts reflect actual grant allotments received by the Trust through SFY 2024.*
[b] *Amounts for base grants beyond FFY2024 are estimated and subject to change and do not account for CDS reductions.*
[c] *Emerging contaminant and lead grants do not require state matching funds.*
[d] *SFY 2024 Base Grant reflects an additional $72,000 increase in grants funds due to a federal reallocation with a $14,400 increase in state mating funds.*

Loan Commitments

A loan commitment is a legal obligation by the Trust to provide subsidized financing to a community for an eligible project and it defines the terms and timing for assistance through the SRF program. The Trust counts a loan as a binding commitment once the project has been issued a Project Regulatory Agreement. At this point, the funding recipient has completed project procurement and is ready to proceed with commencement of the actual project, as detailed in the "Loan Process" graphic below.

Loan Process

The binding commitments detailed below **Fig 2.3** are projects primarily identified in 2023 IUP. While most project disbursements identified in **Fig 2.4** are for projects identified in 2022 IUP. As the loan graphic displays many projects are well into year two before construction begins and the Trust receives disbursement requests. This timeline shows why many of the projects described in this report are offset by one or even two years.

In SFY 2024, the Trust continued to expand its programs by providing loan commitments for **51** CWSRF loans totaling **$404.2 million** and **23** grants for **$2.6 million** in CWSRF AMP grants. For the DWSRF program, the Trust committed **31** DWSRF loan projects totaling **$192.2 million, 79** grants for **$20.0 million** in LSL inventory grants, and **10** grants for **$0.8 million** in Asset Management Planning (AMP) grants. Please see **Appendix B** for a complete list of SFY 2024 binding loan commitments, and **Appendix D** for Program Project Tables.

The list of projects found in **Appendix B** will differ from the IUP and Project Priority List due to the reporting periods of this report. A project appearing on a year's IUP may take a year and a half to be issued a loan, crossing into the next year's Annual Report. Additionally, projects listed on the IUP may decide not to move forward for a variety of reasons, each unique to that community and project.

CLEAN WATER AND DRINKING WATER GOAL

Good Program Governance

The Massachusetts SRF program maximizes annual funding by soliciting and financing highly-rated construction and planning projects, which allows for the Trust to quickly commit the federal grants to projects.

FIG 2.3 | Binding Commitments by Program and SFY
Dollar amounts in millions

SFY		2024		2023 [a]	
Program	**Grant**	**Amount**	**Projects**	**Amount**	**Projects**
CWSRF	**Base/Supplemental**	$404.2	51	$472.5	52
	AMP Grants	$2.6	23	$2.8	27
CWSRF Total Project Commitments		**$406.8**	**74**	**$475.3**	**79**
DWSRF	**Base/Supplemental**	$97.3	17	$171.8	45
	LSL	$31.0	5		
	EC (PFAS)	$64.0	10		
DWSRF Loan Commitment		**$192.2**	**32**	**$171.8**	**45**
LSL Inventory Grants		$20.0	79	14.6	63
AMP Grants		$0.8	10	$0.9	8
DWSRF Total Project Commitments		**$213.0**	**121**	**$187.3**	**116**

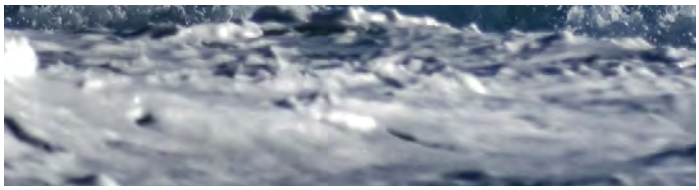
[a] *CWSRF SFY 2023 numbers reflect reported Binding Commitments from EPA National Information Management System (NIMS) Reports published 2/13/2023.*

Disbursements

During SFY 2024, the Trust disbursed the following to borrowers through program project funds and interim loans. The Trust adheres to first in first out (FIFO) when drawing down EPA grant funds. Funds are drawn from the oldest grant funds until fully expended, before drawing funds from newer grants.

FIG 2.4 | Amount Disbursed by Program for SFY 2024
Dollar amounts in millions

SFY		2024
Program	**Grant**	**Amount**
CWSRF	Project Funding	$310.2
	BIL Supplemental Loan Forgiveness	5.4
	ARPA Loan Forgiveness	56.7
	Cape Cod Water Protection Fund Loan Forgiveness	7.3
	AMP Grants	1.8
	Total Disbursements	**$381.4**
DWSRF	Project Funding	$117.8
	BIL Supplemental Loan Forgiveness	13.6
	BIL EC (PFAS) Loan Forgiveness	6
	BIL LSL Loan Forgiveness	5.2
	ARPA Loan Forgiveness	27.3
	AMP Grants	0.5
	Total Disbursements	**$170.4**



Additional Subsidy

The Trust provides additional subsidies in the form of loan forgiveness to communities that would not otherwise be able to afford projects, as required by the federal grants. Loan forgiveness reduces the total principal and interest costs paid over the life of a loan. Traditionally, the Trust has chosen to apply all subsidy funds to communities that are deemed Disadvantaged Communities. However, since the introduction of both BIL and ARPA, the Trust has introduced project-specific loan forgiveness. The following sections will introduce and report on the different types of loan forgiveness and where possible, the amounts committed in SFY 2024 and following up on disbursements from amounts committed SFYs 2022-2023.

American Rescue Plan Act Funding (ARPA)

In SFY 2023, the Trust received **$201.9 million** in American Rescue Plan Act (ARPA) funding from the Massachusetts State Legislature.

The Board of Trustees approved the use of ARPA funds for specific project types and for Disadvantaged Communities. The Trust committed **$84.5 million** to **43** projects in SFY 2024 for 2022 IUP projects. This is in addition to **$117.4 million** committed in FY 2023 to **45** projects from the 2021 IUP. **Fig 2.6** below shows how loan forgiveness is distributed to specific types of projects. See **Appendix C** for detailed loan forgiveness amounts related to 2022 IUP projects, for information on 2021 IUP projects, please see the Trust's 2023 Annual Report.

Disadvantaged Community Loan Forgiveness

The Trust uses the methodology detailed below to identify Disadvantaged Communities, as outlined by the Water Resources Reform and Development Act (WRRDA) of 2014 for the CWSRF, and the America's Water Infrastructure Act of 2018 (AWIA) for the DWSRF.

The Trust's formula, which was approved by EPA Region 1, considers the per capita income, population trend from 2010-2020 and the employment rate for each municipality to develop an adjusted per capita income (APCI). Each municipality is then ranked against the State's APCI. Communities that fall below the State APCI qualify as Disadvantaged Communities and are then sorted into three tiers.

Adjusted Per Capita Income Calculation

Per Capita Income (PCI): *(as listed on the most recent data tables of the Massachusetts Department of Revenue)* PCI is a widely accepted metric of an ability to afford the cost of infrastructure projects.

Employment Rate: *(as listed on the most recent calendar year data tables of the Massachusetts Department of Revenue)* The percentage of the workforce employed. Higher employment rates suggest that a community has more residents able to afford the cost of infrastructure than a community with lower employment rates.

Population Change: The percentage of gain or loss, according to the census data, in a municipal population between 2010 and 2020. An increase in population suggests that the community is experiencing growth, which provides a larger rate payer base to support infrastructure costs. A loss of population suggests negative growth and leaves fewer taxpayers and rate payers to absorb the burden of the infrastructure cost.

Disadvantaged Community Tier Designation

Tier 1: *APCI ≥ 80% of the State APCI, but <100% of the State APCI*
Tier 2: *APCI ≥ 60% of the State APCI, but < 80% of the State APCI*
Tier 3: *APCI < 60% of the State APCI*

Loan Forgiveness by Program and Affordability Tier

Tier	CWSRF	DWSRF
1	3.3%	6.6% (3.3% for PFAS)
2	6.6%	13.2% (6.6% for PFAS)
3	9.9%	19.8% (9.9% for PFAS)

FIG 2.5 | Eligible Communities by Affordability Tier and SFY

Tier*	2024	2023
1	61	64
2	92	93
3	87	83
Not Eligible	111	111

** The SFY 2024 Annual Report reports on projects from the 2022 and 2023 IUPs.*

CLEAN WATER AND DRINKING WATER GOAL

Community Support
The Massachusetts SRF programs work to reduce the financial impact to communities it identifies as disadvantaged by offering loan forgiveness.

Environmentally Disadvantaged Community

To better support all communities that need to remove LSLs, the Trust and MassDEP introduced the Environmentally Disadvantaged Community Designation. This new designation only applies to LSL DWSRF projects for public water suppliers that have detected lead in the water supply and/or have LSLs in the system. Funds for these projects are limited to funds provided by the BIL LSL grant and was retroactively applied to projects on the calendar year 2022 and 2023 IUPs. Projects with this designation are not eligible to receive additional subsidy under the Disadvantaged Community designation. In SFY 2024, the Trust has committed **$17.0 million** for these projects.

DRINKING WATER GOALS

Lead Service Lines (LSL) Planning & Good Program Governance
The Massachusetts DWSRF program launched this program to ensure communities with identified lead can meet LCCR requirements while also ensuring that the Trust can fully utilize the DWSRF LSL grant funds.

Loan Forgiveness Committed and Disbursed

Using the multiple sources of funding and the methodology listed above, the Trust awarded additional subsidies totaling **$173.8 million** to **67** projects with costs totaling **$726.4 million**. The distribution by program and amount disbursed are listed in the table below. Due to the inflow of multiple funding sources that designated the use of funds for additional subsidy, the Trust applied funding from multiple sources to achieve the offered subsidy percentages detailed above.

To ensure accurate and accessible reporting, the Trust has detailed the various sources of funding below for the total projects' loan forgiveness and provided a more detailed breakdown by project in **Appendix C**. The amount of loan forgiveness provided demonstrates that the Trust has met almost all federal requirements for loan forgiveness for the 2022 grants. The Trust must commit an additional **$15.3 million** BIL LSL Loan Forgiveness. The first set of tables reflects the calculation method of loan forgiveness. The second set of tables reflects the source of funds as visualized in **Fig 2.9**.

FIG 2.6 | ARPA Loan Forgiveness Committed by Project Category and Disbursed by SFY

Loan Categories	SRF Program	Amount Committed	Disbursed	
			SFY 2024	SFY 2023
PFAS Remediation Projects	DWSRF	$40.3	$19.7	$19.7
Small Drinking Water Systems	DWSRF	5.1	0.9	3.9
All Other Drinking Water Projects	DWSRF	13.7	6.8	5.3
Combined Sewer Overflow (CSO) / Cape Cod 208 Compliant Projects	CWSRF	52.0	33.5	3.4
All other Wastewater Projects	CWSRF	90.7	23.2	55.1
Total		**$201.9**	**$84.1**	**$87.4**

FIG 2.7 | CWSRF Disadvantaged Community Additional Subsidy as Required by Federal Grants
Dollar amounts in millions

EPA Grant Year	Committed	Expended	% Expended
2022 Base/Supplemental	$22.90	$5.40	23.8%
2021	34.30	34.3	100%
2020 [a]	14.10	14.1	100%
2019 [a]	$8.00	$8.0	100%

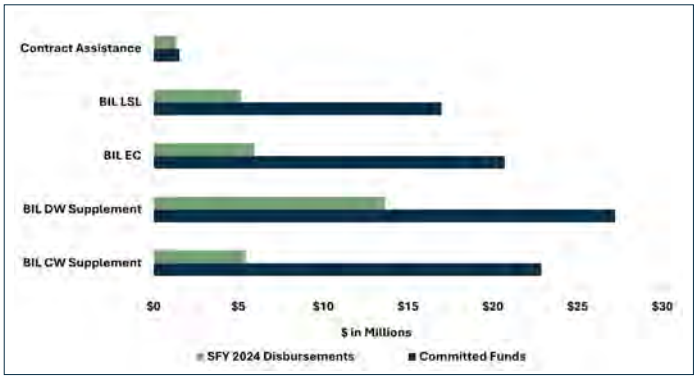
[a] *FFY 2019 and 2020 are listed to show that 100% of the funds detailed in previous annual reports have been expended as of FY 2024.*

FIG 2.8 | DWSRF Disadvantaged Community Additional Subsidy as Required by Federal Grants
Dollar amounts in millions

EPA Grant Year		Committed	Expended	% Expended
2022	**Base/Supplemental**	$27.2	$14.3	52.5%
	EC (PFAS)	20.7	6.0	28.8%
	LSL	17.0	5.2	30.7%
2021		40.1	40.1	100%
2020 [a]		12.0	12.0	100%
2019 [a]		$12.8	$12.8	100%

[a] *FFY 2019 and 2020 are listed to show that 100% of the funds detailed in previous annual reports have been expended as of FY 2024.*

FIG 2.9 | 2022 Loan Forgiveness Committed and Disbursement
Dollar amounts in millions



Part 2. SRF Financial Summary

The following discussion provides additional details on the financial management activities of the SRF loan program.

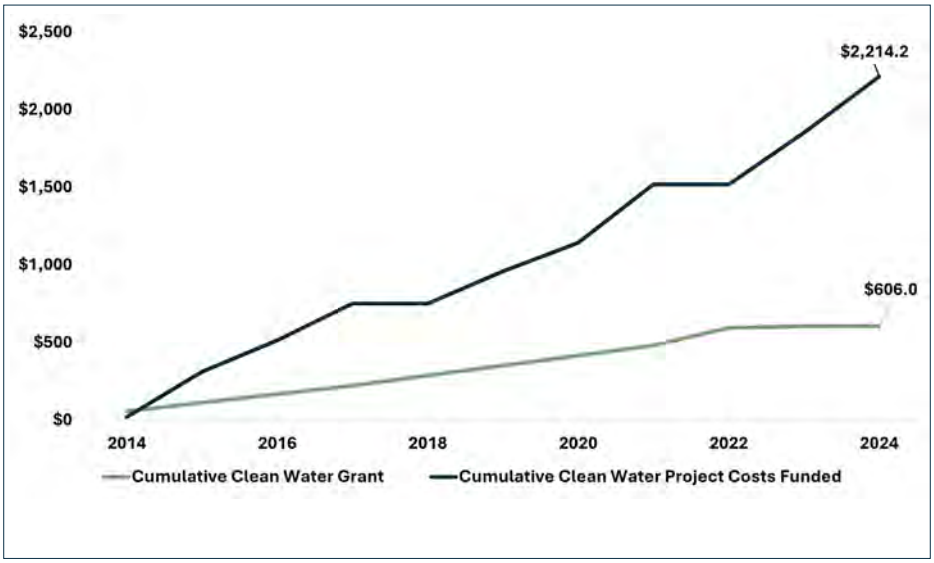
Leveraged Financing Model

The SRF loan program receives funding from the EPA in the form of annual grants, supplemented by state matching funds and the repayment of funds from borrowers. The Trust's SRF loan program utilizes a "leveraged financing model" which allows the Trust to provide funding in excess of the federal grants and state matching funds. Bonds are issued in the capital markets and are secured by borrower payments, reserve funds funded by SRF Program Funds and contract assistance payments from the Commonwealth. The proceeds from the bonds provide capital for new below market rate loans to borrowers for water infrastructure projects.

The leveraged structure of the Trust's program permits the Trust to substantially increase the amount available to finance projects across the Commonwealth. Each dollar of federal grant and associated state matching funds contributed to the program results in at least three dollars of project financing while assuring the perpetual nature of the revolving fund. The following charts demonstrate the lending ability of the Trust by comparing state and federal grants received throughout the life of the program to total loans provided. The annual grant amounts include all federal grant awards received, and the respective state matching funds provided within the SFY.

The Trust's lending and bond issuance programs are structured to ensure adequate cash flows for financing its loans and repaying bonds to maturity. Depending on the type of projects being financed, the terms of the loans to borrowers and the subsidy levels to which the borrowers are entitled, the Trust applies its SRF Program Funds to finance either direct loans to borrowers or invests in reserve funds. Direct loans and/or DSRFs are then pledged as a source of payment and security for the SRF Bonds.

FIG 2.10 | CWSRF Grant Amount Compared to Project Costs Funded by SFY (2014 - 2024)
Dollar amounts in millions



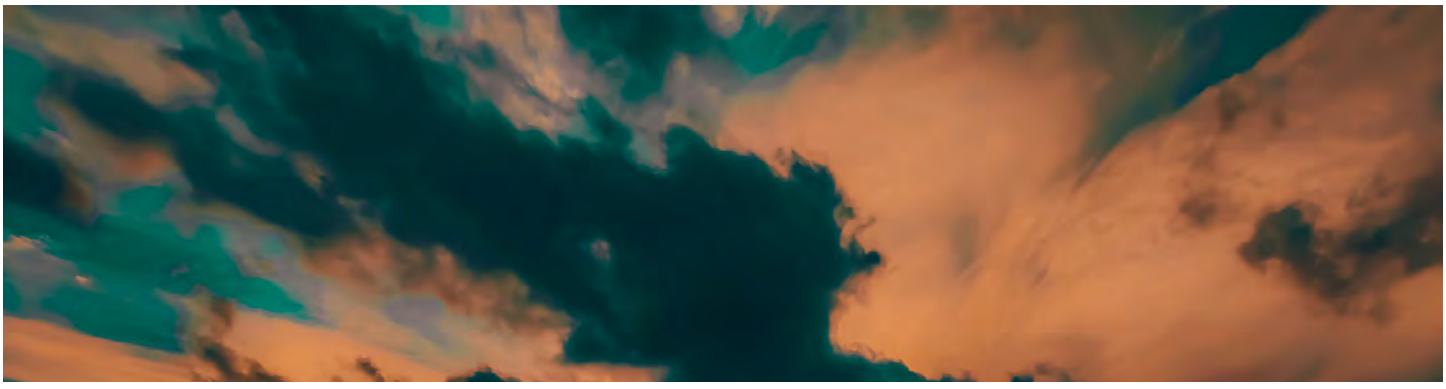


FIG 2.11 | DWSRF Grant Amount Compared to Project Costs Funded by SFY (2014 - 2024)
Dollar amounts in millions

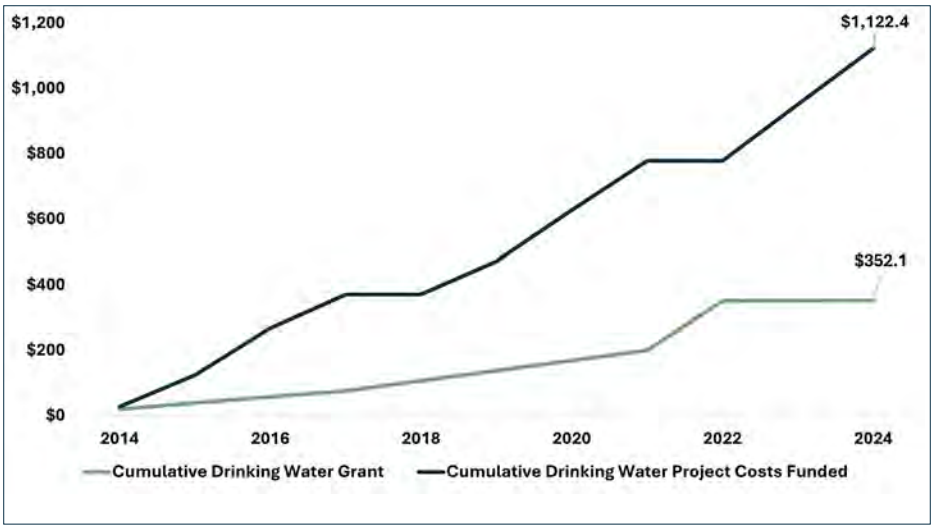
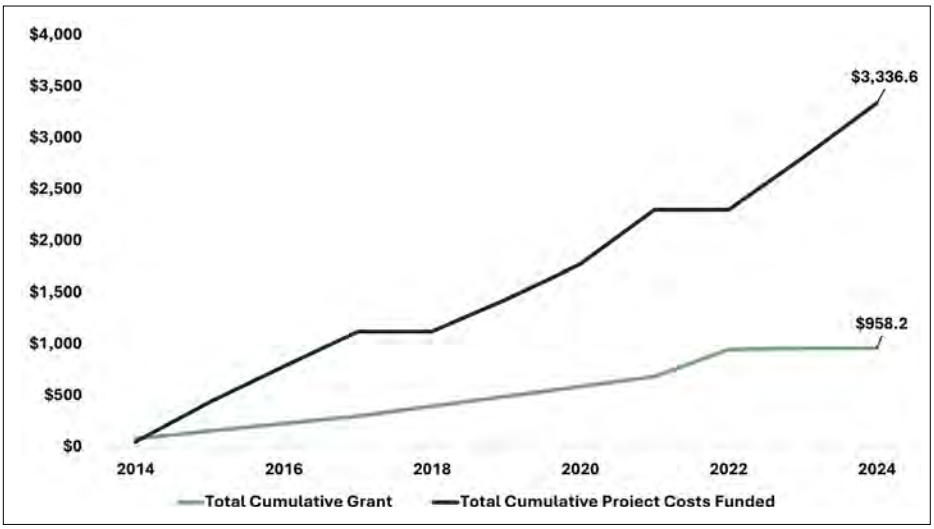
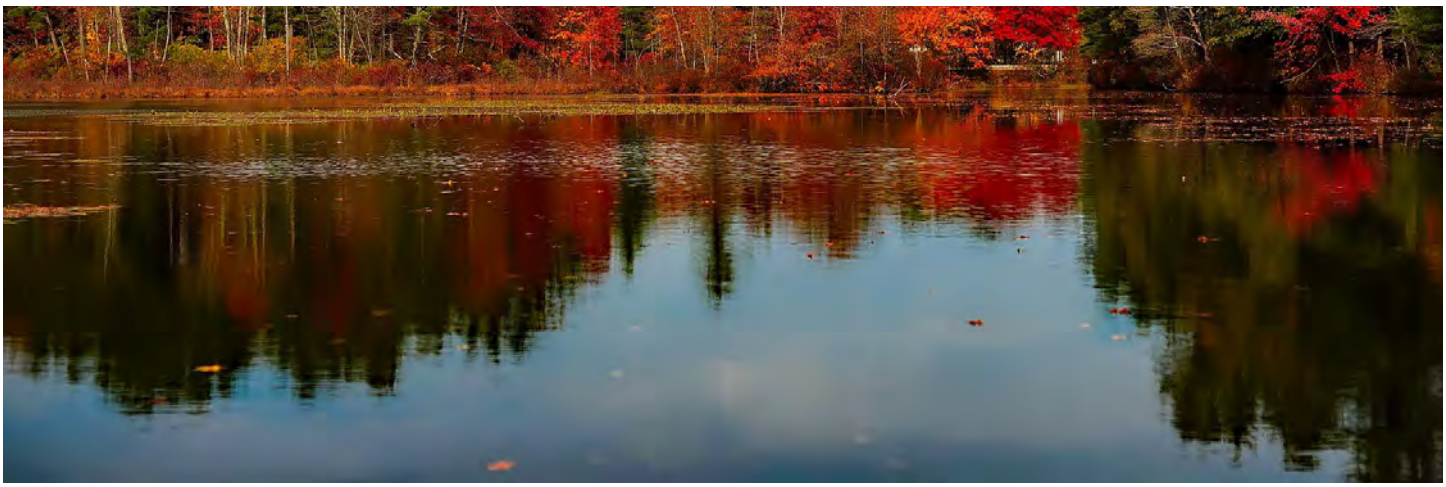


FIG 2.12 | Combined Grant Amount Compared to Project Costs Funded by SFY (2014-2024)
Dollar amounts in millions





SRF Bonds: Sources of Repayment

The sources of repayment for the Trust's SRF Bonds consist of loan repayments from borrowers, interest earnings on DSRFs pledged to secure such bonds, and subsidy payments provided by the Commonwealth in the form of contract assistance.

Pledged Loans

The Trust uses its SRF Program Funds rather than bond proceeds to finance certain loans to borrowers. These loans are pledged as additional security to SRF Bonds. As the loans are repaid, the interest payments on those loans are applied to debt service on the bonds, thus providing the borrowers' interest rate subsidy. Since 2012, the Trust has used the pledged loan approach. As of June 30, 2024, the Trust has **$1.3 billion** in pledged loans outstanding:

CWSRF: **$1.0 billion** of pledged CW loans outstanding.

DWSRF: **$298.3 million** of pledged DW loans outstanding.

Commonwealth Contract Assistance Payments

The Commonwealth makes assistance payments for borrowers by paying a portion of debt service on the related series of the Trust's SRF Bonds, and by augmenting annual additional subsidy in the form of loan forgiveness. This reduces the borrower's overall loan repayment obligation.

Commonwealth contract assistance for interest rate reduction pays the difference between the market rate of the bonds and the subsidized interest rate on the loans of 2% or less. The obligation of the Commonwealth to make such payments to the Trust is a general obligation of the Commonwealth, for which its full faith and credit are pledged. Contract assistance is appropriated annually in the Commonwealth's operating budget. The Trust has as future commitment of **$216.7 million** for both SRF programs.

CWSRF: As of SFY 2024, the Trust has received **$1.4 billion** in Contract Assistance with a future commitment of **$162.3 million**, for a total cumulative commitment by the Commonwealth of **$1.5 billion**. Commonwealth Contract Assistance contributed **7.5%** toward SFY 2024 debt service, totaling **$20.1 million** in assistance applied.

DWSRF
As of June 30, 2024, the Trust has received **$205.2 million** in Contract Assistance with a future commitment of **$54.4 million,** for a total cumulative commitment by the Commonwealth of **$259.6 million**. Commonwealth Contract Assistance contributed **5.1%** toward SFY 2024 debt service, totaling **$5.4 million** in assistance applied.

Deallocation of Funds

As the Trust makes principal payments on its SRF Bonds, the amount of its program assets pledged to the bonds is reduced proportionately, or deallocated, according to each bonds' scheduled cash flows. These released funds are available to cure borrower payment defaults, if any. If not needed to cure a default, the deallocated funds are released to the SRF Program Funds and are then available to be disbursed to new loans, thus assuring the perpetual nature of the revolving fund.

Borrower Repayments

Each borrower is obligated to repay the principal amount of its loan at a subsidized interest rate of **2%** or less. Those with extended term financing, greater than 20 years, receive a subsidized interest rate that is the financial equivalent of a **2%** for 20 years. Series 25, which closed November 21, 2023, had a subsidized interest rate of **2.20%** for extended term financing loans.

CWSRF: In SFY 2024, borrower principal and interest loan repayments accounted for approximately **88.9%** of debt service, totaling **$237.1 million.**

DWSRF: In SFY 2024, borrower principal and interest loan repayments accounted for approximately **93.2%** of debt service, totaling **$97.3 million.**

FIG 2.13 | Total Sources of Debt Service Payments for CWSRF SFY 2024

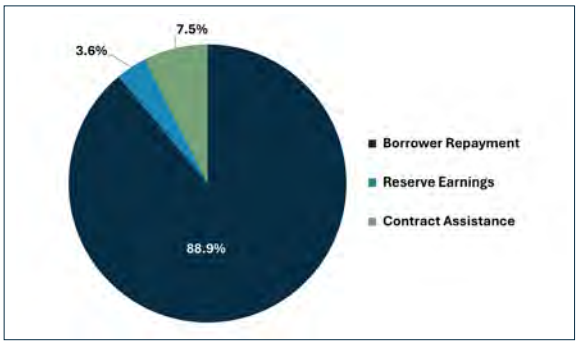


FIG 2.14 | Total Sources of Debt Service Payments for DWSRF SFY 2024

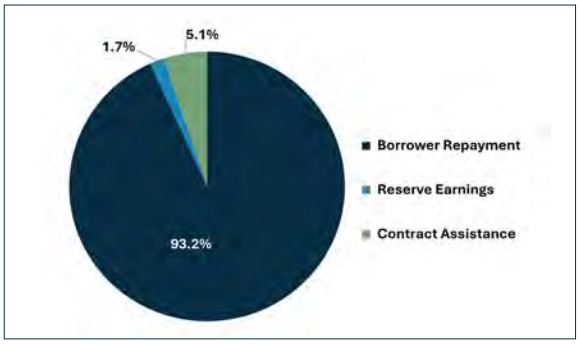
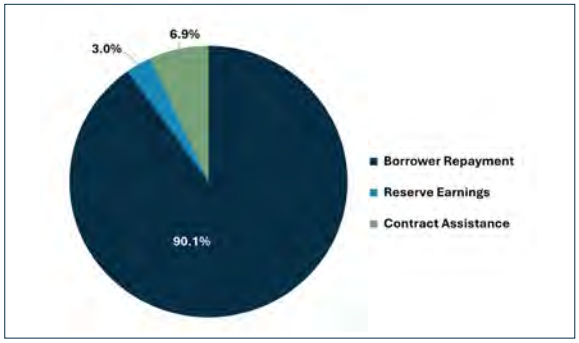


FIG 2.15 | Total Sources of Debt Service Payments for SFY 2024



Debt Service Reserve Funds (DSRF)

In the past, the Trust had pledged a portion of its SRF Program Funds to establish DSRFs to secure a series of its SRF Bonds. The investment earnings from these DSRFs are used to pay a portion of the debt service on the related SRF Bonds, while the fund balances are available as additional security and recycled back to the SRF Program Fund after debt service obligations have been met.

FIG 2.16 | Summary of Debt Service Reserve Fund Balance as of SFY 2024
Dollar amounts in millions

Investment Type	CWSRF	DWSRF	Total Amount
Guaranteed Investment Contracts	$30.6	$2.3	$32.9
US Treasuries and Agencies	48.1	18.9	67.0
Total	**$78.7**	**$21.2**	**$99.9**

Interest Earnings

Earnings on these investments are applied to pay a portion of the debt service on the related series of SRF Bonds. DSRF earnings applied to current debt service payments are listed in the table below. As bonds are repaid, reserve funds are released and returned to their respective SRF Program Fund.

FIG 2.17 | Debt Service Reserve Fund Interest Earnings
Dollar amounts in millions

	CWSRF		DWSRF	
SFY	% of Debt Service	Total Amount	% of Debt Service	Total Amount
2024	3.6%	$9.6	1.7%	$1.7
2023	4.6%	$12.2	2.3%	$2.4

Fees

The The Trust collects an administration fee for all loans that have gone into permanent financing. Fees are collected at a rate of **0.15%** on outstanding principal balances per payment period each year. Fees are used to cover the administrative costs of the Trust and MassDEP.

CWSRF: In SFY 2024, the Trust received **$4.1 million** in administrative fees.

DWSRF: In SFY 2024, the Trust received **$1.5 million** in administrative fees.

Part 1. Lead

Lead has been a long-standing public health issue; especially given the severe health risk lead poses to infants and small children. According to a MassDEP survey, there are an estimated 220,000 LSLs in water supply systems throughout the Commonwealth. Massachusetts has taken a proactive approach to lead in drinking water by no longer accepting partial LSL replacements and providing additional incentives that lower the cost of implementing this vital work.

Rule Updates

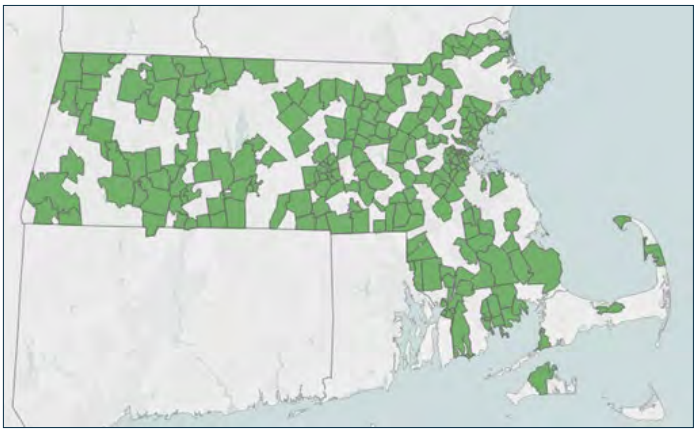
In 1991, the United States EPA promulgated regulations known as the Lead and Copper Rule (LCR) under the authority of the 1974 Safe Drinking Water Act. The LCR protects public health by regulating water suppliers on how to treat and control lead. Finalized in 2021, the LCR Revisions (LCRR) require that all PWSs complete a full inventory of service lines connected to its distribution system, regardless of if they are owned or controlled by the water system, by October 16, 2024. The inventory must be reported in a fully electronic format specified by MassDEP or in an alternate format approved by MassDEP that can be readily compiled into their system.

PWSs must submit a plan detailing how the PWSs will prioritize, fund, and fully remove LSLs connected to its distribution system by the October 2024 deadline. To help meet these deadlines, the Trust has leveraged the additional funding from the BIL to provide enhanced assistance with grants and loan forgiveness.

LSL Inventory Planning Initiatives

The Trust offered grants for activities assisting PWSs to complete planning projects for LSL inventories and for the development of LSL replacement plans. In SFY 2023 and 2024, the Trust committed **$34.6 million** to **142** Communities.

2024 Map of LSL Grant Projects



Further, MassDEP offered the Technical Assistance for *Small Community Water Systems and Non-Transient, Non-Community Systems Program* to help communities that needed additional assistance in completing these required activities. In SFY 2023 and 2024, MassDEP expended over **$252,000** to assist **129** PWSs in **79** communities.

DRINKING WATER GOALS

Lead Service Lines (LSL) Planning & Good Program Governance

The Massachusetts DWSRF program launched multiple programs to reduce lead exposure in drinking water.

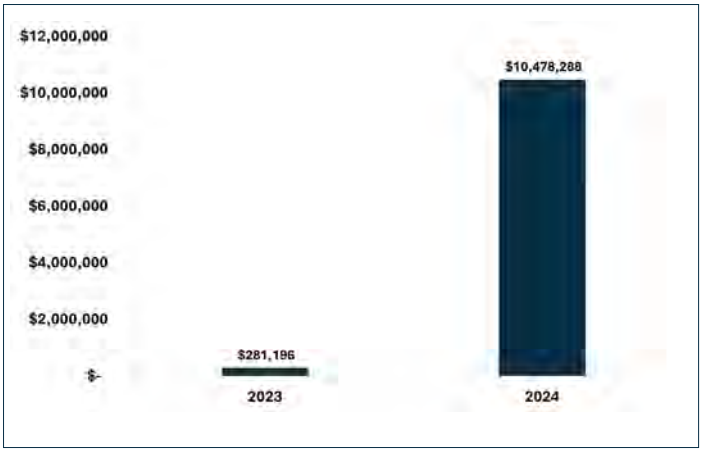
LSL Replacement Program

The goal of the replacement program is to provide PWSs with the resources to replace LSLs. In SFY 2024, construction projects removed **215** LSLs, **122** of which were completed in the City of Boston by the Boston Water and Sewer Commission project listed below. **0%** interest rate loans for construction projects provide deeply discounted funding for the full removal of LSLs. In SFY 2024, the Trust committed **$30.0 million** to **5** LSL construction projects with **$17.0 million** in loan forgiveness. It is estimated that these projects will save **$6.7 million** in interest over the life of their loans in addition to the loan forgiveness savings.

LSL Project Loan Forgiveness and Interest Savings Summary

LSL projects currently qualify for both **0%** interest rate loans and loan forgiveness. This creates a compounding effect on savings. A real example life example can be found in the Boston Water and Sewer Commission (BWSC) Highlight project below. The charts show the financial impact of **0%** interest rate loans combined with Loan Forgiveness.

FIG 3.1 | LSL Planning Grant Disbursements by SFY



Highlight Project | Boston Water & Sewer Commission

Project: Lead Service Line Replacement Program
Loan Number(s): DWLC-22-50, DWL-23-73
Funding for LSL Investigations: $2,800,000
Funding for LSL Remediation: $4,698,888
Grants and Loan Forgiveness Received: $4,679,555

LSL History in Boston: Prior to 1950, lead was used in the construction of exterior plumbing infrastructure. Lead can enter tap water through corrosion in those plumbing materials. Excessive amounts of lead in water present numerous health risks, particularly for pregnant women and young children. In November of 2020, the Boston Water and Sewer Commission (BWSC) received notice from MassDEP that Boston had exceeded the action level during lead and copper sampling. This meant that the city would have to take action to reduce exposure.

In response to the exceedance of the action level, the BWSC developed and implemented a plan that would eventually be included in their LSL Replacement Program (LSLRP). In SFY 2024, the Trust provided BWSC with an LSL Inventory Grant for **$2.8 million**. The BWSC started with an initial inventory of **10,392** services, both public and private, identified as lead, unknown, or other. Their annual target for removal is **8%**, or **831** services.

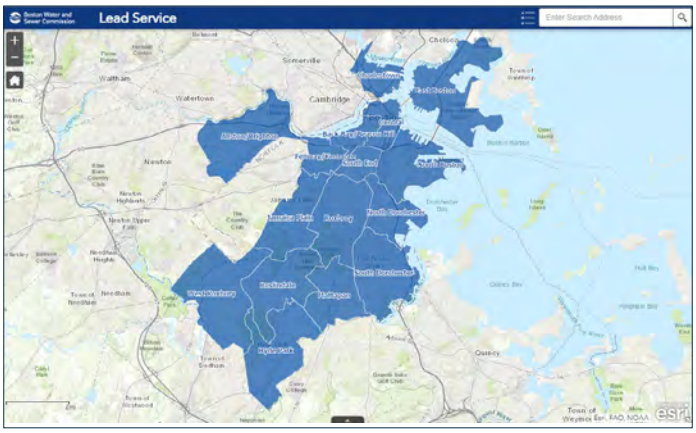
The BWSC employes used scratch testing and vacuum excavation technology to accurately identify the materials of unknown pipes. Vacuum excavation is a method that uses high-pressure water or compressed air to break up soil, which is then removed by a powerful vacuum. This allows for identification of the pipes make up without damage to the pipe, which has allowed for this project to take place without large disruption to the city's water demand. A comprehensive data tracking and reporting system was also established to monitor the progress of the LSLRP.

Boston Water and Sewer Commission

Incentive Program: Under this program, the Commission will cover the replacement costs of LSLs on private property. This program encourages homeowners to replace private water service pipes, which may otherwise be too expensive for the homeowner to replace and can negatively impact the progress otherwise made by the LSLRP.

Economic Impact: The Trust has largely contributed to the financial success of the LSLRP by providing nearly **$4.7 million** in **0%** interest drinking water loans. The Commission has received **40%** loan forgiveness from the BIL Lead Remediation Grant at the Trust's direction and is receiving the **0%** interest benefits of the Trust's LSL program.

The BWSC received nearly **$1.9 million** in loan forgiveness funds and is expected to save approximately **$2.9 million** in interest expense on their 20-year loan, and **$2.0 million** in grants for LSL investigations.



Lead Service Map (Source: Boston Water and Sewer Commission)

FIG 3.2 | BWSC Savings Breakdown
Dollar amounts in millions

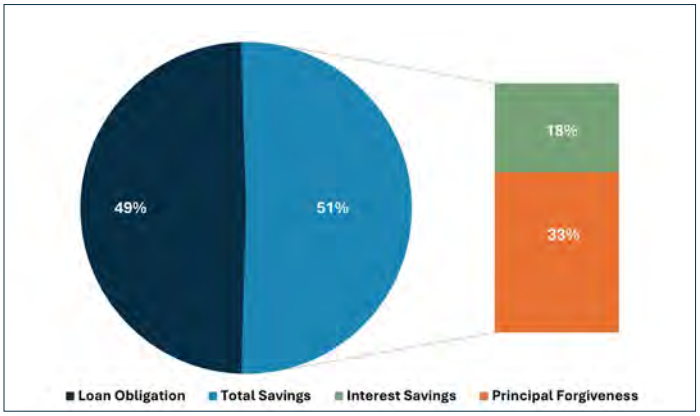
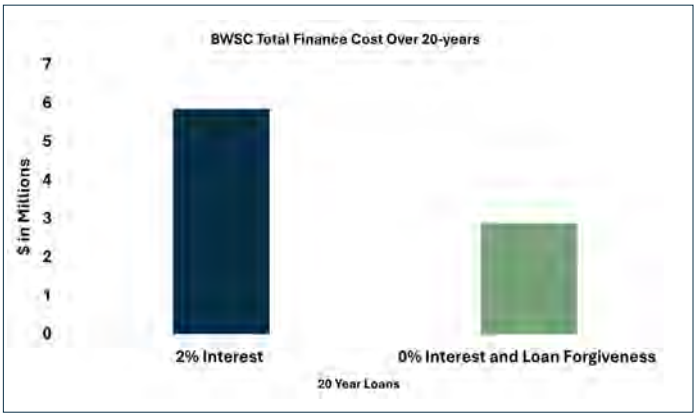


FIG 3.3 | Impact of Loan Forgiveness and 0% Interest
Dollar amounts in millions



Lead in Schools

The School Water Improvement Grant (SWIG) Program

In 2020, the Trust's Board of Trustees approved the pilot round of the SWIG program. The goal of the program is to reduce lead in school drinking water to the lowest levels possible by incentivizing public and private schools, early education facilities and non-residential daycares to test their drinking water fixtures then remediate any lead exceedances that are detected. It accomplishes this by providing funds to purchase and install point-of-use filtered water bottle filling stations to replace drinking water fixtures that tested above the remediation lead action level of 1 part per billion.

SWIG provides **$3,000** for each fixture that tests positive for lead and is eligible to be replaced. The funding covers the purchase of bottle filling stations, installation, and post-installation testing of the units. It allows the organization to use the remaining funds for future operation and maintenance costs. SWIG was launched in concert with MassDEP's expanded version of the Assistance Program for Lead Testing in School Drinking Water using funds from the EPA's Lead Testing in School and Childcare Program Drinking Water Grant.

DRINKING WATER GOAL

LSL Planning and Removal

The Massachusetts DWSRF program launched this program to ensure communities with identified lead can meet LCRR requirements while also ensuring that the Trust can fully utilize the DWSRF LSL grant funds.

In SFY 2024, the Trust awarded **$171,000** in grants to **32** facilities serving over **6,399** students throughout the Commonwealth. Since the inception of the program, the Trust has awarded **$1.8 million** in grants to replace 615 fixtures in **261** facilities serving over **117,000** students throughout the Commonwealth. See **Appendix D** for SFY 2024 projects.

Private School Sampling

In April 2022, the Trust's Board of Trustees voted to reserve **$400,000** to fund sampling and testing in private schools throughout the Commonwealth. These funds are to be used to offer free technical assistance and sampling to facilities that were originally not included in the previous and current free water sampling programs. With this investment, the Commonwealth has demonstrated its commitment to ensuring safe drinking water in facilities that serve those most at risk of health problems from consuming lead in drinking water. In SFY 2024, MassDEP provided technical assistance to **20** facilities, expending **$31,421.**

Part 2. PFAS

Introduction

Per- and polyfluoroalkyl substances (PFAS) are a family of chemicals widely used to manufacture common consumer goods and can be found in some legacy firefighting foams. PFAS have been used on a variety of materials to make them water, oil, and stain repellant, and can be found in commercial household products, workplace electronic manufacturing, common food storage containers, and numerous other sources. PFAS have been called "forever chemical" as they stay in the environment for a long duration and do not breakdown easily.

PFAS has been known to enter drinking water at sites where they were manufactured, used, disposed of, or spilled. PFAS seep through the soil into groundwater or surface water. Humans are exposed to PFAS by consuming contaminated drinking water. Adverse health effects in humans exposed to high levels of PFAS may include hepatic, cardiovascular, endocrine, immune, reproductive, and developmental effects.

Increase in PFAS projects

Since January of 2020, the Trust has committed **$357.1 million** to PFAS construction projects to support communities throughout the Commonwealth. With the establishment of a maximum contaminant level in the Commonwealth, these mitigation projects have grown exponentially to resolve this issue that was largely unknown five years ago. See table in **Appendix D** for a list of PFAS projects with **0%** loans.

0% Interest Rate PFAS Remediation Loans

In January 2020, the Board of Trustees for the Massachusetts Clean Water Trust (the Trust) approved a **0%** interest loan pilot program for Drinking Water State Revolving Fund (DWSRF) projects that remediate PFAS in public water supplies. The goal of these **0%** interest loans was to help communities that have identified PFAS in their water to expedite and complete vital projects at the lowest cost possible. Due to the demand from communities, the Trust's Board voted in July 2020 to continue offering **0%** interest DWSRF loans for PFAS remediation projects.

In April 2021, the Board approved expanding the program to the Clean Water State Revolving Fund (CWSRF). Any utility whose project has the purpose of reducing PFAS in water below the established Maximum Contamination Level (MCL) of 20 parts per trillion (ppt) may be eligible for a **0%** interest loan. As of the end of SFY 2024, the Trust has committed **$357.1 million** to **43** PFAS construction projects. This has saved Commonwealth communities an estimated **$79.8 million** in interest.

Loan Forgiveness

In SFY 2024, using BIL EC (PFAS) grant subsidy and ARPA funds the Trust committed to **$33.5 million** in loan forgiveness for **16** loans serving **13** communities, **10** of which are identified as Disadvantaged Communities. These projects may be found in **Appendix C** of this report. **$20.7 million** comes from the BIL EC (PFAS) grant.

Highlight Project | Tri-Town Regional Water Treatment Plant

Braintree: DWPEC-23-151 $10,000,000
Holbrook: DW-23-152 $3,200,000
Randolph: DW-23-153 $6,800,000

Tri-Town Regional Water Treatment Plant - May 2024 (Source: MassDEP)

Project Overview

The Tri-Town Regional Water Treatment Plant (TTRWTP) is a state-of-the-art replacement to Braintree, Randolph, and Holbrook's existing water treatment facilities. Located across Great Pond Reservoir from the current Randolph/Holbrook water treatment plant, it will greatly improve drinking water for the over **82,000** residents of these communities. The plant will represent **100%** of the drinking water supply for the three communities. The plant will also serve commercial, industrial, and municipal users as well as residential users, making its impact even broader.

The current water treatment systems in Randolph and Holbrook lack sufficient PFAS mitigation and although Braintree recently installed a PFAS mitigation system, it is inadequate for the entire supply. TTRWTP will help protect public health by filtering for PFAS, reducing bacteria, and filtering carcinogenic compounds and disinfectant byproducts present in the current systems.

TTRWTP - July 2024 (Source: MassDEP)

TTRWTP - August 2024 (Source: MassDEP)

The new TTRWTP will incorporate improved treatment technology to provide high- quality finished water and to maintain distribution system residuals. The regional facility, with a design capacity of **12.5 million** gallons a day, would meet all current and anticipated drinking water standards, and would also improve the aesthetic quality of drinking water for Braintree, Randolph, and Holbrook.

DRINKING WATER GOAL

PFAS

PFAS
Prioritize funds for projects or activities that assist communities with eliminating or mitigating PFAS from drinking water sources.

By consolidating the two current water treatment plants amongst the three towns into one, operating cost per gallon will be lowered and the associated capital and maintenance costs will also be significantly reduced. Braintree will pay for **50%** of the construction cost while Randolph will pay **34%** and Holbrook **16%.** The Trust has provided subsidized loans to all three towns since the 2021 IUP. As of SFY 2024, the Trust has committed **$55.0 million** in loans between the three communities, including **$12.0 million** in loan forgiveness.

Because this project is tailored to reduce PFAS, all loan commitments through SFY 2024 are eligible for a **0%** interest rate. This will equate to even more savings for the project over the course of repayment. The overall **$55.0 million** price tag for the project is an extremely heavy burden on all three communities who rely mostly on residential tax revenue as an income stream. The Trust's subsidy programs lighten the burden and allow for this treatment plant to be economically feasible for all three communities.

FIG 3.4 | Braintree Savings Breakdown

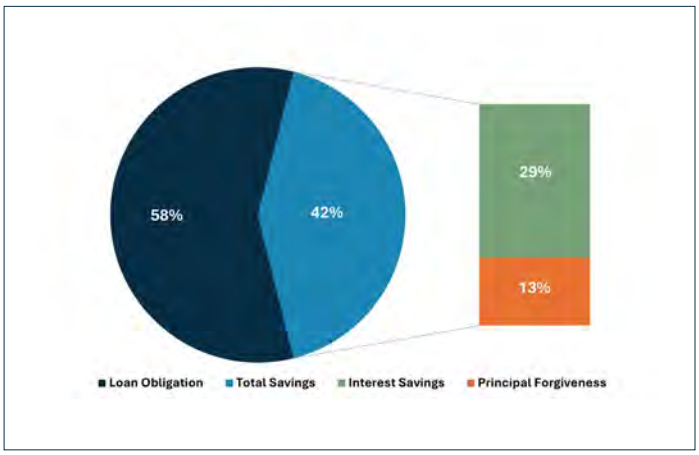
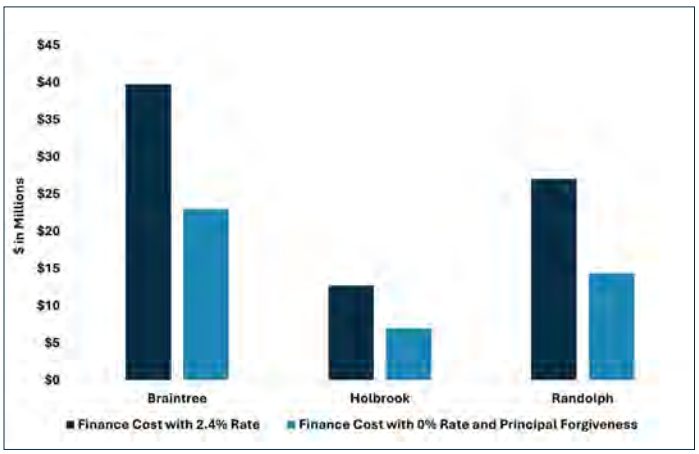


FIG 3.5 | Savings in Dollars Over 30 Years



The project will continue to further public health goals in Massachusetts while providing improved drinking water for these communities in the Greater Boston area. The project is made possible by the DWSRFs financing which has provided the towns subsidized borrowing, needed to support high project costs. The plant is expected to be finished construction in 2025 and represents great political, financial, and public health focused cooperation amongst all three towns, MassDEP, and the Trust.

Part 3. Other Community Support and Incentive Programs

Stormwater and Combined Sewer Overflow (CSO)

Point source and non-point source pollution of water bodies from older industrialized cities, towns and communities have been a constant priority for remediation in the Commonwealth. CSOs are an example of a point-source pollution. Combined sewer systems are sewers that are designed to collect rainwater runoff, domestic sewage, and industrial wastewater, all in the same pipe. During wet weather events, combined sewer systems can reach capacity and the excess overflows into surrounding waters, creating a CSO. CSO correction projects work to reduce the amount of untreated water discharged from combined sewer systems. Eliminating CSOs is an EPA and Commonwealth priority goal because it will reduce the amount of untreated wastewater that is released into water bodies. Beginning in SFY 2023, the Trust utilized ARPA funding as loan forgiveness for CSO removal projects.

The Trust committed **20%** loan forgiveness for 2022 CWSRF IUP projects, resulting in **14** projects receiving **$34.9 million** in loan forgiveness.

Community Septic Management Program

The purpose of this program is to provide funding in the form of low-cost loans to allow communities to devise Local Septic Management Plans and to provide homeowners with low-cost loans to replace failing septic systems. In SFY 2024, the program assisted **7** communities in replacing **25** septic systems.

FIG 3.6 | CSMP Septic Systems Replaced SFY 2024

Borrower	Number of Septic Systems	Disbursed
Scituate	2	$75,301
Bellingham	4	140,000
Easton	4	223,894
Norton	1	35,200
Plymouth	8	230,651
Sharon	2	100,400
Westport	4	$135,000

FIG 3.7 | OSG Funding by Federal Fiscal Year

Dollar amounts in millions

FFY Grant	Allotment	State Match	Total
2020	$0.7	$0.2	$0.9
2021	1.0	0.3	1.3
2022	1.1	0.3	1.4
	$2.7	**$0.8**	**$3.6**

Sewer Overflow and Stormwater Reuse Municipal Grants Program (OSG)

The America's Water Infrastructure Act of 2018 and BIL amended section 221 of the Clean Water Act to reauthorize the Sewer Overflow and Stormwater Reuse Municipal Grants Program (OSG). The OSG program is intended to address local governments' infrastructure needs for CSOs, Sanitary Sewer Overflows (SSO), and stormwater management. The Commonwealth intends to utilize the **$3.6 million** in OSG funds received through SFY 2024 to award up to **$250,000** in grants to communities from its 2025 OSG project solicitation and continue with a rolling application process until the grant funds are fully awarded. MassDEP will provide funding to projects serving Disadvantaged Communities and small rural communities with effort to implement a Long-Term Control Plan for CSOs, SSOs, or stormwater. The 2025 OSG solicitation period ended in July 2024, and MassDEP anticipates announcing grant recipients in the 2025 IUP, tentatively scheduled for release in January 2025.

Highlight Project | Fitchburg

Project: CSO 032, 045, 083 Separation/Rehabilitation
SRF ID: CWSRF-12395
Loan Number: CW-23-34

The discharge of untreated sanitary and combined sewage has posed a significant environmental challenge to the North Nashua River. Over the period 2015-2021, an estimated volume of 39.1 million gallons of raw sewage was released into the river by Combined Sewer Overflow (CSO) regulators 032, 045 and 083. Consequently, there is severe water pollution which endangers both the ecosystem as well as public health.

Project Technical Goals
This issue will be addressed by the CSO 032, 045 & 083 Separation and Rehabilitation Project; it will also separate approximately 21,800 linear feet (LF) of combined sewers and rehabilitate 24,100 LF of sanitary sewers. Separating combined sewers from sanitary sewer lines so that stormwater can go directly to water bodies reduces hydraulic overload in sewer systems, thus minimizing CSO incidents while improving efficiency in wastewater treatment plants. Two combination manholes will be separated as well. Moreover, green infrastructure and stormwater improvements made as part of this rehabilitation project will help manage future storm events as well as reduce infiltration/inflow upstream of the regulators.

Environmental Impact
The North Nashua River is home to various species, some of which are endangered or of special concern, such as the American Brook lamprey and the Jefferson salamander. Protecting the river's water quality is crucial for preserving these species and maintaining biodiversity. Moreover, the river supports agricultural activities in the watershed, which comprise approximately 12% agricultural lands in Massachusetts. Ensuring clean water in the river is vital for the health of these farmlands and the communities that rely on them.

Economic Impact
Fitchburg was financed nearly **$26.0 million** in subsidized loans for this project. Beyond the **2%** subsidized interest rate, this project will be eligible for loan forgiveness that will be awarded in SFY 2025 as Fitchburg is a Tier 3 Disadvantaged Community. The project will be eligible for a minimum of **9.9%** loan forgiveness, which will be approved in SFY25.

Cape Cod and Islands Water Protection Fund (CCIWPF)

The CCIWPF was started by a recommendation from the update to the 208 Plan funded by the Trust and developed by the Cape Cod Commission to address nitrogen flowing into the watersheds on Cape Cod. The CCIWPF is a mechanism to raise revenue from tourism on Cape Cod and dedicate the funds to wastewater infrastructure projects financed by the Trust. It was created pursuant to Chapter 337 of the Acts of 2018 "Act Regulating and Insuring Short Term Rentals". The legislation added an optional 2.75% local excise tax on traditional lodging and short-term rentals for communities on Cape Cod. This excise tax may only be collected by communities participating in the CCIWPF and may only be deposited to the fund managed by the CCIWPF Management Board. The Board is comprised of representatives from each Cape Cod community. The Trust acts as custodian for this fund and moves funds at the direction of the Board. To date, the CCIWPF Board has approved **25%** loan forgiveness for projects over one million dollars and **50%** loan forgiveness for projects under one million dollars for projects on the 2018 IUP and after. This commitment of **25%** loan forgiveness has helped to move more projects on the Cape to construction and is helping to meet the environmental goals of the 208 Plan.

Highlight Project | Harwich

Project: Harwich Phase 3 Sewer Extension Project
Loan Number: CWP-23-19 & CWP-23-19-A
Loan Amount: $41,921,975
Cape Fund Subsidy: $10.5 million

Introduction

The Harwich Phase 3 Sewer Extension Project is a critical initiative aimed at addressing the significant environmental challenge of nitrogen loading from septic systems. The project is part of Harwich's comprehensive strategy to protect and restore its valuable coastal and freshwater resources. By expanding the wastewater collection system, the project seeks to mitigate the impact of septic systems on the watershed, ensuring a healthier ecosystem and improved quality of life for the community. This initiative also aligns with regional efforts to achieve nitrogen Total Maximum Daily Load (TMDL) compliance, which is essential for the sustainable management of water resources in the area.

Solution

The project involves the construction of approximately 10 miles of sewer and 5 pumping stations. The sewer system will include gravity sewers, force mains, and low-pressure sewers to efficiently transport wastewater to the treatment facility. The pumping stations will be equipped with advanced monitoring and control systems to ensure reliable operation and minimize the risk of overflows. Additionally, the project will incorporate green infrastructure elements such as bioswales and rain gardens to manage stormwater runoff and reduce the impact on the sewer system. These measures will help to mitigate flooding and improve the overall resilience of the infrastructure.

Why It Matters

The Pleasant Bay Watershed is a critical environmental resource for Harwich and neighboring communities. By reducing nitrogen levels, the project will help improve water quality, reduce algal blooms in the watershed, and protect both natural and economic resources. This will benefit local ecosystems, recreational activities, and the overall health of the community.

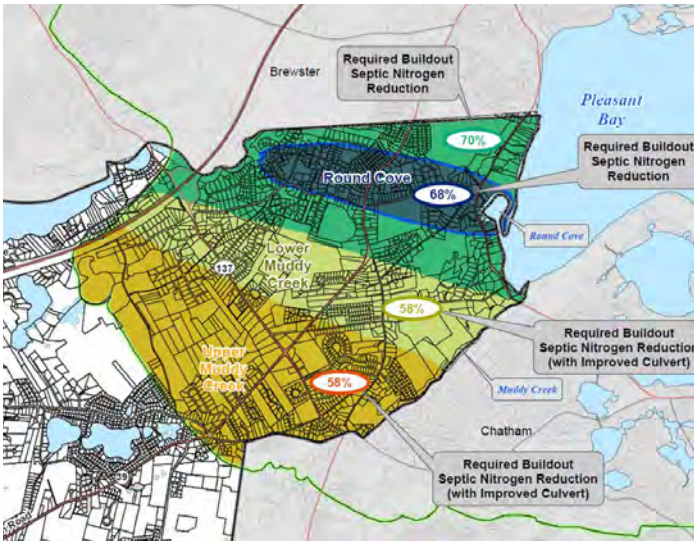
Economic Impact

With a project cost of **$41.9 million**, the town is estimated to save an estimated **$10.3 million** in interest. Additional savings will be addressed in the future when loan forgiveness is committed in SFY 2025, which will further reduce impact on the town. The CCIWPF has contingently committed **$10.5 million** of loan forgiveness to this project. Coupled with future Trust loan forgiveness, this will significantly reduce the final cost of this project. By reducing the overall financing commitment, the Trust's assistance ensures that Harwich can move forward with this critical environmental initiative without compromising its financial stability.

CLEAN WATER GOAL

Stormwater

Fund projects and activities that address or mitigate stormwater runoff and nutrient loading. MassDEP and the Trust leverage predictable funding mechanisms, such as 0% interest loans and fixed percentage loan forgiveness, to provide communities with reliable tools to estimate the future cost of projects and to incentivize communities to tackle projects that have real impact on communities and the environment.



Map of Pleasant Bay Watersheds in Harwich (Source: CDM Smith)

Utility Support Programs

Asset Management Planning (AMP) Grant Program

Asset management for water, wastewater, and stormwater utilities is a systematic approach to physical infrastructure cataloging, process management, and criticality tracking that allows the utility to make informed financial decisions that are most likely to achieve long-term sustainability and deliver consistent cost-efficient service.

CLEAN WATER AND DRINKING WATER GOAL

Utility Sustainability

Fund projects and activities that assist systems with planning and sustainable practices. AMP Projects serve utilities by providing detailed information about the current infrastructure conditions which invaluable when planning future operations and maintenance expenses and long-term capital planning. Additionally, these projects often provide updated tracking technology and processes for constantly updating and integrating infrastructure tracking with current operations tracking. The long-term effect is a more sustainable picture of the system and its conditions.

The Trust launched the AMP Grant program in 2019. The purpose of this grant is to assist eligible applicants with completing, updating, or implementing an asset management plan for wastewater, drinking water, stormwater utilities or any combination of the three. Finally, the program is aimed at assisting applicants with meeting federally required Fiscal Sustainability Planning. The Trust provides a maximum grant award of **$150,000** or **60%** of the total project cost, whichever is less. The applicant provides the remaining amount with a cash contribution, or a cash contribution along with an in-kind services (IKS) contribution as a local match. The IKS contribution is limited to **50%** of the total local match. Small systems may use an IKS contribution of up to **70%** of the local match. Projects may use CWSRF or DWSRF loans with a maximum term of five years to finance the entire local contributions.

In SFY 2022, the Trust and MassDEP updated the program eligibility to include cybersecurity assessments. This allows communities to have a professional review of their infrastructure's network security and make recommendations and policy changes.

AMP grants applications are requested through the annual SRF project solicitation. In SFY 2024, the Trust executed **33** agreements totaling approximately **$3.4 million** in grants which helped to fund nearly **$5.7 million** in AMP activities. See **Appendix D** for SFY 2024 AMP projects.

CWSRF Small System Technical Assistance

In the SFY 2024, MassDEP and the Trust launched a new technical assistance program aimed at providing Wastewater and/or Stormwater Infrastructure Needs Assessments, and assistance with the SRF Project and loan applications. These funds come from the CWSRF BIL 2% Small System Set-Aside and services are provided by a nationally recognized technical assistance provider, RCAP Solutions.

In SFY 2024 the Trust provided the Town of Clarksburg the technical services to assist the town with completing a Request for Proposals (RFP). RCAP worked with the community and Select Board to ensure the RFP for the engineering firm was comprehensive and supported the SRF eligible planning project application. The RFP was for CCTV camera work of the wastewater collection system that has not yet been evaluated. Activities would include documenting these findings and including future recommendations in a report. A previous comprehensive I/I study and asset inventory indicated two key areas in need of further exploration/investigation. The Trust expended **$12,500** to the technical service provider.

Federal Requirement Support

MassDEP and the Trust deployed several new initiatives and continued supporting existing programs. By providing LSL grants directly to cities and towns, a need arose to provide support in meeting generally accepted accounting standards (GAAP) to meet federal grant requirements. The Trust voted in June 2023 to provide funds expressly for this purpose. To date, the Trust has provided **$45,000** to two communities under this program.

CLEAN WATER GOALS

Utility Sustainability and Community Support

Providing the option of direct technical assistance to communities ensures that utilities have access to support and information needed to take advantage of the CWSRF program.

FIG 3.8 | Federal Requirement Support for Communities SFY 2024

PWS	Grant Number	Audit Assistance Amount
Deerfield Fire District	DWL-22-58	$20,000
West Warren Water District	DWL-23-56	25,000
	Total	**$45,000**

DRINKING WATER GOAL

Community Support

Through the process of providing grant funds to DWSRF PWSs, the Trust encountered many communities that were concerned about or unaware of federal grant requirements, specifically audit requirements. To that end, the Trust established a fund to help communities with meeting these federal grant requirements to ensure that communities would not find the acceptance of a free grant onerous and costly.

Cybersecurity

The DWSRF in partnership with the MassDEP Drinking Water Program (MassDEP DWP), offers grants of up to **$50,000,** to PWSs that had a cybersecurity risk assessment and use operational technology equipment with an identified cybersecurity risk. MassDEP DWP is actively working to improve the cybersecurity and resilience of PWSs. Cybersecurity must be addressed in PWS's Emergency Response Plan (ERP) per 310 CMR 22.04(13). The PWSs must assess their system, including cybersecurity, and have a plan to address acts of vandalism or sabotage, including cyber incidents, that have the potential to impact the quality or quantity of water available to the system (as required by 310 CMR 22.04(13)(a)9). Eligibility for the program was limited to Small Systems (serving less than 10,000 people) or systems located in a Disadvantaged Community. The grants will be executed in SFY25 and will be included in the next Annual Report. However, in SFY 2024, the MassDEP Drinking Water team conducted three educational webinars on cybersecurity with over **100** participants and provided cybersecurity assessments to **35** PWSs utilizing technical service providers.

DRINKING WATER GOAL

Utility Sustainability

Fund projects and activities that assist systems with planning and sustainable practices.

Part 1. Clean Water State Revolving Fund

The following discussion addressed the specific reporting required by the CWSRF program.

Green Project Reserve (GPR)

For the 2023 CSWRF grant, Congress required that at least **10%** of the grant be used to finance "green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities." In its 2023 CWSRF IUP, MassDEP identified **46** projects totaling **$809.0 million** that are either entirely or partially green. Given the project a dvancement timeline, and that many construction projects are only partially green, MassDEP is now working to review the schedules of values to extract the green portions of the projects. Once these values are calculated, they will be reported in the Office of Water State Revolving Funds (OWSRF) Database and in the next Annual SRF Report.

For the 2022 CWSRF Grant, Congress required that at least **10%** of the CWSRF grants be used to fund green projects, requiring a minimum of **$10.0 million**. MassDEP confirmed **7** projects (**10** loans) with a total project cost, and green project value, of **$20.7 million**. MassDEP has confirmed that the Massachusetts CWSRF has met or exceeded the 2022 CWSRF Grant Green Project Reserve requirements. It will continue collaborating with communities to meet this annual requirement in the future. See **Appendix E** for 2022 CWSRF Green Project Reserve projects.

CLEAN WATER GOAL

Green Investment
Fund projects and activities that reduce energy use and mitigate pollution of natural resources.

Transfer of Funds to the Drinking Water State Revolving Fund

Section 302 of the 1996 Safe Drinking Water Act Amendments allows states the flexibility to move funds between CWSRF and DWSRF programs to better address specific state priorities. The EPA allows an equivalent of up to 33% of the DWSRF grant to be transferred between the SRF programs.

The level of DWSRF grant funding for Massachusetts is insufficient to meet the state's demand for project financing. The DWSRF grant requires more funds be given away as additional subsidy and provides up to 31% as set-aside funds to be used. As a result, a sizable portion of the DWSRF does not revolve back into the Trust, which limits the program's capacity growth.

In contrast, the CWSRF annual grant requires 10% of the annual amount to be given away as additional subsidy and 4% to be used for program administration. This has allowed a substantial portion of the CWSRF to revolve annually, thereby increasing program capacity. To address this funding insufficiency, the Trust transfers the limited amount allowed from the CWSRF to the DWSRF annually allowing for modest increases in the capacity of the DWSRF and reducing the imbalance in the ability to provide financing. Further, the Trust's Board of Trustees has taken the opportunity to leverage additional BIL funding to increase DWSRF's capacity.

FIG 4.1 | Transferred CWSRF Funds to DWSRF History by FFY Grant
Dollar amounts in millions

Grant Year	Base Grant	BIL Supp	BIL EC	Other [a]	Total Transfer
2023 [b]	$3.5	$14.9	$3.5	-	$21.9
2022	5.4	13.8	3.2	-	22.4
2021	8.5	-		-	8.5
2020	8.4	-		$30.0	38.4
2019	8.4	-		-	8.4
2018	8.5	-		-	8.5
2017	5.1	-		-	5.1
2016	5.1	-		-	5.1
2015	5.4	-		-	5.4
2014	5.4	-		-	5.4
2013	5.2	-		-	5.2
	$68.9	**$28.7**	**$ 6.7**	**$30.0**	**$134.3**

[a] Pursuant to the Water Infrastructure Funding Transfer Act and applicable EPA Guidance, this one-time transfer was allowed to address lead in drinking water.
[b] The CW BIL EC grant was amended to reflect this reduction, however, as of June 30, 2024, the DW BIL EC grant was not amended to reflect the increase.

Administrative Expenses

For SFY 2024, **$3.4 million** of annual CWSRF grant administration federal funds were spent by MassDEP. These costs were associated with construction management of the CWSRF program. An additional **$3.0 million** was spent from the Trust's Administrative Fund to supplement MassDEP administrative costs for both the CWSRF and DWSRF programs.

Program Evaluation Report (PER) Action Item Follow Up

The following is an update to how the Massachusetts SRF responded to action items detailed in 2022 CWSRF PER.

Action Item: In future annual reports, ensure that the additional subsidy amount entered in OWSRF matches the amount in the annual report in the "CWSRF Additional Subsidy by Source by Grant Year" chart, adding additional sources if needed, and ensure that the chart is up to date.

The Trust has updated the reporting tables in the annual report to ensure the source of funding is clear. The updated tables may be found in **Appendix B** of this report. Two tables for each program are now included that detail the calculation of additional subsidy and the source of funding of that additional subsidy.

Part 2. Drinking Water State Revolving Fund

The following discussion provides additional details that are specific to the DWSRF program and its related activities.

Small Systems

A requirement associated with the DWSRF program establishes that states are required to commit **15%** of total available funds for loans to small systems. The EPA defines a small system as a "public water system that regularly serves 10,000 or fewer persons." The total DWSRF funds available for the 2023 IUP was **$59.4 million**, of which approximately **$8.9 million** would be for small system loans.

Beyond directing at least **15%** of the Drinking Water SRF Program's IUP to small systems, the SRF program further advances small systems in both Clean Water and Drinking Water by awarding additional points in the project ranking process and offering various technical assistance opportunities and outreach.

Although small, privately owned drinking water systems may encounter difficulties in obtaining SRF loans due to the lack of collateral, or small rural communities may encounter similar difficulties due to the lack of resources necessary to apply for SRF assistance, the program has successfully committed funding to **41** small system projects totaling **$36.7 million** in SFY 2024.

FIG 4.2 | Small System Commitments SFY 2024
Dollar amounts in millions

Project Type	Number of Projects	Project Amount
DWSRF Construction	3	$18.7
DWSRF EC	2	13.0
LSL Grants	31	4.7
DWSRF AMP	5	.3
Total	**41**	**$36.7**

Set Asides

MassDEP continues to use set-aside funds as outlined in the annual IUP. The following sections describe the programs and accomplishments.

Additional information about MassDEP's Drinking Water Program (DWP) activities can be found in these reports:

DWP's Safe Drinking Water Act Annual Compliance Report

DWP's Safe Drinking Water Act Assessment Advisory Committee's Annual Report to the Legislature

4% Administration

Base and Supplemental Grant Activities

MassDEP uses staff members to help administer the DWSRF program. These Full Time Employee (FTEs) utilize the **4%** set-aside funding to accomplish the following tasks: developing program selection criteria, application ranking and rating, project development, construction inspections, invoice payments, data management, and administrative support functions.

2% Small System Technical Assistance

Base and Supplemental Grant Activities

MassDEP uses staff members for municipal services support. These FTEs provide training and technical assistance (compliance and operational issues) to small systems throughout the Commonwealth. MassDEP partnered with outside training and technical assistance providers, such as the Massachusetts Rural Water Association, New England Water Works Association, and EPA's Environmental Finance Center, to aid small water systems. The DWSRF program uses significant outreach efforts for small system projects throughout the Commonwealth. The 2% Small Systems Technical Assistance set-aside is used to emphasize the SRF as a low-cost source of financing. Highlights from MassDEP and its partners from SFY 2024 include:

- Conducted three educational webinars on cybersecurity with **102** participants.
- Provided cybersecurity assessments to **35** PWS utilizing one or more TA providers.
- Hosted a career panel at Worcester Vocational Technical High School for students.
- Offered a free drinking water exam preparatory course for entry level drinking water operators.

LSL Grant Activities

MassDEP used set-asides for contract services to support DWP administer DWSRF program activities. The contract services supported the Assistance for Small Community Water Systems and Non- Transient, Non-Community Systems - LSL Planning Program. This program works with small community and non-transient non-community PWS to conduct service line inventories and develop LSL replacement plans, if necessary. These deliverables are required to be completed as part of USEPA's Lead and Copper Rule Revisions. In SFY 2024, **129** PWSs serving **79** communities have signed up for assistance under this program which has expended **$252,300**.

10% State Program Management

Base and Supplemental Grant Activities

MassDEP uses staff members to administer DWSRF program activities. FTE staff are involved in the following programs: sanitary survey, source and wellhead protection, emergency response, capacity development, operator certification, consumer confidence report assistance, adoption and implementation of new regulations, evaluation and maintenance of existing federal rules, planning, outreach, MassDEP and data management, engineering and construction supervision, compliance supervision, and other DWSRF program activities. Technical assistance was prioritized for small and Disadvantaged Communities.

Highlights of the programs in SFY 2024 include:

Sanitary Survey Program

MassDEP's DWP is responsible for evaluating the technical, financial, and managerial capability of community, non-transient non-community, and transient non-community PWSs. During last year, the DWP completed **399** evaluations on existing systems.

FIG 4.3 | Sanitary Surveys Completed in SFY 2024

Types of Public Water Systems	Surveys
Community Systems	190
Non-Transient Non-Community System	53
Transient Non-Community Systems	156
Total	**399**

Operator Certification

MassDEP's DWP has an active operator certification program. The program activities have been integrated into daily staff activities. Program activities range from chairing the Board of Certification of Operators of Drinking Water Supply Facilities (the Board) to providing general and specialized assistance for drinking water operators at all levels. There are over 3,000 licensed operators in Massachusetts holding over 6,000 licenses. All operators were required to renew their licenses by December 31, 2023. While most operators renewed their licenses before the deadline, there were approximately 700 operators who did not. While some of these operators may have retired or left the industry, many operators renew their licenses after the deadline and pay a late fee to do so.

MassDEP's DWP participates in the New England Water Works Association certification committee and the annual Water Professionals International meeting. DWP staff published a paper in the New England Water Works Association Journal about operator certification data in Massachusetts and trends in operator certification during the past decade. They assisted the Board in revising the training policy to include requirements and review processes for virtual and asynchronous trainings.

The DWP is also assisting the Board in drafting new policies related to contract operator licensing reviews, reciprocity, and temporary emergency certifications. DWP participates in state-wide efforts to increase workforce recruitment into the drinking water industry, particularly into the operations field, through collaborations with high schools, career programs, and through its internship placement program with the University of Massachusetts – Amherst.

Lead in Schools and Early Education and Care Facilities

The DWP has a longstanding program to support the voluntary testing of drinking water in schools and childcare facilities for lead. The most recent iteration was launched in January 2020 and is currently ongoing. The program offers lead in drinking water testing and technical assistance services to all public and private schools and licensed childcare programs that have not previously participated in the assistance program. The program is supported by USEPA Water Infrastructure Improvements for the Nation (WIIN) Act grants and Trust funding for private school testing. The DWP has recently rebranded the program from the Expanded Assistance Program to the Water-Smart program to create a cohesive identity for the program and increase participation. Over the previous fiscal year, the program has tested **>300** schools and childcares.

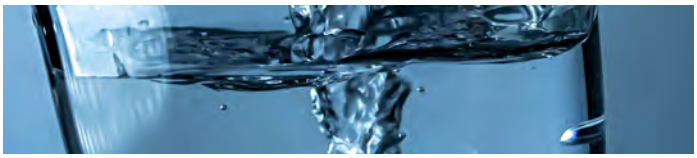
A focus of the program is increasing knowledge and testing in environmental justice (EJ) communities and communities identified by Department of Public Health as high risk for childhood lead poisoning. The program continued robust outreach efforts including monthly email communications, social media posts, and several in person and virtual meetings with community groups and stakeholders. The program also works closely with the Trust's SWIG Program on outreach and in assisting bottle filling station testing prior to being brought into service. MassDEP continued to work with PWSs through the pilot program to support comprehensive testing of schools and childcare facilities ahead of requirements of the USEPA Lead and Copper Rule Revisions. Finally, the program is currently developing a plan to provide remediation options to family childcare centers that detect elevated levels of lead.

Reporting

The DWP contracted services to support PWSs as they prepared Annual Statistics Reports and Water Quality Monitoring Reports. Third-party contractors provided technical assistance to PWSs for preparing and electronically submitting these reports to the DWP.

EC (PFAS)

The DWP continued to aid PWSs as they sampled water for PFAS. If sampling results yielded PFAS levels above the MassDEP maximum contaminant level (MCL) for six PFAS compounds (PFAS6), the DWP supported PWSs that implemented PFAS treatment systems.



Capacity Development

While conducting sanitary surveys on public water systems, MassDEP staff identified 864 technical, financial, or managerial deficiencies and provided corrective action assistance to ensure compliance. MassDEP continues to conduct trainings and programs to assist with the technical, financial, and managerial abilities of public water systems.

MassDEP used set-asides for contract services to support DWP and administer certain DWSRF program activities. These contract services helped with:

PWS Support: Fiscal management, grant support, implementation support for new regulations, data management, and other drinking water program activities.

PWS Small-System Compliance Support: Safe Drinking Water Act requirements and Massachusetts drinking water regulations and support for small and Disadvantaged Communities, LSL replacement inventory, unregulated contaminants and the SRF process.

PWS Information Management: Reporting and database maintenance and improvement.

PWS Data Support Technical Assistance: Safe Drinking Water Act requirements and Massachusetts drinking water regulations and support for electronic submission of data to DWP, including supporting PWS and DEP in submittal of Annual Statistical Report and Water Quality Monitoring Reports and the development of training programs to support DWP staff and PWS in the proper submission of electronic data.

15% Source Water Protection and Capacity Development

Base and Supplemental Grant Activities

MassDEP used staff members and contract services from the 15% Source Water Protection and Capacity Development set-aside to administer DWSRF program activities. These activities included:

Wellhead Protection Program

MassDEP provided technical assistance to PWSs for wellhead protection compliance, the development of protection plans, and determining monitoring waiver eligibility. In addition, MassDEP obtained a 2-year grant from the United States Geological Survey to identify and locate all wells in the state (irrigation, monitoring, domestic, thermal, etc.) by reviewing the Massachusetts well driller database. The well driller program includes well completion reports for all **200,000+** wells in its database. Old wells often have erroneous well locations. This grant is to assist with updating geographic information. Accurate well location data will benefit several programs (e.g., PFAS), with the goal ofprotecting groundwater quality and quantity.

Source Protection Support

The registration of 12 new small PWSs, along with continuing the implementation and monitoring of the chemical monitoring waiver program, has incentivized source protection. It has also promoted preparedness and sustainability. Source protection technical assistance was provided during the **399** sanitary surveys that were completed throughout the year. DWP staff represent MassDEP on the State Pesticide Board, Vegetation Management Panel, and as an alternate on State Reclamation and Mosquito Control Board. In addition, MassDEP participates as a member of the New England Interstate Water Pollution Control Commission (NEIWPCC) Source Water Protection workgroup and the Joint Association of State Drinking Water Administrators and Ground Water Protection Council's National Source Water Protection workgroup.

FIG 4.4 | Registration of New Small PWSs in SFY 2024

Types of Public Water Systems	Number of Systems
Community Systems	2
Non-Transient Non-Community Systems	-
Transient Non-Community Systems	10
Totals	12

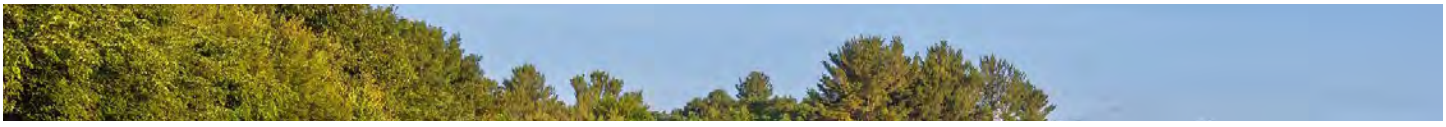
Contract services included:

Statewide Well Location Parcel Matching: activities focus on the Safe Drinking Water Act requirements and Massachusetts Drinking Water Regulations in protecting the groundwater quality in the Commonwealth by acquiring as many accurate locations as possible for the **200,000+** wells currently housed in the Well Driller database.

Hydrogeological Services: Activities focus on the Safe Drinking Water Act requirements and Massachusetts Drinking Water Regulations in protecting the groundwater quality and quantity in the Commonwealth by reviewing the hydrogeologic components of New Source Approvals, Zone II delineations, Groundwater Discharge Permits near Public Water Supplies, and potential contamination threats to Public Water Supplies.

FIG 4.5 | SFY 2024 DWSRF Full Time Employee (FTE) Count by Set-Aside and Grant

Program	4% Administration	2% Small System Technical Assistance	10% State Program Management	15% Source Water Protection and Capacity Development
Base	2	1	N/A	8.5
Supplemental	9.5	2	N/A	5.75
LSL	N/A	N/A	N/A	N/A
EC	N/A	N/A	N/A	N/A



Part 3. Program Certification

Extended Term Financing

The Trust continues to offer extended term financing up to 30 years for construction projects to its borrowers. Extended term financing is available for CWSRF and DWSRF projects that can demonstrate the project's useful life is at least as long as the term of the loan. By offering extended term financing, the Trust provides an equivalent interest rate subsidy for a 30-year loan, as it does for a 20-year loan, based upon current market conditions near the time of the loan closing. For SFY 2024, the interest rate for a 30-year loan was **2.20%**.

American Iron and Steel (AIS)

MassDEP has incorporated the AIS requirements into its Loan Application and Plans and Specifications Preparation Package. The necessary language has also been added in the Project Regulatory Agreement and the Financing Agreement for loans. All projects during the reporting period were subject to the AIS requirements because all projects had plans and specifications submitted, or contracts finalized after the AIS effective date of January 17, 2014.

Federal Funding Accountability and Transparency Act (FFATA)

In compliance with the FFATA, the Trust reports recipient or subrecipient awards for any amount equaling **$25,000** or greater in the FFATA Subaward Reporting System (FSRS) at www.fsrs.gov. The loans used by the Trust for FFATA Reporting can be found in **Appendix B** of this report. See **Appendix E** for 2022 Grant Projects.

Buy America, Build America Act (BABAA)

MassDEP has incorporated the BABAA requirements into its Loan Application, Plans and Specifications Preparation Package, Project Regulatory Agreement, and Financing Agreement for loans. All projects must comply with BABAA unless (i) the SRF borrower has requested and obtained a waiver from the EPA pertaining to the project or the project is otherwise covered by a general applicability waiver; or (ii) MassDEP has advised the borrower in writing that the BABAA requirement is not applicable to the project. MassDEP ensures that the required procurement language is included in contracts and conducts field verifications of project compliance.

Davis-Bacon

The amendments to the Clean Water Act, as part of WRRDA, apply the Davis-Bacon Act requirements to all treatment works projects going forward. The Davis-Bacon requirements do not apply to nonpoint source or decentralized wastewater treatment projects. MassDEP ensures that the required Davis-Bacon language is included in contracts and conducts field verifications of project compliance with the wage rate requirements.

Disadvantaged Business Enterprise (DBE) Certifications

The Trust maintained the DBE goals previously approved by EPA Region 1. The current DBE goals are **4.2%** for minority-owned business enterprises (MBE) and **4.5%** for women-owned business enterprises (WBE). Projects receiving SRF financing must meet those goals. Proponents unable to meet the targets may seek a waiver for the requirement, if it can be demonstrated that a 'good faith effort' was undertaken by the proponent to achieve those goals.

Compliance with Federal Crosscutters

The loan agreement and Project Regulatory Agreement requires that loan recipients comply with applicable federal crosscutting authorities. The state is required to comply with applicable federal crosscutting authorities by the assistance and operating agreements it signs with the EPA and by applicable federal regulations. EPA could be of more assistance by providing more timely updates when new crosscutters are added.

Compliance with Grant Conditions

By signing the CWSRF and DWSRF capitalization grants, the Trust agreed to abide by all conditions of the grant, follow the statutory authorities in the Clean Water Act Title VI and Safe Drinking Water Act Section 1452, and implement regulations in 40 CFR Parts 31 and 35.

Appendix A • Financial Tables

Clean Water SRF	2024		2023	
	Annual Grant Awards		Annual Grant Awards	
Federal Clean Water SRF Grant	$25,469,000		$39,285,000	
BIL Supplemental	70,769,000		60,428,000	
BIL Emerging Contaminant	3,720,000		-	
State Matching Funds	12,170,700		13,899,800	
Total Federal & State Grant Awards	**$112,128,700**		**$113,612,800**	
Annual Binding Commitments				
Binding Loan Commitments Issued	$404,243,836	51	$510,012,116	52
Annual Disbursements				
Clean Water Interim Loans	$315,606,082	103	$275,723,899	123
Project Loans Financed	64,003,869	65	38,651,867	41
Total Disbursements	**$379,609,951**	**168**	**$314,375,766**	**164**
Financial Results from Program Inception				
Federal Clean Water SRF Grant	$1,926,999,761		$1,827,041,761	
State Matching Funds	344,924,792		332,754,092	
Total Federal & State Grant Awards	**$2,271,924,553**		**$2,159,795,853**	
Total Loans Financed	**$6,809,083,377**		**$6,478,299,670**	

Drinking Water SRF	2024		2023	
	Annual Grant Awards		Annual Grant Awards	
Federal Drinking Water SRF Base Grant	$10,602,000		$16,260,000	
BIL Supplemental	45,206,000		41,750,000	
BIL LSL	33,700,000		65,783,000	
BIL EC (PFAS)	19,904,000		20,706,000	
State Matching Funds	6,641,000		7,427,000	
Total Federal & State Grant Awards	**$116,053,000**		**$151,926,000**	
Annual Binding Commitments				
Binding Loan Commitments Issued	$192,219,055	31	$198,108,033	97
Annual Disbursements				
Drinking Water Interim Loans	$147,733,608	51	$113,630,091	42
Project Loans Financed	22,176,759	28	21,537,026	35
Total Disbursements	**$169,910,367**	**79**	**$135,167,117**	**77**
Financial Results from Program Inception				
Federal Drinking Water SRF Grant	$882,556,100		$772,907,100	
State Matching Funds	129,353,800		122,712,820	
Total Federal & State Grant Awards	**$1,011,909,900**		**$895,619,920**	
Total Loans Financed	**$2,252,826,515**		**$2,120,728,921**	

Appendix B • Binding Commitments by Program for SFY 2024

CWSRF Binding Commitments for SFY 2024				
Loan Number	**Borrower**	**Agreement Date**	**Project Description**	**Commitment Amount**
CWP-20-23-B	Barnstable	10/01/2023	Strawberry Hill Road Sewer Expansion	$850,000
CWP-22-65	Barnstable	10/01/2023	Wastewater Pump Station Replacement Project	11,000,000
CWP-23-11	Barnstable	03/01/2024	Sewer Extension and Vacuum Sewer Removal	1,790,143
CWP-19-09-B	Billerica	03/01/2024	WWTF and Pump Station Upgrades	1,166,190
CW-22-52	Boston Water and Sewer Commission (BWSC)	07/01/2023	Sewer and Drain Model Updates and Recalibration	2,172,625
CW-22-30	Chatham	12/01/2023	Chatham Stage Harbor (1C-5/1E-2) Sewer Extension	15,754,810
CW-22-33	Chatham	12/01/2023	Chatham Mill Pond Pumping Station Upgrade 2022	3,605,672
CWP-22-39-A	Chicopee	07/01/2023	South Fairview Sewer Separation Project - Phase A	1,292,000
CWP-22-39(BC)*	Chicopee	07/01/2023	South Fairview Sewer Separation Project - Phase A	6,008,000
CWT-24-05	Easton	06/01/2024	Community Septic Management Program	500,000
CWP-22-67-A	Fairhaven	12/01/2023	Wastewater Treatment Facility Upgrades Project	4,848,109
CWP-22-67(S)*	Fairhaven	12/01/2023	Wastewater Treatment Facility Upgrades Project	65,151,891
CW-22-68	Fall River	07/01/2023	CSO Facility Treatment Study	1,400,000
CWP-22-59	Falmouth	11/01/2023	Falmouth WWTF TASA Improvements	27,202,218
CWP-22-59-A	Falmouth	11/01/2023	Falmouth WWTF TASA Improvements	4,063,000
CWT-24-02	Hamilton	02/01/2024	Community Septic Management Program	500,000
CWT-24-04	Hanson	05/01/2024	Community Septic Management Program	500,000
CWP-23-33	Kingston	04/01/2024	Effluent Recharge Site No. 3 & Sewer Expansion	6,485,500
CWP-23-33-A	Kingston	04/01/2024	Effluent Recharge Site No. 3 & Sewer Expansion	557,500
CW-23-09	Lawrence	11/01/2023	Sanitary Sewer Evaluation Study - Phase IV	410,000
CWP-23-52-A	Lowell	06/01/2024	Duck Island WWTF Phase 3 Upgrade	2,759,000
CWP-23-52	Lowell	06/01/2024	Duck Island WWTF Phase 3 Upgrade	25,084,277
CWP-19-27-A	Lynn Water and Sewer Commission (LWSC)	03/01/2024	West Lynn Sewer Separation	1,197,350
CWP-23-27	Mashpee	06/01/2024	Phase 1 Mashpee Treatment and Collection System	5,400,000
CW-23-61	Massachusetts Water Resources Authority (MWRA)	05/01/2024	DITP Clarifier #2	2,000,000
CW-23-60	MWRA	01/01/2024	DITP Asset Protection Phase 3	1,000,000
CW-22-46	Nahant	11/01/2023	Sewer Collection System Repair & Replacement 2022	7,992,142
CWT-23-07	Nantucket	10/01/2023	Community Septic Management Program	2,000,000
CWA-23-55	New Bedford	12/01/2023	Asset Management Program Expansion	111,500
CWP-22-63	New Bedford	12/01/2023	Pumping Station Improvements (R)	26,860,307
CWP-22-71-A	New Bedford	12/01/2023	Wastewater Treatment Plant Improvements	730,000
CWP-22-71	New Bedford	12/01/2023	Wastewater Treatment Plant Improvements	11,800,950
CWP-22-66A	New Bedford	10/01/2023	Wastewater Collection System Improvements	510,600
CWP-22-66	New Bedford	10/01/2023	Wastewater Collection System Improvements	1,844,744
CWP-22-63-A	New Bedford	12/01/2023	Pumping Station Improvements (R)	2,665,500
CWP-22-43(B)*	Northampton	08/01/2023	Northampton WWTP Upgrades	17,828,800
CWP-22-32	Oak Bluffs	12/01/2023	Oak Bluffs WWTF ENR Upgrade Project	26,000,000
CW-22-28	Orleans	07/01/2023	Meetinghouse Pond Area Collection System and PS	29,443,754
CWT-23-59	Plymouth	12/01/2023	Community Septic Management Program	400,000
CWP-22-49-A	Quincy	07/01/2023	Quincy Sewer Improvements	290,000
CWP-22-49	Quincy	07/01/2023	Quincy Sewer Improvements	4,679,821
CWP-22-55-A	Revere	07/01/2023	Phase 13 Construction- I/I, IDDE, P.S. & Drainage	1,780,000
CWP-22-55(B)*	Revere	07/01/2023	Phase 13 Construction- I/I, IDDE, P.S. & Drainage	8,074,079
CW-22-40	Revere	12/01/2023	Phase 14 Investigations- I/I and IDDE	1,200,000
CWP-22-50	Saugus	07/01/2023	Comprehensive Sewer System Rehabilitation- PS-4	$1,748,703

Appendix B • Binding Commitments by Program for SFY 2024

CWSRF Binding Commitments for SFY 2024				
Loan Number	**Borrower**	**Agreement Date**	**Project Description**	**Commitment Amount**
CWPEC-23-62	Shutesbury	01/01/2024	Shutesbury Fire Department. Immediate Response Action	$150,000
CWP-22-36-A	Springfield Water & Sewer Commission (SWSC)	07/01/2023	Grit Removal System Upgrade at the SRWTF	3,362,339
CWP-22-36(B)*	SWSC	07/01/2023	Grit Removal System Upgrade at the SRWTF	18,627,000
CW-24-01	Worcester	02/01/2024	City Wide Sewer Flow Monitoring	1,666,000
CWP-23-03	Yarmouth	02/01/2024	Phase I - WRRF and Collection System	38,169,258
CWP-23-03-A	Yarmouth	02/01/2024	Phase I - WRRF and Collection System	3,610,054
			Total Clean Water Binding Commitments SFY 2024	**$404,243,836**

**Loans used for FFATA Reporting – Projects identified as FFATA reporting for Grant Year 2022 are listed in Appendix E for program specific reporting, The loan amounts listed in this table may not reflect the amount reported within FFATA. Please see Appendix for amount reported and amount disbursed in SFY 2024. (H) Housing Choice Communities. (BC) Base Capitalization. (S) CWSRF Supplemental. (NE) Nutrient Enrichment Reduction Loans. (CC) Cape Cod and Islands Water Protection Fund Loan*

DWSRF Binding Commitments for SFY 2024				
Loan Number	**Borrower**	**Agreement Date**	**Project Description**	**Commitment Amount**
DWPEC-22-23(EC)*	Abington	12/01/2023	Hannigan and Myers Avenue WTP PFAS Treatment	$7,297,686
DW-22-28(S)*	Andover	08/01/2023	Phase 1 Water Transmission Main Improvements	6,989,326
DWLC-23-105(LSL)*	Andover	01/01/2024	Lead Service Line Replacement	1,800,000
DW-20-16-A	Barnstable	10/01/2023	Wells Treatment Pilots, Conceptual Plans, Layouts	32,300
DWP-22-41(EC)*	Barnstable Fire District	11/01/2023	Water Filtration Plant Construction - Wells 2 & 5	6,983,405
DWP-22-31	Blandford	09/01/2023	Water Treatment Plant Upgrade	1,167,935
DWLC-22-50(LSL)*	BWSC	08/01/2023	Elimination of Lead Water Services in Boston	4,698,888
DWPEC-23-151(EC)*	Braintree	01/01/2024	Tri-Town Regional Water Treatment Plant	10,000,000
DWEC-23-107	Chatham	06/01/2024	Training Field Road PFAS Water Treatment Plant	15,000,000
DWP-22-21(S)*	Eastham	07/01/2023	Eastham Water System - Phase 2E	15,000,000
DW-22-32*	Essex	07/01/2023	Town of Essex's Water Treatment Plant Upgrade	2,498,980
DWP-23-23(LSL)*	Fall River	07/01/2023	Lead Service Line Replacement	4,150,000
DWPEC-23-152(EC)*	Holbrook	01/01/2024	Tri-Town Regional Water Treatment Plant	3,200,000
DWPEC-22-02-A	Mansfield	12/01/2023	Walsh Well PFAS Treatment System and Well Upgrades	155,226
DW-22-37(S)*	MWRA	05/01/2024	Section 23, 24, 47 Water Mains Rehab	9,610,474
DW-23-149	MWRA	05/01/2024	Northern Intermediate High Section 89 Replacement	813,698
DW-23-148	MWRA	05/01/2024	Weston Aqueduct Supply Main Rehabilitation	765,124
DW-23-142	MWRA	05/01/2024	Section 23, 24, 47 Water Mains Rehab	13,421,178
DWP-23-60	Mattapoisett River Valley Water District	09/01/2023	Procurement of Ultrafiltration System Equipment	2,195,000
DW-22-25	Nantucket	09/01/2023	Water System Expansion West of Nantucket Airport	5,933,945
DWPLC-22-47 (LSL)	New Bedford	10/01/2023	Lead Service Line Replacement Program	18,412,748
DWP-22-46	New Bedford	12/01/2023	Quittacas Water Treatment Plant Upgrades	10,000,000
DWP-23-155	New Bedford	01/01/2024	Quittacas Water Treatment Plant Upgrades	15,000,000
DW-23-52	Norwell	08/01/2023	South Street WTP PFAS Remediation Project	2,343,381
DWPEC-23-153(EC)	Randolph	01/01/2024	Tri-Town Regional Water Treatment Plant	6,800,000
DWPEC-22-67 (EC)*	Rockland	12/01/2023	Hannigan and Myers Avenue WTP PFAS Treatment	7,297,686
DWP-22-43-A	Somerset	12/01/2023	Booster Pump Station & High Service Area Rehab	2,616,965
DWPLC-23-42(LSL)*	Somerville	10/01/2023	Somerville LSL Replacement Program	1,926,577
DWPEC-24-24(EC)*	Townsend	06/01/2024	PFAS Water Treatment Improvements	6,016,000
DWEC-23-129(EC)	Westborough	06/01/2024	Oak Street WTP PFAS Improvements	8,188,783
DWP-22-34	Winthrop	10/01/2023	Revere Street PRV Station Improvements	1,903,750
			Total Drinking Water Binding Commitments SFY 2024	**$192,219,055**

**Loans used for FFATA Reporting – Projects identified as FFATA reporting for Grant Year 2022 are listed in Appendix E for program specific reporting, The loan amounts listed in this table may not reflect the amount reported within FFATA. Please see Appendix for amount reported and amount disbursed in SFY 2024. (BC) Base Capitalization. (S) DWSRF Supplemental. (EC) DWSRF Emerging Contaminants - PFAS (H) Housing Choice Communities. (LSL) DWSRF Lead Service Line Replacement Loan*

Appendix C • Loan Forgiveness

2022 CWSRF Loan Forgiveness by Calculation Method						
Borrower	**SRF ID**	**Loan Number**	**Loan Amount**	**ARPA Loan Forgiveness**	**Disadvantaged Community Loan Forgiveness**	**Total Loan Forgiveness**
Barnstable	6953	CW-22-65	$11,000,000	$2,200,000	$363,000	$2,563,000
BWSC	7012	CW-22-56	20,145,084	4,029,017	0	4,029,017
Brockton	7175	CWP-22-34	2,173,452	217,345	215,172	432,517
Chatham	7072	CW-22-33	3,605,672	721,134	0	721,134
Chatham	7079	CW-22-30	15,754,810	3,150,962	0	3,150,962
Chicopee	6973	CWP-22-39	6,008,000	1,201,600	594,792	1,796,392
Chicopee	6973	CWP-22-39-A	1,292,000	258,400	127,908	386,308
Fairhaven	7238	CW-22-67	65,151,891	6,515,189	4,300,025	10,815,214
Fairhaven	7238	CW-22-67-A	4,848,109	484,811	319,975	804,786
Falmouth	6986	CW-22-59	27,202,218	5,440,444	897,673	6,338,117
Falmouth	6986	CW-22-59-A	4,063,000	812,600	134,079	946,679
Fitchburg	6936	CWP-22-58	7,511,358	1,502,272	743,624	2,245,896
Fitchburg	6936	CWP-22-58-A	1,414,590	282,918	140,044	422,962
Framingham	6999	CWP-22-35	9,919,928	991,993	654,715	1,646,708
Franklin	6979	CW-22-31	33,000,000	3,300,000	0	3,300,000
Littleton	7020	CW-22-57	29,438,000	2,943,800	0	2,943,800
LWSC	7024	CWP-22-69	25,000,000	5,000,000	2,475,000	7,475,000
MWRA	4446	CW-22-06	6,890,572	689,057	0	689,057
MWRA	6822	CW-22-08	41,114,486	4,111,449	0	4,111,449
MWRA	7126	CW-22-09	1,994,942	199,494	0	199,494
Nahant	7199	CW-22-46	7,992,142	799,214	0	799,214
New Bedford	7004	CW-22-66	1,844,744	184,474	182,630	367,104
New Bedford	7004	CW-22-66-A	510,600	51,060	50,549	101,609
New Bedford	7054	CW-22-71	11,800,950	1,180,095	1,168,294	2,348,389
New Bedford	7054	CW-22-71-A	730,000	73,000	72,270	145,270
New Bedford	7089	CW-22-63	26,860,307	2,686,031	2,659,170	5,345,201
New Bedford	7089	CW-22-63-A	2,665,500	266,550	263,885	530,435
Northampton	7096	CWP-22-43	17,828,800	1,782,880	1,176,701	2,959,581
Oak Bluffs	7207	CW-22-32	26,000,000	2,600,000	1,716,000	4,316,000
Orleans	7150	CW-22-28	29,443,754	5,888,751	0	5,888,751
Quincy	7019	CWP-22-49	4,679,821	467,982	154,434	622,416
Quincy	7019	CWP-22-49-A	290,000	29,000	9,570	38,570
Revere	7099	CWP-22-55	8,074,079	807,408	532,889	1,340,297
Revere	7099	CWP-22-55-A	1,780,000	178,000	117,480	295,480
Saugus	6960	CWP-22-50	1,748,703	174,870	115,414	290,285
SWSC	7223	CWP-22-36	18,627,000	3,725,400	1,844,073	5,569,473
SWSC	7223	CWP-22-36-A	3,362,339	672,468	332,872	1,005,339
Taunton	7160	CWP-22-53	2,137,058	213,706	211,569	425,275
Taunton	7160	CWP-22-53-A	362,000	36,200	35,838	72,038
Taunton	7210	CWP-22-54	4,000,000	400,000	396,000	796,000
			$488,265,909	**$66,269,573**	**$22,005,646**	**$88,275,219**

Appendix C • Loan Forgiveness

2022 DWSRF Loan Forgiveness by Calculation Method						
Borrower	**SRF ID**	**Loan Number**	**Loan Amount**	**ARPA Loan Forgiveness**	**Disadvantaged Community Loan Forgiveness**	**Total Loan Forgiveness**
Abington-Rockland Joint Water Works	7152	DWPEC-22-23	$7,297,686	$1,824,422	$963,295	$2,787,716
Amherst	7036	DWP-22-15	15,000,000	3,000,000	2,970,000	5,970,000
Andover	6978	DW-22-28	6,989,326	1,397,865	0	1,397,865
Andover	12495	DWLC-23-105	1,800,000	720,000	0	720,000
Barnstable Fire District	7128	DW-22-41	6,983,405	1,745,851	460,905	2,206,756
Blandford	7204	DW-22-30	75,000	15,000	0	15,000
Blandford	6975	DW-22-31	1,167,935	291,984	154,167	446,151
BWSC	7185	DWLC-22-50	4,698,888	1,879,555	0	1,879,555
Braintree	7258	DWP-22-51	10,000,000	2,500,000	660,000	3,160,000
Brockton	7189	DWP-22-13	9,332,000	1,866,400	1,847,736	3,714,136
Burlington	7245	DW-22-03	14,090,350	3,522,588	0	3,522,588
East Brookfield	6965	DWP-22-49	7,869,027	1,967,257	1,038,712	3,005,968
Eastham	7047	DWP-22-21	15,000,000	3,750,000	990,000	4,740,000
Essex	7178	DW-22-32	2,498,980	624,745	0	624,745
Fall River	6988	DWP-22-11	1,841,575	368,315	364,632	732,947
Fall River	12468	DWP-23-23	4,150,000	1,660,000	821,700	2,481,700
Fitchburg	7001	DWP-22-40	3,300,000	660,000	653,400	1,313,400
Holbrook	7259	DWP-22-53	3,200,000	800,000	422,400	1,222,400
Leicester Water Supply District	7051	DW-22-38	5,179,421	1,294,855	683,684	1,978,539
Mansfield	7040	DWP-22-02	6,999,694	1,749,924	461,980	2,211,903
MWRA	4564	DW-22-08	5,389,526	1,077,905	0	1,077,905
MWRA	7218	DW-22-37	9,610,474	1,922,095	0	1,922,095
Nantucket	7011	DW-22-25	5,933,945	1,757,161	0	1,757,161
New Bedford	7172	DWP-22-46	10,000,000	2,000,000	1,980,000	3,980,000
New Bedford	7168	DWPLC-22-47	18,412,748	7,365,099	3,645,724	11,010,823
North Attleborough	6950	DWP-22-01	4,541,545	1,135,386	299,742	1,435,128
North Attleborough	6956	DWP-22-20	7,250,061	1,812,515	478,504	2,291,019
Orange	7268	DWP-22-04	1,120,955	224,191	221,949	446,140
Randolph	7260	DWP-22-52	6,800,000	1,700,000	1,346,400	3,046,400
Rockland	15594	DWPEC-22-67	7,297,686	1,824,422	963,295	2,787,716
Scituate	6985	DW-22-36	2,368,763	473,753	0	473,753
Somerset	7134	DWP-22-43	1,353,540	270,708	178,667	449,375
Somerset	7134	DWP-22-43-A	2,616,965	523,393	345,439	868,832
Somerville	10382	DWPLC-23-42	1,926,577	770,631	127,154	897,785
Sudbury Water District	7156	DW-22-05	3,311,392	827,848	0	827,848
Townsend	6964	DWP-22-26	14,900,000	4,048,250	1,909,908	5,958,158
Water Supply District of Acton	7265	DW-23-01	1,000,000	250,000	66,000	316,000
Winthrop	7102	DWP-22-34	1,903,750	380,750	125,648	506,398
Winthrop	7062	DWP-22-35	4,890,101	978,020	322,747	1,300,767
			$238,101,315	**$60,980,887**	**$24,503,786**	**$85,484,673**

Appendix C • Loan Forgiveness

2022 CWSRF Loan Forgiveness by Source of Funds						
Borrower	**SRF ID**	**Loan Number**	**Loan Amount**	**ARPA**	**BIL CWSRF Supplemental**	**Total Loan Forgiveness**
Barnstable	6953	CW-22-65	$11,000,000	$2,563,000		$2,563,000
BWSC	7012	CW-22-56	20,145,084	4,029,017		4,029,017
Brockton	7175	CWP-22-34	2,173,452	432,517		432,517
Chatham	7072	CW-22-33	3,605,672	721,134		721,134
Chatham	7079	CW-22-30	15,754,810	3,150,962		3,150,962
Chicopee	6973	CWP-22-39	6,008,000	1,796,392		1,796,392
Chicopee	6973	CWP-22-39-A	1,292,000	386,308		386,308
Fairhaven	7238	CW-22-67	65,151,891		10,815,214	10,815,214
Fairhaven	7238	CW-22-67-A	4,848,109	804,786		804,786
Falmouth	6986	CW-22-59	27,202,218		6,338,117	6,338,117
Falmouth	6986	CW-22-59-A	4,063,000	946,679		946,679
Fitchburg	6936	CWP-22-58	7,511,358	2,245,896		2,245,896
Fitchburg	6936	CWP-22-58-A	1,414,590	422,962		422,962
Framingham	6999	CWP-22-35	9,919,928	1,646,708		1,646,708
Franklin	6979	CW-22-31	33,000,000	3,300,000		3,300,000
Littleton	7020	CW-22-57	29,438,000	2,943,800		2,943,800
LWSC	7024	CWP-22-69	25,000,000	7,475,000		7,475,000
MWRA	4446	CW-22-06	6,890,572	689,057		689,057
MWRA	6822	CW-22-08	41,114,486	4,111,449		4,111,449
MWRA	7126	CW-22-09	1,994,942	199,494		199,494
Nahant	7199	CW-22-46	7,992,142	799,214		799,214
New Bedford	7004	CW-22-66	1,844,744	367,104		367,104
New Bedford	7004	CW-22-66-A	510,600	101,609		101,609
New Bedford	7054	CW-22-71	11,800,950	2,348,389		2,348,389
New Bedford	7054	CW-22-71-A	730,000	145,270		145,270
New Bedford	7089	CW-22-63	26,860,307	0	5,345,201	5,345,201
New Bedford	7089	CW-22-63-A	2,665,500	530,435		530,435
Northampton	7096	CWP-22-43	17,828,800	2,959,581		2,959,581
Oak Bluffs	7207	CW-22-32	26,000,000	4,316,000		4,316,000
Orleans	7150	CW-22-28	29,443,754	5,888,751		5,888,751
Quincy	7019	CWP-22-49	4,679,821	622,416		622,416
Quincy	7019	CWP-22-49-A	290,000	38,570		38,570
Revere	7099	CWP-22-55	8,074,079	1,340,297		1,340,297
Revere	7099	CWP-22-55-A	1,780,000	295,480		295,480
Saugus	6960	CWP-22-50	1,748,703	290,285		290,285
SWSC	7223	CWP-22-36	18,627,000	5,569,473		5,569,473
SWSC	7223	CWP-22-36-A	3,362,339	1,005,339		1,005,339
Taunton	7160	CWP-22-53	2,137,058	65,062	360,213	425,275
Taunton	7160	CWP-22-53-A	362,000	72,038		72,038
Taunton	7210	CWP-22-54	4,000,000	796,000		796,000
			$488,265,909	**$65,416,474**	**$22,858,745**	**$88,275,219**

Appendix C • Loan Forgiveness

2022 DWSRF Loan Forgiveness by Source of Funds									
Borrower	**SRF ID**	**Loan Number**	**Loan Amount**	**ARPA**	**BIL DWSRF Supplemental**	**BIL DWSRF EC**	**BIL DWSRF LSL**	**Contract Assistance**	**Total Loan Forgiveness**
Abington-Rockland Joint Water Works	7152	DWPEC-22-23	$7,297,686	$0	$0	$2,787,716	$0	$0	$2,787,716
Amherst	7036	DWP-22-15	15,000,000	930,778	5,039,222	0			5,970,000
Andover	6978	DW-22-28	6,989,326	1,190,163				207,702	1,397,865
Andover	12495	DWLC-23-105	1,800,000				720,000		720,000
Barnstable Fire District	7128	DW-22-41	6,983,405			2,206,756			2,206,756
Blandford	7204	DW-22-30	75,000	15,000					15,000
Blandford	6975	DW-22-31	1,167,935		446,151				446,151
BWSC	7185	DWLC-22-50	4,698,888				1,879,555		1,879,555
Braintree	7258	DWP-22-51	10,000,000			3,160,000			3,160,000
Brockton	7189	DWP-22-13	9,332,000		3,714,136				3,714,136
Burlington	7245	DW-22-03	14,090,350	3,522,588					3,522,588
East Brookfield	6965	DWP-22-49	7,869,027		3,005,968				3,005,968
Eastham	7047	DWP-22-21	15,000,000		4,740,000				4,740,000
Essex	7178	DW-22-32	2,498,980	624,745					624,745
Fall River	6988	DWP-22-11	1,841,575		732,947				732,947
Fall River	12468	DWP-23-23	4,150,000				2,481,700		2,481,700
Fitchburg	7001	DWP-22-40	3,300,000					1,313,400	1,313,400
Holbrook	7259	DWP-22-53	3,200,000			1,222,400			1,222,400
Leicester Water Supply District	7051	DW-22-38	5,179,421		1,978,539				1,978,539
Mansfield	7040	DWP-22-02	6,999,694			2,211,903			2,211,903
MWRA	4564	DW-22-08	5,389,526	1,077,905					1,077,905
MWRA	7218	DW-22-37	9,610,474	1,922,095					1,922,095
Nantucket	7011	DW-22-25	5,933,945	1,757,161					1,757,161
New Bedford	7172	DWP-22-46	10,000,000		3,980,000				3,980,000
New Bedford	7168	DWPLC-22-47	18,412,748				11,010,823		11,010,823
North Attleborough	6950	DWP-22-01	4,541,545	1,435,128					1,435,128
North Attleborough	6956	DWP-22-20	7,250,061	2,291,019					2,291,019
Orange	7268	DWP-22-04	1,120,955		446,140				446,140
Randolph	7260	DWP-22-52	6,800,000			3,046,400			3,046,400
Rockland	15594	DWPEC-22-67	7,297,686			2,787,716			2,787,716
Scituate	6985	DW-22-36	2,368,763	473,753	0				473,753
Somerset	7134	DWP-22-43	1,353,540		449,375				449,375
Somerset	7134	DWP-22-43-A	2,616,965		868,832				868,832
Somerville	10382	DWPLC-23-42	1,926,577				897,785		897,785
Sudbury Water District	7156	DW-22-05	3,311,392	827,848					827,848
Townsend	6964	DWP-22-26	14,900,000	2,675,049		3,283,109			5,958,158
Water Supply District of Acton	7265	DW-23-01	1,000,000	316,000					316,000
Winthrop	7102	DWP-22-34	1,903,750		506,398				506,398
Winthrop	7062	DWP-22-35	4,890,101		1,300,767				1,300,767
			$238,101,315	**$19,059,233**	**$27,208,475**	**$20,706,000**	**$16,989,863**	**$1,521,102**	**$85,484,673**

Appendix D • Program Project Commitments

DWSRF LSL Inventory Grants for SFY 2024			
Loan Number	**Borrower**	**Agreement Date**	**Commitment Amount**
DWL-23-113	Aquarion Water Company, Springdale Farms	11/1/2023	$107,200
DWL-23-98	Aquarion Water Company	10/1/2023	130,400
DWL-23-95	Aquarion Water Company	10/1/2023	127,000
DWL-23-111	Aquarion Water Company, Oxford	11/1/2023	167,000
DWL-23-99	Aquarion Water Company, Millbury	10/1/2023	168,000
DWL-23-16	Attleboro Water Department	8/1/2023	80,000
DWL-24-02	Bedford Water Department	3/1/2024	318,000
DWL-23-104	Bellingham Department of Public Works Water Sewer Division	10/1/2023	131,000
DWL-23-102	Belmont Water Department	10/1/2023	96,400
DWL-24-03	Bondsville Fire and Water District	2/1/2024	25,000
DWL-23-73	BWSC	7/1/2023	2,800,000
DWL-24-16	Boylston Water District	5/1/2024	75,000
DWL-24-12	Bridgewater Water Department	4/1/2024	360,514
DWL-23-79	Burlington Water Department	8/1/2023	125,000
DWL-24-19	Canton Water Department	5/1/2024	385,080
DWL-23-146	Chelsea Water Department (MWRA)	1/1/2024	682,650
DWL-23-62	City Of New Bedford Department of Public Infrastructure	7/1/2023	227,400
DWL-23-54	Clinton Water Department	7/1/2023	188,500
DWL-23-76	Concord Water Department	8/1/2023	168,850
DWL-23-157	Dighton Water District	2/1/2024	296,000
DWL-23-61	Easthampton Water Department	7/1/2023	225,000
DWL-23-69	Framingham Water Department	7/1/2023	430,514
DWL-23-72	Gardner Water Department	7/1/2023	290,000
DWL-23-81	Gloucester Public Utility Division	8/1/2023	242,400
DWL-23-75	Great Barrington Fire District	8/1/2023	191,000
DWL-23-147	Groveland Water Department	12/1/2023	147,885
DWL-23-112	Holden Water Division, Department of Public Works	11/1/2023	154,300
DWL-23-90	Holyoke Water Works	9/1/2023	190,000
DWL-23-96	Hopkinton Water Department	10/1/2023	127,510
DWL-23-80	Huntington Water Department	8/1/2023	132,000
DWL-23-88	Hyannis Water System, Town Of Barnstable	9/1/2023	292,928
DWL-23-156	Lancaster Water Department	1/1/2024	163,900
DWL-23-85	Leicester Water Supply District	9/1/2023	86,600
DWL-24-20	Leominster Water Division	6/1/2024	253,000
DWL-23-109	Longmeadow Water Department	10/1/2023	191,000
DWL-24-06	Lowell Regional Water Utility	5/1/2024	123,300
DWL-23-65	Malden Water Division	7/1/2023	1,400,000
DWL-24-14	Manchester By The Sea Department of Public Works	4/1/2024	146,000
DWL-24-01	Marblehead Water Department (MWRA)	3/1/2024	356,425
DWL-23-59	Mattapoisett Water Department	7/1/2023	100,000
DWL-23-55	Maynard Dpw, Water Division	7/1/2023	200,000
DWL-23-92	Middleborough Water Supply	9/1/2023	57,800
DWL-23-86	Newburyport Water Department	9/1/2023	207,800
DWL-23-101	North Adams Water Department	10/1/2023	204,000
DWL-24-17	North Attleboro Water Department	5/1/2024	$531,000

Appendix D • Program Project Commitments

DWSRF LSL Inventory Grants for SFY 2024			
Loan Number	**Borrower**	**Agreement Date**	**Commitment Amount**
DWL-23-145	North Chelmsford Water District	12/1/2023	$475,000
DWL-23-93	North Raynham Water District	9/1/2023	200,000
DWL-23-89	Northborough Water Department	9/1/2023	72,300
DWL-24-04	Peabody Water Department	2/1/2024	125,000
DWL-23-78	Pembroke Water Division Departmentof Public Works	8/1/2023	205,220
DWL-24-21	Plainville Water Department	6/1/2024	350,925
DWL-23-100	Plymouth Water Company	10/1/2023	128,000
DWL-23-58	Provincetown Water Department	7/1/2023	123,760
DWL-24-22	Randolph Water Department	6/1/2024	288,335
DWL-24-08	Revere Water Division (MWRA)	3/1/2024	365,000
DWL-24-09	Rockport Water Department	4/1/2024	190,000
DWL-23-57	Rowley Water Department	7/1/2023	43,200
DWL-23-97	Saugus Water Department	10/1/2023	250,000
DWL-23-68	Seekonk Water District	7/1/2023	259,740
DWL-24-11	Sharon Water Department	4/1/2024	286,464
DWL-23-63	South Deerfield Water Supply District	7/1/2023	213,000
DWL-23-64	Southwick Water Department	7/1/2023	231,300
DWL-23-74	Sudbury Water District	7/1/2023	188,890
DWL-23-84	Tisbury Water Works	9/1/2023	217,025
DWL-23-77	Upton Departmentof Public Works Water/Wastewater Division	8/1/2023	110,000
DWL-23-108	Uxbridge Department of Public Works Water Division	10/1/2023	171,700
DWL-23-106	Wakefield Water Department	10/1/2023	198,800
DWL-24-10	Waltham Water Department	4/1/2024	273,500
DWL-24-18	Weir River Water System	5/1/2024	475,036
DWL-24-07	Wellesley College	5/1/2024	16,400
DWL-24-13	Wellesley Water Division	4/1/2024	109,000
DWL-23-94	West Bridgewater Water Department	9/1/2023	43,350
DWL-23-83	West Newbury Water Department	9/1/2023	75,000
DWL-23-56	West Warren Water District	7/1/2023	150,000
DWL-23-12	Westfield Department of Public Works Water Division	7/1/2023	307,500
DWL-23-87	Whitinsville Water Company	9/1/2023	85,000
DWL-23-91	Williamstown Water Department	10/1/2023	119,000
DWL-23-66	Wilmington Water Department	7/1/2023	214,795
DWL-24-05	Worcester Department of Public Works Water Supply Division	2/1/2024	350,000
	Total DWSRF LSL Inventory Grant Commitments		**$20,015,596**

Appendix D • Program Project Commitments

PFAS Mitigation Project Receiving 0% Interest as of SFY 2024			
Borrower	**Loan Number**	**Project Title**	**Project Cost**
Abington	DWPEC-22-23	Hannigan and Myers Avenue WTP PFAS Treatment	$7,297,686
Aquarion Water Company of Massachusetts, Inc	DWEC-23-134	Oak Pond Well Granular Action Carbon Treatment Facility	4,679,913
Aquarion Water Company of Massachusetts, Inc	DWEC-23-144	North Main Street Water Treatment Plant	4,514,850
Ayer	DWP-20-04	Spectacle Pond Wellfield PFAS Treatment	6,052,983
Barnstable	DWP-19-28	Emergency-Airport Well and Straightway Facility	2,829,018
Barnstable	DW-20-16	Wells Treatment Pilots, Conceptual Plans, Layouts	547,542
Barnstable	DW-20-16-A	Wells Treatment Pilots, Conceptual Plans, Layouts	32,300
Barnstable County	CWP-20-44	Emergency Site Capping and Related Stormwater Improvements to Mitigate PFAS	1,402,431
Barnstable Fire District	DWP-20-30	PFAS Interim Rehabilitation of Well Pump Station 1	1,458,444
Barnstable Fire District	DW-22-41	Water Filtration Plant Construction- Wells 2 & 5	6,983,405
Braintree	DWP-21-21, DWP-22-51, and DWPEC-23-151	Tri-Town Regional Water Treatment Plant	27,500,000
Burlington	DW-22-03	Mill Pond Water Treatment Plant- PFAS	14,090,350
Chatham	DWEC-23-107	Training Field Road PFAS Water Treatment Plant	15,000,000
Devens (Massachusetts Development Finance Agency)	DW-21-05	Devens Water Treatment Plant Project	27,300,000
Dudley	DWP-21-16	Dudley PFAS Water Treatment Plant	11,288,220
Holbrook	DWP-21-22, DWP-22-53, and DWPEC-23-152	Tri-Town Regional Water Treatment Plant	5,600,000
Hopedale	DWPEC-23-117	Greene Street WTP PFAS Treatment	4,750,000
Hudson	DWP-21-04	Chestnut Street PFAS Treatment System	8,800,000
Littleton	DW-20-07	Emergency PFAS Blending Pipeline Project	899,328
Littleton	DW-21-01	Fe, Mn, and PFAS Water Treatment Plant	24,534,937
Lynnfield Center Water District	DWEC-23-131	Glen Drive Water Treatment Plant & Station 2 Pipeline	15,000,000
Mansfield	DW-21-02	Cate Springs Well PFAS Treatment System	4,545,824
Mansfield	DWP-22-02 and DWPEC-22-02-A	Walsh Well PFAS Treatment System and Well Upgrades	7,154,920
Nantucket	DW-22-25	Water System Expansion West of Nantucket Airport	5,933,945
Natick	DW-21-24	PFAS Treatment at Springvale Water Treatment Plant	3,000,000
North Attleborough	DWP-22-01	Adamsdale Well PFAS Treatment Facility	4,541,545
North Attleborough	DWP-22-20	McKeon PFAS Water Treatment Facility	7,250,061
Norwell	DW-23-52	South Street WTP PFAS Remediation Project	2,343,381
Randolph	DWP-21-23, DWP-22-52, and DWPEC-23-153	Tri-Town Regional Water Treatment Plant	18,700,000
Rockland	DWPEC-22-67	Hannigan and Myers Avenue WTP PFAS Treatment	7,297,686
Sharon	DWEC-23-123	Wells 2 & 4 Water Treatment Plant	15,000,000
Shutesbury	CW-23-62	Shutesbury Fire Dept. Immediate Response Action	150,000
Stoughton	DWPEC-23-122	Muddy Pond Pump Station PFAS Treatment	4,314,700
Sudbury Water District	DW-22-05	Raymond Road Water Treatment Plant PFAS Treatment	3,311,392
Sudbury Water District	DWEC-23-138	East Street Water Treatment Plant PFAS Treatment	7,250,611
Townsend	DWP-22-26 and DWPEC-24-24	PFAS Water Treatment Improvements	20,916,000
Water Supply District of Acton	DW-23-01	PFAS Treatment at North Acton Water Treatment Plant	1,000,000
Water Supply District of Acton	DWEC-23-126	PFAS Treatment at South Acton Water Treatment Plant	7,565,462
Webster	DWPEC-23-119	PFAS Water Treatment Plants	15,000,000
Westborough	DWEC-23-129	Oak Street Water Treatment Plant PFAS Improvements	8,188,783
West Bridgewater	DWPEC-23-124	West Bridgewater Long Term PFAS Compliance	3,920,285
Westfield	DWP-21-06	Dry Bridge Road PFAS Water Treatment Plant	15,548,617
Yarmouth	DWP-23-18	Yarmouth Well 4&5 Package PFAS Treatment System	3,584,154
		Total Loan Cost	**$357,078,773**

Appendix D • Program Project Commitments

AMP Grants for SFY 2024				
Community	**Loan/Grant Number**	**Agreement Date**	**Project Cost**	**Grant Amount**
Athol	CWA-24-06	6/12/2024	$178,000	$106,800
Auburn Water District	DWA-23-70	7/12/2023	155,000	93,000
Bedford	CWA-23-05	9/6/2023	112,500	67,500
Braintree	CWA-23-38	1/17/2024	142,933	102,200
Chester	DWA-23-115	12/6/2023	113,500	68,100
Concord	CWA-23-44	12/6/2023	179,950	107,970
Douglas	DWA-23-120	12/6/2023	140,000	84,000
Dover	CWA-23-41	12/6/2023	165,000	99,000
Dudley	CWA-23-08	10/11/2023	185,000	111,000
Easton	CWA-23-10	10/11/2023	136,375	81,825
Everett	CWA-23-45	12/6/2023	200,070	120,042
Fitchburg	DWA-23-132	12/6/2023	102,000	61,200
Franklin	CWA-23-04	9/6/2023	250,000	150,000
Hadley	CWA-23-35	12/6/2023	120,000	72,000
Harwich	CWA-23-28	11/1/2023	125,000	75,000
Haverhill	CWA-23-13	11/1/2023	250,000	150,000
Holbrook	CWA-23-40	1/17/2024	261,727	150,000
Hudson	CWA-23-12	12/6/2023	53,000	31,800
Lawrence	CWA-23-46	12/6/2023	250,000	129,000
Littleton	CWA-23-37	12/6/2023	182,500	109,500
Lowell	CWA-23-49	11/1/2023	250,000	150,000
Marion	DWA-23-10	10/11/2023	55,000	33,000
Medway	CWA-23-06	9/6/2023	250,000	150,000
Middleborough	DWA-23-71	7/12/2023	209,000	125,259
Milford	DWA-23-67	7/12/2023	73,200	43,920
New Bedford	CWA-23-55	12/6/2023	261,500	150,000
Rockland	CWA-23-39	12/6/2023	279,618	150,000
Russell	DWA-23-114	12/6/2023	151,000	90,600
Southampton	CWA-23-43	1/17/2024	140,000	84,000
Southampton	DWA-23-82	9/6/2023	80,000	48,000
Sturbridge	CWA-23-23	12/6/2023	250,000	150,000
Sudbury Water District	DWA-23-133	1/17/2024	250,000	150,000
Winchendon	CWA-23-32	12/6/2023	135,625	81,375
		Total	**$5,687,498**	**$3,376,091**

Appendix D • Program Project Commitments

SWIG Recipients for SFY 2024			
Organization	**Awarded Fixture(s)**	**Grant Amount**	**Date Awarded**
Leverett School District	2	$6,000	7/12/2023
St. Columbkille Partnership School	1	3,000	8/2/2023
Torah Academy Inc.	1	3,000	8/2/2023
Taunton Public Schools	10	30,000	10/4/2023
Temple Israel of Natick	1	3,000	10/4/2023
My Little Best Friends Early Learning Center	1	3,000	11/2/2023
Little Ones Child Care of Sterling LLC	1	3,000	11/2/2023
St. James-St. John School	3	9,000	1/17/2024
Emerging Academy LLC	1	3,000	1/17/2024
Temple Shalom - William & Charlotte Bloomberg Jewish Community Center	1	3,000	1/17/2024
St. Anthony School	3	9,000	1/17/2024
Blessed Stephen Bellesini OSA Academy, Inc.	2	6,000	1/17/2024
Nahant Public Schools	1	3,000	1/17/2024
First Parish Preschool	1	3,000	2/14/2024
All Saints Catholic School	2	6,000	2/14/2024
Reading Montessori School, Inc.	1	3,000	2/14/2024
Boys & Girls Club Family Center	2	6,000	2/14/2024
Lexington Montessori School	3	9,000	2/14/2024
New Bedford Public Schools	4	12,000	3/6/2024
Kiddosland Child Development Center	2	6,000	4/3/2024
Christa McAuliffe Charter School	1	3,000	4/3/2024
Academy Preschool	2	6,000	5/1/2024
Applewild School Inc.	4	12,000	5/1/2024
Holy Family Academy	2	6,000	5/1/2024
Melrose Day Care Center Inc.	1	3,000	5/1/2024
Suzy's School Inc.	1	3,000	5/1/2024
Abundant Life Christian School and Learning Center	3	9,000	6/12/2024
On N On Community Child Care	1	3,000	6/12/2024
Meridian Academy	1	3,000	6/12/2024
Total	**59**	**$177,000**	

Appendix E • Program Specific Reporting Project Tables

2022 IUP Green Project Reserve Projects					
Borrower	**Loan Number**	**Project Names**	**Current Agreement Amount**	**Total Current GPR Amount**	**% Green Funding**
New Bedford	CWP-22-66A	Wastewater Collection System Improvements	$510,600	$510,600	100%
New Bedford	CWP-22-66	Wastewater Collection System Improvements	1,844,744	1,844,744	100%
Taunton	CWP-22-53A	2023 Sewer & Drain Improvements	362,000	362,000	100%
Taunton	CWP-22-53	2023 Sewer & Drain Improvements	2,137,058	2,137,058	100%
Brockton	CWP-22-34	2023 Sewer System Rehabilitation	2,173,452	2,173,452	100%
Fitchburg	CWP-22-58	CSO 010, 032, 045, 083 Separation/Rehabilitation	7,511,358	7,511,358	100%
Fitchburg	CWP-22-58A	CSO 010, 032, 045, 083 Separation/Rehabilitation	1,414,590	1,414,590	100%
Fall River	CW-22-68	CSO Facility Treatment Study	1,400,000	1,400,000	100%
New Bedford	CW-22-73	Phase 3 Illicit Connection Identification Program	1,621,200	1,621,200	100%
New Bedford	CW-22-61	Phase 1 - Sewer System Evaluation Survey Program	1,730,000	1,730,000	100%
		Total	**$20,705,002**	**$20,705,002**	

2022 Federal Funding Accountability and Transparency Act (FFATA) Projects

2022 CWSRF Base			
Borrower	**Loan Number**	**FFATA Amount**	**FY 2024 Disbursement Total**
Chicopee	CWP-22-39	$4,400,000	$0
Fitchburg	CWP-22-58	5,600,000	3,485,975
Northampton	CWP-22-43	13,300,000	1,139,508
Revere	CWP-22-55	6,000,000	4,228,398
SWSC	CWP-22-36	8,413,600	1,976,076
New Bedford	CWP-22-66	1,571,400	0
		$39,285,000	**$10,829,957**

2022 CWSRF Supplemental			
Borrower	**Loan Number**	**FFATA Amount**	**FY 2024 Disbursement Total**
Fairhaven	CWP-22-67	$40,000,000	$4,821,976
Falmouth	CWP-22-59	13,302,320	246,315
Quincy	CWP-22-49	3,500,000	3,247,212
New Bedford	CWP-22-63	3,625,680	0
		$60,428,000	**$8,315,503**

2022 DWSRF Base			
Borrower	**Loan Number**	**FFATA Amount**	**FY 2024 Disbursement Total**
Amherst	DWP-22-15	$11,219,400	$4,208,594
		$11,219,400	**$4,208,594**

2022 DWSRF Supplemental			
Borrower	**Loan Number**	**FFATA Amount**	**FY 2024 Disbursement Total**
Andover	DW-22-28	$3,000,000	$0
Brockton	DWP-22-13	6,669,500	5,314,595
Eastham	DWP-22-21	11,250,000	1,328,497
MWRA	DW-22-37	9,610,474	9,610,474
MWRA	DW-22-08	5,389,526	5,389,526
		$35,919,500	**$21,643,092**

2022 DWSRF EC			
Borrower	**Loan Number**	**FFATA Amount**	**FY 2024 Disbursement Total**
Abington	DWPEC-22-23	$2,787,716	$234,776
Barnstable Fire District	DWP-22-41	2,206,756	0
Braintree	DWP-22-51	3,160,000	0
Holbrook	DWP-22-53	1,222,400	0
Mansfield	DWP-22-02	2,211,903	2,211,903
Randolph	DWP-22-52	3,046,400	0
Rockland	DWPEC-22-67	2,787,716	234,776
Townsend	DWP-22-26	3,283,109	3,283,109
		$20,706,000	**$5,964,564**

2022 DWSRF LSL Planning Projects			
Borrower	**Loan Number**	**FFATA Amount**	**FY 2024 Disbursement Total**
Auburn Water District	DWL-22-55	$230,000	$75,900
Billerica	DWL-22-61	680,000	155,676
Brockton	DWL-22-54	640,000	295,250
Cherry Valley and Rochdale Water District	DWL-23-53	110,000	44,603
Cheshire	DWL-23-24	123,500	58,891
Chester	DWL-23-36	136,000	27,200
Chicopee	DWL-23-44	311,500	84,006
Clinton	DWL-23-54	188,500	82,699
Dalton Fire District	DWL-23-28	196,400	38,906
Deerfield Fire District	DWL-22-58	89,869	40,005
Douglas	DWL-22-63	200,000	84,000
Dracut Water Supply District	DWL-23-27	230,500	48,405
Dudley	DWL-23-21	200,000	102,000
East Longmeadow	DWL-23-13	161,700	42,033
Easthampton	DWL-23-61	225,000	73,223
Erving	DWL-23-37	121,500	9,799
Everett	DWL-23-46	150,000	41,667
Fairhaven	DWL-23-50	100,000	56,854
Fall River	DWL-22-12	1,150,000	295,469
Falmouth	DWL-23-47	128,000	95,439
Fitchburg	DWL-23-02	140,000	109,156
Framingham	DWL-23-69	430,514	222,416
Gardner	DWL-23-72	290,000	48,633
Great Barrington Fire District	DWL-23-75	191,000	38,200
Greenfield	DWL-23-31	200,000	60,000
Groveland	DWL-23-147	147,885	22,559
Hadley	DWL-23-43	145,770	34,296
Holyoke Water Works	DWL-23-90	190,000	9,788
Lanesborough Fire and Water District	DWL-23-08	179,300	61,323
Lee	DWL-23-29	182,800	88,575
Leicester Water Supply District	DWL-23-85	86,600	38,542
Lunenburg Water District	DWL-23-41	253,000	204,000
LWSC	DWL-23-09	522,000	297,975
Malden	DWL-23-65	1,919,912	833,262
Maynard	DWL-23-55	313,610	174,541
Methuen	DWL-23-22	870,000	335,900
Middleborough	DWL-23-92	57,800	19,335
Millis	DWL-22-14	199,782	107,952
Newburyport	DWL-23-86	207,800	54,086
North Adams	DWL-23-101	204,000	71,400
North Raynham Water District	DWL-23-93	200,000	75,966
Norwood	DWL-22-56	420,000	71,500
Pembroke	DWL-23-78	205,220	63,138
Rowley	DWL-23-57	$43,200	$23,760

2022 DWSRF LSL Planning Projects			
Borrower	**Loan Number**	**FFATA Amount**	**FY 2024 Disbursement Total**
Saugus	DWL-23-97	$250,000	$129,271
Seekonk Water District	DWL-23-68	259,740	123,019
Somerset	DWL-23-49	75,000	15,935
Southwick	DWL-23-64	231,300	57,825
Templeton	DWL-23-26	200,000	90,000
Turners Falls Fire District	DWL-23-45	124,900	23,936
Uxbridge	DWL-23-108	171,700	30,813
Ware	DWL-23-20	200,000	92,000
Warren Water District	DWL-23-03	200,000	68,000
Webster	DWL-22-57	200,000	84,000
West Bridgewater	DWL-23-94	30,568	3,420
West Springfield	DWL-23-35	150,400	45,120
West Warren Water District	DWL-23-56	150,000	45,000
Williamstown	DWL-23-91	119,000	61,447
Yarmouth	DWL-22-62	452,650	47,161
		$15,787,920	**$5,735,275**

Appendix F • SRF IUP Goal Mapping

The following are the goals that Massachusetts has set for its 2024 CWSRF IUP.

Short-Term Goals

1. Finance highly ranked, construction ready, water improvement projects.
2. Solicit projects and prioritize projects that assist the Commonwealth in maximizing the utilization of Bipartisan Infrastructure Law (BIL) capitalization grant funds.
3. Prioritize projects that promote nutrient removal, especially those which implement the Cape Cod 208 Plan recommendations.
4. Prioritize projects that eliminate or abate Combined Sewer Overflow discharges.
5. Promote the asset management planning and cybersecurity best management practices by providing grants through the Trust's AMP grant program.
6. Allocate at least 10% of the annual federal grant to Green Infrastructure projects, or components, for projects that minimize greenhouse gas emissions and energy use.
7. Encourage energy efficiency/conservation by providing enhanced subsidy to projects that include renewable energy components for the portion of the loan that is financing the renewable energy component.
8. Ensure that wastewater treatment projects financed through the SRF fully consider cost- effective energy efficiency measures and/or renewable energy strategies.
9. Finance eligible projects addressing unanticipated problems of acute public health concerns that arise during the year and constitute an imminent public health threat.
10. Utilize CWSRF set-aside funds to develop technical assistance programs to aid small systems and promote outreach and engagement with communities across the Commonwealth about SRF program benefits, priorities, and opportunities to improve water quality, reduce project costs, and enhance resiliency.

CWSRF Long-Term Goals

1. Ensure that the CWSRF program remains accessible to assist communities across the Commonwealth to maintain compliance with the Clean Water Act, particularly communities with small systems.
2. Identify and prioritize additional subsidy for projects in the IUP that serve Disadvantaged Communities.
3. Assist stormwater and wastewater treatment plant operators to finance projects to address the impact of climate change and resiliency as indicated in the Commonwealth's Hazard Mitigation and Climate Adaptation Plan, by encouraging resiliency and climate adaptation in the design and construction of water infrastructure.
4. Promote systematic Asset Management Planning for water, wastewater, and stormwater utilities to achieve long-term sustainability, implementable climate change mitigation and resiliency, and deliver consistent service in a cost-efficient manner.
5. Establish and efficiently manage a permanent source of financing for the construction of publicly owned water pollution abatement facilities to enhance and protect the quality of the waters of the Commonwealth.
6. Promote public engagement and program transparency by publishing informative and readily accessible program materials and reports.

CWSRF Mapping Outline

1. **Good Program Governance -** Operate an efficient and dynamic program that is resilient and responsive to state needs.
   a. CWSRF ST 1, 2, 8, 9, 10
   b. CWSRF LT 1, 4, 5, 6

2. **Stormwater -** Fund projects and activities that address or mitigate stormwater runoff and nutrient loading.
   a. CWSRF ST 3, 4,
   b. CWSRF LT 3, 4

3. **Green Investment -** Fund projects and activities that reduce energy use and mitigate pollution of natural resources.
   a. CWSRF ST 6, 7, 8
   b. CWSRF LT 3, 4

4. **Utility Sustainability -** Fund projects and activities that assist systems with planning and sustainable practices.
   a. CWSRF ST 5, 10
   b. CWSRF LT 4,

5. **Community Support -** Prioritize funding, loan relief and technical assistance to communities defined as disadvantaged or identified as small.
   a. CWSRF ST 2, 5, 8, 9, 10
   b. CWSRF LT 1, 2, 4

Appendix F • SRF IUP Goal Mapping

The following are the goals that Massachusetts has set for its 2024 DWSRF IUP.

Short-Term Goals

1. Finance highly ranked, construction ready, drinking water improvement projects.
2. Increase flexibility for planning projects with a rolling application process for non-construction projects.
3. Prioritize projects that undertake full replacements of lead service lines and incentivize projects by leveraging Bipartisan Infrastructure Law (BIL) lead mitigation capitalization grant funds for planning and construction projects.
4. Assist communities with complying with Lead and Copper Rule revisions with a program to assist with developing inventories and required reports.
5. Prioritize projects that remediate PFAS in drinking water and incentivize projects by leveraging BIL emerging contaminant capitalization grant funds for planning and construction projects.
6. Promote the asset management planning and cybersecurity best management practices by providing grants through the Trust's AMP grant program.
7. Finance eligible projects addressing unanticipated problems of acute public health concern that arise during the year and constitute an imminent public health threat.
8. Take steps to improve and develop assistance program for small and very small private PWS that may need additional assistance with completing the SRF application process and securing financial assistance.
9. Provide targeted outreach and engage with communities across the Commonwealth about SRF program benefits, priorities, and opportunities to improve water quality, reduce project costs, and enhance resiliency

Long-Term Goals

1. Ensure that the DWSRF program remains accessible to assist communities across the Commonwealth to maintain compliance with the Safe Drinking Water Act, particularly communities with small systems.
2. Identify and prioritize additional subsidy for projects in the IUP that serve Disadvantaged Communities.
3. Ensure that water treatment projects financed through the SRF fully consider cost-effective energy efficiency measures and/or renewable energy strategies.
4. Assist public water suppliers to finance projects to address the impact of climate change and resiliency concerns on the safe and continuous operation of the utility. Through its Hazard Mitigation and Climate Adaptation Plan, the Commonwealth is encouraging resiliency and climate adaptation in the design and construction of water infrastructure.
5. Promote systematic Asset Management Planning for drinking water utilities to achieve long-term sustainability, implementable climate change mitigation and resiliency measures, and deliver consistent service in a cost-efficient manner.
6. Establish and efficiently manage a permanent source of financing for drinking water infrastructure to enhance and protect public health.
7. Promote public engagement and program transparency by publishing informative and readily accessible program materials and reports.

DWSRF Mapping Outline

1. **Good Program Governance -** Operate an efficient and dynamic program that is resilient and responsive to state needs.
   a. DWSRF ST 1, 2, 7, 9
   b. DWSRF LT 1, 3, 5, 6, 7

2. **Lead Service Lines (LSL) -** Prioritize funds for projects or activities that assist communities with eliminating LSLs and complying with updated Lead and Copper Rule Revisions (LCRR).
   a. DWSRF ST 3, 4,
   b. DWSRF LT

3. **PFAS -** Prioritize funds for projects or activities that assist communities with eliminating or mitigating PFAS from drinking water sources.
   a. DWSRF ST 5,
   b. DWSRF LT

4. **Utility Sustainability -** Fund projects and activities that assist systems with planning and sustainable practices.
   a. DWSRF ST 6, 7, 8
   b. DWSRF LT 3, 4, 5

5. **Community Support -** Prioritize funding, loan relief and technical assistance to communities defined as disadvantaged or identified as small.
   a. DWSRF ST 2, 6, 7, 8, 9
   b. DWSRF LT 1, 2, 5

2024 Annual Green Bonds and Sustainability Bonds Report

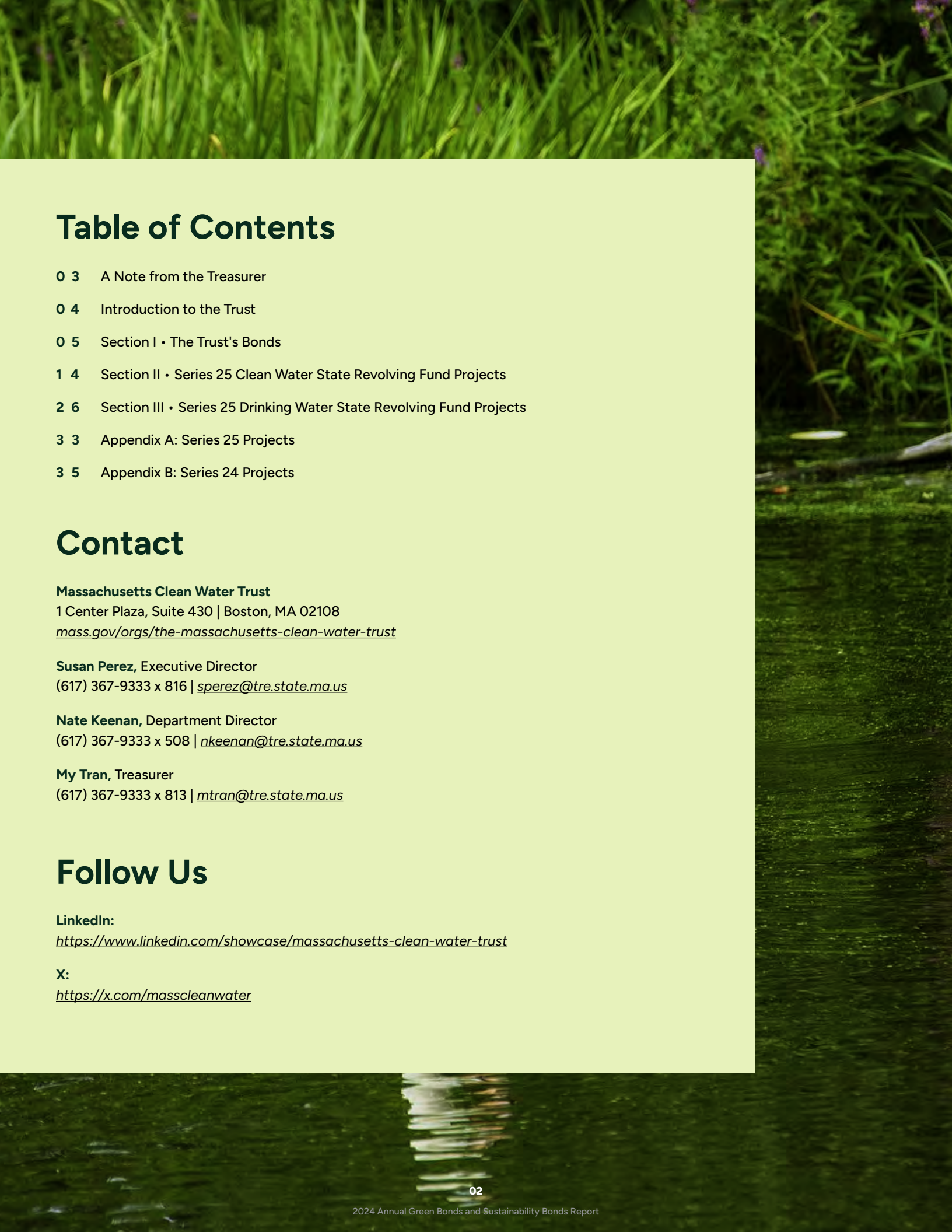
SFY2024 Massachusetts State Revolving Fund Annual Report

Office of the State Treasurer
Massachusetts Department of Environmental Protection
Executive Office for Administration and Finance

MASSACHUSETTS
CLEAN WATER TRUST

2024 Annual Green Bonds and Sustainability Bonds Report

MASSACHUSETTS
CLEAN WATER TRUST



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A Note from the Treasurer

As Chair of the Massachusetts Clean Water Trust (the Trust) Board of Trustees, and in keeping with the Trust's policy of openness and transparency, I am pleased to submit the 2024 Annual Green Bonds and Sustainability Bonds Report.

The Trust has issued eight new money Green Bond series totaling over **$1.4 billion** to support **432** local water infrastructure project loans, and three new money Sustainability Bonds series totaling over **$464.4 million** in support of **116** project loans. With the issuance of Green and Sustainability Bonds, the Trust is once again demonstrating its commitment to an innovative finance program.

The projects financed by these bonds enhanced ground and surface water resources, ensured the safety of drinking water, protected public health, and developed resilient communities. The impact of these investments may not always be visible to the public, but it is felt in every glass of water poured, in restored water bodies, and in homes and businesses that receive safe and reliable water.

These bond designations provide investors with an Environmental, Social, and Governance (ESG) focus an opportunity to invest in bonds that support critical public health infrastructure, supports needed environmental improvement, and helps communities that need it most.

Sustainability

The Trust was one of the first to leverage the Sustainability Bonds designation for water infrastructure through the State Revolving Fund program. These bonds finance projects that meet the same standards as Green Bonds, but have the additional impact of serving communities with socio-economic challenges. As this ESG marketplace continues to mature, the Trust is committed to transparent and accurate reporting for the bond label to continue to instill investor confidence.

AAA Credit Rating

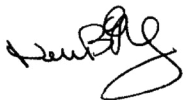
With its AAA credit rating by all three major credit agencies, the Trust provides low interest loans to local governments and other eligible entities for water infrastructure projects across the state. Since its establishment, the Trust has financed approximately **$9.1 billion** for nearly three hundred borrowers, serving **97%** of the Massachusetts' population.

Commitment

The Trust is committed to transparency and constant improvement. This can be found in its industry leading issuances with the improved accessibility, to its documents from the preliminary official statements, to this very report. We are pleased to contribute to this innovative marketplace and stay committed to improving our communications. We ask that you let us know if there are any additional ways that we can meet your information needs. Your feedback is always welcome and much appreciated.

Finally, I am deeply thankful to the staff of the Trust and our program partners, the Massachusetts Department of Environmental Protection (MassDEP) and EPA Region 1, for their tireless work and commitment to the communities of Massachusetts. The Trust and MassDEP are constantly innovating and remain dedicated to the mission of serving our residents.

Sincerely,



Deborah B. Goldberg
Treasurer and Receiver-General
Commonwealth of Massachusetts
mass.gov/treasury

Introduction to the Trust

The Massachusetts Clean Water Trust (the Trust), in collaboration with the Massachusetts Department of Environmental Protection (MassDEP), helps communities build or replace water infrastructure that enhances ground and surface water resources, ensures the safety of drinking water, protects public health, and develop resilient communities. It accomplishes these objectives by providing low-interest loans and grants to cities, towns, and water utilities through the Massachusetts State Revolving Funds (SRFs).

The Trust and MassDEP administer two SRFs, the Clean Water (CW) and Drinking Water (DW) SRFs. The CWSRF was established in 1987 under the Clean Water Act and the DWSRF was established in 1996 under the Safe Drinking Water Act. The Trust manages the flow of funds to borrowers while MassDEP manages project development and oversight.

SRFs receive funding from the United State Environmental Protection Agency (EPA) in the form of annual capitalization grants. The SRFs function as an environmental infrastructure bank making loans to local governments with the federal funds and once those loans are paid back, the funds are then loaned out again, which is how the fund "revolves."

The Trust uses a "leveraged financing model" to provide funding to projects in excess of the federal and state grants. Bonds are issued in the capital markets and are secured by borrower repayments and reserve funds. The proceeds from bonds are used to provide capital for new, below-market rate loans to borrowers for water infrastructure projects. This model has allowed the Trust to finance approximately **$9.1 billion** in projects from nearly **$3.1 billion** in federal grants and state matching funds.

The Trust is administered by a three-member Board of Trustees that is chaired by the Treasurer of the Commonwealth. The Secretary of the Executive Office for Administration and Finance and the Commissioner of MassDEP serve as Trustees. During monthly meetings, the Board of Trustees approves all financial commitments, agreements, and program decisions. All Board of Trustees materials can be found on the Trust's website along with all pertinent investor information, including this report.

About this Report

This report covers the Trust's activity during State Fiscal Year (SFY) 2024 and is separated into three sections. The first section, "The Trust's Bonds," details the Trust's process for issuing Green Bonds and Sustainability Bonds. It covers program-specific project categories, project selection and an overview of the Trust's operations. The second and third sections provide full project descriptions from the Series 25A Green Bonds and Series 25B Sustainability Bonds, and when referenced together, are noted collectively as Series 25, organized by the CWSRF and DWSRF programs. Projects associated with Series 25B Sustainability Bonds are shaded in light green. The appendices at the end of this report list all loans by Green Bonds and Sustainability Bonds series that are still being funded. Additional information such as the percentage of project funding drawn, and loan numbers are included. Readers should note that the main report sections are organized by projects that, in certain cases, were financed by multiple loans spanning multiple bond series.

For full project descriptions for previous bond series, please review previous editions of the Green Bond Report, the Trust's Annual Reports, or the specific bond series' official statements. All reports and documents may be found on the Trust's website under "Investor Resources": www.mass.gov/orgs/the-massachusetts-clean-water-trust.

Section I • The Trust's Bonds

In SFY 2024, the Trust successfully issued three series of bonds — Series 25A Green Bonds, Series 25B Sustainability Bonds and Series 2023 Green Bonds, the Trust's first refunding Green Bond Series[1]. This was the Trust's eighth issuance of new money Green Bonds and the third issuance of new money Sustainability Bonds. This section will describe the Trust's approach to issuing Green Bonds and how the Trust has adopted the International Capital Market Association (ICMA) 2021 *Green Bond Principles* framework for project selection. Further, this section details how Sustainability Bonds are designated and their distinction from Green Bonds. Finally, the section will describe how the Trust maps projects to United Nations Sustainable Development Goals (UN SDGs)

Since Series 23, the Trust departed from the way it had traditionally issued Green Bonds. The Trust made the decision to include all projects associated with the issuances. Previous practice limited project disclosure to those directly funded through bond proceeds and did not include projects that were financed with the Trust's program funds, pledged to secure the Trust's bonds. Series 23 through 25 included all projects, whether they were bond funded or funded by Trust program funds. Tables found in this report that detail the number of projects or loans for previous issuances reflect the policy that was in place at the time of issuance and should be considered individually.

Green Bonds

Since 2015, the Trust has issued over **$1.5 billion** of its bonds as Green Bonds in compliance with the federal Clean Water Act and the Safe Drinking Water Act. Consistent with the "Green Bond" classification, the proceeds are dedicated to projects that promote pollution prevention, sustainable water, wastewater management, energy efficiency or other environmentally sustainable purposes in alignment with ICMA's *Green Bond Principles*. The Green Bonds were issued to finance **432** loans for **353** water infrastructure projects through the CWSRF and DWSRF programs.

Green Bonds Issued			
Series	**Year**	**Issue Amount**	**Total Loans**
Series 18	2015	$228,155,000	81
Series 19	2016	207,805,000	66
Series 20	2017	207,350,000	51
Series 21	2018	163,460,000	38
Series 22	2019	191,610,000	44
Series 23A	2021	141,945,000	48
Series 24A	2022	137,095,000	56
Series 25A	2023	144,990,000	48
Totals		**$1,422,410,000**	**432**

Sustainability Bonds

The Trust issued Sustainability Bonds due to the projects' adherence to the same environmental standards of the Green Bonds and the designation of certain borrowers as "Disadvantaged Communities" under the acts. These projects represent communities that are identified as the most disadvantaged in relation to other communities in the Commonwealth.

The purpose of labeling the bonds as "Sustainability Bonds" is to allow investors to invest directly in bonds that finance projects in Disadvantaged Communities and are environmentally beneficial projects that meet ICMA's 2021 *Green Bond Principles, Social Bond Principles, Sustainability Bond Guidelines,* and the *United Nations Sustainable Development Goals.* Projects designated as "Sustainability Bonds" are made up exclusively from Disadvantaged Community projects ranked as Tier 3, those most in need, according to the Trust's Annual Affordability Calculation as detailed below. Sustainability Bonds were issued to finance **116** loans for **85** water infrastructure projects through the CWSRF and DWSRF programs.

Footnote

[1]The Series 2023 Green Bond refunding series was issued to refund a portion of the Series 18 Green Bonds, which had fully drawn the bonds proceeds and reported on the use of proceeds in the 2018 Annual Report. Therefore, the Trust will not report on the use of proceeds for the Series 2023 Refunding Green Bonds, or include the series in the total amount of Green Bonds issued.

Sustainability Bonds Issued			
Series	**Year**	**Issue Amount**	**Total Loans**
Series 23B	2021	$209,495,000	44
Series 24B	2022	143,060,000	47
Series 25B	2023	111,870,000	25
Totals		**$464,425,000**	**116**

The Trust's Disadvantaged Community Program

The Clean Water Act and the Safe Drinking Water Act define a Disadvantaged Community as a municipality most in need as identified by a state's affordability criteria. SRFs are required to provide additional subsidies to Disadvantaged Communities, calculated as an annual percentage of the CWSRF and DWSRF capitalization grants. Massachusetts awards this subsidy in the form of loan forgiveness, reducing the principal obligation that must be repaid on eligible loans. Additionally, the Trust applies further loan forgiveness through a state matching component to this federal requirement.

The Trust uses the Affordability Calculation for an adjusted per capita income (APCI) metric as its affordability criteria. This approach identifies communities that are the most in need of additional financial assistance to construct needed infrastructure improvements. In addition to determining financial need, the metric uses publicly available, transparent sources of data. Pursuant to EPA guidance, the criteria must be based upon income, unemployment data, population trends, and other data determined relevant by the state. The Trust uses the following formula to calculate the affordability tiers.

Adjusted Per Capita Income (APCI) = Per Capita Income * Employment Rate * Population Change

PER CAPITA INCOME (as listed on the most recent data tables of the Massachusetts Department of Revenue): Per Capita Income is a widely accepted metric of an ability to afford the cost of infrastructure projects.

EMPLOYMENT RATE (as listed on the most recent calendar year data tables of the Massachusetts Department of Revenue): The percentage of the workforce employed. Higher employment rates suggest that a community has more residents able to afford the cost of infrastructure than a community with lower employment rates.

POPULATION CHANGE: The percentage of gain or loss, according to the US Census data, in a municipal population between 2010 and 2020. Increase in population suggests that the community is experiencing growth, which provides a larger rate payer base to support infrastructure costs. Loss of population suggests negative growth and leaves fewer taxpayers and rate payers to absorb the burden of the infrastructure cost.

Based on the APCI formula described above, the Trust calculates APCI for the state and its 351 individual municipalities annually. Communities that fall below the Commonwealth's APCI are assigned into the three (3) affordability tiers based on a community's APCI as a percentage of the Commonwealth's APCI. The table below shows how the tiers are broken down.

Disadvantaged Community Tier Designation	
Tier 1	APCI equal to or more than 80% of the State APCI, but less than 100% of the State APCI
Tier 2	APCI equal to or more than 60% of the State APCI, but less than 80% of the State APCI
Tier 3	APCI less than 60% of the State APCI

Project Selection

The Trust's loan process is dictated by an annual list of projects it commits to finance called the Intended Use Plan (IUP). MassDEP compiles two IUPs annually, one for each SRF program and project eligibility is determined by the Clean Water Act and Safe Drinking Water Act. Projects that apply for financing are selected during an annual solicitation process which is open July through August.

MassDEP compiles the annual IUPs using this rigorous selection process that establishes the Commonwealth's priorities for the upcoming year. MassDEP engineers review detailed project specifications and rank them using an established set of criteria that measures the severity of the problem, the sensitivity of the environmental hazard, the public health risk, and the appropriateness of the proposed solution.

For CWSRF projects, the program emphasizes watershed management priorities, stormwater management, green infrastructure and encourages communities to undertake projects with meaningful water quality and public health benefits. The DWSRF program emphasizes compliance with federal and state water requirements to protect public health while addressing the Commonwealth's drinking water needs.

Project Funding

The Trust, MassDEP, and EPA have entered into a Revolving Fund Operating Agreement for the CWSRF and DWSRF. These agreements establish rules, procedures, and activities to be followed by the EPA and the Trust in administering federal grants. To date, the Trust has been awarded approximately **$1.9 billion** in federal grants and **$344.9 million** in state matching funds for the CWSRF program. Approximately **$882.6 million** in federal grants and **$129.4 million** in state matching funds have been awarded to the DWSRF program.

Project Categories

The SRF programs fund or finance a wide range of projects. **11** categories of projects are eligible to receive CWSRF assistance and six categories are eligible to receive DWSRF assistance. To streamline the content of this report, the Trust has consolidated similar and related categories while omitting categories with no current projects. Below is an overview of the categories listed within this report.

Clean Water Categories

Wastewater Treatment Projects

These projects involve the maintenance, upgrade, or construction of wastewater treatment facilities (WWTF). A WWTF receives sewage from a municipality or utility district service area then treats the water before releasing it back into the environment in accordance with National Pollutant Discharge Elimination System (NPDES) permits. The goal of these projects is to reduce or eliminate pollutants and nutrients found in wastewater for cleaner water ways.

Infiltration/Inflow (I/I) and Sewer System Rehabilitation Projects

These projects involve removing infiltration and inflow (i.e. water other than wastewater) from a sewer system, including construction associated with I/I rehabilitation. I/I is when groundwater or stormwater enters a dedicated wastewater or sanitary sewer system either by direct connections or through damaged parts of sewer pipes. I/I increases the flow to wastewater treatment facilities and leads to back-ups or overflows of the systems. Sewer system rehabilitation and I/I correction projects are concerned with removing sources of water that are either illicitly adding to a sewer system, or from sources entering via defective pipes or utility access holes. Eliminating I/I and replacing sewer systems reduces the occurrences of overflows, meaning less untreated wastewater is released into surface water bodies.

Collector and Interceptor Sewer Projects

These projects involve the physical conveyance of wastewater. Collector sewers gather wastewater from the source. Interceptor sewers convey wastewater to a treatment facility. Extending capacity in an existing sanitary sewer system can help mitigate issues in communities that have insufficient infrastructure to meet local demand. These projects are generally implemented in conjunction with other project categories such as combined sewer overflow correction which separates stormwater and wastewater collection systems to reduce untreated water being released into surface water bodies.

Combined Sewer Overflow (CSO) Correction Projects

These projects involve the reduction of untreated water discharged from combined sewer systems. Combined sewer systems are sewers that are designed to collect rainwater runoff, domestic sewage, and industrial wastewater all in the same pipe. During wet weather events, combined sewer systems can reach capacity and the excess overflows into surrounding waters, creating a CSO. CSO correction projects work to reduce the amount of untreated water discharged from combined sewer systems. Eliminating CSOs is an EPA and Commonwealth priority goal because it will reduce untreated water being released into surface water bodies.

Non-Point Source (NPS) Sanitary Landfill

These projects involve the reduction of NPS pollution from landfills by capping, installing leachate collection systems or repairing insufficient or damaged landfill systems. NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, depositing them into ground and surface waters.

NPS Decentralized Wastewater Treatment Systems

These projects involve the rehabilitating or replacing residential onsite wastewater treatment systems or clustered systems. Failed onsite systems are a leading source of groundwater and nutrient enrichment in waterways. This category contains the projects related to the community septic management program.

Stormwater Infrastructure

These projects involve techniques for managing stormwater to prevent or reduce non-point source pollutants from entering surface waters or ground waters. This includes designing and installing stormwater management systems for conveying, collecting, storing, discharging, recharging, or treating stormwater. These systems aim to reduce the overall impact of excess water on an existing system during wet weather events.

Planning Projects

These projects involve developing plans to address water quality and related public health problems. Infrastructure management tracking, capital investment schedules, and the adoption of best management practices are also common objectives. For example, comprehensive wastewater management plans provide strategies for addressing wastewater treatment and disposal issues in a community. Integrated municipal stormwater and wastewater resource management planning assists communities with meeting requirements that arise from distinct wastewater and stormwater programs. Fiscal sustainability and asset management planning assists communities with maintaining replacement schedules and forecasting capital needs.

Drinking Water Categories

Drinking Water Treatment Projects

These projects involve the upgrade, maintenance, and construction of water treatment facilities. These projects are meant to improve the overall quality of drinking water and are targeted to remove pollutants that are known health risks. Treatment plant upgrades can impact the overall efficiency of a plant's energy consumption. Replacing equipment at the end of its useful life will improve overall system efficiency. New pumping and filtering equipment is designed with energy efficiency in mind.

Drinking Water Transmission and Distribution Projects

These projects involve the infrastructure that brings untreated water to treatment facilities and the infrastructure that conveys treated water for consumption. This includes everything from large transmission mains from reservoirs to the service lines that provide treated water to homes and businesses. Lines at the end of their useful life can lead to inefficiency in water transmission. Older pipes made of lead or cast iron can be severe health risks when corrosion occurs. Upgrades to pumping and booster stations make the transmission process more energy-efficient and improve the overall efficiency of the system.

Drinking Water Source and Storage Projects

These projects involve two distinct categories. Source water projects are related to untreated water sources – such as rehabilitating surface water in a reservoir or drilling and maintaining wells. Storage projects deal with infrastructure for maintaining and storing treated water before it is distributed into a system.

Drinking Water Planning and Design Projects

These projects involve the activities needed to plan, design, and/or study drinking water infrastructure. Such projects are essential for maintaining and improving the key infrastructure that protects public health and water quality.

United Nations Sustainable Development Goals Project Mapping

The United Nations Sustainable Development Goals (UN SDGs) are **17** goals adopted as part of the '2030 Agenda for Sustainable Development.' The goals were adopted by all United Nations member states in 2015. The UN SDGs are meant to provide a blueprint for combating poverty, spurring economic growth, and improving health and education while ensuring both climate and environmental sustainability. In reference to the 2022 ICMA's *Green and Social Bonds: A High-Level Mapping to the Sustainable Development Goals,* the Trust intends for the proceeds from the designated bonds to be used in a manner that is expected to be consistent with the following UN SDGs.

While the Trust intends for projects financed with Green Bonds and Sustainability Bonds to adhere to the applicable UN SDGs as detailed below, the Trust does not guarantee that such criteria will ultimately be met, either in substance or with respect to any timelines set forth in the UN SDGs.

Mapping Green Bonds

Consistent with the "Green Bond" classification, the proceeds from the Green Bonds will be dedicated to projects that promote pollution prevention, sustainable water and wastewater management, energy efficiency, or other environmentally sustainable purposes in alignment with ICMA's 2021 *Green Bond Principles.*

Goal 3: Ensure healthy lives and promote well-being for all at all ages

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

Goal 6: Ensure availability and sustainable management of water and sanitation for all

6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all.

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

6.b Support and strengthen the participation of local communities in improving water and sanitation management.

Goal 12: Ensure sustainable consumption and production patterns

12.2 By 2030, achieve the sustainable management and efficient use of natural resources.

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience and take action for their restoration in order to achieve healthy and productive oceans.

Programs	Project Category	UN SDG Alignment
CWSRF Eligible Projects	Wastewater Treatment	3.9, 6.3, 6.4, 12.4
	Collector and Interceptor Sewers	3.9, 6.3, 6.4, 14.1
	Combined Sewer Overflow Correction	3.9, 6.3, 6.b, 12.2, 14.1
	Infiltration/Inflow and Sewer System Rehabilitation	3.9, 6.3, 6.b, 14.1
	NPS Sanitary Landfill	3.9, 6.3, 6.b, 12.2, 12.4, 14.1, 14.2
	NPS Decentralized Wastewater Treatment System	3.9, 6.3, 6.b, 12.2, 12.4, 14.1, 14.2
	Stormwater Infrastructure	3.9, 6.3, 6.b, 12.2, 14.1, 14.2
	Planning	3.9, 6.3, 6.4, 6.5, 6.b, 12.2, 14.1
DWSRF Eligible Projects	Drinking Water Treatment	3.9, 6.1, 6.4, 6.5, 12.4
	Drinking Water Transmission and Distribution	3.9, 6.1, 6.4, 12.2
	Drinking Water Source and Storage	3.9, 6.1, 12.2, 12.4
	Drinking Water Planning and Design	3.9, 6.1, 6.4, 6.5, 6.b, 12.2, 12.4

Mapping Sustainability Bonds

Projects financed as 'Sustainability Bonds' will generally adhere to the UN SDGs as detailed in this report. In addition, the projects financed by the Series 23B Bonds all fall into the Tier 3 Disadvantaged Communities category as determined at the time of project approval.

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

Goal 10: Reduce inequality within and among countries

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.

11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all.

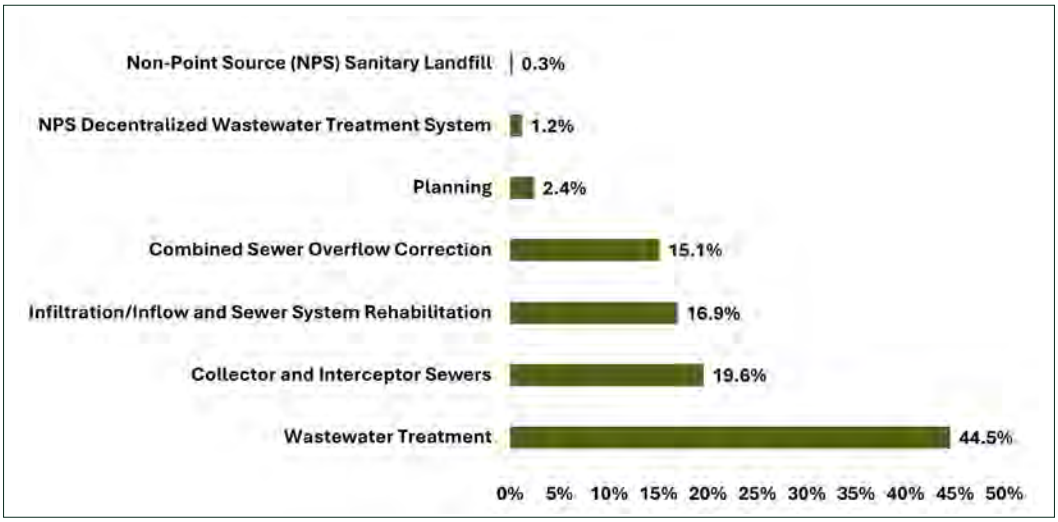
A Look at Series 25

The Data

The following sections include data from the combined Series 25A Green Bonds and Series 25B Sustainability Bonds. Series 25 is composed of **73** projects with **71%** being CWSRF projects and **29%** DWSRF projects. The following charts illustrate the distribution of Series 25 projects in each of the CWSRF and DWSRF project categories, first by financing amount and then by number of projects.

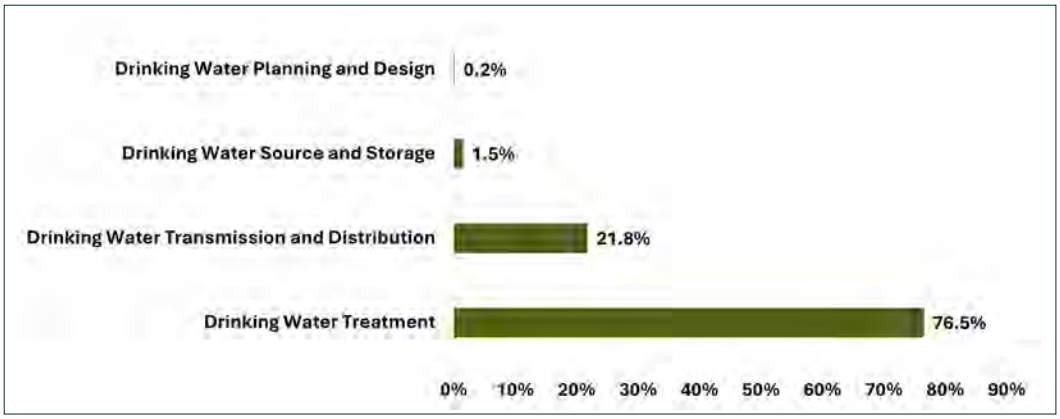
Series 25 Data Highlights

Series 25 CWSRF Funding Distribution



- Wastewater Treatment projects make up **18%** of projects in Series 25 by count but **32%** of all project funding.
- I/I and Sewer System Rehabilitation projects as the next largest CWSRF category made up **16%** of all Series 25 projects by count, and **12%** percent of all project funding.
- CSO Correction projects account for nearly **3%** of CWSRF Series 25 projects by count, but nearly **11%** of total Series 25 project funding. These projects tend to be in early industrialized communities, where the cost of repair is disruptive and expensive. Based on the forementioned statistics, the projects in this category tend to receive substantial amounts of financing to help these communities reduce the amount of untreated water released into the environment.
- Collector and Interceptor Sewer projects account for **14%** of Series 25 project funding.
- NPS Sanitary Landfill was the least represented category of projects in CWSRF Series 25, with only one project accounting for **0.2%** of Series 25 funding.
- NPS Decentralized Wastewater Treatment Systems has the fourth largest portfolio of projects, but only accounts for **1%** of CWSRF funding. This disparity is due to the small-scale nature of these projects.
- Planning projects, unlike the other categories, are less costly per project as they do not require the procurement of physical infrastructure. While Planning projects account for approximately **8%** of the total number of projects, they only occupy little more than **1%** of total CWSRF funding.

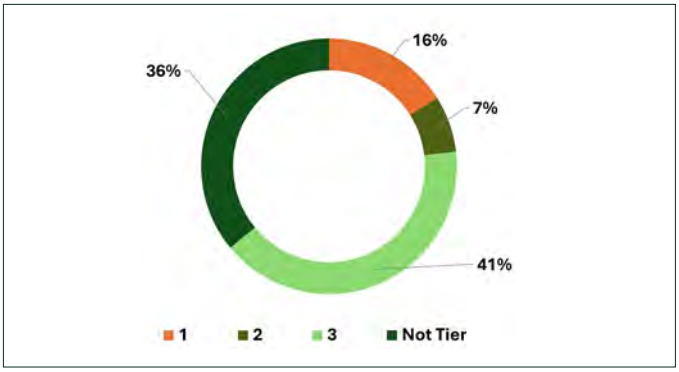
Series 25 DWSRF Funding Distribution by Project Category



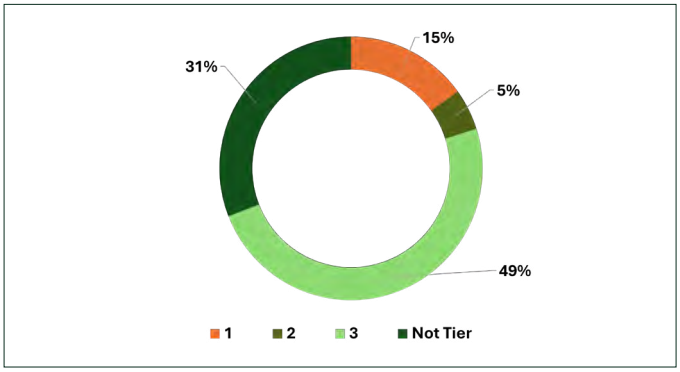
- Drinking Water Treatment projects account for approximately **22%** of the Series 25 project funding but represent nearly **77%** of DWSRF project funding.
- Drinking Water Transmission and Distribution accounts for most remaining funds. These **7** projects account for more than **21%** of DWSRF project funding.
- Drinking Water Planning and Design projects account for nearly **0.2%** of total project funding. Like their CWSRF counterparts, Drinking Water Planning and Design is limited to non-construction activities. Though it should be noted that many projects will build this design work into their DWSRF projects.
- Drinking Water Source and Storage's single project accounts for the last **0.2%** of project funding. These projects focus on improving the infrastructure that maintains, and stores treated water prior to its distribution back into the community, as well as rehabilitating surface water in reservoirs and wells.

The following charts show the distribution of Series 25 funds to CWSRF and DWSRF programs by Disadvantaged Community tiers.

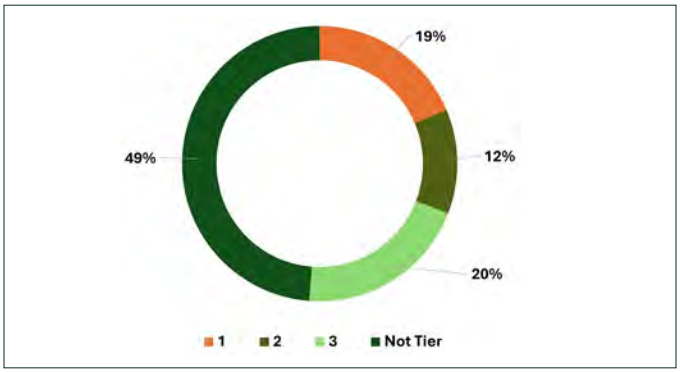
Percentage of Funding by Disadvantaged Community Tier



Percentage of CWSRF Funding by Disadvantaged Community Tier

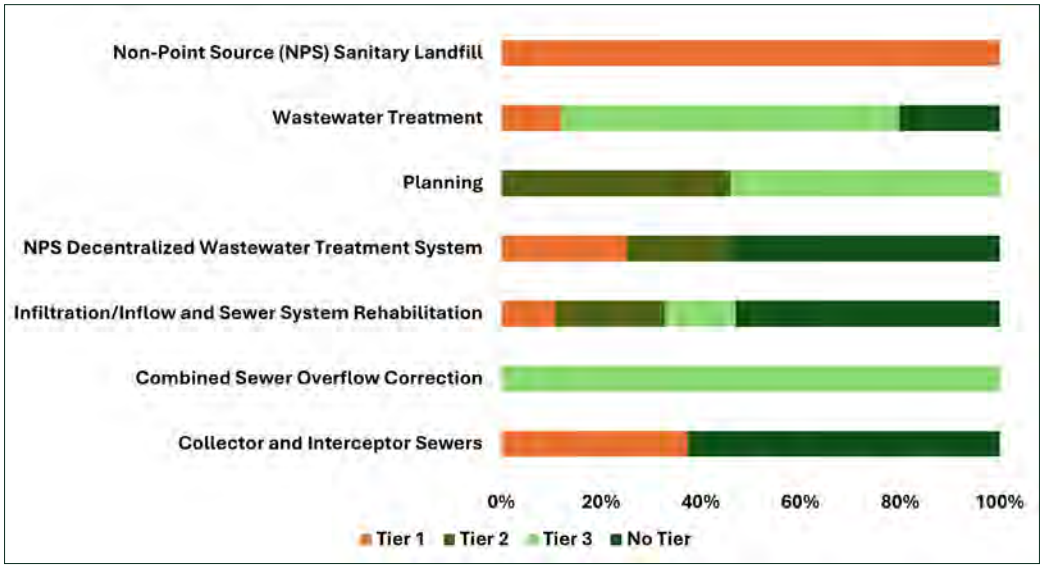


Percentage of DWSRF Funding by Disadvantaged Community Tier



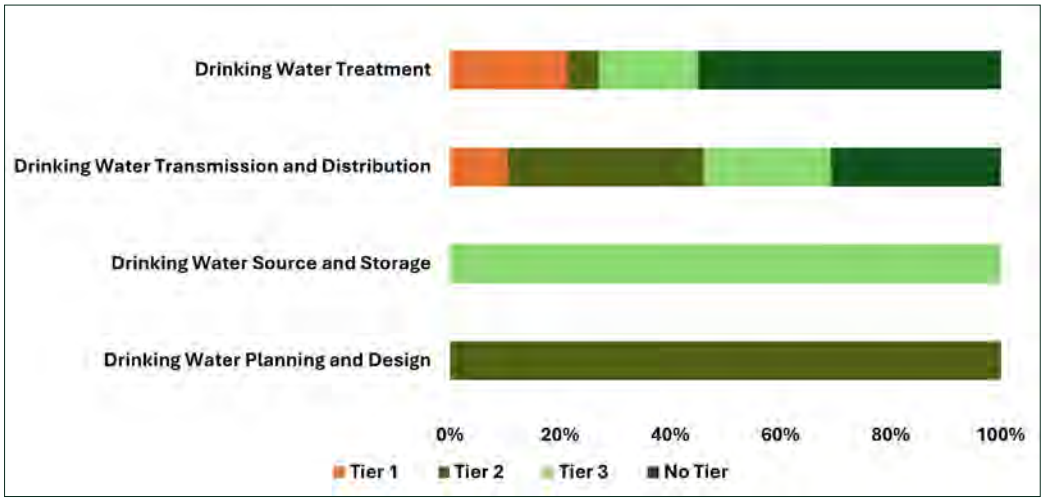
- **$296.4 million** or **64%** of all Series 25 loans went to a Disadvantaged Community.
- **$189.0 million** or **41%** of all Series 25 loans were made to Tier 3 Disadvantaged Communities.
- **$102.1 million** or **49%** of all CWSRF loans were made to Tier 3 Disadvantaged Communities.
- **$25.9 million** or **19%** of all DWSRF loans were made to Tier 3 Disadvantaged Communities.

CWSRF Percent Distribution in each Project Category by Disadvantaged Community Tier



- **$86%** of the Tier 3 allocation went to CWSRF Disadvantaged Community projects.
- **100%** of Planning, CSO and Stormwater project funding went to Disadvantaged Communities.
- **47%** of I/I and Sewer System Rehabilitation project funding went to Disadvantaged Communities.

DWSRF Percent Distribution in each Project Category by Disadvantaged Community Tier



- Approximately **29%** of Disadvantaged Community funding was allocated to DWSRF projects, but this is proportionate to the size of the DWSRF portfolio.
- **51%** of total DWSRF loan funds went to Disadvantaged Communities.
- **45%** of Drinking Water Treatment project funding went to Disadvantaged Communities.
- **69%** of Drinking Water Transmission and Distribution went to Disadvantaged Communities.
- **100%** of Drinking Source and Storage project funds went to Tier 3 Disadvantaged Communities. These projects are intended for drinking water improvement in densely populated neighborhoods in Tier 3 Disadvantaged Communities.

Wastewater Treatment Projects

Wastewater treatment projects are eligible for SRF assistance under the Clean Water Act for facilities that provide, or are being upgraded to provide, secondary or advanced wastewater treatment. Water treatment facility upgrades or improvements can vary widely depending on the age of the infrastructure in question. These facilities are governed under the National Pollutant Discharge Elimination System (NPDES), which determines the level of water treatment required to discharge wastewater. Many of the upgrades help facilities meet environmental and public health requirements. Upgrades include replacing inefficient mechanical equipment, upgrading pollutant removal systems, or updating water storage facilities to reduce odor.

Wastewater Treatment Projects			
Total Amount in Dollars ($)	**Total Number of Projects**	**Total Series 25 Amount in Dollars ($)**	**Total Number of Series 25 Projects**
$2,981,795,578	354	$147,270,584	13

Series 25 Wastewater Treatment Impact

- Adams, Barnstable, Northampton, Orleans, and Taunton have implemented modern systems to replace outdated treatment plants or building treatment for the first time, which will reduce operating expenses and replace crucial components nearing or past their useful life
- Adams, Pittsfield, Spencer, Springfield Water and Sewer Commission (SWSC), and Taunton improved discharge systems to achieve compliance with current NPDES permit requirements.

Borrower	Project Description	Amount
Adams	**Wastewater Treatment Facility (WWTF) Capital Improvements** The Town of Adams' construction project includes the repair, replacement, and refurbishment of various systems of the WWTF, as defined in its 2020 capital needs assessment report to address stringent National Pollutant Discharge Elimination System permit limits, reduce nutrient discharges, and ensure the integrity of the plant. The WWTF has been in operation since 1968, with limited capital improvements occurring in 2006. The town has performed general maintenance and rebuilt equipment to maintain WWTF operation; however, many components have exceeded their anticipated life expectancy. This project serves to repair and replace aging process equipment and infrastructure to allow the WWTF to continue serving the community and reliably protecting the environment in the future.	$6,548,006
Barnstable	**Solids Handling Upgrade Project** This project includes upgrades and modifications to the existing Water Pollution Control Facility (WPCF). These improvements include the addition of two gravity belt thickening units to improve operational efficiency at the facility as well as the replacement of other aged systems that have exceeded their useful life. Specifically, the project will replace or rehabilitate sludge pumps, the dry polymer system, the sludge holding tanks and blowers, the odor control system, the instrumentation systems as appropriate, and other architectural and mechanical systems.	$8,111,998
Chicopee	**Solids Handling Improvements Project** This project included improvements to the Chicopee's Water Pollution Control Facility (WPCF) and Wastewater Pump Station (PS) Improvements. The WPCF improvements included the demolition and replacement of a belt filter press with a centrifuge, the installation of a redundant sludge cake pump, and upgrades to the primary clarifier, including replacement of the mechanisms, cross collector, scum collector pipe, and associated electrical upgrades. The improvements increased reliability of the solids handling process, and increased solids handling capabilities at the WPCF. The Jones Ferry PS is considered the most critical PS in the City, because it pumps most of the flow that is conveyed to the WPCF in the Connecticut River Interceptor. The PS improvements included the replacement of wastewater pumps with submersible pumps and the replacement of entry doors, roof, grating in the wet well, slide gates, fuel storage tank, and motor control center. Facility upgrades included the ventilation system, oil furnace, unit heaters, and monorail system, and the installation of a sewage grinder, variable frequency drives, rock catcher, and magnetic flow meter.	$4,471,798

Section II • Series 25 Clean Water State Revolving Fund Projects

Borrower	Project Description	Amount
Northampton	**Northampton Wastewater Treatment Plant (WWTP) Upgrades** The project was the first phase of a plan to upgrade and modernize the Northampton WWTP. These construction activities were based on a long-term wastewater planning study that recommended improvements to the WWTP to extend its lifespan and ensure long-term functionality and federal and state permit compliance.	$9,581,648
Orleans	**Downtown Area Collection System and Wastewater Treatment Facility (WWTF)** The construction Project included a new collection system, Pump Station (PS), WWTF and effluent disposal for the Downtown Area consisting of about 1,087 users to address water quality in the various estuaries. In general, the project included a WWTF (influent screening and flow measurement; flow equalization; biological process (SBR); effluent filters; post equalization; effluent pumps; ultra violet disinfection; odor control; septage receiving and processing; and solids storage and thickening); effluent disposal (wicks); about 30,800 linear feet (LF) of 8" to 12" galvanized steel piping and connections, about 2,000 LF of 1-1/2" to 2-1/2"lined pipe systems and appurtenances, about 9,200 LF of 8" effluent force main, 3 PS, and about 9,200 LF of 6" and 8"force main and appurtenances for the estimated flow of 250,000 gallons-per-day.	$29,704,600
Pittsfield	**Wastewater Treatment Plant (WWTP) Nutrient Removal** This project is to upgrade the WWTP to achieve compliance with National Pollutant Discharge Elimination System permit limits and an Administrative Consent Order (ACO) issued by the Environmental Protection Agency. The project will optimize the nitrogen removal process, resulting in reductions of phosphorus and aluminum discharges to the Upper Housatonic River Area, an area of critical environmental concern, and remediate documented nutrient enrichment in the downstream Wood's Pond impoundment. Four major component projects are necessary to achieve compliance: tertiary treatment upgrade, sludge dewatering upgrade, nitrogen removal upgrade (Phase I), and secondary clarifier upgrade. The project components are consistent with the plant needs and energy efficiency improvements identified in the recently updated WWTP facilities plan.	$508,975
Spencer	**Wastewater Treatment Facility (WWTF) Upgrades Project** Spencer's project involves essential upgrades to the WWTF to address stringent phosphorus and copper limits, achieve nitrogen removal goals, and replace aging infrastructure. An Administrative Consent Order (ACO) and the current National Pollutant Discharge Elimination System permit require compliance with phosphorus and copper limits by December 2024. The project also includes abandoning use of constructed wetlands, and the construction of new septage receiving equipment, upgraded influent screening and odor control systems, improved grit removal, new submersible influent pumps, nitrogen removal, renovations to create lab space, the addition of a secondary clarifier, a new tertiary treatment building for phosphorous removal, ultraviolet disinfection, and new sludge thickening equipment.	$40,116,057
Springfield Water and Sewer Commission (SWSC)	**Nutrient Removal Upgrade and Related Facility Improvements** The Springfield Water and Sewer Commission's project includes upgrades to the Biological Nutrient Removal (BNR) Process – Hybrid BNR mixed liquor recycle pumping, replacing the diffused aeration distribution system, upgrades to the plant electrical system, and rehabilitation of the ventilation system in the grit and screenings building. The objective of these improvements is to increase the effectiveness of the wastewater treatment facility to continue meeting its current and anticipated future National Pollutant Discharge Elimination System permit limits and to replace and increase the reliability of critical infrastructure onsite.	$27,829,703
Taunton	**Wastewater Treatment Facility (WWTF) - Solids Handling Improvements** This project was for a complete upgrade of the Taunton WWTF. Improvements were made to meet the requirements of the new National Pollutant Discharge Elimination System discharge permit. In addition, the facility was expanded hydraulically to accept higher flows from the new Main Lift Pumping Station, which reduces the size and frequency of combined sewer overflows. This project was specifically for solids handling improvements with multiple phases to be implemented over multiple years.	$5,406,000
Taunton	**Wastewater Treatment Facility (WWTF) Upgrade- Phase 1** This project is part of a complete upgrade of the Taunton WWTF that is necessary to meet the requirements of the new National Pollutant Discharge Elimination System discharge permit. The facility will expand hydraulically to reduce combined sewer overflows. This project encompasses solids handling improvements.	$14,991,799

Highlight Project | Spencer

Project: Town of Spencer Wastewater Treatment Facility Upgrades Project
Series 25B Loan Amount: $40,116,057
Disadvantaged Community: Tier 3
UNSDG Alignment: 3, 6, 9, 10, 11, 12, 14

Background
Spencer's wastewater treatment facility (WWTF) serves around 1,600 residential and commercial connections with a capacity of 1.08 MGD. Built in 1946 and upgraded in the 1960s and 1980s, the plant uses constructed wetlands for tertiary treatment before discharging into the Cranberry River. Concerns have been raised about the impact of these discharges on downstream water quality, including Lake Quacumquasit and Quaboag Pond. The aging WWTF cannot meet the stricter discharge requirements of the 2019 NPDES permit, particularly for phosphorus and copper, leading to an EPA administrative order. Future nitrogen requirements are also anticipated. Spencer must comply with these new standards by December 2024.

The Project
This project aims to upgrade the WWTF to meet more stringent phosphorus and copper permit requirements, achieve nitrogen removal goals, improve safety for plant workers, and upgrade aging infrastructure. The project involves abandoning the constructed wetlands discharge process for more modern and effective treatment processes, installing upgraded influent screening and grit removal systems to increase solid materials removal and screening capacity during high flow events, and replacing the current influent four-pump system with a more efficient and dynamic two-pump system. A new tertiary treatment building will be constructed to house rapid mix tanks for chemical addition, chemical storage facilities, disc filters, ultraviolet disinfection, and flow meters. Existing infrastructure will be reused to provide flow measurement capabilities, add septage screening, separate storage tanks for septage and industrial/brewery waste, and adequate storage for multiple days of septage acceptance. Two abandoned primary clarifier tanks will be repurposed for septage storage with removable covers for odor control.

Environmental Impact and Public Health Impact
Elevated levels of phosphorus negatively impact aquatic life by accelerating algal growth, which affects water quality, aquatic food resources, habitats, and decreases oxygen availability for fish and other aquatic life. Some algal blooms produce elevated toxins and bacteria growth that can make humans and animals sick. High concentrations of copper produced by the plant can also be toxic to aquatic life. Improvements at the WWTF will enhance water quality by limiting nutrient discharges and bypass events. Occasional secondary treatment bypass events result in untreated wastewater being lost to groundwater, posing a public health risk to residents on private wells and those downstream on Quaboag Pond and Quacumquasit Pond. Fishing activity along the Cranberry River and downstream waterbodies will also benefit from the reduced public health risk due to improved water quality.

Economic Impact
The total projected cost of the WWTF upgrade is approximately **$47 million.** By utilizing the Trust's financing, Spencer will save around **$23.6 million** in total debt service. Through the CWSRF program, Spencer benefits from two key savings programs. First, Spencer received approximately **$6.6 million** in loan forgiveness, with **$3.8 million** due to its Tier 3 Disadvantaged Community designation and **$2.8 million** from ARPA funds. Second, the project qualifies for the **0%** Interest Rate Nutrient Enrichment Reduction loan program, saving Spencer **$17.0 million** in interest costs over the thirty-year loan term.

Source: *Tighe & Bond, Spencer WWTP*

NPS Decentralized Wastewater Treatment Systems

The NPS decentralized wastewater treatment systems projects are comprised of the Community Septic Management Program (CSMP). The CSMP provides loans to the Commonwealth's cities and towns for assisting homeowners in the repair or replacement of failed septic systems. These projects help eliminate contamination from failing septic systems which are a leading source of groundwater pollution that causes contaminated drinking water, tainted shellfish beds, weed choked lakes and ponds, and polluted beaches. With the CSMP, the Trust issues low-interest rate loans to communities who, in turn, issue loans directly to homeowners for up to 20 years. Loans to homeowners are secured through a betterment on their properties. This program allows municipalities to provide access to capital for home septic repair or replacement at a subsidized interest rate. The program is funded within the CWSRF program as NPS projects.

Community Septic Management Projects			
Total Amount in Dollars ($)	**Total Number of Projects**	**Total Series 25 Amount in Dollars ($)**	**Total Number of Series 25 Projects**
$139,530,605	440	$3,859,934	10

Series 25 Community Septic Management Program Impact

- Repair and replacement of failing septic systems can be a vital component for reducing pollution. This is especially important to communities with little wastewater infrastructure. For example, Cape Cod contains roughly 145,000 developed parcels. 74% of these homes and businesses are not connected to a wastewater treatment system and utilize septic systems. Septic Nitrogen loading accounts for roughly 80% of the water quality degradation of Cape Cod.

Community Septic Management Program	
Borrower	**Amount**
Bellingham	$600,000
Cohasset	$50,000
Easton	$500,000
Essex	$307,944
Ipswich	$300,000
Medway	$95,265
Middleborough	$500,000
Nantucket	$833,574
Norton	$373,151
Stoughton	$300,000

Infiltration/Inflow (I/I) and Sewer System Rehabilitation Projects

These projects correct sewer system infiltration and inflow problems. Infiltration includes water, usually groundwater, penetrating a sanitary or combined sewer system from the ground through defective pipes or utility access holes. Inflow includes controlling the penetration of water, usually stormwater, into a system from sump pumps, drains, storm sewers, and other improper entries. Sewer system rehabilitation projects maintain, reinforce, or reconstruct deteriorating or undersized sewer systems. Corrective actions are necessary to maintain the functional integrity of the system.

Infiltration/Inflow (I/I) and Sewer System Rehabilitation Projects			
Total Amount in Dollars ($)	**Total Number of Projects**	**Total Series 25 Amount in Dollars ($)**	**Total Number of Series 25 Projects**
$1,057,761,880	365	$55,981,334	12

Series 25 Infiltration/Inflow (I/I) and Sewer System Rehabilitation Project Impact

- Abington, Haverhill, Lawrence, Millbury, and Quincy have repaired and rehabilitated existing infrastructure by addressing system deficiencies and replacing system parts that have exited their useful life.
- Millbury, Orange, Quincy, and Revere have implemented cost effective measures to evaluate the amount of Infiltration and Inflow (I/I) in their systems which will improve their ability to address I/I levels and develop strategies to reduce them.
- Abington, Barnstable, and Massachusetts Water Resources Authority (MWRA) have utilized projects to help address environmental conservation efforts and environmental degradation and erosion concerns.

Borrower	Project Description	Amount
Abington	**St. Force Main Replacement Project** The Town of Abington's New Sewer Force Main project is constructing a new 11,000 linear foot sewer force main for providing system redundancy as well as accommodating future average daily flow demands. The existing 30-year-old 16-inch ductile iron force main, which transported all wastewater from the Town to Brockton for treatment, has experienced two breaks due to corrosion. The most recent failure, near a wetland area, was caused by corrosive soil destroying the pipe from the outside. The previous break was at a high point in the pipeline where hydrogen sulfide caused the pipe failure. This project protects the environment and public health as it will safely convey wastewater flows in a new corrosion resistant pipeline.	$5,490,763
Barnstable	**Wastewater Pump Station (PS) Improvements Project** Barnstable has 27 wastewater PSs. Many of them have equipment that is well over its useful life and requires replacement to prevent anticipated major failures, which impact public health and the environment. All 27 PSs were evaluated in advance of the issuance of the 2019 Wastewater PS Asset Management Plan (AMP). PS improvement projects over the next 20 years were identified in the AMP. Several factors contributed to the recommendations for improvements in year 1 including the end of service life of equipment, coastal resiliency, and energy improvements/ electrical upgrades.	$576,776
Haverhill	**Sewer System Improvements** The City of Haverhill's project will repair and rehabilitate the historic sewer system by addressing structural deficiencies and/or operational and maintenance deficiencies identified during recent inspections.	$7,948,783
Lawrence	**Sewer and Drainage System Improvements** Lawrence's project rehabilitated and replaced sewer system defects, and operational and maintenance issues identified in the 2019 Sewer System Evaluation Survey (SSES) report. The sewer and drainage system improvements will address structural pipe failures, reduce infiltration and inflow sources, and abate illicit cross-connections to the Small Municipal Separate Storm Sewer System (MS4) areas.	$2,168,250

Section II • Series 25 Clean Water State Revolving Fund Projects

Borrower	Project Description	Amount
Millbury	**Year 1 to 4 Sewer Rehabilitation Project** Millbury's sewer system rehabilitation project removes infiltration and inflow (I/I) and addresses structural defects. This project implements the recommendations from the Sewer System Evaluation Survey (SSES) to remove cost-effective I/I and rehabilitate sewer pipes and manholes with structural defects. The project includes chemically root treating 2,417 linear feet (LF) of sewer; cleaning, inspecting, testing, and sealing 5,340 LF of sewer; installing 60 LF of structural short liner; installing 8,830 LF of structural cured-in-place pipe; performing 2 spot repairs; testing and grouting 18 service connections; installing 7 lateral liners; chemically root treating 17 manholes; cementitious lining of 1,350 vertical feet of manholes; and other related tasks.	$859,000
Massachusetts Water Resources Authority (MWRA)	**Nut Island HW Odor Control & HVAC - Contract 7548** The Nut Island Headworks is a preliminary treatment facility serving 22 communities that provides screening and de-gritting of wastewater prior to the wastewater receiving primary and secondary treatment and disinfection at MWRA's Deer Island Treatment Facility. This project replaces the odor control and Heating, Ventilation, and Air Conditioning (HVAC) systems at the Nut Island Headworks to maintain reliable operation of the systems, meet requirements of their air quality permit, and maintain an environment within the facility that is safe for workers and suitable for equipment. The project will also replace other equipment at the headworks that is approaching the end of its lifecycle to ensure reliable operation of this critical wastewater treatment facility.	$29,658,241
Orange	**North Main Street Water and Sewer Replacement** The Town of Orange recently completed a three-year flow monitoring program to evaluate the amount of infiltration and inflow (I/I) throughout the collection system. Additionally, a 2013 long-term planning study (CWMP) recommended inflow and infiltration (I/I) removal projects based on current recommendations and investigations. Based on the results of this program and recommendations from the CWMP, the Town replaced sanitary sewer mains located in North Main Street prior to a road reconstruction project in the same location. Water mains located on North Main Street were also replaced as part of this project.	$1,161,236
Quincy	**Quincy FY22 Sewer Improvements** Quincy's project implemented the recommendations from the 2020 Sewer System Evaluation Survey to cost effectively remove infiltration and inflow (I/I) and rehabilitate approximately 3.25 miles of sewer pipe in the city through open cut repairs and cured-in-place pipe lining. This project will reduce I/I to the system, supporting the regional I/I reduction program and reducing the risk of sanitary sewer overflows and backups.	$3,541,594
Revere	**Phase 12 Construction- Inflow and Infiltration (I/I), Illicit Discharge Detection and Elimination (IDDE), Pump Station (PS) & Drainage** Revere's Phase 12 Construction Project will include the removal of I/I from the City's sewer system. Construction will include the redirection of public and private I/I sources discovered during Phase 12 field investigations, IDDE source removal, and drainage improvements. Illicit connections, including sump pumps and roof leaders, were removed from the City's sewer system to remove I/I and increase wastewater capacity. Construction will also include PS improvements (both stormwater and wastewater), Cured-in-Place Pipe (CIPP) lining, sewer spot repairs, replacements, new sewer lines, cleaning, and additional wastewater metering.	$4,576,691

Collector and Interceptor Sewers Projects

According to the EPA, millions of gallons of human and industrial waste are sent through complex underground collections systems. These systems operate all day, every day. Most municipal sewer systems are at least 60 years old. Collection systems consist of pipelines, conduits, pumping stations, force mains, and other components to collect wastewater and convey it to treatment facilities before being discharged into the environment. Design, operation, and maintenance are critical for system efficiency and public health. System expansions can be used to mitigate issues with combined sewer overflows and septic systems. New collector sewers are projects associated with new pipes used to collect and carry wastewater from a sanitary or industrial wastewater source to an interceptor sewer that will convey the wastewater to a treatment facility. New interceptor sewers and pumping stations are being built to convey wastewater from collection sewer systems to a treatment facility or to another interceptor sewer. This category includes costs for relief sewers, which are designed to handle the excess capacity of an existing system.

Collector and Interceptor Sewer Projects			
Total Amount in Dollars ($)	**Total Number of Projects**	**Total Series 25 Amount in Dollars ($)**	**Total Number of Series 25 Projects**
$1,237,370,142	364	$64,808,322	9

Series 25 Collector and Interceptor Sewers Projects Project Impact

- Barnstable's Yarmouth Road Intersection project, Barnstable's Strawberry Hill Road project, and Chatham have constructed large expansionary projects that will greatly increase the capacity of their systems and expand access to more residents of the Commonwealth.
- Barnstable's Strawberry Hill Road project, Barnstable's Route 28 East project, and Nantucket have constructed pump improvements that will greatly increase the capacity and efficiency of their systems.
- Chatham and Nantucket improved, repaired, or expanded their wastewater collection systems to reduce the amount of untreated wastewater being discharged into the environment.

Borrower	Project Description	Amount
Barnstable	**Strawberry Hill Road Sewer Expansion** The Strawberry Hill Road Sewer Expansion Project is installing approximately 19,000 liner feet (LF) of gravity sewer, 9,300 LF of sewer force main and 1 new pump station (PS). The project will provide a significant portion of the sewer infrastructure needed to address the wastewater needs of the Centerville River Watershed. The project was identified in the Town's Wastewater Plan and involves the installation of sewer infrastructure to accommodate future sewer expansion. The scope of work includes the installation of gravity sewer along Route 28 and a sewer force main in Yarmouth Road to connect the future "Old Yarmouth Road" sewer expansion to the existing collection system, and multiple force mains within Route 28. Barnstable has 27 wastewater PSs. Many of them have equipment that is well over its useful life and requires replacement to prevent anticipated major failures, which impact public health and the environment. Further, this project includes upgrades and modifications to the existing water pollution control facility, with the addition of two gravity belt thickening units as well as the replacement of other aged systems that have exceeded their useful life. The project will replace or rehabilitate sludge pumps, dry polymer system, sludge holding tanks and blowers, odor control system, instrumentation systems, and other architectural and mechanical systems.	$9,797,085
Barnstable	**Route 28 and Yarmouth Road Intersection Sewer** The project involves the installation of sewer infrastructure to accommodate future sewer expansion identified in the Town's wastewater plan. The Town is partnering with the Massachusetts Department of Transportation to include the installation of sewer infrastructure while the agency completes intersection improvements. The Town's scope of work includes the installation of gravity sewer along Route 28 for future sewer expansion, a sewer force main in Yarmouth Road which will connect the future "Old Yarmouth Road" sewer expansion to the existing collection system and multiple force mains within Route 28 that could accommodate a potential future wastewater partnership with the Town of Yarmouth.	$1,241,494
Barnstable	**Route 28 East Sewer Expansion Project** This project includes construction of approximately 11,000 linear feet of gravity sewer and a new pump station. Once operational, the new infrastructure will handle approximately 1.5 million gallons per day (MGD) of average daily flow. This project is a critical element of building an extensive wastewater collection system that will eventually serve more than 7,000 properties during the town's thirty-year phased comprehensive wastewater management plan.	$13,145,127

Section II • Series 25 Clean Water State Revolving Fund Projects

Borrower	Project Description	Amount
Chatham	**Sewer Extension** This project includes extending sewers to serve portions of the Taylors Pond/Mill Creek, Pleasant Bay and Stage Harbor watersheds. The project consists of multiple construction contracts. These sewer extensions will allow Chatham to continue implementing their approved Comprehensive Wastewater Management Plan (CWMP) and addressing nitrogen loading from septic systems by extending the wastewater collection system to serve properties within the watersheds impacting the Town's coastal estuaries.	$13,104,638
Nantucket	**Sea St. Pump Station (PS) Force Main No. 3** The Sea Street PS pumps flow from Nantucket's collection system to the Surfside Wastewater Treatment Plant (WWTP) through one of two force mains. There is a 20-inch ductile iron force main and a cast iron force main, rehabilitated with a 16-inch polyethylene pipe. In January 2018, the rehabilitated pipe suffered a failure leading to a sanitary sewer overflow (SSO) and discharge of at least 2 million gallons of untreated sewage into Nantucket Harbor. Since the force main break, the Town has determined that due to the age and condition of the existing force mains, a new pipeline should be constructed to mitigate the risk of future SSO's and provide needed system resilience.	$27,519,978

Combined Sewer Overflow (CSO) Correction Projects

CSOs are events where a combined sewer system fails to collect rainwater, domestic sewage, and industrial wastewater in the same pipe as intended. When these systems exceed their capacity, untreated water can discharge directly into a water body. CSO correction projects are associated with measures used to achieve water quality objectives by preventing or controlling periodic discharges that occur when the capacity of a sewer system is exceeded during a wet weather event.

Combined Sewer Overflow (CSO) Correction Projects			
Total Amount in Dollars ($)	**Total Number of Projects**	**Total Series 25 Amount in Dollars ($)**	**Total Number of Series 25 Projects**
$1,653,804,533	165	$49,982,948	2

Series 25 Combined Sewer Overflow Correction Project Impact

- Lynn Water and Sewer Commission (LWSC) and Springfield Water and Sewer Commission (SWSC) have implemented methods of protecting public resources by installing and repairing systems that mitigate CSO.
- SWSC took extraordinary measures to reduce CSOs by tunneling under the Connecticut River to provide more capacity and backup handling for wet weather events.

Borrower	Project Description	Amount
Lynn Water and Sewer Commission	**West Lynn Sewer Separation** The Lynn Water and Sewer Commission has entered a third modified consent decree with the Environmental Protection Agency to implement a long-term control plan to reduce combined sewer overflow (CSO) discharges to local receiving waters. The West Lynn Sewer Separation project is the first of several projects included in the plan to mitigate CSO discharges into the Lynn Harbor.	$48,333,235
SWSC	**York Street Pump Station (PS) and Connecticut River Crossing** Consistent with the SWSC's Integrated Wastewater Plan, the York Street PS and Connecticut River Crossing project will increase the wet weather flow to the Springfield Regional Wastewater Treatment Facility (WWTF), substantially reducing the volume and frequency of Combined Sewer Overflow (CSO) events from multiple regulators across the Connecticut River CSO system. The project includes a new 62 million gallons per day wastewater pumping station and screening facility, 3 new pipes crossing under the Connecticut River to the Springfield Regional WWTF, and modification to the Springfield Regional WWTF influent structure.	$1,649,713

Non-Point Source (NPS) Sanitary Landfill Project

NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff water moves, it picks up and carries away natural and human-made pollutants, finally depositing them into ground and surface waters. Ensuring that landfills are properly capped, maintained, and monitored is necessary to avoid water contaminants leaks into local waters. NPS landfill projects can include purchase, installation, and repair of capping systems (gas venting layer, geosynthetics, barrier layer, top cover, etc.), leachate collection, storage, and treatment systems (onsite or off-site), side slope seepage prevention and control systems, gas condensation systems, monitoring wells and equipment, and stormwater runoff controls.

Non-Point Source (NPS) Sanitary Landfill			
Total Amount in Dollars ($)	**Total Number of Projects**	**Total Series 25 Amount in Dollars ($)**	**Total Number of Series 25 Projects**
$89,421,336	37	$873,885	1

Series 25 Non-Point Source (NPS) Sanitary Landfill Project Impact

- Barnstable County installed capping to the stormwater systems to prevent Per- and Polyfluoroalkyl Substances (PFAS) from penetrating the system. This was a rare example of the CWSRF utilizing funds to reduce PFAS spread and exposure, which normally, and predominantly, falls under the DWSF.

Borrower	Project Description	Amount
Barnstable County	**Emergency Site Capping - Per- and Polyfluoroalkyl Substances (PFAS) Treatment** The County constructed a capping system and stormwater improvements to reduce infiltration from stormwater and runoff into PFAS-contaminated soil at the Barnstable County Fire and Rescue Training Academy (BCFRTA) facility, and thereby mitigated leaching of PFAS from soil to the underlying groundwater located within several Hyannis municipal wells.	$873,885

Planning Projects

Projects in this category are for developing plans to address water quality and water quality-related public health problems. Planning projects can consist of multiple types of investigations. Field investigations are used to view the state of current water infrastructure assets to identify and prioritize design, maintenance, and replacement activities. Sensor and field analysis can be used as part of a larger analysis that consists of plans to adopt best management practices and capital improvements. These projects assist municipalities with determining environmental issues that may be affecting local water sources or endangering public health.

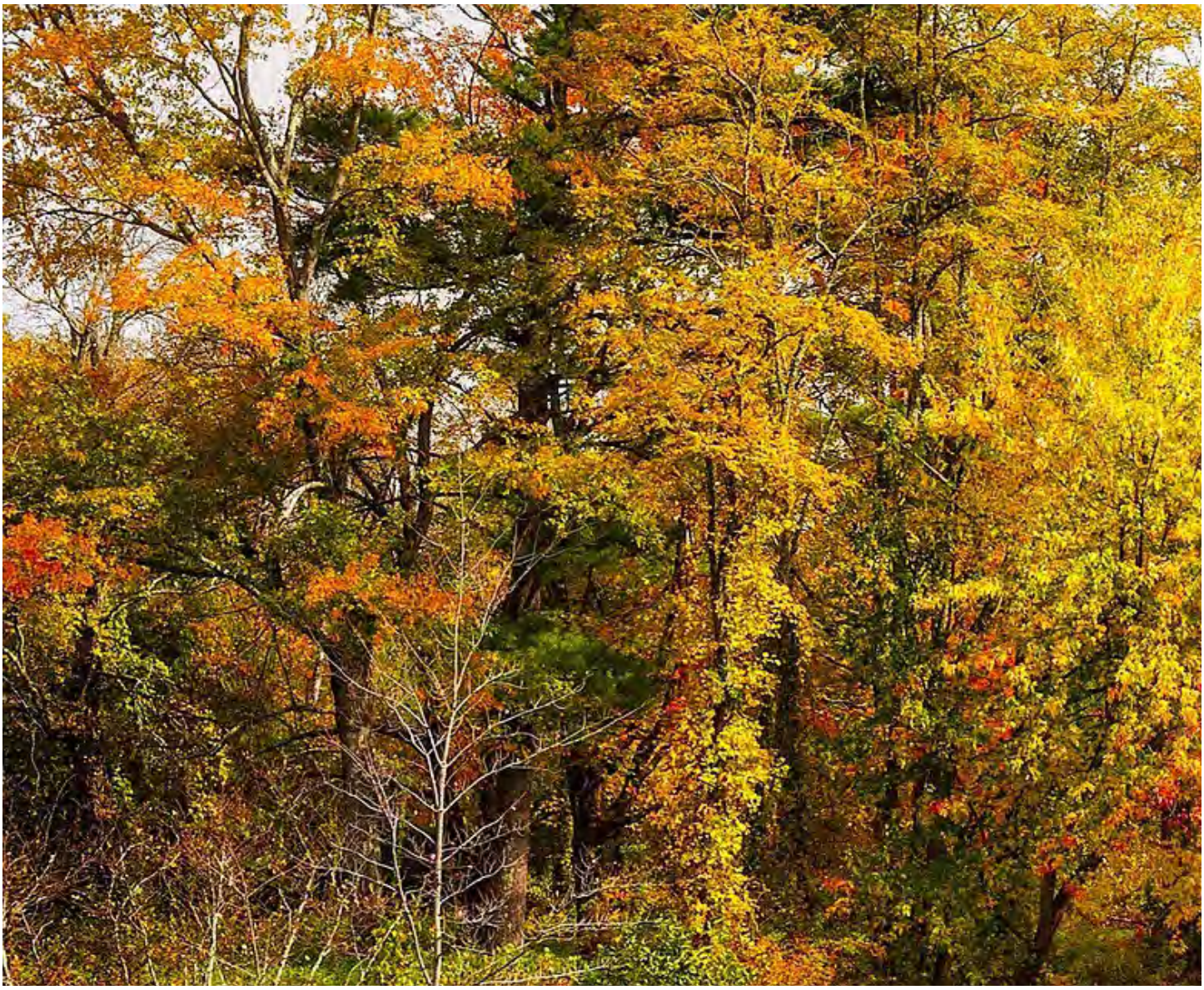
Planning Projects			
Total Amount in Dollars ($)	**Total Number of Projects**	**Total Series 25 Amount in Dollars ($)**	**Total Number of Series 25 Projects**
$372,627,036	360	$8,006,700	6

Series 25 Planning Projects Impact

- Millbury, New Bedford, Quincy, and Revere initiated investigations into Illicit Discharge and installed Illicit Discharge detection systems which will help mitigate the effects of illegal discharge into their sewer systems by sump pumps, roof ladders, and other illicit sources.
- Fall River and Fitchburg implemented data collection systems that will better investigate and inform replacement decisions which is a cost savins for their system maintenance.

Borrower	Project Description	Amount
Fall River	**Asset Management Planning (AMP) Loan** This AMP project conducted an asset inventory, condition assessment, and criticality/risk evaluation of the City's wastewater treatment facility. The information gathered was used to develop data driven renewal and replacement decisions and was imported to the City's integrated (drinking water, wastewater, and stormwater) asset management software system.	$28,000
Fitchburg	**Combined Sewer Overflow (CSO) 010, 032, 045, 083 Separation/Rehabilitation** The City's Wastewater Treatment Facility (WWTF) Improvements project is the second phase of a complete WWTF rehabilitation/upgrade for reliable National Pollutant Discharge Elimination System compliance and to address water quality and public health and safety issues.	$1,048,700
Millbury	**Municipal Separate Storm Sewer System (MS4) Permit Compliance** The project will assist Millbury in complying with the requirements of their MS4 Permit, which regulates stormwater discharges. The project focuses on tasks related to improving water quality where the impairment is phosphorus or bacteria. This includes the development of a phosphorus control plan for Brierly Pond, Dorothy Pond, Howe Reservoir, and Pondville Pond; the development of a phosphorus source identification report for the Blackstone River, illicit discharge detection and elimination investigations in high priority areas, and wet weather outfall screening and sampling of outfalls that discharge directly to the Blackstone River.	$500,000
New Bedford	**Sewer and Stormwater System Illicit Discharge Detection and Elimination (IDDE) Program** This project facilitated progress of the city's IDDE program, to meet requirements of the 2017 Massachusetts Municipal Separate Storm Sewer System Permit and draft administrative order that was being negotiated. The city had screened 50 percent of stormwater outfalls for signs of illicit discharges. This project consisted of two phases 1) screening the remaining outfalls and 2) performing upstream investigations (dry weather manhole testing, dye testing, closed caption TV, etc.) of systems that indicated potential illicit discharges during screening	$1,750,000

Borrower	Project Description	Amount
Quincy	**Stormwater Drainage and Management Planning Study** Quincy evaluated its drainage system capacity to determine the causes of flooding identified in the Drainage Capital Improvement Study. Geographic information system (GIS) data, field visits, and surveys will be used to develop conceptual mitigation measures that can be implemented as capital improvements to reduce flooding frequency, duration, and/or extents, along with potential water quality improvements. The Study also focused on improving water quality of receiving water bodies by evaluating past and future projects to comply with the City's Small Municipal Separate Storm Sewer System (MS4) Permit Year 4 and 5 requirements. This planning study included an illicit discharge investigation that integrates sewer/drain improvements and generates prioritized water quality improvement projects for consideration as capital improvement programs.	$3,180,000
Revere	**Phase 13 Investigations- Inflow and Infiltration (I/I) and Illicit Discharge Detection and Elimination (IDDE)** The City of Revere's Phase 13 Field Investigations, IDDE, and Illicit Connections and sump pump investigation programs included common investigative elements such as: closed-circuit television of drains and sewers throughout the city, dye testing, smoke testing, wastewater and storm water pump station inspections, and inspections of private homes and businesses to identify sources of I/I from sump pumps, roof leaders, roof drains, driveway drains, yard drains and other sources of I/I. The findings of these investigations will be incorporated in future construction projects to address the identified deficiencies.	$1,500,000



Section III • Series 25 Drinking Water State Revolving Fund Projects

Drinking Water Treatment Projects

Treatment projects include the construction, expansion and rehabilitation of drinking water infrastructure that reduces contamination through various treatment processes. Such processes aim to condition water or remove contaminants. Treatment processes include filtration of surface water, pH adjustment, softening, disinfection, waste handling, and other treatment needs (i.e., granular activated carbon which filters out chemicals, particularly organic chemicals, aeration, and iron and manganese removal) along with chemical storage tanks.

Upgrades and maintenance to water treatment plants leads to improved water quality and system efficiency. Replacing equipment that has reached the end of its useful life along with upgrading filtering and purifying equipment makes these facilities less susceptible to failures that could endanger public health. Additionally, system improvements such as corrosion control help keep the public safe from issues related to older cast iron pipes and lead service lines. Upgraded equipment generally leads to more efficient facilities that consume less power and improves worker safety.

Drinking Water Treatment Projects			
Total Amount in Dollars ($)	**Total Number of Projects**	**Total Series 25 Amount in Dollars ($)**	**Total Number of Series 25 Projects**
$1,340,119,325	254	$101,087,101	11

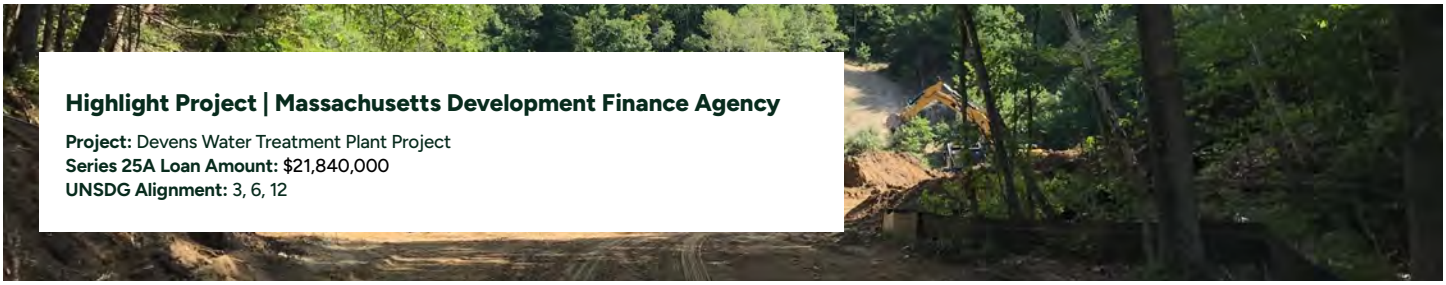
Series 25 Drinking Water Treatment Impact

- Burlington, Hudson, Littleton, Mansfield Massachusetts Development Finance Agency, North Attleborough, and Westfield implemented projects that will reduce the levels of Per- and Polyfluoroalkyl Substances (PFAS) found within their drinking water systems including well water systems, improving public health.
- Leominster and SWSC improved and replaced backwash systems and granular activated carbon systems to stay in compliance with the Stage two Disinfection By-Product Rule.
- Dracut Water Supply District implemented measures to reduce iron and manganese levels in wells to below the secondary maximum contaminant levels and MassDEP's Office of Research and Standards Guidelines limits.

Borrower	Project Description	Amount
Burlington	**Mill Pond Water Treatment Plant - Per- and Polyfluoroalkyl Substances (PFAS)** The town constructed a new system at the Mill Pond Treatment Plant to remove or mitigate existing PFAS concentrations within the Town's water supply system.	$10,567,762
Dracut Water Supply District	**Water System Improvements** This project is intended to reduce iron and manganese levels in the District's Tyngsborough wells to below the secondary maximum contaminant levels and MassDEP's Office of Research and Standards Guidelines limits. The project also includes a new sole transmission main and a water storage tank to increase capacity to meet current demands and create redundancies.	$9,611,848
Hudson	**Chestnut Street Per- and Polyfluoroalkyl Substances (PFAS) Treatment System** The Town of Hudson's Chestnut Street PFAS Treatment System project involved expanding the existing temporary PFAS removal system at the Chestnut Street Water Treatment Plant (WTP) to include a third treatment train in addition to the two existing trains in response to elevated levels of PFAS in the Town's groundwater supply. The third treatment train included an additional two ion-exchange vessels in a lead-lag configuration. The resulting system consists of three treatment trains, each with a design capacity of 50% of the plant's maximum flow, and all appurtenant piping and valves. The treatment process expansion included piping modifications, expansion of the existing concrete support slab and foundation, and installation of a building with all associated electrical, lighting, and HVAC systems.	$4,116,611
Leominster	**Notown and Fallbrook Water Treatment Plant (WTP) Upgrades** The City of Leominster has changing raw water quality that has resulted in elevated levels of disinfection by-products (DBPs). This project incorporates activated carbon at the Notown WTP and the replacement of the existing granular activated carbon system at the Fallbrook WTP to reduce DBPs.	$5,691,997

Section III • Series 25 Drinking Water State Revolving Fund Projects

Borrower	Project Description	Amount
Littleton	**Iron, Manganese, and Per- and Polyfluoroalkyl Substances (PFAS) Water Treatment Plant (WTP)** The Town's WTP project included installation of piping water from Spectacle Pond to Whitcomb Ave and a new combined WTP, rather than two separate WTPs at Spectacle Pond and Whitcomb Ave. The WTP includes biological filtration for iron and manganese removal and granular activated carbon (GAC) filters for PFAS removal. The two largest source waters operated by Littleton are currently limited by pumping capacity and water quality. The Spectacle Pond well has elevated levels of iron, manganese, and PFAS above the regulatory limits. This is the town's largest source of water and can only currently be operated through blending. The existing Spectacle Pond WTP was outdated and in need of repair. The Whitcomb Avenue wells also have elevated levels of iron and manganese and detectable levels of PFAS.	$19,627,950
Mansfield	**Walsh Well Per- and Polyfluoroalkyl Substances (PFAS) Treatment System and Well Upgrades** Mansfield installed new gravel pack wells to replace the existing wellfield and reduce maintenance requirements and constructed of a new granular activated carbon based PFAS treatment system to allow the source to distribute water meeting all regulatory criteria. The project involved installation and testing of new groundwater wells, construction of a new water filtration facility, upgrades to existing electrical and controls systems to replace aging infrastructure and accommodate the new wells and treatment building, and associated site improvements.	$4,787,791
Mansfield	**Cate Springs Well Per- and Polyfluoroalkyl Substances (PFAS) Treatment System** The Town's Cate Springs Well PFAS Treatment System project involved the construction of a PFAS removal treatment system including granular activated carbon (GAC) pressure vessels at the Cate Springs Well site. The treatment system included 4-6 GAC pressure vessels and included piping modifications, upgrades to the existing building at the site (utilized for hydrant, valve, and other parts inventory storage) including associated electrical and lighting and heating, ventilation, and air conditioning systems necessary for the new treatment system. Instrumentation and controls system upgrades were included to ensure the new system was fully integrated into the existing treatment process which previously only included chemical addition treatment.	$3,522,274
Massachusetts Development Finance Agency	**Devens Water Treatment Plant (WTP) Project** The Town of Devens' project consists of constructing two 1.44 million gallons a day WTPs for iron and manganese removal and Per- and Polyfluoroalkyl Substances (PFAS) treatment for Devens' existing wells. The project includes a GreensandPlus™ pressure filtration system, Granular Activated Carbon filters, Ion Exchange contact chambers, chemical feed systems, backwash recycling system, settled solids waste system, baffled clearwell and ancillary equipment and controls at both WTPs. Also included is the construction of a new finished water main for the Patton WTP, new raw water, finished water mains for the Shabokin WTP, and site restoration and miscellaneous work and cleanup necessary to provide complete and fully operational water treatment plants.	$21,840,000
North Attleborough	**Adamsdale Well Per- and Polyfluoroalkyl Substances (PFAS) Treatment Facility** North Attleborough constructed a PFAS removal treatment system including granular activated carbon pressure vessels at the Adamsdale Well site. The new system includes two pressure vessels and piping modifications, construction of a new pre-engineered building with associated electrical, lighting, and heating, ventilation, and air conditioning systems. Instrumentation and control systems upgrades were included to fully integrate the new system into the existing treatment process, which previously included only chemical addition. Concurrently, the addition of a sodium fluoride chemical feed system was coordinated with the PFAS treatment system.	$3,106,417
SWSC	**Clearwell and Backwash Pump Station (PS) Replacement** A new 1 million-gallon a day (MGD) clearwell and associated backwash PS replaced old, failing facilities that were needed to maintain reliable operation of the 60 MGD water production. The failing facilities were adversely impacting water quality being produced, contributing to maximum contamination level exceedances of haloacetic acids that have resulted in non-compliance with the Stage 2 Disinfection By-Products Rule.	$8,567,159
Westfield	**Dry Bridge Road Per- and Polyfluoroalkyl Substances (PFAS) Water Treatment Plant (WTP)** Westfield's Dry Bridge Road PFAS WTP project included construction of a new treatment plant with four granular activated carbon contactors and three chemical storage and feed systems, upgrades to Wells 1 and 2, interconnecting raw water pipelines from Wells 1 and 2, and the installation of a new treated water main from the WTP to the distribution system. This project allows Westfield to reduce PFAS found within its drinking water sources below levels of concern. PFASs have been detected in Westfield's production Wells 1, 2, 7, and 8.	$9,647,292



Highlight Project | Massachusetts Development Finance Agency

Project: Devens Water Treatment Plant Project
Series 25A Loan Amount: $21,840,000
UNSDG Alignment: 3, 6, 12

Background
The Devens Regional Enterprise Zone (Devens) is a 4,400-acre former military facility located in north-central Massachusetts, bordering Worcester and Middlesex Counties, 30 miles northwest of Boston, and situated near the Nashua River. The Massachusetts Development Finance Agency (MassDevelopment) is responsible for the reuse, redevelopment, and operation of Devens, providing all municipal services to a drinking water population of approximately 6,100 people. The Devens water system serves residential, commercial, industrial, and municipal users and includes approximately 354 service connections.

The Project
Initial studies have shown that Greensand Plus filtering media effectively removes high concentrations of iron and manganese, while PFAS treatment systems using Granular Activated Carbon (GAC) and Ion Exchange (IX) contact chambers successfully eliminate PFAS from source water. The project involves constructing two 1.44 million gallons per day (MGD) water treatment plants (WTPs) at the Patton and Shabokin well sites. The Patton WTP will treat water from the existing well, and the Shabokin WTP will treat water from both the existing Shabokin Well and the future Sheridan Well. The new facilities will include new Greensand Plus pressure filtration systems for iron and manganese removal, GAC filters followed by IX contact chambers for PFAS removal, new chemical feed systems, a backwash recycling system, a settled solids waste system, a baffled Clearwell, and the necessary ancillary equipment and controls. Additionally, the project includes constructing new water mains for both WTPs, site restoration, and miscellaneous work to ensure fully operational facilities.

Environmental Impact and Public Health Impact
The project will implement energy efficiency measures, including new water-saving fixtures, variable frequency drive pumps, energy-efficient heating, ventilation, and air conditioning equipment, energy-efficient lighting, and optimized chemical feed systems. These improvements will result in energy savings and reduce the overall carbon footprint of the water distribution system. By constructing new WTPs to remove iron, manganese, and PFAS concentrations, public health and safety will be significantly improved. Elevated levels of manganese pose a public health risk, as identified by MassDEP's recent Office of Research & Standards guideline, which closely follows the EPA Health Advisory for manganese. Humans exposed to high levels of PFAS may experience adverse health effects, including hepatic, cardiovascular, endocrine, immune, reproductive, and developmental effects. Studies have also found that exposure to elevated levels of PFAS may cause developmental effects in fetuses during pregnancy and in breast-fed infants.

Economic Impact
The Devens water treatment project is estimated to cost just over **$27.0 million**. To help manage these costs, the project is eligible for two incentive programs. First, it will receive **20%** loan forgiveness through the American Rescue Plan Act (ARPA), saving nearly **$5.5 million**. Second, the project qualifies for a **0%** PFAS Mitigation Loan program, which will save approximately **$6.0 million** in loan interest over twenty years. These incentives make it easier for public water providers to address serious public health dangers while minimizing the financial impact on residents.

Source: *MassDevelopment, Devens Water Treatment Plant*

Drinking Water Transmission and Distribution Projects

These projects are for installing, replacing, or rehabilitating transmission lines that carry drinking water from the source to the treatment plant or from the treatment plant to the consumer. Items such as pipes for raw and finished water transmission, service lines, valves, backflow prevention, water meters, and pumping stations may be components of these projects.

Replacing or repairing transmission lines improves water quality, system pressure, and reliability. Additionally, the replacement and relocation of lines may be needed to improve the overall efficiency of a system that was designed for a smaller and less expansive community. The older practice of grouping transmission lines can lead to water distribution issues if one begins to leak and causes physical damage to the surrounding soil and adjacent transmission lines. Replacement of lead service lines reduces the risk of lead exposure and removes a public safety risk.

Drinking Water Transmission and Distribution Projects			
Total Amount in Dollars ($)	**Total Number of Projects**	**Total Series 25 Amount in Dollars ($)**	**Total Number of Series 25 Projects**
$930,209,684	341	$28,803,893	7

Series 25 Drinking Water Transmission and Distribution Projects Impact

- Brockton, Dighton Water District, and Orange have constructed broad improvement projects that have replaced hydrants that were beyond their useful life contributing to improved public safety.
- Dighton Water District, Eastham, Lowell, and MWRA have initiated projects that span large distances (up to 11 miles) to increase redundancy of their current systems and improve access to their systems for residence of the Commonwealth.
- Somerset replaced booster pump stations which are crucial to a system's ability to pump water long distances and to higher elevations. This will reduce dead water withing the system and reduces water age, increasing system longevity and preserving public health.

Borrower	Project Description	Amount
Brockton	**Transmission Main Valve Replacement Project Phase 2** This project will work on twin 24-inch transmission mains and a 36-inch transmission main from Brown's Crossing to the City limits. The work will include replacement of crossover piping and valves, replacement of transmission main gate valves and installation of hydrants.	$1,179,951
Dighton Water District	**Main Street Water Main Replacement** The Dighton Water District's project includes installation of approximately 11,600 linear feet (LF) of 12-inch ductile iron (DI) water main 100 LF of 10-inch DI water main and 60 LF of 8-inch DI water main including hydrants, gate valves and service connections along Main Street between Williams Street and the intersection with Pleasant Street and Somerset Avenue.	$3,018,400
Eastham	**Eastham Water System- Phase 2D** The Town of Eastham's Water System - Phase 2D project consists of constructing the third well field at District H and installation of 11 miles of water main for the newly built Town-wide municipal water system.	$9,310,036
Lowell	**Transmission Main Connection** The City of Lowell's transmission main connection project involves installation of approximately 4,000 linear feet of transmission main as an extension to a previously installed water main needed to provide redundancy from the Water Treatment Facility to the existing distribution system.	$4,831,501
Massachusetts Water Resources Authority (MWRA)	**Weston Aqueduct Supply Main Rehabilitation** The Weston Aqueduct Supply Main 3 (WASM 3) is an existing 10-mile, 56-inch to 60-inch diameter, steel water main that supplies the communities of Waltham, Watertown, Belmont, Arlington, Lexington, Bedford and Winchester. In addition, the pipe conveys flow to the MWRA's Intermediate High, Northern High, and Northern Extra High-pressure systems. The pipe was built in the 1920's and needed repair due to frequent leaks and aging valves and appurtenances. It serves as a primary means of backup supply within the MWRA's distribution system in the event of a failure along the City Tunnel and City Tunnel Extension.	$8,885,025

Section III • Series 25 Drinking Water State Revolving Fund Projects

Borrower	Project Description	Amount
Orange	**North Main Street Water Main Replacement** The Work consists of replacement of approximately 2,300 linear feet of existing water mains with new ductile iron pipe along North Main Street. Included with this work is replacement of water services, valves, hydrants, and similar appurtenances associated with the project.	$674,815
Somerset	**Booster Pump Station (PS) and High Service Area Rehabilitation** Somerset replaced a booster PS to re-establish the high service area in the Town's distribution system. The previous booster PS was no longer operable and required the distribution system to operate at one pressure zone. The replacement of the booster PS allowed the re-establishment of the high service zone, which reduces the total dead water storage within the distribution system and lowers the water age. A total trihalomethanes (TTHM) removal system was also added to the tanks within the low service area to address disinfection by-products exceedances.	$904,165

Drinking Water Source and Storage Projects

This project category is for developing or improving sources of water used in public water systems. Project costs include those for constructing or rehabilitating surface water intake structures, drilled wells, wellhead pumps, and spring collectors. Having multiple sources of raw water is a standard precaution to make sure that water supplies are not endangered or cut off. Source protection and testing are necessary to confirm that raw water quality can be properly purified at the intended water treatment plant. Excessive amounts of toxins or pollutants in raw water can cause efficiency issues once raw water reaches a water treatment plant. Pumping, well maintenance, and water extraction must be monitored to ensure that water quality at the source is not impacted by these activities.

Storage projects in this category aim to provide finished water storage for public water systems. Examples may include systems involving elevated and ground level storage for treated water and covers for existing storage. Storage tanks and the systems they employ are vital components of a water distribution system. Tanks are used to ensure the water supply when there may be issues with supply lines or when maintenance is being performed. Upgraded systems that chlorinate water or monitor water quality are more efficient with advanced systems. This means that water quality is more consistent and requires less human maintenance.

Drinking Water Source and Storage Projects			
Total Amount in Dollars ($)	**Total Number of Projects**	**Total Series 25 Amount in Dollars ($)**	**Total Number of Series 25 Projects**
$243,029,206	128	$1,986,600	1

Series 25 Drinking Water Source and Storage Projects Impact

- Fitchburg replaced an existing half million gallons water storage tank addressing system deficiencies, while maintaining functional and current storage levels.

Borrower	Project Description	Amount
Fitchburg	**Oak Hill Water Storage Tank Replacement** The City of Fitchburg replaced an existing 0.5-million-gallon water storage tank and coating rehabilitation for two additional water storage tanks within the City's water distribution system. The storage tank replacement addressed an existing Administrative Consent Order. The project addressed deficiencies within the existing storage tanks and maintains the existing storage capability and operations of the water distribution system.	$1,986,600

Drinking Water Planning and Design Projects

These projects involve the activities needed to plan for design and/or study drinking water infrastructure. Planning and design projects are essential for maintaining and improving the key infrastructure that protects public health and water quality. These activities may include using geographic information services (GIS) to map infrastructure, develop asset management plans to better track capital cost, and system maintenance. Additionally, these projects may be used to determine system improvement needs related to water loss, emerging contaminants, and numerous other issues that may affect the effectiveness of a system's ability to provide safe drinking water to a community.

Drinking Water Source and Storage Projects			
Total Amount in Dollars ($)	**Total Number of Projects**	**Total Series 25 Amount in Dollars ($)**	**Total Number of Series 25 Projects**
$11,808,047	22	$220,000	1

Series 25 Drinking Water Transmission and Distribution Projects Impact

- East Brookfield investigated implementation of a new sole water storage and treatment plant which included in-depth site analysis and system performance analysis, implementation of which will develop strategies necessary to improve water quality.

Borrower	Project Description	Amount
East Brookfield	**Planning for Systemwide Water Quality Improvements** This project included the preliminary planning, and investigations required for the design of a new sole water storage tank and sole Water Treatment Plant (WTP) to meet the requirements of the Administrative Consent Order issued by MassDEP. Tasks for the WTP included preliminary site analysis, treatment pilot for iron and manganese removal, and conceptual floor plan designs. A new water storage tank is necessary to maintain minimum pressure throughout the system and provide more usable storage. Tasks for the tank included preliminary site analysis, tank style analysis, and hydraulic evaluation. Additionally, a Unidirectional Flushing Program was developed using the Town's hydraulic model to improve water quality in the distribution system.	$220,000

Appendix A - Series 25 Projects - Projects associated with Series 25 Sustainability Bonds are highlighted in light green.

Borrower	Loan Number	Project Name	Amount	Percentage Completed[1]	Program	Category	DC Tier	UN SDG
Abington	CWP-21-01	Summer St. Force Main Replacement Project	$5,490,763	70%	CW	Infiltration/Inflow and Sewer System Rehabilitation	1	3, 6, 14
Adams	CWP-21-24	Wastewater Treatment Facility (WWTF) Capital Improvements	$5,951,006	92%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Adams	CWP-21-24-A	Wastewater Treatment Facility (WWTF) Capital Improvements	$597,000	90%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Barnstable	CWP-20-23	Strawberry Hill Road Sewer Expansion	$9,458,635	63%	CW	Collector and Interceptor Sewers	1	3, 6, 14
Barnstable	CWP-20-23-A	Strawberry Hill Road Sewer Expansion	$338,450	50%	CW	Collector and Interceptor Sewers	1	3, 6, 15
Barnstable	CWP-20-24	Route 28 and Yarmouth Road Intersection Sewer	$1,241,494	12%	CW	Collector and Interceptor Sewers	1	3, 6, 14
Barnstable	CWP-20-18	Wastewater Pump Station (PS) Improvements Project	$576,776	89%	CW	Infiltration/Inflow and Sewer System Rehabilitation	1	3, 6, 14
Barnstable	CWP-20-43	Solids Handling Upgrade Project	$7,346,134	82%	CW	Wastewater Treatment	1	3, 6, 12
Barnstable	CWP-20-43-A	Solids Handling Upgrade Project	$765,864	96%	CW	Wastewater Treatment	1	3, 6, 12
Barnstable	CWP-21-49-A	Route 28 East Sewer Expansion Project	$908,504	85%	CW	Collector and Interceptor Sewers	1	3, 6, 14
Barnstable	CWP-21-49	Route 28 East Sewer Expansion Project	$12,236,623	48%	CW	Collector and Interceptor Sewers	1	3, 6, 14
Barnstable County	CWP-20-44	Emergency Site Capping - Per- and Polyfluoroalkyl Substances (PFAS) Treatment	$873,885	100%	CW	Non-Point Source (NPS) Sanitary Landfill	1	3, 6, 12, 14
Bellingham	CWT-19-13	Community Septic Management Project	$600,000	100%	T5	NPS Decentralized Wastewater Treatment System	1	3, 6, 12, 14
Brockton	DWP-20-24	Transmission Main Valve Replacement Project Phase 2	$1,179,951	51%	DW	Drinking Water Transmission and Distribution	3	3, 6, 9, 10, 11, 12
Burlington	DW-22-03	Mill Pond Water Treatment Plant - Per- and Polyfluoroalkyl Substances (PFAS)	$10,567,762	95%	DW	Drinking Water Treatment		3, 6, 12
Chatham	CW-19-47	Sewer Extension	$11,152,091	46%	CW	Collector and Interceptor Sewers		3, 6, 14
Chatham	CW-19-47-A	Sewer Extension	$1,952,547	44%	CW	Collector and Interceptor Sewers		3, 6, 14
Chicopee	CWP-20-32	Solids Handling Improvements Project	$4,471,798	89%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Cohasset	CWT-17-07-A	Community Septic Management Project	$50,000	100%	T5	NPS Decentralized Wastewater Treatment System		3, 6, 12, 14
Dighton Water District	DWP-21-17	Main Street Water Main Replacement	$3,018,400	94%	DW	Drinking Water Transmission and Distribution	1	3, 6, 12
Dracut Water Supply District	DWP-20-18-A	Water System Improvements	$9,611,848	92%	DW	Drinking Water Treatment	1	3, 6, 12
East Brookfield	DW-21-09	Planning for Systemwide Water Quality Improvements	$220,000	100%	DW	Drinking Water Planning and Design	2	3, 6, 12
Eastham	DWP-21-10	Eastham Water System- Phase 2D	$9,310,036	51%	DW	Drinking Water Transmission and Distribution	2	3, 6, 12
Easton	CWT-21-10	Community Septic Management Project	$500,000	100%	T5	NPS Decentralized Wastewater Treatment System		3, 6, 12, 14
Essex	CWT-17-31	Community Septic Management Project	$307,944	100%	T5	NPS Decentralized Wastewater Treatment System		3, 6, 12, 14
Fall River	CWA-20-26	Asset Management Planning (AMP) Loan	$28,000	100%	CW	Planning	3	3, 6, 9, 10, 11, 12, 14
Fitchburg	CW-21-07	Combined Sewer Overflow (CSO) 010, 032, 045, 083 Separation/Rehabilitation	$1,048,700	92%	CW	Planning	3	3, 6, 9, 10, 11, 12, 14
Fitchburg	DWP-22-40	Oak Hill Water Storage Tank Replacement	$1,986,600	96%	DW	Drinking Water Source and Storage	3	3, 6, 9, 10, 11, 12
Haverhill	CWP-21-40-A	Sewer System Improvements	$753,965	65%	CW	Infiltration/Inflow and Sewer System Rehabilitation	2	3, 6, 14
Haverhill	CWP-21-40	Sewer System Improvements	$7,194,818	54%	CW	Infiltration/Inflow and Sewer System Rehabilitation	2	3, 6, 14
Hudson	DWP-21-04	Chestnut Street Per- and Polyfluoroalkyl Substances (PFAS) Treatment System	$4,116,611	92%	DW	Drinking Water Treatment	1	3, 6, 12
Ipswich	T5-11-0200-B	Community Septic Management Project	$300,000	100%	T5	NPS Decentralized Wastewater Treatment System		3, 6, 12, 14
Lawrence	CWP-21-25	Sewer and Drainage System Improvements	$2,168,250	76%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Leominster	DWP-20-26	Notown and Fallbrook Water Treatment Plant (WTP) Upgrades	$5,691,997	90%	DW	Drinking Water Treatment	2	3, 6, 12
Littleton	DW-21-01	Iron, Manganese, and Per- and Polyfluoroalkyl Substances (PFAS) Water Treatment Plant (WTP)	$19,627,950	73%	DW	Drinking Water Treatment		3, 6, 12
Lowell	DWP-21-14	Transmission Main Connection	$4,831,501	55%	DW	Drinking Water Transmission and Distribution	3	3, 6, 9, 10, 11, 12
Lynn Water and Sewer Commission	CWP-20-50	West Lynn Sewer Separation	$48,333,235	84%	CW	Combined Sewer Overflow Correction	3	3, 6, 9, 10, 11, 12, 14
Mansfield	DWP-22-02	Walsh Well Per- and Polyfluoroalkyl Substances (PFAS) Treatment System and Well Upgrades	$4,787,791	100%	DW	Drinking Water Treatment	1	3, 6, 12
Mansfield	DWP-21-02	Cate Springs Well Per- and Polyfluoroalkyl Substances (PFAS) Treatment System	$3,522,274	100%	DW	Drinking Water Treatment		3, 6, 12
Massachusetts Development Finance Agency	DW-21-05	Devens Water Treatment Plant (WTP) Project	$21,840,000	91%	DW	Drinking Water Treatment		3, 6, 12

Footnotes

[1] Series 25: All Amount and Percentage Completed sections are accurate as of June 30, 2024.

Appendix A - Series 25 Projects - Projects associated with Series 25 Sustainability Bonds are highlighted in light green.

Borrower	Loan Number	Project Name	Amount	Percentage Completed[1]	Program	Category	DC Tier	UN SDG
Medway	CWT-16-06	Community Septic Management Project	$95,265	100%	T5	NPS Decentralized Wastewater Treatment System		3, 6, 12, 14
Middleborough	CWT-22-03	Community Septic Management Project	$500,000	100%	T5	NPS Decentralized Wastewater Treatment System	2	3, 6, 12, 14
Millbury	CW-20-16	Municipal Separate Storm Sewer System (MS4) Permit Compliance	$500,000	68%	CW	Planning	2	3, 6, 12, 14
Millbury	CWP-21-21	Year 1 to 4 Sewer Rehabilitation Project	$859,000	84%	CW	Infiltration/Inflow and Sewer System Rehabilitation	2	3, 6, 14
Massachusetts Water Resources Authority (MWRA)	CW-21-56	Nut Island HW Odor Control & HVAC - Contract 7548	$29,658,241	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation		3, 6, 14
MWRA	DW-21-28	Weston Aqueduct Supply Main Rehabilitation	$8,885,025	100%	DW	Drinking Water Transmission and Distribution		3, 6, 12
Nantucket	CW-20-42-A	Sea St. Pump Station (PS) Force Main No. 3	$2,367,871	52%	CW	Collector and Interceptor Sewers		3, 6, 14
Nantucket	CW-20-42	Sea St. Pump Station (PS) Force Main No. 3	$25,152,107	45%	CW	Collector and Interceptor Sewers		3, 6, 14
Nantucket	CWT-19-01-A	Community Septic Management Project	$833,574	100%	T5	NPS Decentralized Wastewater Treatment System		3, 6, 12, 14
New Bedford	CW-20-20	Sewer and Stormwater System Illicit Discharge Detection and Elimination (IDDE) Program	$1,750,000	91%	CW	Planning	3	3, 6, 9, 10, 11, 12, 14
North Attleborough	DWP-22-01	Adamsdale Well Per- and Polyfluoroalkyl Substances (PFAS) Treatment Facility	$3,106,417	76%	DW	Drinking Water Treatment	1	3, 6, 12
Northampton	CWP-19-38	Northampton Wastewater Treatment Plant (WWTP) Upgrades	$9,581,648	100%	CW	Wastewater Treatment	1	3, 6, 12
Norton	CWT-18-02	Community Septic Management Project	$373,151	100%	T5	NPS Decentralized Wastewater Treatment System	1	3, 6, 12, 14
Orange	CWP-21-52	North Main Street Water and Sewer Replacement	$1,161,236	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Orange	DWP-22-04	North Main Street Water Main Replacement	$674,815	100%	DW	Drinking Water Transmission and Distribution	3	3, 6, 9, 10, 11, 12
Orleans	CW-19-33-A	Downtown Area Collection System and Wastewater Treatment Facility (WWTF)	$29,704,600	93%	CW	Wastewater Treatment		3, 6, 12
Pittsfield	CWP-18-12-D	Wastewater Treatment Plant (WWTP) Nutrient Removal	$508,975	98%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Quincy	CWP-21-37	Quincy FY22 Sewer Improvements	$3,219,087	71%	CW	Infiltration/Inflow and Sewer System Rehabilitation	2	3, 6, 14
Quincy	CWP-21-37-A	Quincy FY22 Sewer Improvements	$322,507	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation	2	3, 6, 14
Quincy	CW-21-09	Stormwater Drainage and Management Planning Study	$3,180,000	85%	CW	Planning	2	3, 6, 12, 14
Revere	CWP-21-35	Phase 12 Construction- Inflow and Infiltration (I/I), Illicit Discharge Detection and Elimination (IDDE), Pump Station (PS) & Drainage	$3,853,941	75%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Revere	CWP-21-35-A	Phase 12 Construction- Inflow and Infiltration (I/I), Illicit Discharge Detection and Elimination (IDDE), Pump Station (PS) & Drainage	$722,750	94%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Revere	CW-21-34	Phase 13 Investigations- Inflow and Infiltration (I/I) and Illicit Discharge Detection and Elimination (IDDE)	$1,500,000	99%	CW	Planning	3	3, 6, 9, 10, 11, 12, 14
Somerset	DWP-22-43	Booster Pump Station (PS) and High Service Area Rehabilitation	$904,165	86%	DW	Drinking Water Transmission and Distribution	2	3, 6, 12
Spencer	CWP-21-48-A	Wastewater Treatment Facility (WWTF) Upgrades Project	$3,249,800	67%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Spencer	CWP-21-48	Wastewater Treatment Facility (WWTF) Upgrades Project	$36,866,257	41%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Springfield Water and Sewer Commission (SWSC)	CWP-18-18-C	York Street Pump Station (PS) and Connecticut River Crossing	$1,649,713	98%	CW	Combined Sewer Overflow Correction	3	3, 6, 9, 10, 11, 12, 14
SWSC	CWP-21-11	Nutrient Removal Upgrade and Related Facility Improvements	$27,829,703	78%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
SWSC	DWP-21-03	Clearwell and Backwash Pump Station (PS) Replacement	$8,567,159	89%	DW	Drinking Water Treatment	3	3, 6, 9, 10, 11, 12
Stoughton	CWT-20-01	Community Septic Management Project	$300,000	100%	T5	NPS Decentralized Wastewater Treatment System	2	3, 6, 12, 14
Taunton	CWP-20-19	Wastewater Treatment Facility (WWTF) - Solids Handling Improvements	$5,406,000	93%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Taunton	CWP-20-21-A	Wastewater Treatment Facility (WWTF) Upgrade- Phase 1	$14,991,799	82%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Westfield	DWP-21-06	Dry Bridge Road Per- and Polyfluoroalkyl Substances (PFAS) Water Treatment Plant (WTP)	$9,647,292	81%	DW	Drinking Water Treatment	3	3, 6, 9, 10, 11, 12

Footnotes

[1] Series 25: All Amount and Percentage Completed sections are accurate as of June 30, 2024.

Appendix B - Series 24 Projects - Projects associated with Series 24 Sustainability Bonds are highlighted in light green.

Borrower	Loan Number	Project Name	Amount	Percentage Completed[1]	Program	Category	DC Tier	UN SDG
Ayer	DWP-20-04	Spectacle Pond Wellfield Per- and Polyfluoroalkyl Substances (PFAS) Treatment	$5,253,989	100%	DW	Drinking Water Treatment	2	3, 6, 12
Barnstable	DW-20-16	Wells Treatment Pilots, Conceptual Plans, and Layouts	$547,542	99%	DW	Drinking Water Planning and Design	1	3, 6, 12
Barnstable Fire District	DWP-20-30	Per- and Polyfluoroalkyl Substances (PFAS) Interim Rehabilitation of Well Pump Station 1	$1,362,187	96%	DW	Drinking Water Treatment	1	3, 6, 12
Billerica	CWP-19-09	Wastewater Treatment Facility (WWTF) and Pump Station (PS) Upgrades	$9,907,371	100%	CW	Wastewater Treatment	1	3, 6, 12
Billerica	CWP-19-09-A	Wastewater Treatment Facility (WWTF) and Pump Station (PS) Upgrades	$1,078,360	100%	CW	Wastewater Treatment	1	3, 6, 12
Blackstone	DWP-20-20	Blackstone Groundwater Treatment	$5,390,280	98%	DW	Drinking Water Treatment	2	3, 6, 12
Bourne	CWP-19-07	Buzzards Bay Wastewater Treatment Facility (WWTF)	$3,341,513	100%	CW	Wastewater Treatment	1	3, 6, 12
Bridgewater	CWT-20-37	Community Septic Management Program	$400,000	100%	T5	NPS Decentralized Wastewater Treatment Systems	2	3, 6, 12
Bridgewater	DWP-19-17	New High Street Water Treatment Facility (WTF)	$12,198,813	99%	DW	Drinking Water Treatment	2	3, 6, 12
Brockton	CWP-18-42-A	Wastewater Treatment Facility (WWTF) Upgrade	$939,000	96%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Brockton	CWP-19-34	2019 Sewer Rehabilitation Project	$2,264,248	75%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Brockton	CWP-19-34-A	2019 Sewer Rehabilitation Project	$332,919	53%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Brockton	CWP-20-17	Sewer Rehabilitation Project	$1,221,060	91%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Brockton	CWP-20-17-A	Sewer Rehabilitation Project	$249,577	69%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Chatham	CW-18-24	Phase 1D - Chatham/Harwich Regionalization	$5,800,258	100%	CW	Collector and Interceptor Sewers	-	3, 6, 14
Chicopee	CWP-19-42	Blue Bird Acres Sewer Pump Station (PS) and Force Main	$1,823,094	86%	CW	Collector and Interceptor Sewers	3	3, 6, 9, 10, 11, 14
Chicopee	CWP-20-31	Jones Ferry Wastewater Pump Station PS Phase II Improvements	$3,537,236	88%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Chicopee	CWP-20-31-A	Jones Ferry Wastewater Pump Station PS Phase II Improvements	$320,450	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Chicopee	DW-16-04-A	Redundant Water Transmission Main	$123,260	100%	DW	Drinking Water Transmission and Distribution	3	3, 6, 9, 10, 11, 12
Concord	T5-05-1243-E	Community Septic Management Program	$300,000	100%	T5	NPS Decentralized Wastewater Treatment Systems	-	3, 6, 12
Dartmouth	DWP-18-05	Action Plan to Reduce Total Trihalomethane (TTHM) Levels	$1,174,616	100%	DW	Drinking Water Treatment	1	3, 6, 12
Deerfield Fire District	DWP-20-09	Greenfield Road Water Main Replacement Project	$688,291	99%	DW	Drinking Water Transmission and Distribution	1	3, 6, 12
Dracut Water Supply District	DWP-20-18	Water System Improvements	$8,343,085	100%	DW	Drinking Water Treatment	1	3, 6, 12
Dudley	CWP-20-14	Dudley Infiltration and Inflow I/I Mitigation Construction Project	$863,107	90%	CW	Infiltration/Inflow and Sewer System Rehabilitation	2	3, 6, 14
Dudley	DWP-20-25	Dudley Drinking Water System Improvements Project	$4,059,754	91%	DW	Drinking Water Transmission and Distribution	2	3, 6, 12
East Brookfield	DWP-20-22	Water Main Replacement and Wellhouse Upgrades	$3,472,000	100%	DW	Drinking Water Transmission and Distribution	2	3, 6, 12
Eastham	DWP-19-06	Phase 2B of Town-Wide Water System	$9,722,989	100%	DW	Drinking Water Transmission and Distribution	2	3, 6, 12
Eastham	DWP-20-23	Eastham Water System - Phase 2C	$11,938,889	100%	DW	Drinking Water Transmission and Distribution	2	3, 6, 12
Easton	CW-18-25	Easton Five Corners Sewer	$10,720,026	100%	CW	Collector and Interceptor Sewers	-	3, 6, 14
Easton	CWT-20-10	Community Septic Management Program	$500,000	100%	T5	NPS Decentralized Wastewater Treatment Systems	-	3, 6, 12
Fall River	CWP-19-23	South End Sewer Pump Station (PS) Replacement	$2,911,987	98%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Fall River	CWP-19-23-A	South End Sewer Pump Station (PS) Replacement	$513,570	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Fall River	DWA-19-23	Fall River Asset Management Plan (AMP)	$150,000	100%	DW	Drinking Water Planning and Design	3	3, 6, 9, 10, 11, 12
Fall River	DWP-19-14	Phase 19 - Water System Improvements	$1,862,773	98%	DW	Drinking Water Transmission and Distribution	3	3, 6, 9, 10, 11, 12
Fall River	DWP-20-13	Water Main Rehabilitation - Phase 20	$1,875,518	96%	DW	Drinking Water Transmission and Distribution	3	3, 6, 9, 10, 11, 12
Fitchburg	CWP-20-03	Combined Sewer Overflow (CSO) 007, 011, 039, 048 Separation and Rehabilitation	$6,756,066	100%	CW	Combined Sewer Overflow Correction	3	3, 6, 9, 10, 11, 12, 14
Fitchburg	CWP-20-03-A	Combined Sewer Overflow (CSO) 007, 011, 039, 048 Separation and Rehabilitation	$1,054,170	100%	CW	Combined Sewer Overflow Correction	3	3, 6, 9, 10, 11, 12, 14
Gloucester	CW-20-38	Gloucester Comprehensive Wastewater Management Plan (CWMP)	$180,000	83%	CW	Planning	2	3, 6, 12, 14
Hanson	CWT-18-01-A	Community Septic Management Program	$200,000	100%	T5	NPS Decentralized Wastewater Treatment Systems	1	3, 6, 12
Harwich	CWP-18-23	Harwich Sewer Collection System - Phase 2	$16,092,328	100%	CW	Collector and Interceptor Sewers	2	3, 6, 14

Footnotes

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Appendix B - Series 24 Projects - Projects associated with Series 24 Sustainability Bonds are highlighted in light green.

Borrower	Loan Number	Project Name	Amount	Percentage Completed[1]	Program	Category	DC Tier	UN SDG
Holyoke	CWP-19-04	Jackson Street Area Sewer Separation Project	$7,254,309	75%	CW	Combined Sewer Overflow Correction	3	3, 6, 9, 10, 11, 12, 14
Holyoke	CWP-19-04-A	Jackson Street Area Sewer Separation Project	$769,997	94%	CW	Combined Sewer Overflow Correction	3	3, 6, 9, 10, 11, 12, 14
Holyoke	DWP-20-11	Phase 2A Water Main Replacement Project	$2,104,387	92%	DW	Drinking Water Transmission and Distribution	3	3, 6, 9, 10, 11, 12
Kingston	CWP-19-46	Kingston Wastewater Treatment Plant (WWTP) Expansion	$15,955,530	92%	CW	Wastewater Treatment	1	3, 6, 12
Kingston	DWP-19-20	Manganese Removal Facility for GH and 1-86 Wells	$7,723,970	97%	DW	Drinking Water Treatment	1	3, 6, 12
Kingston	T5-97-1211-F	Community Septic Management Program	$200,000	100%	T5	NPS Decentralized Wastewater Treatment Systems	1	3, 6, 12
Lakeville	CWT-22-01	Community Septic Management Program	$960,000	100%	T5	NPS Decentralized Wastewater Treatment Systems	1	3, 6, 12
Lawrence	CW-19-21	Sanitary Sewer Evaluation Survey (SSES) Phases VI through VIII	$3,000,000	99%	CW	Planning	3	3, 6, 9, 10, 11, 12, 14
Lawrence	DWP-19-01	Water Valve Replacement Project	$2,193,753	82%	DW	Drinking Water Transmission and Distribution	3	3, 6, 9, 10, 11, 12
Lawrence	DWP-19-12	Marston Street Pump Station (PS) Replacement	$1,502,938	100%	DW	Drinking Water Transmission and Distribution	3	3, 6, 9, 10, 11, 12
Leominster	CWP-19-26	Aeration Basin and Secondary Clarifier Upgrade	$11,649,712	100%	CW	Wastewater Treatment	2	3, 6, 12
Leverett	CW-20-07	Connection to Amherst Waterline	$1,182,752	100%	CW	NPS Sanitary Landfill	-	3, 6, 12, 14
Lowell	CWP-16-15-A	Capital Improvement Program (CIP) Phase – Wastewater Treatment Facility (WWTF) and Infrastructure Upgrades	$1,921,168	100%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Lowell	CWP-16-15-B	Capital Improvement Program (CIP) Phase – Wastewater Treatment Facility (WWTF) and Infrastructure Upgrades	$2,200,000	100%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Lynn Water & Sewer Commission	CWP-19-27	West Lynn Sewer Separation	$10,017,036	97%	CW	Combined Sewer Overflow Correction	3	3, 6, 9, 10, 11, 12, 14
MWRA	CW-20-46	Nut Island HW Odor Control & HVAC - Contract 7548	$8,986,259	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation	-	3, 6, 14
Middleborough	CWT-20-04	Community Septic Management Program	$500,000	100%	T5	NPS Decentralized Wastewater Treatment Systems	2	3, 6, 12
Millville	CWT-19-02	Community Septic Management Program	$160,410	100%	T5	NPS Decentralized Wastewater Treatment Systems	1	3, 6, 12
MWRA	DW-20-33	Northern Intermediate High Section 89 Replacement	$9,798,686	100%	DW	Drinking Water Transmission and Distribution	-	3, 6, 12
Nahant	CW-20-13	Sewer Collection System – Repair and Replacement	$9,767,852	94%	CW	Infiltration/Inflow and Sewer System Rehabilitation	-	3, 6, 14
Nantucket	CW-19-32	Surfside Road Area Sewer System Improvements	$6,995,000	84%	CW	Collector and Interceptor Sewers	-	3, 6, 14
New Bedford	CWP-20-22	Wastewater Collection System Improvements	$3,666,070	82%	CW	Combined Sewer Overflow Correction	3	3, 6, 9, 10, 11, 12, 14
New Bedford	CWP-20-22-A	Wastewater Collection System Improvements	$212,366	100%	CW	Combined Sewer Overflow Correction	3	3, 6, 9, 10, 11, 12, 14
New Bedford	DWP-19-24	Highway Bridge Crossing Replacement Project	$819,581	100%	DW	Drinking Water Transmission and Distribution	3	3, 6, 9, 10, 11, 12
Orleans	CW-19-33	Downtown Area Collection System and Wastewater Treatment Facility (WWTF)	$14,852,300	100%	CW	Wastewater Treatment	-	3, 6, 12
Peabody	DWP-19-15	Winoma and Coolidge Water Treatment Plant (WTP) Improvements	$8,680,000	100%	DW	Drinking Water Treatment	2	3, 6, 12
Peabody	DWP-20-10	Winoma and Coolidge Water Treatment Plant (WTP) Improvements	$10,152,825	99%	DW	Drinking Water Treatment	2	3, 6, 12
Pittsfield	CWP-18-12-B	Wastewater Treatment Plant (WWTP) Nutrient Removal	$3,100,000	84%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Pittsfield	CWP-18-12-C	Wastewater Treatment Plant (WWTP) Nutrient Removal	$2,200,640	100%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Plymouth	CWT-20-02	Community Septic Management Program	$300,000	100%	T5	NPS Decentralized Wastewater Treatment Systems	1	3, 6, 12
Quincy	CWP-19-28	The Strand Pump Station (PS) Upgrade Project	$2,724,124	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation	2	3, 6, 14
Quincy	CWP-19-29	Fiscal Year (FY) 2020 Sewer Improvements	$3,184,496	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation	2	3, 6, 14
Revere	CW-19-40	Phase XI Investigations	$1,500,000	100%	CW	Planning	3	3, 6, 9, 10, 11, 12, 14
Revere	CW-20-28	Phase XII Investigations	$1,300,000	100%	CW	Planning	3	3, 6, 9, 10, 11, 12, 14
Revere	CW-20-29	Alternative Wastewater Connections and Storage Evaluation	$750,000	95%	CW	Planning	3	3, 6, 9, 10, 11, 12, 14
Revere	CW-20-30	Fats, Oils, and Grease (FOG) Control and Capacity, Management, Operations and Maintenance (CMOM) Equipment Procurement	$798,214	87%	CW	Planning	3	3, 6, 9, 10, 11, 12, 14
Revere	CWP-16-17-A	Phase VII Construction – Infiltration and Inflow (I/I), Illicit Discharge Detection and Elimination (IDDE), Pump Station (PS) and Drainage	$8,556,684	75%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Revere	CWP-19-39	Phase X Construction – Infiltration and Inflow (I/I), Illicit Discharge Detection and Elimination (IDDE), Pump Station (PS) and Drainage	$3,624,587	94%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14

Footnotes

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Appendix B - Series 24 Projects - Projects associated with Series 24 Sustainability Bonds are highlighted in light green.

Borrower	Loan Number	Project Name	Amount	Percentage Completed[1]	Program	Category	DC Tier	UN SDG
Revere	CWP-20-27	Phase XI Construction - Infiltration and Inflow (I/I), Illicit Discharge Detection and Elimination (IDDE), Pump Station (PS) and Drainage	$4,290,614	86%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Revere	CWP-20-27-A	Phase XI Construction - Infiltration and Inflow (I/I), Illicit Discharge Detection and Elimination (IDDE), Pump Station (PS) and Drainage	$839,732	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Saugus	CWP-19-31	Lincoln Avenue Pump Station (PS) Improvements, Phase 2	$571,162	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation	2	3, 6, 14
Scituate	DW-19-18	Scituate Well 17A Water Treatment Plant (WTP)	$6,586,387	100%	DW	Drinking Water Treatment	-	3, 6, 12
South Essex Sewerage District	CW-20-34	Contract No. 20-1 Danvers Siphon Rehabilitation	$1,788,940	82%	CW	Infiltration/Inflow and Sewer System Rehabilitation	1	3, 6, 14
SWSC	CWP-18-18-D	York Street Pump Station (PS) and Connecticut River Crossing	$55,044,592	100%	CW	Combined Sewer Overflow Correction	3	3, 6, 9, 10, 11, 12, 14
SWSC	CWP-18-18-E	York Street Pump Station (PS) and Connecticut River Crossing	$6,341,902	100%	CW	Combined Sewer Overflow Correction	3	3, 6, 9, 10, 11, 12, 14
SWSC	DWP-20-01	Clearwell and Backwash Pump Station (PS) Replacement	$12,030,000	100%	DW	Drinking Water Treatment	3	3, 6, 9, 10, 11, 12
Sudbury	CW-19-16	Comprehensive Wastewater Management Plan (CWMP) Update	$500,000	100%	CW	Planning	-	3, 6, 12, 14
Taunton	CWP-19-53	Main Lift Pump Station (PS) Improvements Phase 2	$3,186,512	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Taunton	CWP-19-53-A	Main Lift Pump Station (PS) Improvements Phase 2	$616,284	100%	CW	Infiltration/Inflow and Sewer System Rehabilitation	3	3, 6, 9, 10, 11, 14
Taunton	CWP-20-21	Wastewater Treatment Facility (WWTF) Upgrade - Phase 1	$12,023,423	100%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Taunton	CWT-21-02	Community Septic Management Program	$250,000	100%	T5	NPS Decentralized Wastewater Treatment Systems	3	3, 6, 9, 10, 11, 12
Taunton	DWP-18-07	2018 Water Main Improvements Project	$3,228,606	99%	DW	Drinking Water Transmission and Distribution	3	3, 6, 9, 10, 11, 12
Tyngsborough	CW-18-17	Phase 2 Middlesex Road North	$10,246,968	100%	CW	Collector and Interceptor Sewers	-	3, 6, 14
Tyngsborough	CWP-20-11	Infiltration and Inflow (I/I) Rehabilitation	$450,677	99%	CW	Infiltration/Inflow and Sewer System Rehabilitation	1	3, 6, 14
Wareham	CWP-20-09	Process Upgrades at the Wareham Pollution Control Facility (WPCF)	$8,109,000	100%	CW	Wastewater Treatment	3	3, 6, 9, 10, 11, 12
Water Supply District of Acton	DW-19-16	Manganese Removal Water Treatment Plant	$11,796,097	100%	DW	Drinking Water Treatment	-	3, 6, 12
West Boylston Water District	DWP-19-27-A	North Main Street and Laurel Street Water Main Replacement	$108,065	88%	DW	Drinking Water Transmission and Distribution	2	3, 6, 12
West Boylston Water District	DWP-20-17	Manganese Removal Treatment at Oakdale Well	$7,603,680	97%	DW	Drinking Water Treatment	2	3, 6, 12
West Springfield	CWP-19-41	Birnie Avenue and Piper Road Area Sewer Project	$5,821,644	93%	CW	Collector and Interceptor Sewers	2	3, 6, 14
West Springfield	CWP-19-41-A	Birnie Avenue and Piper Road Area Sewer Project	$967,830	100%	CW	Collector and Interceptor Sewers	2	3, 6, 14
West Springfield	DWP-17-13-A	Drinking Water System Improvements Project	$245,835	100%	DW	Drinking Water Source and Storage	2	3, 6, 12
Westport	CWT-18-33	Community Septic Management Program	$500,000	100%	T5	NPS Decentralized Wastewater Treatment Systems	1	3, 6, 12
Winthrop	CWP-19-05	Town Center - Sewer and Drainage Improvements	$7,272,545	93%	CW	Infiltration/Inflow and Sewer System Rehabilitation	2	3, 6, 14

Footnotes

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2024 Annual Green Bonds and Sustainability Bonds Report

MASSACHUSETTS
CLEAN WATER TRUST