

2027 - 2029
PROPOSED CAPITAL IMPROVEMENT PROGRAM

Boston Water and Sewer Commission

PROPOSED BOSTON WATER AND SEWER COMMISSION CAPITAL IMPROVEMENT PROGRAM
2027-2029

Henry F. Vitale
Executive Director
November 2027

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EXECUTIVE SUMMARY

The Boston Water and Sewer Commission ("the Commission" or "BWSC") is a body politic and corporate and political subdivision of the Commonwealth created by Chapter 436 of the Acts of 1977 ("Enabling Act"). The Enabling Act abolished the water and sewer divisions within the City of Boston Public Works Department and transferred the ownership, operation and control of the water, sewer and storm drain systems to the Commission. As a public instrumentality, the Commission performs an essential public function in providing water and sewer services to the residents of the City of Boston. The Act authorizes the Commission to construct and make improvements to the water and sewer systems, establish and collect rates and charges for its services and finance its operations and improvements through revenue collections and the sale of bonds and notes payable solely from the Commission's revenues. The Act further provides that any revenue surplus earned by the Commission in any Fiscal Year shall be credited to the next year's rates or returned to the City of Boston. Since its inception, the Commission has generated a surplus in each year of its operations and has credited the surplus to the reduction of the next year's rates.

The Enabling Act and the Commission's General Revenue Bond Resolution adopted December 6, 1984 ("the Resolution") require the Commission, on an annual basis, to develop a three-year Capital Improvement Program ("CIP"). Information generated by the Commission's ongoing monitoring programs for the systems and from various engineering data files, together with information concerning the development needs of the City, is used to compile a list of pipes, conduits, transmission mains and other system components to be either renewed, replaced, relocated or added to the systems each year. The CIP outlines the schedule and implementation of the capital projects necessary to maintain and improve the water and sewer systems for the ensuing three-year period. Due to pace of project implementation, the actual expenditures are currently expected to occur over a longer period of time. While there can be no assurance that projections for the projects included in the 2027-2029 CIP will not be exceeded or that additional projects will not be required, the Commission believes the amounts set forth the 2027-2029 Capital Improvement Program are reasonable for such projects.

The Commission in compliance with the requirements of the Enabling Act and the Resolution, project costs of the Commission's Capital Improvement Program from Fiscal Years 2027 through 2029 total approximately $427.7 million.

Since the Commission's inception in 1977, the Commission has set forth its Capital Improvement Plan to provide for long-term capital improvements to its water distribution and sewer collection systems, governed by a core commitment to prudent fiscal management. Comprehensive and well-planned water distribution system maintenance and planning has sustained superior water service for our customers and resulted in a low incidence of system failures. The Commission has also led the industry in implementing effective water conservation measures, including dedication to deploying the most efficient technologies and practices enabling the Commission to maximize cost savings.

The Commission utilizes effective conservation measures through continued efforts to eliminate leaks across the system through advanced leak detection technology and proactive maintenance of the system's water mains.

DISCUSSION OF MANAGEMENT OBJECTIVES AND ACCOMPLISHMENTS

The Commission was created to maintain and improve the long-term quality and reliability of water, sewer, and stormwater services for all users in the City and to assure adequate funding for operation and maintenance of the systems. For the purposes of this document, "Systems" include the water distribution system (including potable water and fire suppression facilities) and sewer system (including separate sanitary sewers, separate stormwater drains and combined sewers) and the related appurtenances and fixtures. The Commission is committed to four primary goals:

- To maintain and improve the water distribution and wastewater collection systems. The Commission is committed to various improvements to the Water Distribution and Sewer Systems, including following an aggressive renewal and replacement program, reducing unaccounted for water, encouraging conservation and improving the environment. The Commission is also committed to meeting and exceeding the requirements of all federal and state water and wastewater laws, regulations and technical standards.

- To establish and administer a billing and collections system that is fair and efficient. The Commission has worked to establish a rate structure that fully and fairly reflects its costs, properly distributes the financial obligation concerning its customer base and encourages water conservation. The metering, billing, and collection process is a central focus of the Commission's full management team, and the Commission is committed to maintaining its strong record in that area.

- To maintain a strong financial structure. The Commission has consistently employed conservative financial projections and budgeting assumptions, maintained adequate reserves, and struck a reasonable balance between debt funding and rate funding of capital expenses.

- To sustain the effectiveness of investments / compliance of regulations. The Commission is committed to complying with all its regulatory obligations under federal and state laws, including the Safe Drinking Water Act ("SDWA") and Clean Water Act ("CWA") with its National Pollutant Discharge Elimination System ("NPDES") permitting obligations for both its stormwater systems and combined sewer systems. Compliance obligations also extend to meeting and exceeding the goals and requirements of the Boston Harbor Decree and the Consent Decree executed in 2012 with the Environmental Protection Agency ("EPA") related to stormwater discharges.

In planning its CIP, the Commission balances the recognized need for ongoing renewal and replacement and preservation of its Systems with the desirability of specific improvements to accommodate development or redevelopment plans for the city. Wherever feasible, capital improvements are scheduled in cooperation with the street rebuilding and reconstruction activities of the City's Department of Public Works, the Boston Planning Department, and Massachusetts Department of Transportation.

OBJECTIVES

The overall objectives of the Commission's 2027-2029 CIP are to ensure the delivery of high-quality potable water for consumption and fire protection, as well as the efficient collection of sewage for transport and delivery to a treatment facility or for approved discharge. In addition, the CIP includes projects to improve overall efficiency of the Commission and to enhance the Commission's ability to provide services to its customers.

The Stormwater category was created in 2017 that focuses on Stormwater management. This category funds projects with goals of improving both stormwater conveyance and the water quality of discharges to local receiving waters. These projects ensure compliance with state and federal regulations, help to minimizing flooding, and strategically manage Stormwater throughout the City of Boston. The primary purpose of the Stormwater category in the 2027-2029 CIP is replacement and rehabilitation of drain pipes throughout the City, the installation of new drain pipes for sewer separation, and the replacement of existing and installation of new tide gates near the coastline.

CIP expenditures are divided into four categories: Water Distribution System projects, Sewer System projects, Support projects and Stormwater projects. Water Distribution System projects account for $178.5 million, or 41.7% of the 2027-2029 CIP. Sewer System projects comprise $144.8 million, or 33.9%, Support projects total $32.0 million, or 7.5% of the expenditures outlined in the program, and Stormwater projects account for $72.3 million, or 16.9% of the 2027-2029 CIP.

Total capital expenditures of $159.1 million are outlined for 2027. Water Distribution projects comprise $61.9 million, or 38.9% of the 2027 CIP. Sewer System projects account for $57.0 million, or 35.8%; Support projects account for $12.1 million of the 2027 amount, or 7.6%; Stormwater projects totaling $28.2 million of the 2027 amount, or 17.7%.

Tables 1 and 2 represent the cash flow expenditures and funding sources for the Commission's 2027-2029 CIP.

Table 1 - 2027-2029 CIP Cash Flows

Program	2027	2028	2029	2027-2029
Water	61,862,000	53,078,800	63,594,600	178,535,400
Sewer	56,977,800	56,346,600	31,507,775	144,832,175
Support	12,060,000	12,480,000	7,442,500	31,982,500
Stormwater	28,198,800	22,311,000	21,836,875	72,346,675
Total	**159,098,600**	**144,216,400**	**124,381,750**	**427,696,750**

CIP expenditures are funded by five funding sources: Bonds, Rate Revenue, the MWRA funded Local Water System Assistance Program (LWSAP), the MWRA funded I/I Local Financial Assistance Program (MWII), and the State Revolving Fund (SRF). In 2000 the MWRA instituted a new assistance program for the identification and removal of lead from water pipes. This program is called the Lead Service Line Replacement Loan Program (MWLLP). Costs for this program are associated under the MWRA Water Assistance program and SRF. Rate funded projects comprise of $153.5 million or 35.9%; Bonds funded projects account for $184.2 million of the 2027-2029 CIP or 43.1%; MWRA funded sewer projects account for $21.4 million of the 2027-2029 CIP or 5.0%; SRF funded projects account for $56.8 or 13.3% of the 2027-2029 CIP; and MWRA funded water projects total $11.8 million of the expenditures outlined in the program or 2.8%.

Total capital expenditures of $159.1 million are outlined for 2027. Bond funded projects comprise $71.1 million of the 2027 amount or 44.7%; Rate funded projects account for $51.1 million of the 2027 amount or 32.1%; I/I projects total $10.2 million of the 2027 amount or 6.4%; and SRF account for $24.0 million of the 2027 amount or 15.1%; and MWRA Water projects account for $2.6 million of the 2027 amount or 1.7%.

Table 2 – 2027-2029 CIP Funding Souces

Program	2027	2028	2029	2027-2029
BWSC Bonds	71,149,000	68,295,600	44,754,450	184,199,050
Rate Revenue	51,054,400	50,896,000	51,543,050	153,493,450
MWRA Water Assistance	2,639,200	4,052,000	5,155,250	11,846,450
MWRA I/I Assistance	10,211,200	7,740,800	3,400,000	21,352,000
SRF	24,044,800	13,232,000	19,529,000	56,805,800
Total	**159,098,600**	**144,216,400**	**124,381,750**	**427,696,750**

PROJECT HIGHLIGHTS

The Commission's CIP includes projects to improve the overall efficiency and to enhance the Commission's ability to provide services to its customers. The projects included in this CIP are intended to accomplish these objectives in the most efficient and cost-effective manner. The Commission intends to enhance Boston's water, sewer, and stormwater infrastructure with several targeted projects included in the 2027-2029 Capital Improvement Program. Some of the major projects are listed below:

- ✓ Fort Point Channel and Mystic/Chelsea Combined Sewer Overflow Control Projects
- ✓ Rehabilitation of the New Boston Main Interceptor (NBMI)
- ✓ East Boston Sewer Separation
- ✓ South Boston Sewer Separation
- ✓ West Roxbury and Hyde Park SSES
- ✓ Illegal Connections Investigations
- ✓ Upgrades to Union Park Pumping Station & Satellite Stations
- ✓ Charlestown SSES
- ✓ Charlestown Sewer Separation
- ✓ Construction of Daisy Field Stormwater Treatment
- ✓ Coastal Stormwater Impact Analysis
- ✓ Projects affiliated with the Consent Decree; includes cleaning and televising 85 miles of sewer and drains

WATER DISTRIBUTION SYSTEM

Since its creation, the Boston Water and Sewer Commission has provided the City of Boston with reliable, quality water. A program, which began as an aggressive 17 miles of water pipe replaced or rehabilitated annually based on age and the City's construction schedule, has transformed into a successful asset management approach. When combined with an aggressive leak detection and flushing program, the results have been undeniable. The Commission has averaged just over 35 water pipe failures per year and has witnessed its unbilled water drop from 48% to 9%. The Commission utilizes effective conservation measures through continued efforts to eliminate leaks across the system through advanced leak detection technology and proactive maintenance of the system's water mains.

In 1991 the EPA issued the Lead and Copper Rule (the "Lead Rule") regulating the concentration of lead and copper in drinking water. Lead enters tap water through corrosion, or wearing away of lead contained in service piping, solder used in plumbing and some brass fixtures. The Commission's drinking water is treated at the MWRA's John J. Carroll facility to make it less corrosive. Under the Lead Rule, water suppliers must conduct lead and copper sampling programs, identify and implement optimal corrosion control treatment and provide information to the public on ways to further reduce their exposure to lead in drinking water. At the time the Lead Rule was passed, the MWRA and MassDEP agreed that, since the MWRA was a consecutive water supplier and provides the same drinking water to all communities it serves, the number of lead and copper samples the MWRA communities were required to collect could be reduced. The Commission collects water samples from the required 33 customer locations and submits them to the MWRA. The MWRA analyzes the samples for lead and copper content and provides the results from all the MWRA local communities to MassDEP.

In 2004, the Commission created the Lead Replacement Incentive Program. In accordance with state and federal regulations, the Commission continues its sampling program at 33 private sites that are known to have lead services. Importantly, Boston drinking water is lead free when it leaves the reservoirs, and the MWRA and Boston's water main do not contain lead. In October 2021, the Commission and MassDEP executed an administrative consent order requiring the Commission to remove at least three hundred lead service lines annually as well as perform 700 investigations of water services on the "lead, unknown and other" inventory lists. The MassDEP has approved the Commission for partial funding of this program, including 100% reimbursement the investigations and a 40% grant for lead water service removals. On July 26, 2023 the Commissioners voted to amend the financial assistance program, removing all cost limits on lead removal on private property and making replacement available at no cost to eligible property owners. As part of the plan, the Commission implemented a robust public education program to inform particularly vulnerable members of the public about the dangers of lead in water. The Commission's website provides information for customers to indicate the potential of a lead service on their property. In October 2023, the Commission's lead sample results from identified private homes exceeded 15 parts per billion at 6 of the 33 tested locations, thus exceeding EPA's action level of 15 parts per billion at the 90th percentile. The Commission is continuing the removal of known lead service lines in the system and investigating service lines of unknown composition. In October 2024, the EPA promulgated the Lead and Copper Rule Improvements (LCRI), with a compliance date of November 1, 2027. The LCRI requires water systems to replace all lead service lines – in the public way and on private property – within 10 years, lowers the lead action level from 15 to 10 parts per billion, and strengthens tap sampling, corrosion control and public notification requirements. The Commission's ongoing removal of private lead service lines under the Administrative Order positions Boston ahead of these federal requirements.

From January 1, 2026 to date, the Commission completed 276 lead service line removals. This includes 9 public side removals, 267 private side removals and 4 locations where lead was removed from both the public and private sides. During the same time period the Commission completed 502 scratch tests. Of those investigations 130 services were identified as lead, while the remaining services were identified as copper or other pipe materials.

The Safe Drinking Water Act (SDWA) requires that all community water systems publish an annual drinking water quality report to be distributed to all customers of each community system. The report, called a Consumer Confidence Report, is required to contain monitoring results of all detected contaminants that are regulated by the EPA. The regulations governing this provision of the SDWA were promulgated in August 1998. The report has been published annually since 1998 by the MWRA, in cooperation with the communities it serves.

The Public Health Security and Bioterrorism Response Act, enacted in June 2002, mandated the preparation of a Vulnerability Assessment and Emergency Response Plan (ERP) by each public drinking water supplier. The Emergency Response Plan addresses the actions to be taken in response to a major or catastrophic events and terrorists attack on the Commission's Water Distribution System. Based in part upon the findings of the Vulnerability Assessment and the Emergency Response Plan, the Commission continues to design and develop Water Distribution System Improvements to mitigate, prevent, detect and respond to disruptive acts and terrorist activities.

America's Water Infrastructure Act of 2018 (AWAI) mandated the preparation of an All-Hazard and Resilience Assessment (RRA) to evaluate the Commission's vulnerabilities and a full update of the existing Water Emergency Response Plans (ERP) for public water systems (PWSs) with a focus on Cybersecurity. The Water Emergency Response Plan addresses the actions to be taken in response to major or catastrophic natural or man-made events on the Commission's water distribution system and associated facilities

The Commission took this opportunity to redesign and update all of BWSC's Emergency Planning and drafted a new Collection System Emergency Response Plan along with several Incident Specific Response plans for specific situations like sever weather and major interceptor failure. Based in part upon the finding of the Risk and Resilience Assessment and the Emergency Response Plan, the Commission continues to design and develop Water and Collection systems improvements to mitigate, prevent, detect, and respond to man-made and natural hazards and incidents.

The Boston Water & Sewer Commission has completed and submitted both the Risk and Resilience Assessment (RRA) and the Emergency Response Plan (ERP) for certification in compliance with the EPA's five-year recertification requirement. The RRA was completed and submitted on March 28, 2025, ensuring that system vulnerabilities and critical assets were thoroughly evaluated and updated. Subsequently, the ERP was finalized and submitted on September 29, 2025. Together, these submissions confirm the Commission's ongoing commitment to maintaining regulatory compliance and enhancing the security and resilience of its water infrastructure.

In 2011, the Commission completed a Water Distribution Study, which provided a thorough understanding of the water system and how to best manage it. The study gave all stakeholders a better sense of the history of Boston's water infrastructure and provided key insights into current conditions. The study has been responsible for the development of best management practices in value maintenance, main flushing and more effective methodology of selecting pipe to be replaced under the Capital Improvement Plan. Not only do these tools assist current Commission employees with an understanding of the system, but they also provide future employees with a roadmap for optimal system maintenance.

The three-year study was divided into two phases. The first phase was to have both Commission staff and a hired contractor collect 93 pipe samples (coupons). The samples were taken from every neighborhood and varied in size and pipe material. The age of the water pipes ranged from 18 years old to 147 years old and included cast iron, ductile iron and a mix of cement lined and unlined. The pipe and soil samples, which were also taken from the locations, were analyzed. The analysis consisted of physical observations and measurements, microscopic examination, mechanical properties test, and chemical composition analysis. The soil sample obtained at each location was also analyzed to

determine its corrosiveness. The results of the tests performed were matched with locations on Commission maps, and corrosion rates were correlated with fill areas, electrified rail locations and groundwater levels.

The second phase was to create a sustainable distribution system by developing a risk-based measure for selecting pipe to be included in the annual CIP budget. This phase employed sophisticated models that levered all the data collected in phase one, data the Commission collects in its GIS, Citiworks, and hydraulic model to determine the appropriate level of pipe rehabilitation and replacement needed to achieve the Commission's goals. The pipe selected is based on a risk-based assessment. The framework is derived from asset management principles, which consider the highest risk of pipe to be the probability of a failure, and what the consequences of an event occurring could be (hospital flooding or critical customers without water).

This system is used in the selection of pipes for replacement under the Capital Improvement Program. Pipes with the highest ranking are considered first. Pipes are also selected within proximity to other selected pipe to create geographic based contracts. All street excavations are coordinated with City and State Paving Programs.

The study recommended replacing eleven miles of pipe per year through the year 2030. This ranking system was updated in 2016 resulting in a recommendation to replace and rehabilitate eight miles of pipe per year.

In addition to the samples taken during the three-year study, the Commission obtains eight pipe samples every year. Once the results of the analysis are received the information is uploaded into the Commission's database to continue selecting the most vulnerable pipe.

Using the latest technology solutions, we are identifying new areas where BWSC can make sustainable improvement to the quality of our environment and services.

With aggressive leak detection and repair combined with progressive metering programs, the Commission continues to reduce its unbilled water by approximately 85% from 70 mgd in Fiscal Year 1977 to 9.77 mgd in Fiscal year 2025. Unbilled water is the difference between water purchased from the MWRA and water sold to customers. Of the 9.77 mgd of unbilled water in Fiscal Year 2025, approximately 4.33 mgd was identified as water for unbilled public purposes such as firefighting and street cleaning. Thus, unaccounted-for-water was approximately 5.44 mgd, or about 8.8% of the 61.67 mgd which the Commission purchased from the MWRA. The Commission continues to provide a leakage survey of the entire system each year.

Water distribution system improvements made since 1978 include the replacement of 489 miles of older water mains.

Over the three years of the CIP, the Commission is projected to expend $178.5 million on improvements to the Water Distribution System. Most of these expenditures will occur in the replacement of water mains.

The projects scheduled for initiation in 2027 will result in the replacement of 9.8 miles of water mains.

Table 3 presents a summary of the 2027-2029 capital expenditures for the Water Distribution System.

Table 3 - Water Distribution System Expenditures by Program Category

Program	2027	2028	2029	2027-2029
Water Replacement	50,095,600	44,989,200	55,995,600	151,080,400
Water Special	11,766,400	8,089,600	7,599,000	27,455,000
Total	**61,862,000**	**53,078,800**	**63,594,600**	**178,535,400**

SEWER SYSTEM

The CIP for the Sewer System includes a total of $144.8 million for various types of system improvements. These include in-kind replacement and rehabilitation of sewer pipes, installation or replacement of sewers and storm drains that increase the overall capacity of the system, separation of combined sewers, identification and reduction of infiltration and inflow and compliance with permit requirements in the areas of combined sewer overflows and stormwater discharges.

Major sewer system improvements have resulted in increased system capacity and the virtual elimination of dry weather overflows from combined sewers into Boston Harbor and the Neponset, Charles and Mystic Rivers. These improvements have also increased water quality and improved accessibility to all waterways.

Projects associated with the Plan in the Sewer System CIP include the rehabilitation or replacement of approximately 15.5 miles of newly identified deteriorated or collapsed sanitary sewers and storm drains and the television inspection of approximately 85 miles of sewer and drain pipe within the next year. Also included are drainage improvements and the replacement of faulty tide-gates and the installation of new tide-gates.

The CIP continues funding for the separation of combined sewers and for the reduction of infiltration and inflow into the sanitary system. Infiltration and inflow (I/I) are extraneous quantities of water, which enters the sanitary sewers and reduces the capacity of the system to transport sanitary sewage. Reduction of I/I also decreases the quantity of water transported to the Massachusetts Water Resource Authority ("MWRA") wastewater treatment facilities, thereby reducing overall transportation costs, treatment costs and BWSC's sewer assessments.

Combined flows that exceed the capacity of the interceptors during storm events discharged into the Boston Harbor and the Charles River. In the past several years, the Commission has undertaken a number of studies of its combined sewer system and has developed flows to significantly reduce CSO. The issue of infiltration and inflow ("I/I") into the sanitary system in separated areas of the system is also being addressed. Surveys have been performed to identify I/I sources, stormwater into the sanitary sewers.

Table 4 presents a summary of the 2027-2029 capital expenditures for the Sewer System.

Table 4 - Sewer System Expenditures by Program Category

Program	2027	2028	2029	2027-2029
Sewer R & R	54,142,600	52,013,800	28,453,725	134,610,125
Sewer Special	2,835,200	4,332,800	3,054,050	10,222,050
Total	**56,977,800**	**56,346,600**	**31,507,775**	**144,832,175**

CONSENT DECREE

On August 23, 2012, the Commission entered in a Consent Decree with the Environmental Protection Agency and Conservation Law Foundation. Under the terms of the Consent Decree the Commission implemented a Capacity, Maintenance, Operations and Management ("CMOM") self-assessment study in 2012 that analyzed all aspects of the Commission's sanitary sewer and storm drainage facility operations and maintenance. The Commission finalized a CMOM Corrective Action Plan in July 2013 and developed a CMOM Program Document in May 2014. The CMOM Program synchronizes infrastructure maintenance and operations goals with long-term CIP planning to achieve ("CWA") compliance with the Commission's NPDES permit and ultimately improve water quality.

As part of the CMOM Corrective Action Plan filed with the EPA, the Commission increased its inspection and assessment of its sewer and drainage systems. The program represents progressive increases in the quantity of pipes cleaned and televised with an end goal of completing approximately 10% of the system annually.

The Commission has embraced the Consent Decree requirements from senior management through all divisions and departments. The Commission views the requirements as an opportunity to enhance its current practices and procedures in operating and maintaining the sewer system. Staffing leadership changes have been implemented; for example, a CMOM superintendent and an SSO manager were hired in 2013 to ensure compliance with the requirements enforced by the Consent Decree.

The Consent Decree offers an unprecedented opportunity for the Commission to increase its role as an environmental steward for Boston's waterways. The Commission is committed to meeting and surpassing the benchmarks outlined in the Consent Decree. To fulfill this commitment, the Commission has begun implementing both short-term and long-term measures that are designed to improve water quality, increase public awareness, and protect the environment.

The City of Boston, the Commission and its ratepayers have helped clean up Boston Harbor and Boston's waterways to a level where they are accessible for the public use 90.2% of the time. South Boston's beaches are recognized as the cleanest urban beaches in the U.S. and the Charles River has been recognized by the EPA and internationally as one of the cleanest urban rivers in America. The Commission's illicit discharge detection protocol and sampling program have been cited as an example and standard by EPA. These achievements are a direct result of the Commission's investment in improved sewer and stormwater infrastructure, implementation of best management practices and working with other stakeholders in the City of Boston. The Commission will continue a tenable, sustainable path to improve water quality and maintain outstanding access to the City's waterways.

PROJECTS ASSOCIATED WITH THE CONSENT DECREE & WATER QUALITY IMPROVEMENTS

There are several projects that the Commission is performing and planning to undertake to fulfill and exceed recommendations of the Environmental Protection Agency and Conservation Law Foundation ("EPA" and "CLF") under the Consent Decree. The following projects will support the Commission's goal of compliance with the Consent Decree and improved water quality discharges and the environment:

Consent Decree:

Sewer R & R

- Cleaning and Inspections of Sewers and Storm Drains (CMOM-Capacity Management Operations)

Sewer Special

- Citywide Illegal Connection Investigation
- Customization of SCREAM & CMOM

Storm Water

- Design of Stormwater Detention Facilities
- Fort Point Channel and Mystic/Chelsea Combined Sewer Overflow Control Projects
- Construction of Stormwater Detention Facilities
- CCTV of Sewers and Storm Drains (Contamination Investigation) IDDE
- Constructed Wetland in Stormwater Tributary Area
- Green Infrastructure
- Sampling of Stormwater Treatment Vault on Talbot Avenue
- Willow Pond Road Stormwater Treatment Vault

NOTE: *Full description and forecasted budgets of individual projects are available in the Sewer R & R, Sewer Special & Stormwater sections.*

WASTEWATER AND STORM DRAINAGE FACILITIES PLAN

The Commission completed its Wastewater and Storm Drainage System Facilities Plan in 2015. A major objective of the plan was to develop facility plans for the operation of the Commission's sewer and storm drains that are aligned with the Commission's primary service goals and supported by effective operations, maintenance, and engineering practices. This plan has reviewed all aspects of the Commission Sewer System, including the Commission's design standards, assets, mapping, maintenance and operational practices and future impacts of climate change on the Commission's facilities.

Critical elements of this Plan include:

- ✓ **Assessment of the Commission's Service Goals** and other factors affecting long-term planning including changing regulatory requirements, climate change and financial conditions.
- ✓ **Systematic use of Risk-based tools** to govern prioritization of investments in condition assessments, repairs and replacements
- ✓ **Integration of Business Processes** needed to sustain effective **C**apacity, **M**anagement, **O**peration and **M**aintenance (CMOM) Programs for sanitary sewer collections systems and engineering programs
- ✓ **Training and Education** to embrace the use of new tools and business processes and to sustain knowledge of the system and its operations

In addition to establishing a sustainable framework for planning and management, the plan includes a broad spectrum of data collection, engineering evaluation and tool development activities.

SUPPORT PROJECT EXPENDITURES

The capital projects included in the Support category contribute to the overall efficient operation of the Commission and improve the Commission's ability to manage/administer projects and collect revenues. The allocated budget for Support projects in the 2027-2029 CIP total $32.0 million.

The allocated budget in this section of the CIP includes expenditures for Advanced Meter Infrastructure, Information Technology, and various Administrative Equipment.

Table 5 presents a summary of the 2027-2029 capital expenditures for the Support projects.

Table 5 - Support Expenditures by Project Category

Program	2027	2028	2029	2027-2029
Metering	2,800,000	2,800,000	2,350,000	7,950,000
IT	3,360,000	3,240,000	3,230,000	9,830,000
Admin Equip	5,900,000	6,440,000	1,862,500	14,202,500
Total	**12,060,000**	**12,480,000**	**7,442,500**	**31,982,500**

STORMWATER PROJECT EXPENDITURES

The primary purpose of the Stormwater Program is to encourage participation in the Boston Harbor pollution abatement projects and implement green infrastructure to improve the water quality of discharges to the local receiving waters. The goal is also to study existing conditions and make recommendations for placement of best new management practices designed to promote improved water quality, ensure compliance with state and federal regulations, minimize flooding, and manage stormwater throughout the City of Boston. The allocated budget for Stormwater projects in the 2027-2029 CIP total $72.3 million.

Table 6 presents a summary of the 2027-2029 capital expenditures for the Stormwater projects.

Table 6 - Stormwater Expenditures by Project Category

Program	2027	2028	2029	2027-2029
Stormwater	28,198,800	22,311,000	21,836,875	72,346,675
Total	**28,198,800**	**22,311,000**	**21,836,875**	**72,346,675**

MASSACHUSETTS WATER RESOURCES AUTHORITY (MWRA)

The Commission obtains its water supply and wastewater treatment services from MWRA. MWRA provides water services to 54 cities, towns and special purpose entities ("Local Bodies") including the Commission and wastewater treatment to nearly half of the State's population in 43 cities, towns and special purpose entities located throughout central and eastern Massachusetts.

MWRA Background

In December 1984, MWRA was created by Chapter 372 of the Acts of 1984 ("the Act"). In accordance with the provisions of the Act effective July 1, 1985 the ownership, possession and control of all property comprising the Metropolitan District Commission ("MDC") water and sewer systems was transferred to MWRA. The Act authorizes MWRA to repair, replace, rehabilitate, modernize and extend the water delivery system and the sewage collection, disposal and treatment systems on a self-sustaining basis. The Act also allows for the issuance of bonds and notes to finance any of its corporate activities.

On January 31, 1985, a suit commonly referred to as the Boston Harbor case, was brought against the MDC, the Commonwealth, MWRA (as successor to the MDC) and the Commission alleging water pollution of an alleged illegal discharges into Boston Harbor in violation of the Clean Water Act. As the successor to the MDC, MWRA assumed responsibility for taking the Court-ordered actions to achieve and maintain compliance with the CWA. Such large-scale projects are financed through the issuance of revenue bonds, proceeds of federal and state grants and operating revenues.

MWRA Rates and Charges

Under the Act, MWRA was empowered to establish charges for its services and commodities. One of the basic goals achieved by the MWRA Act was the substitution of assessments, or user fees, to the member communities for the prior tax-based system of charges.

The Commission is the largest single customer for MWRA. For MWRA fiscal year 2027, the Commission will be assessed 34.1% of the water system charges and 27.7% of the sewer system charges. On a combined basis, the Commission will pay 30.1% of the total MWRA assessments.

Assessments for water services are calculated by MWRA based on the metered water use in the calendar year immediately preceding the MWRA fiscal year. The Commission's water charges for the MWRA fiscal year 2027 total $114.7 million based on the Commission's calendar year 2026 metered water use.

As of fiscal year, 1995, sewer assessments were calculated by a formula using, among other things, population and population equivalents. In accordance with legislation enacted in 1993, the MWRA developed a new sewer rate methodology for calculating assessments beginning in fiscal year 1996. The new methodology allocates operating and maintenance costs based on total metered annual flow and total annual average strength, septage contributions and high strength flow loads. Septage contributions are allocated based on volume, total suspended solids ("TSS") and biochemical oxygen demand ("BOD") loadings. High-strength flow loads are generated by those permitted entities whose flows exceed 25,000 gallons per day and whose TSS and/or BOD concentrations exceed 400 milligrams per liter.

Capital or debt service costs are allocated as follows: two-eighths based on maximum month metered flow and total annual average strength, septage and high strength flow loads; three-eighths based upon contributing (sewer) population; and three-eighths based population. Metered wastewater flow from the immediately preceding calendar year is used in calculating assessments. The Commission's sewer assessment for the MWRA fiscal year 2027 based on calendar year 2025 data, totals $156.6 million. Total assessments for water and sewer charges for MWRA fiscal year 2027 are $271.2 million.

As the largest of MWRA's customers, BWSC represents 34.8% of the current demand on the MWRA water supply. BWSC's water comes from the Quabbin Reservoir and the Wachusett Reservoir, located about 65 miles and 35 miles west of Boston. The two reservoirs combined supplied an average of 191.8 mgd (millions of gallon per day) to consumers in 2025. The safe yield of the reservoir system is 300 mgd.

Water distributed to the Boston metropolitan area is conveyed from the reservoirs through the Cosgrove or Wachusett Aqueducts and treated at the MWRA's John J. Carroll Water Treatment Plant at Walnut Hill in Marlborough. Treatment includes ozone disinfection, pH adjustment with sodium bicarbonate and the addition of chloramines and fluoride. Water leaves the plant through the MetroWest Water Supply Tunnel and is stored in covered storage tanks, such as Norumbega Reservoir and the Loring Road Tanks, where it is held for delivery to BWSC's service networks. MWRA mains distribute water to the BWSC system at 29 metered delivery points.

Today, Boston is one of 54 customers that purchases water wholesale from MWRA. BWSC's water distribution system currently provides service to approximately 90,000 active accounts throughout the City. Boston's resident population of nearly 675,000 almost doubles each day by commuting workers and students, shoppers, tourists, conventioneers, hospital patients and visitors.

MWRA has completed construction of major transmission and treatment facilities to service the Greater Boston area including the Metro West Tunnel. These improvements will ensure that Boston receives a reliable source of clean water.

FUNDING SOURCES AND FINANCIAL IMPACT

Funding for the Commission's CIP is provided through five sources: Commission general revenue bonds, rate revenues, state revolving funds and two grant/loan programs provided by MWRA.

The primary funding source for the three-year capital program is the sale of Commission general revenue bonds. Over the three-year plan, general revenue bonds will comprise $184.2 million of the total funding requirement. In 2027, bonds will make up approximately $71.1 million of the funding required for that year.

The 2027-2029 CIP outlines R&R expenditures of $153.5 million of total expenditures over the three years of the program. In 2027, approximately $51.1 million will be expended out of current rate revenues for CIP projects.

Each year the Commission participates in the MWRA's I/I program for Infiltration/Inflow and Separation projects. Since 1993, the Commission has received $162.0 million in MWRA funding for various Infiltration/Inflow and Separation projects of which $133.0 million is currently outstanding. The Commission plans to continue to take advantage of MWRA funding over the 2027-2029 period.

Table 7 lists projects funded by MWRA's I/I program for Infiltration/Inflow and Separation

Table 7 – Projects Funded by MWRA's I/I Program of Infiltration/Inflow and Separation

Contract	Description
27-309-009, 27-309-010 28-309-009, 28-309-010 29-309-009, 29-309-010	CCTV of Sewers and Storm Drains/CMOM - Future Contracts
26-309-010	Cleaning and Television Inspection of Sewers and Drains in the City of Boston II
26-309-009	Cleaning and Television Inspection of Sewers and Drains in The City of Boston I
25-309-011	Inflow and Infiltration Discovery
24-309-006	Charlestown Sewer Separation
24-308-14A	Sewage and Drainage Works Improvements
23-309-001	Liner in Allston-Brighton
23-206-005	West Roxbury and Hyde ParkSewer System Evaluation Survey
22-309-003	R&R in Upper Roxbury
22-309-002	Replacement of Sewer and Drains Citywide, R&R
20-309-007	R&R in AB, FK, JP, Rox
20-308-002	South End Water Improvements Phase III
	Roxbury SSES
	CCTV Tidal Infiltration

The MWRA Board of Directors, by their vote on March 16, 2016, authorized the enhancement of the Local Water System Assistance Program to provide up to $100 million in 10-year zero-interest loans to communities under the MWRA Lead Service Line Replacement Loan Program. The program will also be referenced as the "Lead Loan Program" or "LLP" for short. This interest-free loan program is designed to assist member water communities to rehabilitate or replace water service lines so that all lead pipe is fully removed. The program will help upgrade local water systems to reduce the potential for elevated lead levels at customer taps and maintain high water quality conditions throughout the system. As of December 31, 2026, the Commission has received $7.6 million in LRP funding (formerly known as LLP) of which there currently is an outstanding balance of $4.9 million.

The MWRA provides support for water systems improvement projects through its Local Water System Assistance Program (LWSAP). The program offers interest-free loans payable over a ten-year period and is designed to improve water quality in local distribution systems. The MWRA has also established the Local Water System Assistance Program ("LWSAP") to assist its Local Bodies in the performance of water systems improvement projects. The program offers interest-free loans payable over a ten year period and is designed to improve water quality in local distribution systems. The amount allocated for BWSC in Phase 3 of the program is $52.8 or approximately $5.3 million per year. The loans will be repaid to the MWRA over a 10-year period. Loans are approved for distribution from fiscal year 2011 through fiscal year 2034. The Commission has applied for loan funding for certain water main replacement projects through the remainder of this program. MWRA's Board of Directors recently approved Phase 4 of the Local Water System Assistance Program (LWSAP) to provide an additional $300 million in interest-free loans to member water communities for local water system improvement projects. New Phase 4 Loan funds are approved for distribution beginning in FY25 through FY34. For Boston, a total of $16,926,136 is currently available for LWSAP loan distribution (Program Phases 3 and 4), with a new annual allocation of $4,963,900 for Phase 4. All project costs incurred on or after January 1, 2010 have been considered for eligibility in application $17.2 million will be funded using the LWSAP Program. As of December 31, 2026, the Commission has received $86.5 million in LWSAP funding of which there currently is an outstanding balance of $30.9 million.

It is anticipated that in the 2027-2029 Capital Improvement Program $11.8 million will be funded using the LWSAP Program.

Table 8 lists water projects funded by the MWRA with LWSAP & MWLLP

Table 8 – Projects Funded by the MWRA with LWSAP & MWLLP

Contract	Description
25-308-004	Water Works Improvements in Dorchester and Mattapan
23-308-003	Water Relay City Proper
19-308-004	Water Relay Beacon Hill

The EPA and Commonwealth provide support for funding and financing through the State Revolving Fund (SRF). The SRF offers affordable loan options to cities and towns to improve water supply infrastructure and drinking water safety; and to help them to comply with federal and state water quality requirements that deal with wastewater treatment plants and collection systems, while addressing issues such as watershed management priorities, stormwater management, and green infrastructure. Additionally, the SRF supplies financial assistance to address communities with septic system problems. These federal-state programs offer below-market rate loans and other authorized assistance with extended loan terms typically over twenty to thirty years.

It is anticipated that in the 2027-2029 Capital Improvement Program $56.8 million will be funded using the SRF Program.

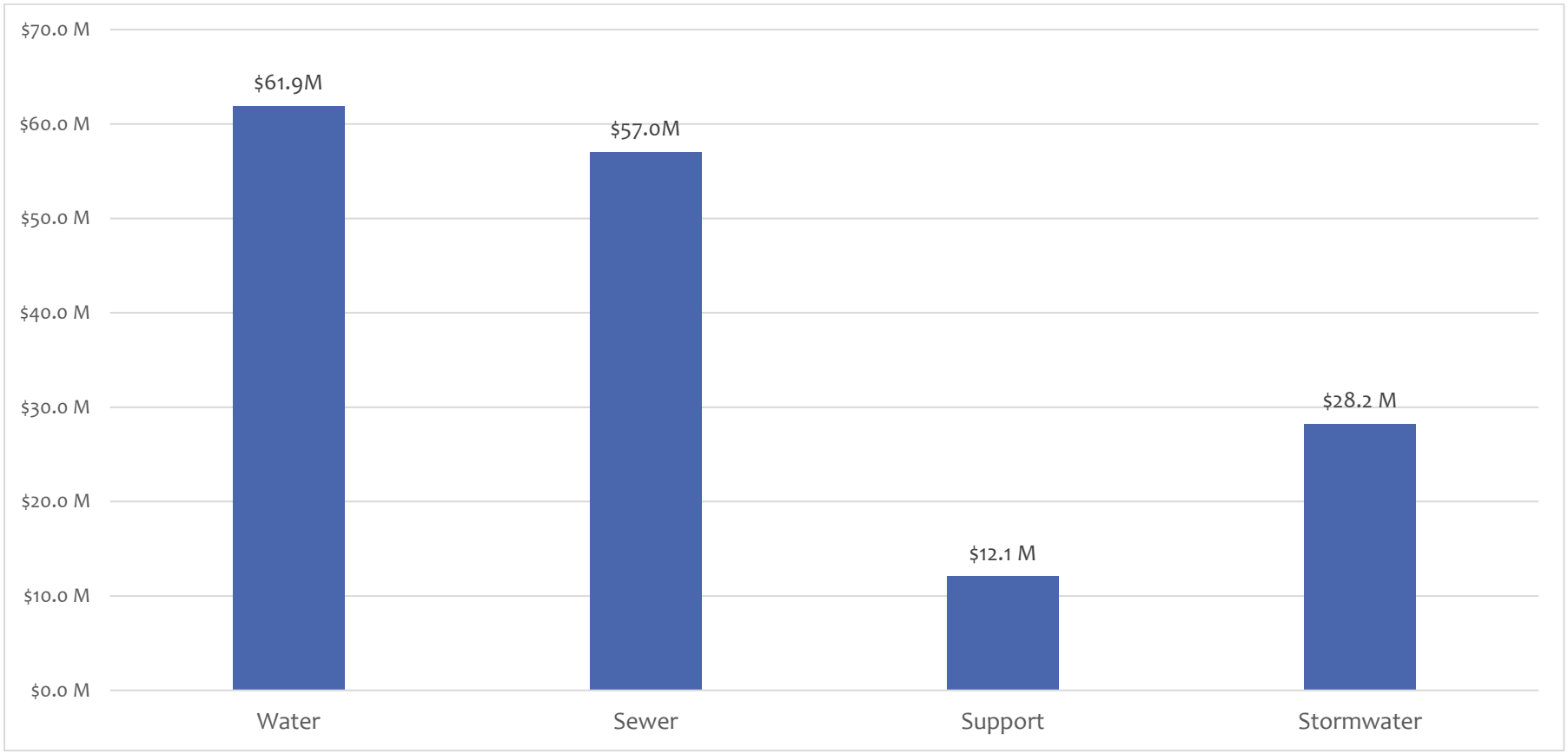
Table 9 on page 18 represents the cash flow expenditures by category and funding source for the Commission's 2027-2029 CIP.

Table 9

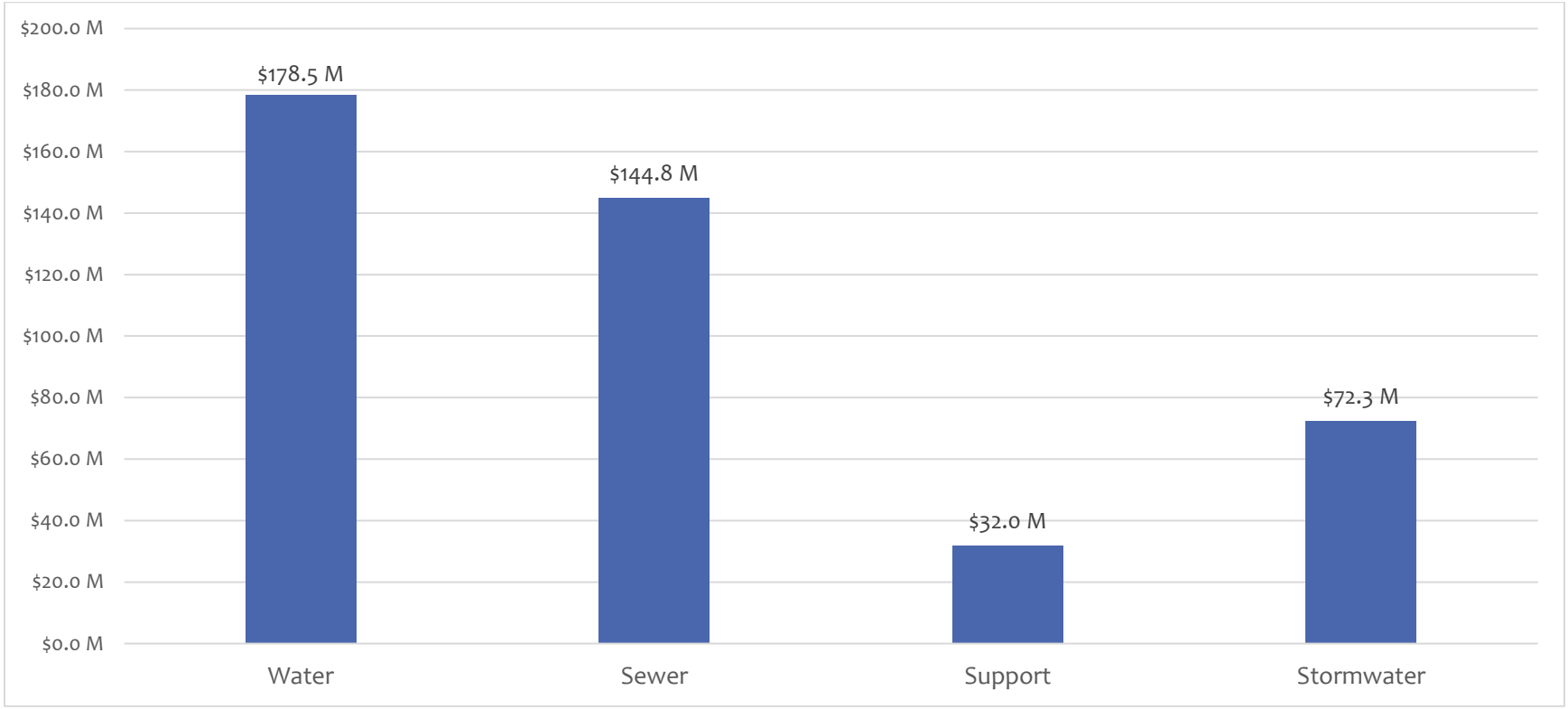
Capital Improvement Program
2027 - 2029
Totals by Category and Funding Source

	2027	2028	2029	Total 2027 - 2029
Water Total	**61,862,000**	**53,078,800**	**63,594,600**	**178,535,400**
BWSC Bonds	29,518,800	30,088,400	31,962,900	91,570,100
LWSAP	2,639,200	4,052,000	5,155,250	11,846,450
RATE Revenue	28,964,000	17,458,400	22,261,300	68,683,700
SRF	740,000	1,480,000	4,215,150	6,435,150
Sewer Total	**56,977,800**	**56,346,600**	**31,507,775**	**144,832,175**
BWSC Bonds	22,923,000	19,464,200	3,696,650	46,083,850
MWRA II	7,548,800	5,338,400	1,241,000	14,128,200
Rate Revenue	14,160,800	23,996,000	17,789,800	55,946,600
SRF	12,345,200	7,548,000	8,780,325	28,673,525
Support Total	**12,060,000**	**12,480,000**	**7,442,500**	**31,982,500**
BWSC Bonds	12,060,000	12,480,000	7,442,500	31,982,500
Stormwater Total	**28,198,800**	**22,311,000**	**21,836,875**	**72,346,675**
BWSC Bonds	6,647,200	6,263,000	1,652,400	14,562,600
MWRA II	2,662,400	2,402,400	2,159,000	7,223,800
Rate Revenue	7,929,600	9,441,600	11,491,950	28,863,150
SRF	10,959,600	4,204,000	6,533,525	21,697,125
Total				
BWSC Bonds	71,149,000	68,295,600	44,754,450	184,199,050
MWRA II	10,211,200	7,740,800	3,400,000	21,352,000
Rate Revenue	51,054,400	50,896,000	51,543,050	153,493,450
SRF	24,044,800	13,232,000	19,529,000	56,805,800
LWSAP	2,639,200	4,052,000	5,155,250	11,846,450
Total	159,098,600	144,216,400	124,381,750	427,696,750

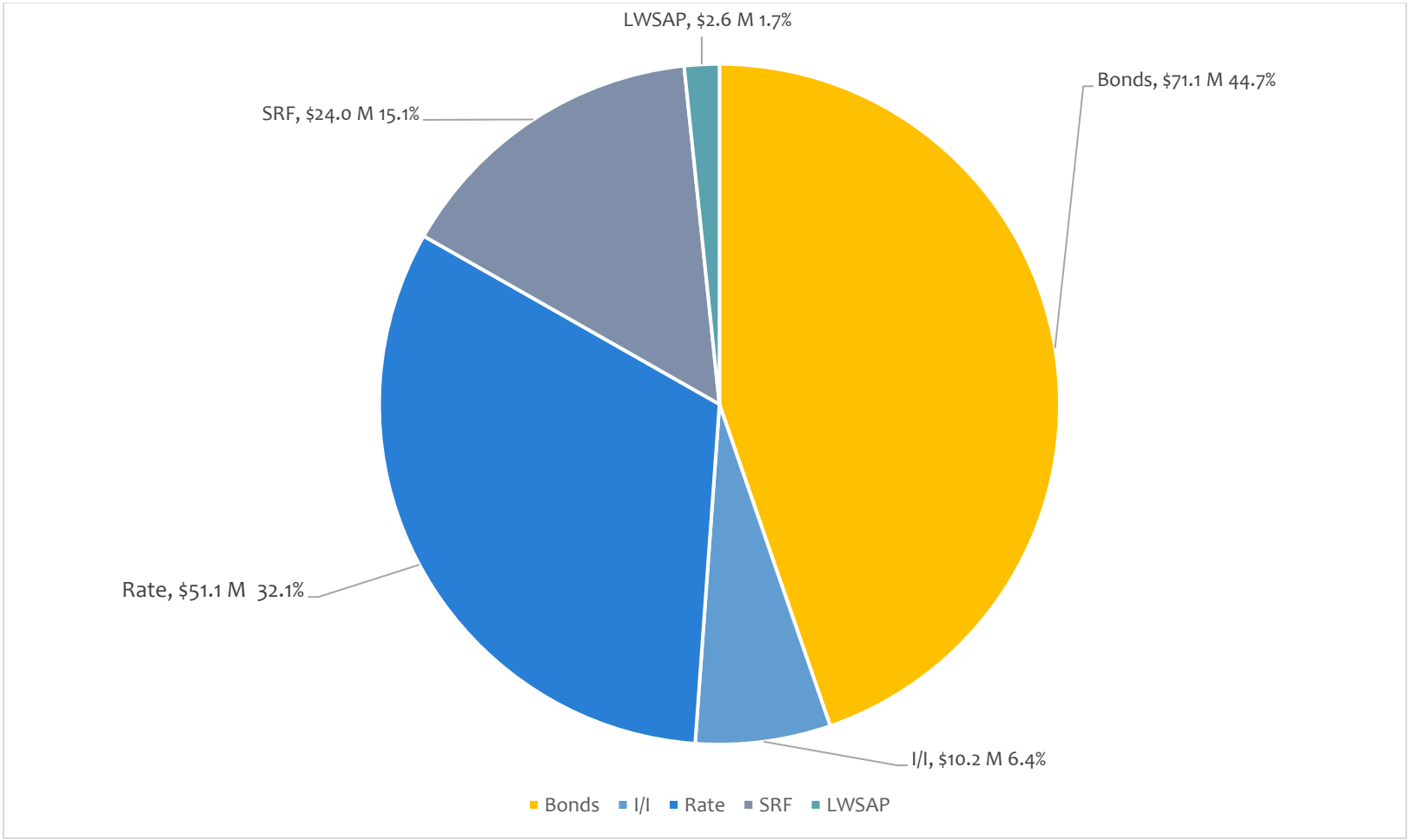
Graph 1 - 2027 CIP Total Expenditures by Category $159.1 Million



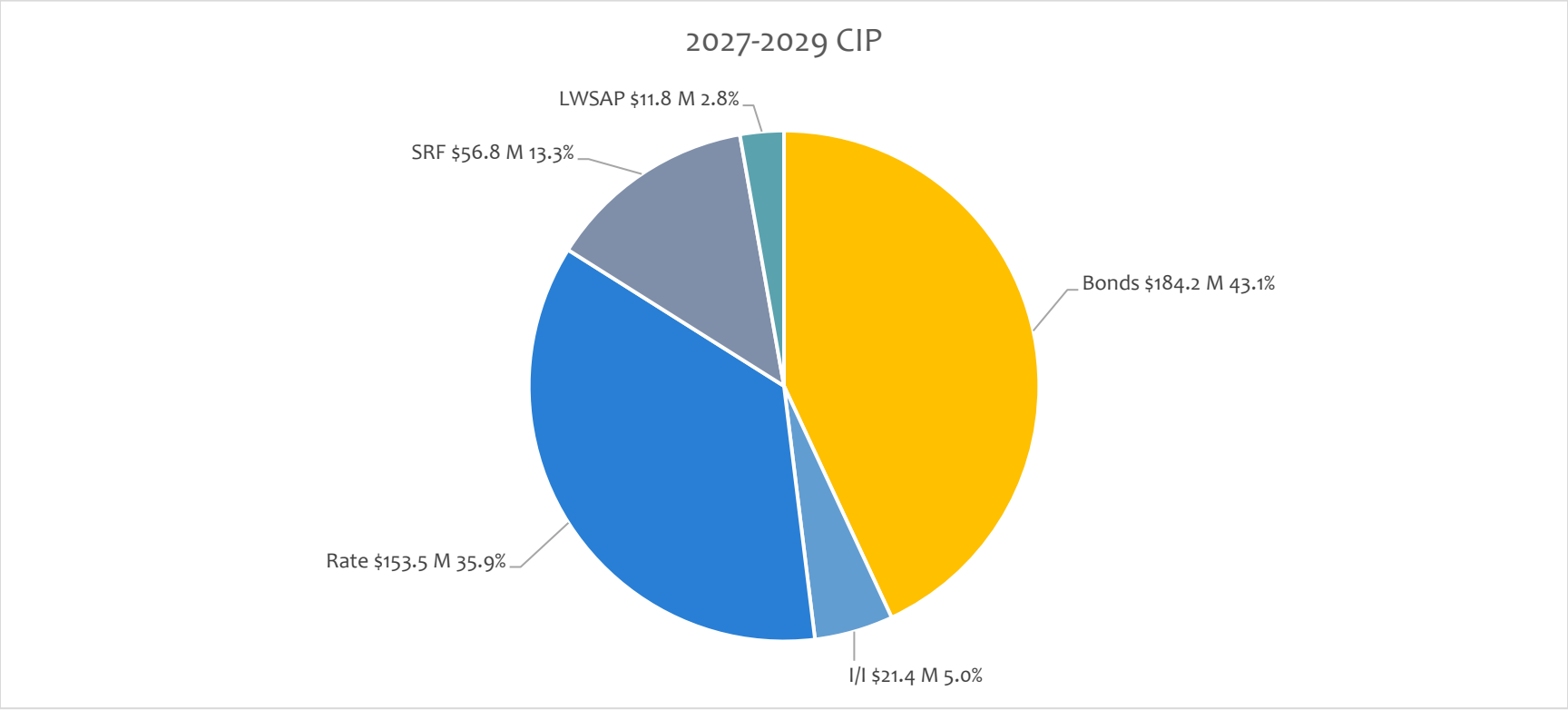
Graph 2 – 2027-2029 CIP Total Expenditures by Category $427.7 Million



Graph 3 – 2027 CIP Total Expenditures by Funding $159.1 Million



Graph 4 – 2027 - 2029 Total Expenditures by Funding Source $427.7 Million



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WATER DISTRIBUTION SYSTEM

The system serves approximately 90,000 accounts through five major service networks: Southern Low Service, which serves City Proper, South Boston and parts of Roxbury; Northern Low Service, which serves Allston/Brighton, Charlestown and East Boston; Southern High Service, which serves City Proper, Allston/Brighton, Dorchester, Hyde Park, Roslindale and parts of Jamaica Plain, Roxbury and West Roxbury; and Southern Extra-High Service, which serves portions of Jamaica Plain, West Roxbury and Hyde Park. In addition, a relatively small area in the Orient Heights section of East Boston is served by a single connection to the MWRA Northern High Service System.

Approximately 90% of the water consumed in the city is delivered through the Southern Low Service and Southern High Service, with most of the remainder delivered through the Northern Low Service. These service networks are supplied with potable water purchased from MWRA at 29 metered delivery points. This water is drawn from the Quabbin and Wachusett Reservoirs located in western and central Massachusetts. Supply is conveyed via aqueducts from these reservoirs to the Loring Road Tanks and Norumbega Reservoirs, where it is held for delivery to the Commission's service networks.

The Commission's current water distribution system consists of the following:

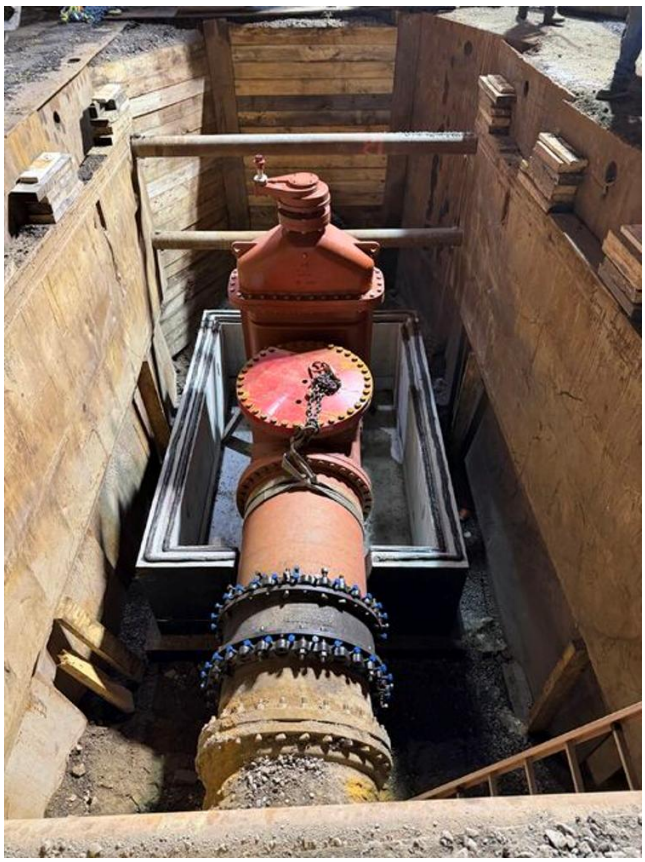
Appurtenances		Water Main City Wide		Pressure Zone	
		Total Linear Feet	5,326,937	High Pressure Fire System	15 Miles
Hydrants	12,854	Total Linear Miles	1,009	Northern High	4 Miles
				Northern Low	90 Miles
Gate Valves	17,963	Water Pumping Stations	1	Southern Extra High	80 Miles
				Southern High	560 Miles
				Southern Low	260 Miles

OBJECTIVES

Primary Objectives of the 2027-2029 Water Distribution System Capital Improvement Plan are:

- To ensure a continued adequate supply of high quality, potable water at adequate pressure for consumption by Commission's customers and for fire protection
- To reduce the amount of non-revenue producing water and to reduce the long-term maintenance costs of the system
- To improve the operability of valves and appurtenances to advance the efficient operation of the water system
- To reduce public inconvenience by coordinating the scheduling of system improvements with related projects of other public agencies

To ensure the above stated objectives are attained, the Commission has implemented projects of the rehabilitation and replacement of water mains, the replacement of valves and hydrants, and the installation or replacement of water mains associated with bridge reconstruction projects.



25-308-009

New 42" Gate Valve Installation with Chamber

2027-2029 WATER PROJECTS

Water Pipe Replacement Projects	• The Commission uses Statistical Analysis, Age, Criticality, and Condition with Capital Improvements Including those of Other Agencies
Water Special	• System Planning as well as Other Studies and Professional Services with the Rehabilitation and Operation of the Water System

The Commission's improvements to the Water Distribution System since 1978 include the replacing or relining of approximately 474.44 miles of water mains, resulting in lower maintenance costs and improved water service. As a result of the Commission's renewal and replacement, leak detection and metering programs, annual unbilled water, which is the difference between water purchased from the Massachusetts Water Resources Authority (the "MWRA") and water sold to customers, has been reduced from 70 mgd in Fiscal Year 1977 to 10.4 mgd in Fiscal in 2025, an 85% reduction.

2027-2029 WATER DISTRIBUTION SYSTEM CAPITAL PROGRAM

The Commission's 2027-2029 CIP for the Water Distribution System continues the investments necessary to maintain and improve the water distribution infrastructure. Projects are planned in the following areas: the rehabilitation or replacement of water mains, including the replacement of water pipes and the upgrade of valves and hydrants. Also included are water mains that are replaced as part of the Commission's sewer separation work. Together, these planned program activities will result in significant improvements to the water distribution system.

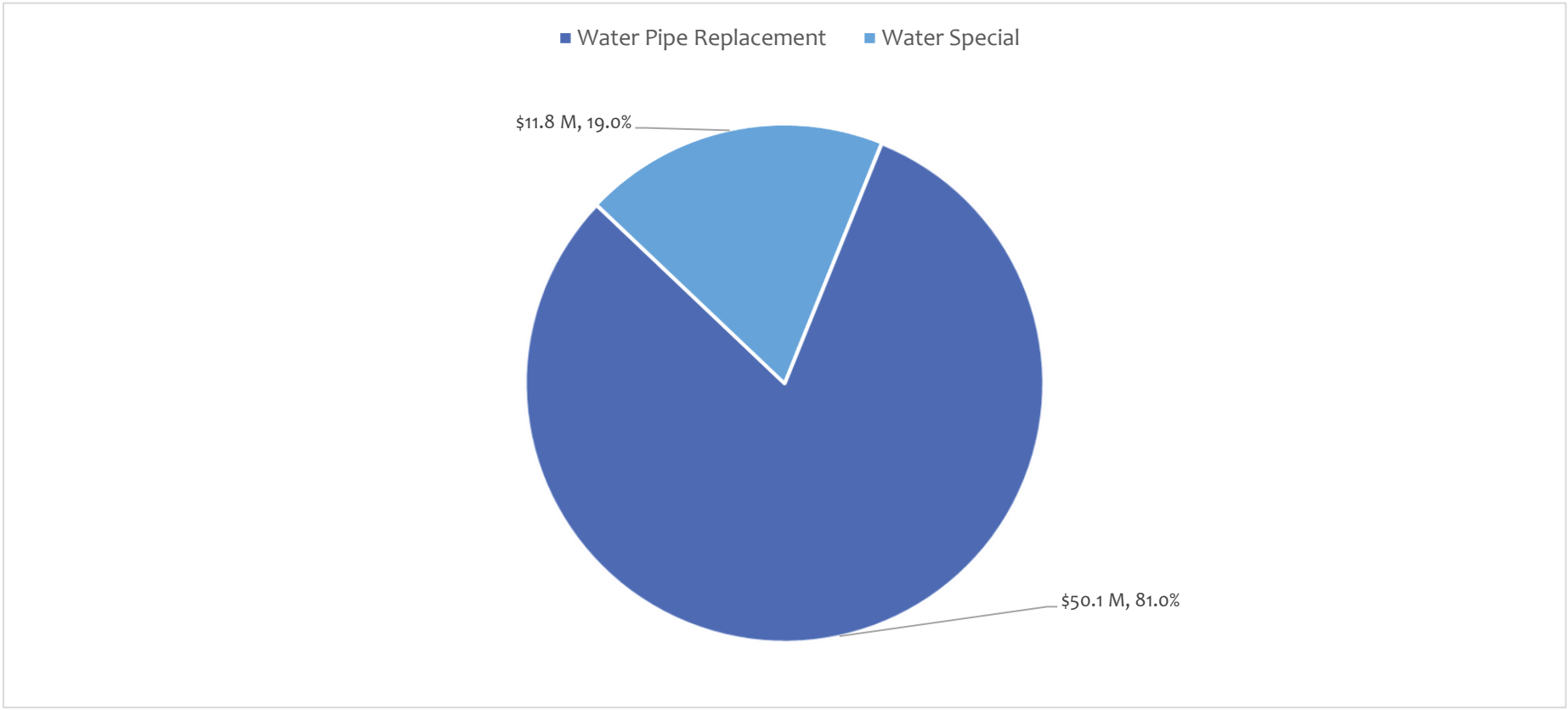
Table 10 and Graph 5 on the following pages present the 2027-2029 capital expenditures for the Water Distribution System. Graph 6 depicts the funding source application of the 2027-2029 capital expenditures. Graph 7 illustrates the spending by the program for 2027. Three-year expenditures are projected to be $178.5 million, of which $61.9 million is allocated in 2027. The three-year amounts are distributed in the Water Program as follows: Replacement $151.1 million and Special $27.5 million.

Table 10 - Water Distribution System by Category

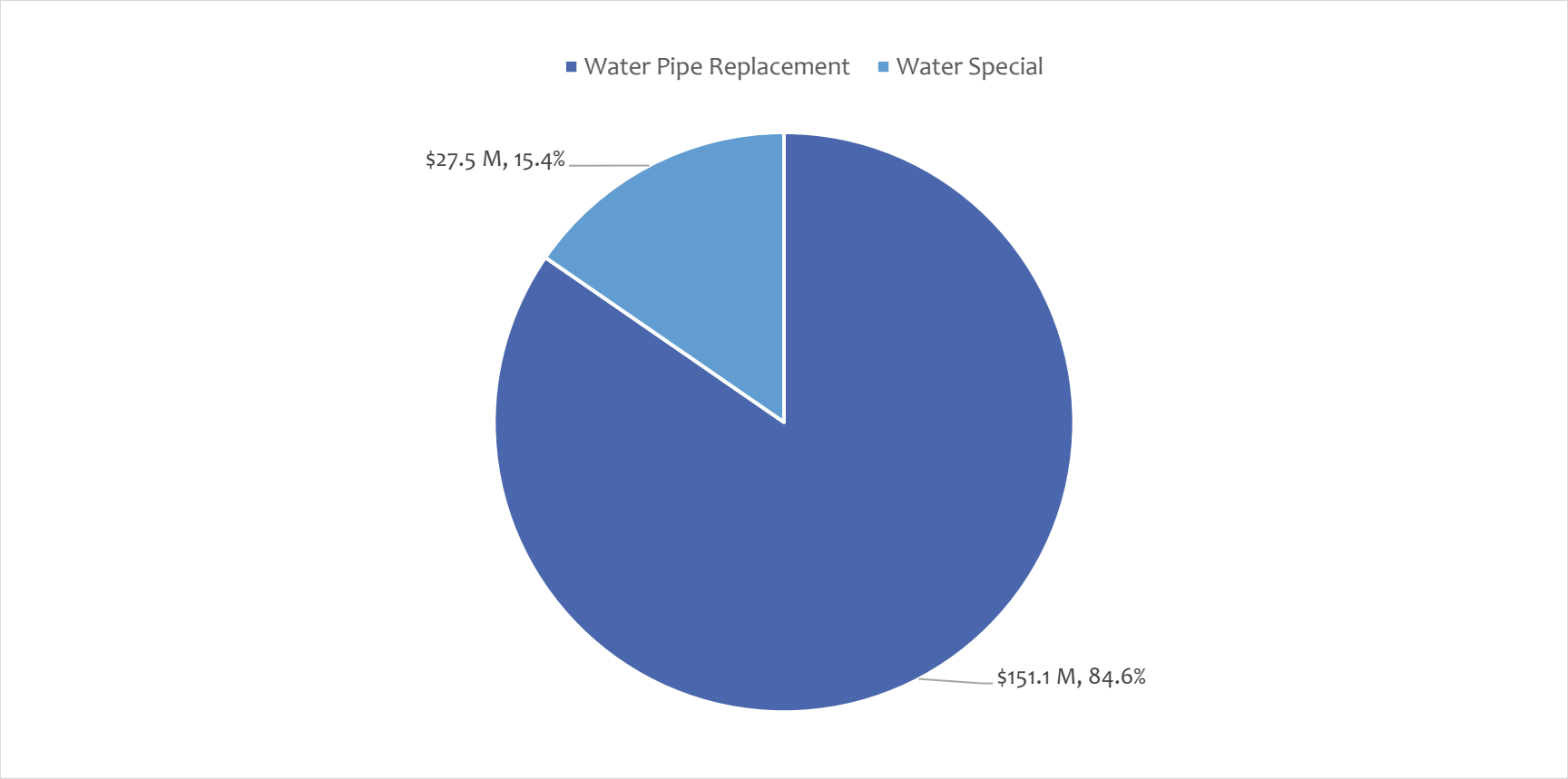
Capital Improvement Program
2027 - 2029
Water Total

	2027	2028	2029	Total 2027 - 2029
Water Replacement	**50,095,600**	**44,989,200**	**55,995,600**	**151,080,400**
BWSC Bonds	26,109,200	25,350,800	27,925,400	79,385,400
RATE Revenue	20,607,200	14,106,400	18,699,800	53,413,400
SRF	740,000	1,480,000	4,215,150	6,435,150
LWSAP	2,639,200	4,052,000	5,155,250	11,846,450
Water Special	**11,766,400**	**8,089,600**	**7,599,000**	**27,455,000**
BWSC Bonds	3,409,600	4,737,600	4,037,500	12,184,700
Rate Revenue	8,356,800	3,352,000	3,561,500	15,270,300
Total				
BWSC Bonds	29,518,800	30,088,400	31,962,900	91,570,100
RATE Revenue	28,964,000	17,458,400	22,261,300	68,683,700
SRF	740,000	1,480,000	4,215,150	6,435,150
LWSAP	2,639,200	4,052,000	5,155,250	11,846,450
Total	61,862,000	53,078,800	63,594,600	178,535,400

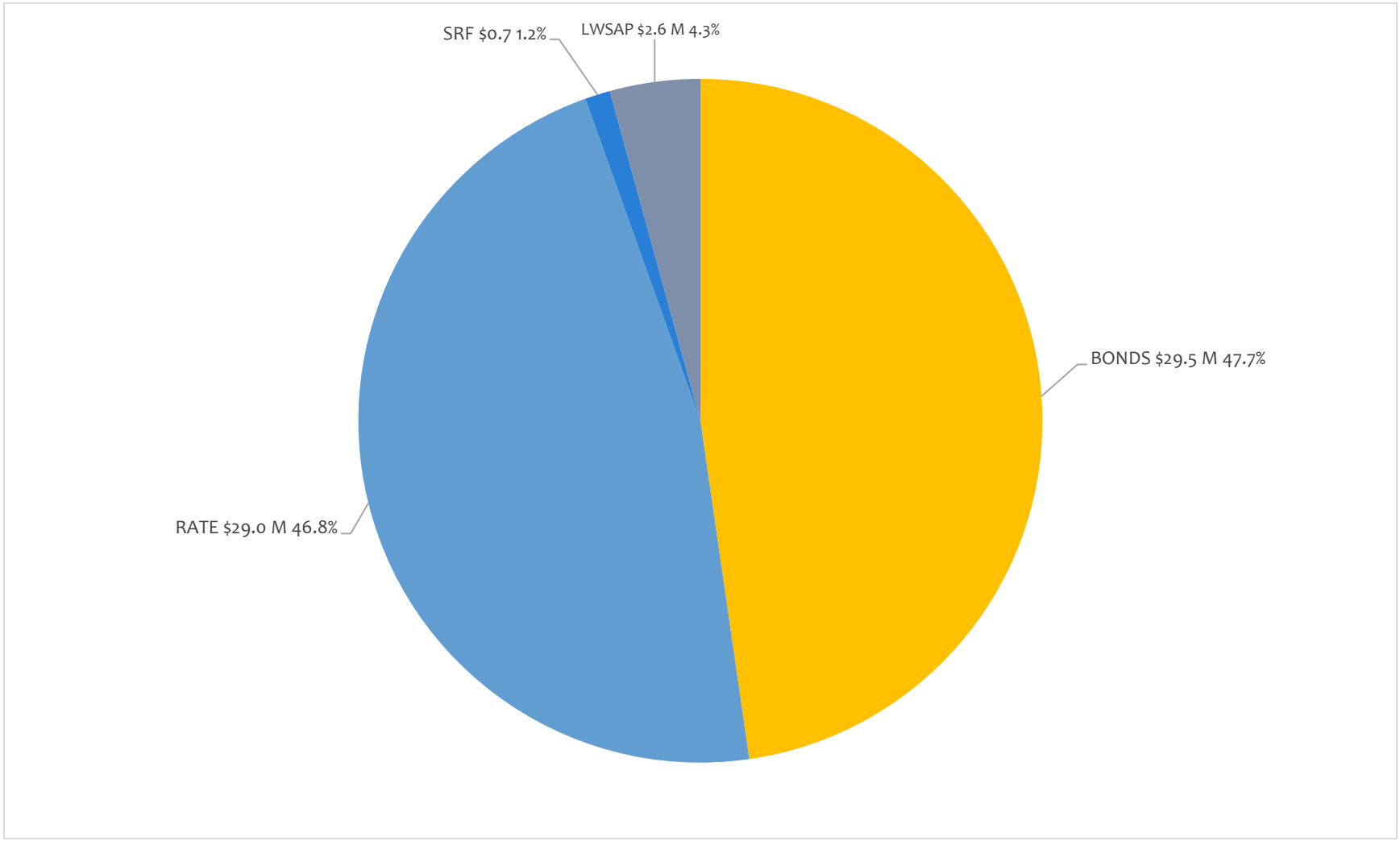
Graph 5 - 2027 Total Water Expenditures by Program $61.9 million



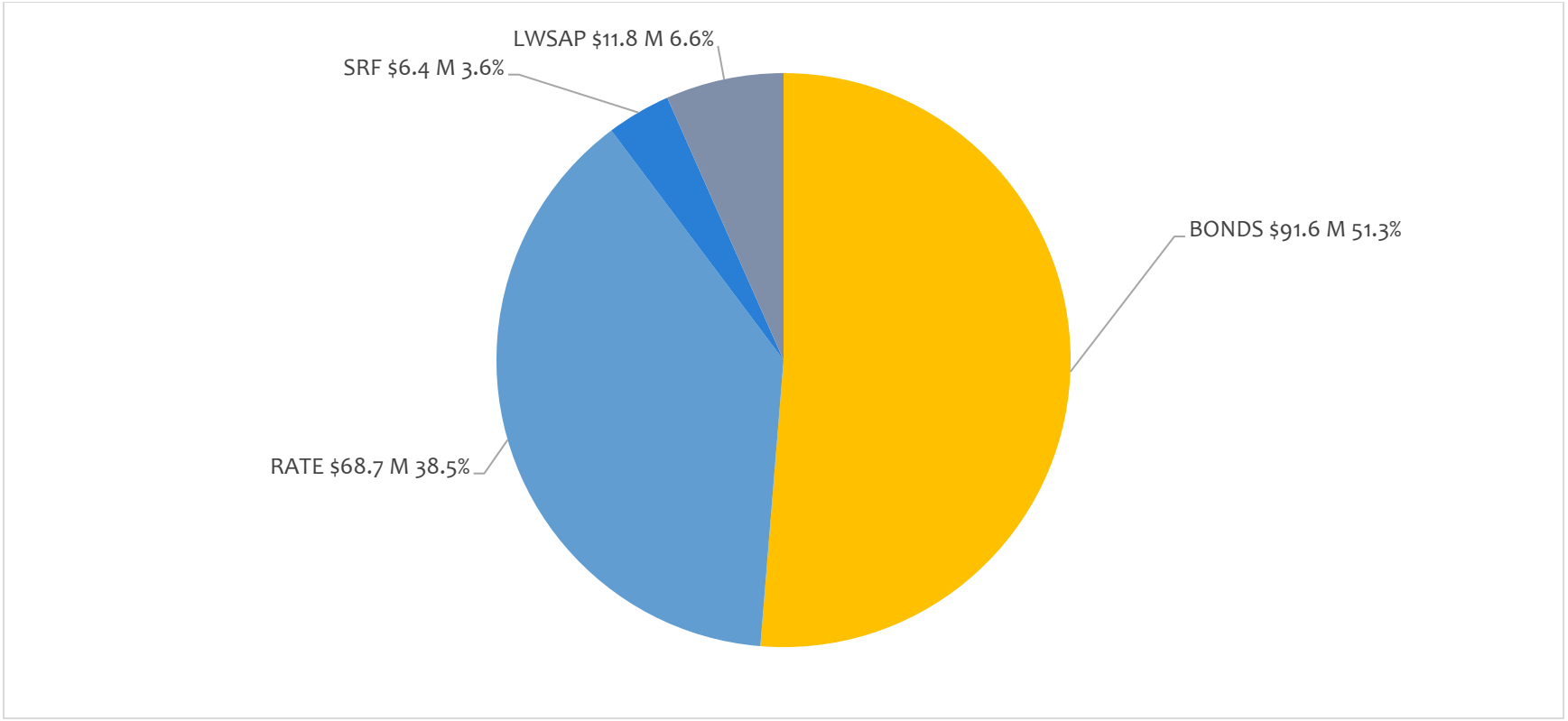
Graph 6 – 2027 - 2029 Total Water Expenditures by Program $178.5 million



Graph 7 – 2027 Total Water Expenditures by Funding Source
$61.9 Million



Graph 8 - 2027-2029 Total Water Expenditures by Funding Source $178.5 million



WATER MAIN REPLACEMENT PROGRAM

DESCRIPTION AND JUSTIFICATION

Funding is provided in the 2027-2029 CIP for the continuation of the Commission's Water Main Replacement Program. The program consists of the replacement of cast-iron water mains and water mains that have reached the end of their design life.

The primary purpose of the Water Main Replacement Program is to ensure the quality and quantity of water provided by the Commission to its customers. Over long periods of time, the internal and external surfaces of water mains are subject to corrosion and deterioration. Internal corrosion of water mains can affect water quality, particularly taste, odor and color as well as reduce the hydraulic capacity of the pipe. Internal and external corrosion can also reduce the structural integrity of pipe, causing potential leakage and main breaks.

The largest component of the Water Distribution System CIP is the program to replace water mains. The replacement program replaces aged, undersized or structurally deteriorated pipe. The program also includes rehabilitation of pipe by structural lining.

The 2027-2029 CIP for the Water Distribution System continues programs for the replacement of water mains, the replacement of hydrants as necessary on all replacement projects, the replacement of water mains on new or reconstructed bridges and various design services, permits and paving fees associated with capital funded projects.

THE WATER MAIN REPLACEMENT PROGRAM ACCOMPLISHES THE FOLLOWING:

- Reduces the occurrence of main breaks, public inconvenience, loss of water and associated costs
- Decreases water leakage
- Increases the capacity of water mains, when replacing unlined mains
- Reduces discolored water conditions associated with water main tuberculation
- Reduces long-term maintenance costs
- Contributes to the control of biofilm in complying with the requirements of the Safe Drinking Water Act

WATER MAIN REPLACEMENT PROGRAM 2027 SUMMARY

The projects scheduled for initiation in 2027 will result in the replacement of approximately 9.8 miles of water mains.

Prior to construction, the Commission inspects sewer and drain pipes in streets where water pipes are scheduled to be replaced. All sewer and drain replacement and rehabilitation work is then performed along with the water pipe replacement. This coordination avoids disruption of the streets and saves project costs. Funding for the sewer and drain work is included in the sewer section of the CIP.

METHODOLOGY FOR SELECTING WATER MAINS FOR REHABILITATION

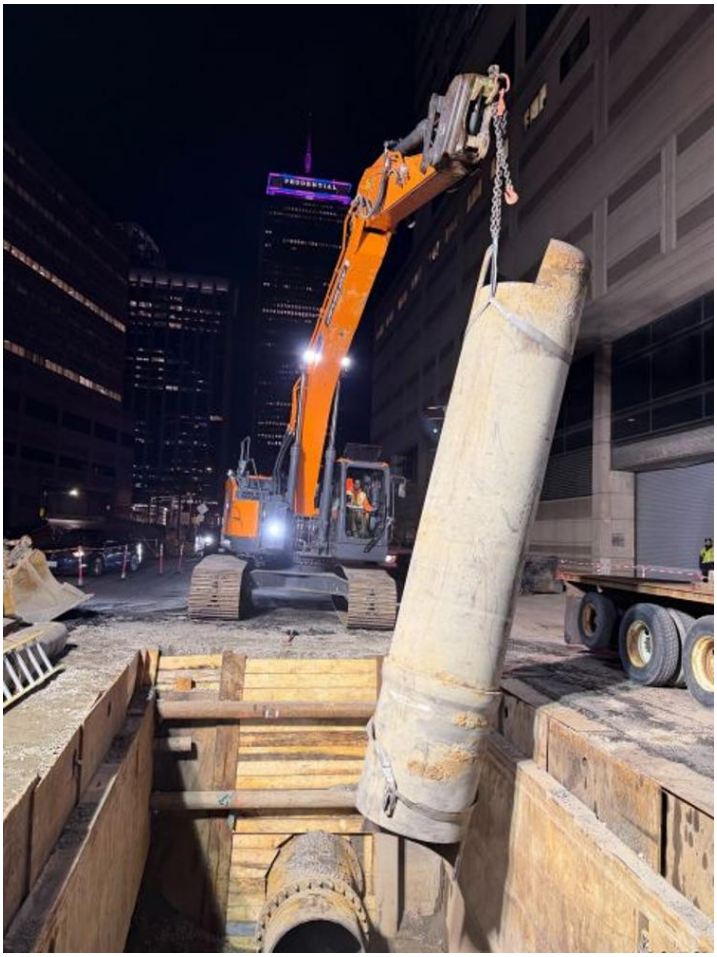
The Commission conducts an annual evaluation of its water distribution system to determine and prioritize water main replacement and rehabilitation needs. Based on this annual evaluation, staff prepares a priority list of pipes to be replaced.

Candidates are based on information and recommendations from the 2016 update of the pipe ranking system as well as water main breaks, customer complaints concerning water quality or pressure deficiency, BWSC maintenance records, pressure and fire-flow tests, machine learning artificial intelligence software and construction work planned by other agencies.

To the highest extent possible, the Commission coordinates the replacement and lining of water mains with roadway and highway construction, urban development, housing development and mass transit work planned by state or local government entities.

For example, if the City of Public Works Department (BWPD) is planning to resurface a roadway within the next few years, the Commission would make every effort to replace the older water main in that street before it is resurfaced.

The coordination of the Commission's capital programs with other scheduled infrastructure improvements minimizes temporary construction related impacts to Boston's residential neighborhoods and commercial centers.



25-308-009 Existing 42" Steel Removal

WATER REPLACEMENT

The following pages contain brief summaries of each on-going and new water replacement projects included in the 2027-2029 CIP.

PROJECTS

Engineering CCTV Contract 27-309-004: Television inspection and cleaning of sewer and drainpipes in the City of Boston for streets where water main replacement or separation work is planned, and large conduits. Construction is scheduled to commence in April 2027 and complete in December 2027. The total three-year budget is **$**560,000.

Replacement of Water Mains in the City of Boston 27-308-005: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. Construction is scheduled to commence in November 2028 and complete in June 2030**.** The total three-year budget is $2,147,000.

Replacement of Water Mains in the City of Boston 27-308-004: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. Construction is scheduled to commence in November 2028 and complete in June 2030. The total three-year budget is $2,533,300.

Replacement of Water Mains in the City of Boston 27-308-003: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. Construction is scheduled to commence in November 2028 and complete in June 2030. The total three-year budget is $2,533,300.

Replacement of Water Mains in the City of Boston 27-308-002: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. Construction is scheduled to commence in November 2028 and complete in June 2030. The total three-year budget is $2,533,300.

Replacement of Water Mains in the City of Boston 27-308-001: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. Construction is scheduled to commence in November 2028 and complete in June 2030. The total three-year budget is $2,533,300.

Water Main Renewal on Columbus Av 26-308-006: Relay of 30" Main on Columbus Avenue (Compression Fit Renewal) that have reached the end of their design life and have a history of water main breaks**.** Construction is scheduled to commence in April 2027 and complete in December 2027 The total three-year budget is $1,620,000.

Water Relay Dorchester/ City Proper 26-308-005: Relay of old water mains that have reached the end of their design life and have a history of water main breaks. Construction is scheduled to commence in November 2027 and complete in April 2030. The total three-year budget is $3,401,050.

Water Relay Mattapan, South Dorchester, and Hyde Park 26-308-004: Relay of old water mains. Construction is scheduled to commence in November 2027 and complete in April 2030. The total three-year budget is $8,971,600.

Water Relay Jamaica Plain and Roxbury 26-308-003: Relay of old water mains. Construction is scheduled to commence in November 2027 and complete in April 2030. The total three-year budget is **$**5,556,200**.**

Water Relay Dorchester 26-308-002: Relay of old water mains. The total three-year budget is $2,502,450.

Replacement of Water Mains in the City of Boston 26-308-001 Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. Construction is scheduled to commence in August 2027 and complete in November 2029. The total three-year budget is **$**4,000,000.

BWSC Unidirectional Water Flushing 26-103-005: Since 1997, the Commission has maintained a system-wide water main flushing program to ensure water quality throughout its entire water distribution system. The flushing program was initiated as part of the Commission's Biofilm Corrective Action Plan developed in response to a 1996 violation of the Total Coliform Rule, a national primary drinking water regulation. Since implementation of the water main flushing program, the Commission has had no Coliform bacteria violations. The Commission's unidirectional water main flushing program is designed to flush all pitometer sections individually and includes water main pipes less than 16-inches in diameter. Unidirectional water main flushing is achieved by closing valves to isolate water mains from the actual pipe being flushed. After isolating the desired pipe and creating one (1) intake main, hydrant(s) are flowed downstream from a dead-end valve. Water main flushing is intended to bring stronger chlorine residuals into areas where it is low and scour pipe walls of biofilm and tuberculation. Annually, the Commission flushes approximately 200 miles of water main with the intended goal of flushing 800 miles of water main over a 4-year cycle. The flushing program is conducted during the construction season (March-November) in the late evening/early morning hours to minimize disturbance to customers. The Commission has engaged the services of a professional engineering consulting firm to implement and maintain the system-wide water main flushing program. The total three-year budget is $122,500**.**

Sewer and Drain Replacement and Rehabilitation for North End 25-309-003: The intent of this project will be to rehab and replace water/sewers/drains where SSOs and other issues have occurred in order to mitigate future issues. This will be on an as needed basis due to receiving emergency design requests from the Chief Engineer and OPS during year after CIP is developed. Construction is scheduled to commence in September 2028 and complete in January 2030. The total three-year budget is $159,800.

Replacement and Rehabilitation of Water and Sewer Pipes in Allston-Brighton 25-309-002: Replacement and rehabilitation of sewer and drainpipes as identified from previous CCTV inspections. Replacement of water pipes on streets requiring sewer work. Construction is scheduled to commence in September 2027 and complete in June 2029. The total three-year budget is $1,540,000**.**

Water Works Improvements 25-308-004: Replacement and Rehabilitation of Water Pipes**.** Construction is scheduled to commence in October 2027 and complete in December 2029. The total three-year budget is $9,225,250.

Water Relay Hyde Park 25-308-003: The replacement of water mains in Hyde Park that have reached the end of their design life and have a history of water main breaks. The total three-year budget is $7,876,000.

Water Relay East Boston 25-308-002: The replacement of water mains in East Boston that have reached the end of their design life and have a history of water main breaks. The total three-year budget is $2,894,400.

Water Relay Chinatown 25-308-001: The replacement of water mains in Chinatown that have reached the end of their design life and have a history of water main breaks. The total three-year budget is $9,310,000.

South Boston Sewer Separation - Contract 5 24-309-012: Construction of new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water main systems to continue to provide the highest-level service to the community and support future development along Dorchester Avenue. Construction Contract No. 5 is one of five (5) planned contracts to construct new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community and to support the BPDA's initiative to foster future development along Dorchester Avenue. The total three-year budget is $3,972,900.

Charlestown Sewer Separation 24-309-006: Sewer Separation and water and sewer pipe replacement in Charlestown in the area known as Lost Village. Sewer separation to reduce CSO volumes. Replacement and rehabilitation of old or damaged water and sewer pipes. Construction is scheduled to commence in April 2028 and complete in December 2029. The total three-year budget is $745,000**.**

Replacement and Rehabilitation of Water, Sewers and Drains in Jamaica Plain and Roxbury 24-309-003: This project involves the rehabilitation and replacement of sewers and drains where SSOs and other issues have occurred to mitigate future overflows. Additionally, water pipes that are beyond their design life on associated streets will be replaced. Construction commenced in September 2026 and is scheduled to be completed in September 2028. The total three-year budget is $3,295,200.

Citywide R&R 24-309-002: The intent of this project will be to rehabilitate and replace water, sewers, and drains where SSOs and other issues have occurred to mitigate future issues. This will be on an as needed basis due to receiving emergency design requests from the Chief Engineer and OPS during year after CIP is developed. Construction is scheduled to commence in September 2027 and complete in November 2028. The total three-year budget is $200,000.

Water Relay in Back Bay and Rehabilitation of Drains and Sewers 24-308-003: Relay of old water mains and associated sewers. Construction commenced in November 2026 and is scheduled to be completed in April 2029. The total three-year budget is $6,953,350.

Water Main Replacement Heath Street 24-308-002: Replacement of 12-inch and 36-inch water mains and replacement/rehabilitation of associated sewers and drains. Awaiting CCTV videos for approximately 3,085 lf of sewer and drainpipe, which may alter replacement v. lining footages. Water main breaks and age criterion. Sewer and drain work developed from CCTV inspection video review. Project schedule highly dependent on permitting and coordination with the MBTA for work near South Huntington Avenue. Construction commenced in October 2026 and is scheduled to be completed in December 2028. The total three-year budget is $2,894,400.

South Boston Sewer Separation - Contract 4 23-309-012: Construction of new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water main systems to continue to provide the highest-level service to the community and support future development along Dorchester Avenue. Construction Contract No. 4 is one of five (5) planned contracts to construct new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community and to support the BPDA's initiative to foster future development along Dorchester Avenue. The total three-year budget is $3,153,600.

Replacement and Rehabilitation of Sanitary Sewer and Drainpipes in Fenway 23-309-011: Replacement and Rehabilitation of associated water pipes**.** The total three-year budget is $1,991,850.

Replacement and Rehabilitation in Dorchester, Mattapan, & Roxbury 23-309-005: Replacement and rehabilitation of water pipes. The total three-year budget is $53,600.

Sewer and Drain Replacement and Rehabilitation 23-309-003: Associate replacement and rehabilitation of waterpipes. The total three-year budget is $1,600,000.

East Boston Sewer Separation Phase IV - Contract 2 23-309-002: Construction of new storm drains to separate approximately 230 acres in East Boston and is a continuation of sewer separation work that has been implemented in the neighborhood over the last 20 years. The project also includes upgrades of the sanitary sewer and water main systems to continue to provide the highest-level service to the community. Construction Contract No. 2 is one of five (5) planned contracts to construct new storm drains to separate approximately 230 acres in East Boston to further mitigate CSOs and improve water quality. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community. Construction Contract No. 2 is one of five (5) planned contracts to construct new storm drains to separate approximately 230 acres in East Boston to further mitigate CSOs and improve water quality. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community. The total three-year budget is $4,506,600.

Water Relay City Proper 23-308-003: The replacement of water mains in City Proper that have reached the end of their design life and have a history of water main breaks. The total three-year budget is $2,950,000.

Water Relay South End Phase IV 23-308-002: Relay of old water mains. The total three-year budget is $2,328,350.

Water Relay Lower Roxbury 23-308-001: Replacement of Water Mains. The total three-year budget is $490,400.

South Boston Separation Contract 3 22-309-012: Construction Contract No. 3 is one of five (5) planned contracts to construct new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community and to support the BPDA's initiative to foster future development along Dorchester Avenue. The total three-year budget is $2,764,800.

Upper Roxbury R&R 22-309-003: Replacement of Water Mains. The total three-year budget is $1,159,200.

Replacement of Sewer and Drains Citywide, R&R 22-309-002: The intent of this project will be to rehabilitate and replace sewers and drains where SSOs have occurred in order to mitigate future overflows. The total three-year budget is **$**476,000.

East Boston Sewer Separation Phase IV 21-309-002: Construction of new storm drains to separate approximately 230 acres in East Boston and is a continuation of sewer separation work that has been implemented in the neighborhood over the last 20 years. The project also includes upgrades of the sanitary sewer and water main systems to continue to provide the highest-level service to the community. Construction Contract No. 1 is one of five (5) planned contracts. The total three-year budget is $4,752,800.

Replacement and Rehabilitation of Sewer and Drainpipes and Replacement of Water Mains in Roxbury 21-309-001: The contract includes associated water relay for pipes within project limits. Sewer and Storm Drain Improvements in Hyde Park based on the findings of the CMOM group which identified sewer and drain defects in this area. The total three-year budget is $800,000.

Citywide R&R 20-309-006: Sewer Replacement/Rehabilitation based on findings of the CMOM group, some Water Main Replacement. The total three-year budget is $329,600.

South End Water Improvements Phase III 20-308-002: Water Relay for 6,770 feet of 12- and 16-inch water mains on Shawmut Avenue, Waltham, Hanson and Bond Street in the South End. As part of the design work, associated sewers and drains found in disrepair will be structurally rehabilitated or replaced if found damaged beyond rehabilitation. Currently, the project also includes the lining of 3,215 linear feet of 10" thru 24" sewer pipe and the rehabilitation of 755 linear feet of 15" and 18" drainpipe. The total three-year budget is **$**3,791,200.

Water Relay Beacon Hill - Addendum 3 19-308-004: Replacement and rehabilitation of water mains in Beacon Hill. The total three-year budget is $1,771,200.

Water Replacement and Rehabilitation w/associated Sewer and Drain R&R 19-308-002: Replacement and rehabilitation of water, sewers and drains in Charlestown. The total three-year budget is $7,083,200.

Citywide R&R 18-309-003: Replacement of sanitary sewer, storm drain and combined sewer pipes in need of structural repair as identified by various Commission inspection programs. Replacement of water main associates with sewerage works. The total three-year budget is $4,027,200.

Replacement of Water Mains Replacement in Fenway/Kenmore - 18-309-001: Replacement of Water Mains on Jersey Street, Peterborough Street, and Public Alley 931. The total three-year budget is $521,600.

PROJECT CASH FLOW

Table 11 on page 39 presents cash flow expenditures for Water Replacement Projects for the period from 2027-2029. The total expenditures for the three-year period are $151.1 million, of which $50.1 million is allocated in 2027.

Table 11 - Water Replacement

Description	Contract	Prog	Class	2027	2028	2029	2027-2029
Engineering CCTV Contract	27-309-004	10100	RATE	560,000			560,000
East Boston Sewer Separation Phase IV - Contract 4	27-309-002	10100	BONDS			600,000	600,000
East Boston Sewer Separation Phase IV - Contract 4	27-309-002	10100	SRF			1,547,000	1,547,000
Replacement of Water Mains in Back Bay	27-308-005	10100	RATE		267,200	2,266,100	2,533,300
Replacement of Water Mains in Roxbury	27-308-004	10100	RATE		267,200	2,266,100	2,533,300
Replacement of Water Mains in Jamaica Plain and West Roxbury	27-308-003	10100	RATE		267,200	2,266,100	2,533,300
Replacement of Water Mains in Allston/Brighton	27-308-002	10100	RATE		267,200	2,266,100	2,533,300
Replacement of Water Mains in Dorchester	27-308-001	10100	RATE		267,200	2,266,100	2,533,300
Water Main Renewal on Columbus Av	26-308-006	10100	RATE	1,620,000	-	-	1,620,000
Water Relay Dorchester/ City Proper	26-308-005	10100	BONDS	-	160,800	2,390,200	2,551,000
Water Relay Dorchester/ City Proper	26-308-005	10100	RATE	-	53,600	796,450	850,050
Water Relay Mattapan, South Dorchester, and Hyde Park	26-308-004	10100	BONDS	748,000	3,987,200	4,236,400	8,971,600
Water Relay Jamaica Plain and Roxbury	26-308-003	10100	BONDS	-	833,600	4,722,600	5,556,200
Water Relay Dorchester	26-308-002	10100	BONDS	-	305,600	1,571,650	1,877,250
Water Relay Dorchester	26-308-002	10100	RATE	-	101,600	523,600	625,200
Replacement of Water Mains in Back Bay/Beacon Hill, Central, Fenway/Kenmore and South End	26-308-001	10100	RATE	-	1,280,000	2,720,000	4,000,000
Engineering Design, 3 year Services	26-206-xxx	10100	BONDS	900,000	1,200,000	1,275,000	3,375,000
Engineering Design, 3 year Services	26-206-002	10100	BONDS	960,000	1,200,000	1,275,000	3,435,000
BWSC Unidirectional Water Flushing	26-103-005	10100	RATE	40,000	40,000	42,500	122,500
Sewer and Drain Replacement and Rehabilitation for North End	25-309-003	10100	RATE	-	27,200	132,600	159,800
Replacement and Rehabilitation of Water and Sewer Pipes AB	25-309-002	10100	RATE	-	1,540,000	-	1,540,000
Water Works Improvements in Dorchester and Mattapan	25-308-004	10100	LWSAP	868,000	4,052,000	4,305,250	9,225,250
Water Relay Hyde Park	25-308-003	10100	BONDS	4,974,000	2,902,000		7,876,000
Water Relay East Boston	25-308-002	10100	RATE	300,000	1,147,200	-	1,447,200
Water Relay East Boston	25-308-002	10100	RATE	300,000	1,147,200	-	1,447,200
Water Relay Chinatown	25-308-001	10100	BONDS	400,000	4,320,000	4,590,000	9,310,000
South Boston Sewer Separation - Contract 5	24-309-012	10100	BONDS	-	-	2,091,000	2,091,000
South Boston Sewer Separation - Contract 5	24-309-012	10100	SRF	-	-	1,881,900	1,881,900
Charlestown Sewer Separation	24-309-006	10100	BONDS	-	320,000	425,000	745,000
Replacement and Rehabilitation of Water, Sewers and Drains JPROX	24-309-003	10100	RATE	2,240,000	1,055,200	-	3,295,200
Citywide R&R	24-309-002	10100	RATE	-	200,000	-	200,000
Water Relay Back Bay/ Rehabilition of Drains and sewer	24-308-003	10100	RATE	3,349,600	2,149,600	1,454,150	6,953,350
Water Main Replacement Heath Street	24-308-002	10100	BONDS	3,200,000	6,400,000	2,400,000	12,000,000
South Boston Sewer Separation - Contract 4	23-309-012	10100	BONDS	3,153,600	-	-	3,153,600
Replacement and rehabilitation of sanitary sewer and drain pipes in Fenway	23-309-011	10100	BONDS	650,400	650,400	691,050	1,991,850
R&R in Dor, Matt, & Rox	23-309-005	10100	BONDS	53,600	-	-	53,600
Sewer and Drain Replacement and Rehabilitation	23-309-003	10100	BONDS	400,000	1,200,000	-	1,600,000
East Boston Sewer Separation Phase IV - Contract 2	23-309-002	10100	BONDS	300,000	881,600	318,750	1,500,350
East Boston Sewer Separation Phase IV - Contract 2	23-309-002	10100	SRF	740,000	1,480,000	786,250	3,006,250
Water Relay City Proper	23-308-003	10100	LWSAP	-	-	850,000	850,000
Water Relay City Proper	23-308-003	10100	RATE	-	400,000	1,700,000	2,100,000
Water Relay South End Phase IV	23-308-002	10100	BONDS	-	989,600	1,338,750	2,328,350
Water Relay Lower Roxbury	23-308-001	10100	RATE	490,400	-	-	490,400
S. Bos Sep Contr 3	22-309-012	10100	BONDS	2,764,800	-	-	2,764,800
Upper Roxbury R&R	22-309-003	10100	RATE	1,159,200	-	-	1,159,200
Replacement of Sewer and Drains Citywide, R&R	22-309-002	10100	RATE	476,000	-	-	476,000
East Boston Sewer Separation Phase IV	21-309-002	10100	RATE	4,752,800	-	-	4,752,800
Replacement and Rehabilitation of Sewer and Drain Pipes and Replacement of Water Mains in Roxbury	21-309-001	10100	RATE	400,000	400,000	-	800,000
Citywide R&R	20-309-006	10100	RATE	164,800	164,800	-	329,600
South End Water Improvements Phase III	20-308-002	10100	RATE	2,211,200	1,580,000	-	3,791,200
Water Relay Beacon Hill - Addendum 3	19-308-004	10100	LWSAP	1,771,200	-	-	1,771,200
Water Replacement and Rehabilitation w/associated Sewer and Drain R&R	19-308-002	10100	BONDS	7,083,200	-	-	7,083,200
Citywide R&R	18-309-003	10100	RATE	2,543,200	1,484,000	-	4,027,200
Peterborough and Jersey	18-309-001	10100	BONDS	521,600	-	-	521,600

WATER DISTRIBUTION SYSTEM SPECIAL PROJECTS

DESCRIPTION AND JUSTIFICATION

Special Projects includes funding for a variety of system planning and other studies, professional services associated with the rehabilitation and operation of the water system, and for the engineering design and construction of the installation or replacement of water mains associated with bridge improvement projects undertaken by other agencies. Also included are the associated design and engineering services required for the implementation of capital projects and the permanent paving fees for ongoing and future capital improvements.

Overall, the objectives of the Water Distribution System Special Projects are to extend the design life of water mains, reduce long-term maintenance and repair costs, reduce the occurrence of main breaks and the resulting impacts, conserve drinking water and coordinate improvements with other agencies to minimize disruptions.

PROJECTS

Roadway Restoration of BWSC Excavations 27-309-007: Permanent paving restoration of streets and sidewalks excavated during construction activities. The total three-year budget is $4,000,000.

Columbus Avenue Bridge 27-308-007: The replacement or lining of the 24-inch and 20-inch steel pipes. There have been multiple main breaks. The bridge is currently out of service due to a leak above the highway. Mains are needed for fire flows and redundancy. The total three-year budget is $1,600,000.

Southampton Street Water Mains 27-308-006: The replacement or lining of 2 water pipes that lie beneath the Southeast Expressway and Amtrak in South Boston and Roxbury. The 16-inch water pipe is broken and out of service. Mains are needed for fire flows and redundancy. The total three-year budget is $850,000.

Paving and Sidewalk Restoration 27-303-008, 27-303-009 & 27-303-012, 28-303-008, 28-303-009 & 28-303-012, 29-303-008, 29-303-009 & 29-303-012: The total three-year budget is $9,793,500.

Evaluation of Water Transmission Mains: The total three-year budget is $2,460,000.

Water Pipe Testing Services 26-206-004: Professional services contract for lab and analysis on water pipes. This professional services contract provides metallurgical testing of pipes. The information provided by the testing is to be used in conjunction with water main breaks to forecast future CIP work. The total three-year budget is $160,000.

Capital Surveying Services, 3 year 26-206-001: The total three-year budget is $171,000.

Traffic Management Services 25-206-004: Professional services contract for traffic management design. In support of the capital plan, on occasion it is necessary to develop traffic management plans for construction phasing of water, sewer, and drain replacement projects. This project allows the Commission to utilize transportation engineers to develop these plans in accordance with BTD regulations. If the construction will occur on state agency roadways, the traffic plans can be produced to meet state agency requirements. The contract is scheduled to be signed by the end of the year and last three years. The three-year budget is $107,200.

Lead Program for Schools and Childcare Facilities 23-206-006: This funding will be used to develop and implement a long-term program for lead sampling of the tap water of public and private schools and licensed childcare facilities within the Commission's service area. The total three-year budget is $396,000.

Water System Model Update and Asset Evaluation 21-206-004: Water System Model Update and asset evaluation. Design Services to update water distribution model and perform asset management. The total three-year budget is $20,000.

Water Main Valve Replacement 20-308-006: Replacement of water main valves, citywide. These improvements are based on the findings of the Special Structures group which identified faulty valves when surveyed and exercised. Schedule of work is subject to BPWD approval during winter moratorium, which may delay work. The total three-year budget is $1,476,800.

Hydrants: Replacement of hydrants. The total three-year budget is $1,695,500.

City Permits: This project involves obtaining street opening permits from the City of Boston for excavation activities performed by the Commission's crews and contractors in the public way. The City of Boston Public Works Department issues the street opening permits for which the Commission reimburses the City. The Boston Water and Sewer Commission is required by the City of Boston's regulations to obtain street opening permits for any construction activity that will require the removal of existing street and/or sidewalk material in the public way. This budget accounts for the annual invoicing of permits. The total three-year budget is $4,165,000.

TV Truck: Purchase of a TV inspection truck for sewers and drains. The total three-year budget is $560,000.

Streets	2027	2028	2029	2027-2029 Total
Permits	1,360,000	1,360,000	1,445,000	4,165,000
Paving	3,040,000	3,192,000	3,561,500	9,793,500
Total	**4,400,000**	**4,552,000**	**5,006,500**	**13,958,000**

PROJECT CASH FLOW

Table 12 on page 42 illustrates the cash flow information for the Water Special Program for 2027-2029. Three-year expenditure for this program total $27.5 million, of which $11.8 million is allocated in 2027.

Table 12 - Water Special

Description	Contract	Class	2027	2028	2029	2027-2029
Roadway Restoration of BWSC Excavations	27-309-007	RATE	3,840,000	160,000		4,000,000
Columbus Avenue Bridge	27-308-007	BONDS		1,600,000		1,600,000
Southampton Street Water Mains	27-308-006	BONDS			850,000	850,000
Paving and Sidewalk Restoration	27-303-008, 27-303-009 &	RATE	3,040,000	3,192,000	3,561,500	9,793,500
Evaluation of Water Transmission Mains	27-206-xxx	BONDS	480,000	960,000	1,020,000	2,460,000
Water Pipe Testing Services	26-206-004	BONDS	80,000	80,000	-	160,000
Capitial Surveying Services 3year	26-206-001	BONDS	60,000	60,000	51,000	171,000
Traffic Management Services	25-206-004	BONDS	53,600	53,600	-	107,200
Lead Program for Schools and Childcare Facilities	23-206-006	BONDS	396,000	-	-	396,000
Water System Model Update and asset evaluation	21-206-004	BONDS	20,000	-	-	20,000
Water Main Valve Replacement	20-308-006	RATE	1,476,800	-	-	1,476,800
Hydrants		BONDS	400,000	624,000	671,500	1,695,500
City Permits		BONDS	1,360,000	1,360,000	1,445,000	4,165,000
TV Truck		BONDS	560,000	-	-	560,000

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THE SEWER SYSTEM

The Commission owns and operates a system for the collection and transport of wastewater in the City of Boston.

The original backbone of the sewer system was the Boston Main Drainage System ("BMDS"). The BMDS was constructed from 1877 to 1884 under the direction of a special committee established by the City of Boston for that specific purpose. The original system consisted of five combined interceptors, the Calf Pasture pumping station and the Dorchester Bay Tunnel. Neither the pumping station, nor the tunnel is in use today. The BMDS interceptors were initially designed to carry a peak dry weather sanitary flow together with an allowance for stormwater.

In 1988, construction of the New Boston Main Interceptor and the New East Side Interceptor were completed, replacing portions of the original system. The interceptors serve the sewer needs of downtown Boston, the South End, Roxbury, Dorchester, and South Boston. These improvements have increased capacity, eliminated dry weather overflows, and decreased the occurrences and volume of wet weather overflows.

Other collection facilities provide sewer services to different parts of the City. Charlestown is served by a separated system, except for one small area. East Boston, City Proper, South Boston and Roxbury are served by combined systems; however, major portions of each area have been or are in the process of being separated. The South End has been separated under a program initiated by the City's urban renewal program and continued by the Commission where feasible and cost effective. Allston/Brighton, Roslindale, West Roxbury, Hyde Park, Mattapan and portions of Dorchester and Jamaica Plain, all of which are in the southern part of the City, are served by separate systems.

The backbone of the Commission's sewer is several major interceptors, which convey flows from the Commission's system to the MWRA's interceptors. The New East Side Interceptor, the Boston Main Interceptor completed in 1988 and the New Albany St. Interceptor completed in 1990, serve Downtown, South Boston, the South End and Dorchester. The other interceptors and the neighborhoods they serve are:

Interceptor	Neighborhood Served
Boston Main Interceptor	South End, Roxbury and North Dorchester
Dorchester Interceptor	Dorchester and Neponset
East Side Interceptor	Downtown and North End
Faneuil Street Trunk Sewer	Allston/Brighton
Roslindale Interceptor	Roslindale and West Roxbury
South Boston Interceptors	South Boston
Southwest Corridor Interceptor	Roxbury and Jamaica Plain
Stony Brook Interceptor	Roxbury
Stony Brook Valley Sewer	Roxbury and Jamaica Plain
West Side Interceptor	Back Bay, Beacon Hill and West End
Talbot Avenue High Level Sewer	Dorchester, Mattapan and Roslindale
Hyde Park Trunk Sewer	Hyde Park
East Boston Low Level Sewer	East Boston
Dorchester High Level Sewer	Mattapan and Hyde Park

The sewer system is comprised of the following:

Appurtenances		Sewer Main City Wide		TYPE OR DESIGNATION	
Catch Basins	30,589	Total Linear Feet	8,136,646	Combined Sewer	137 Miles
Manholes	50,587	Total Linear Miles	1,541	Combined Sewer	12 Miles
Regulators	142	Pumping Stations	9	Overflow Sanitary Sewer Storm Drain	718 Miles 674 Miles
Tide gates	200	Total Linear Feet	8,136,646	Combined Sewer	137 Miles

OBJECTIVES

Primary Objectives of the 2027-2029 Sewer Collection System are:

- Implement and manage contracts affiliated with the Consent Decree
- Implement Green Infrastructure Projects
- Comply with the requirements of the Commission's National Pollutant Discharge Elimination System ("NPDES") and Municipal permits
- Minimize infiltration and inflow into the sanitary system, which will increase system capacity and decrease treatment costs
- Reduce combined sewer overflows by reducing wet weather inflows and minimizing sea water intrusions
- Provide sufficient hydraulic capacity for current and projected flows
- Protect the structural integrity of the wastewater collection and storm drainage systems
- Coordinate sewer system improvements with the related projects of other public agencies

OBJECTIVES

The objectives of the Sewer System Capital Improvement Program for 2027-2029 are to provide uninterrupted wastewater transport and storm drainage services to the residents, businesses, and visitors of Boston and to improve water quality in Boston Harbor and its tributary waters. The 2027-2029 CIP has five major programs for the Sewer System: the sewer renewal and replacement program, the increased capacity program, the sewer separation program, the infiltration/inflow program, and sewer special program.

The Commission's CMOM Program utilizes closed circuit TV camera inspection equipment and software to assess the structural and maintenance condition of pipes and identify areas of excessive infiltration and inflow. The System Condition Risk Enhanced Assessment Model "SCREAM" software system is utilized to prioritize these inspection results for repair and replacement by Commission crews and under its Capital Improvement Program. The CMOM Program includes the cleaning and inspection of approximately 85 miles of sewer pipe in 2027. This along with TV inspection under other programs will result in the inspection of 90 miles of pipe in 2027 with a goal of completing the entire system over a ten-year period.

The sewer system objectives will be carried out through the continuation of the following program activities renewal and replacement of sewer pipes, rehabilitation of sewers and drains, separation of combined sewers, improvements that will result in an increase in system capacity, an infiltration/inflow reduction program including the disconnection of downspouts and several special projects necessary to improve the efficiency and effectiveness of the sewer system.

In addition, all sewers and drains on streets where water mains are to be replaced will be inspected prior to replacement. All defective pipes will then be replaced or rehabilitated in the water main replacement contract under the 2027-2029 Sewer System Capital Program.

WASTEWATER PROJECT HIGHLIGHTS

- New Boston Main Interceptor
- South Boston Separation
- Design of Dorchester Interceptor
- West Roxbury and Hyde Park SSES
- Sewer Improvements in Charlestown
- Sewer R&R in Fenway
- Replacement and Rehabilitation of Sewer in Dorchester and South Boston
- Replacement and Rehabilitation of Sewers and Drains in Allston/Brighton, Fenway/Kenmore, Jamaica Plain and Roxbury
- Charlestown SSES
- Dorchester, Mattapan and Roxbury R&R

PROJECT CASH FLOW

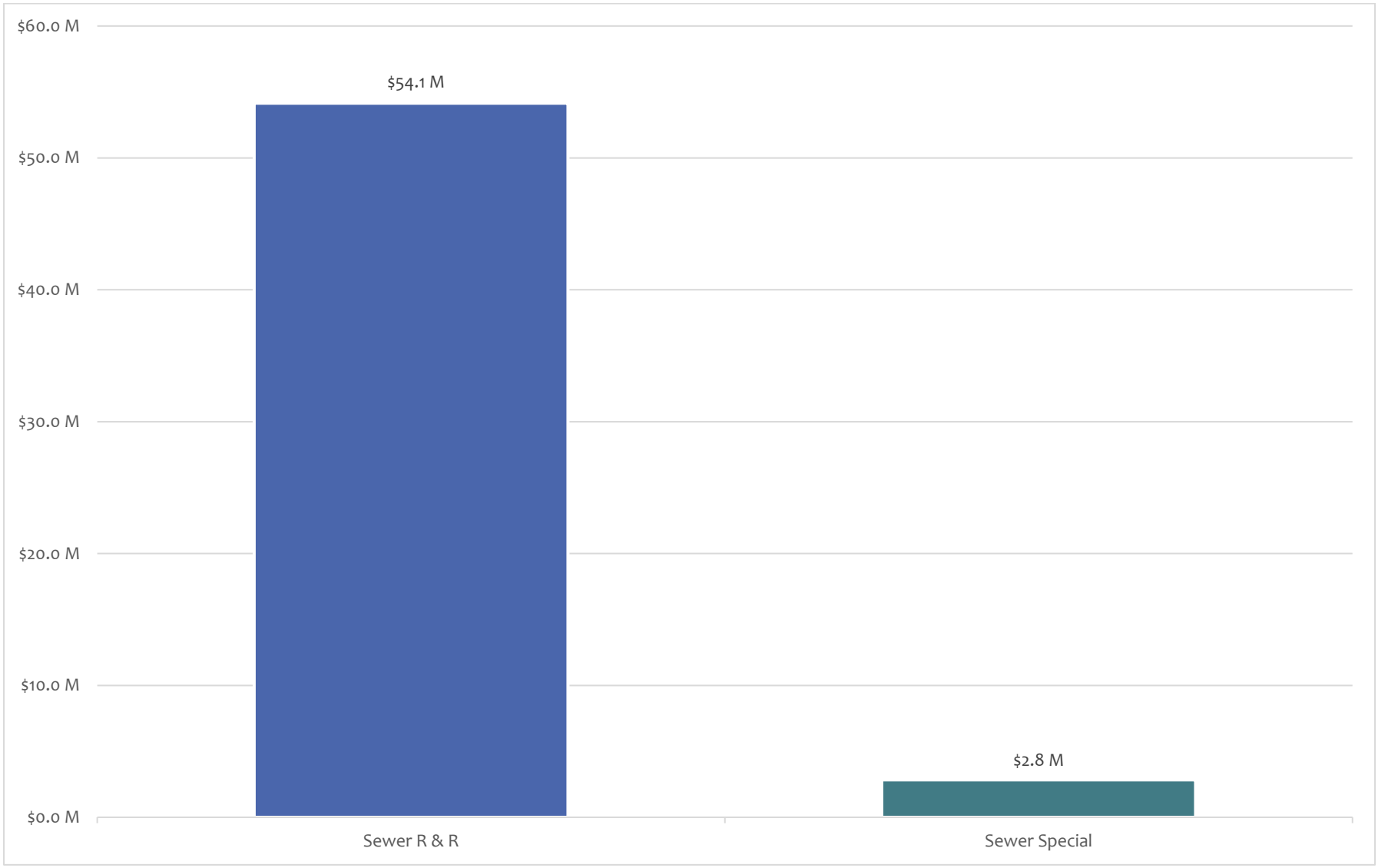
Table 13 on page 47 illustrates Sewer Distribution System by Category. Graph 10 on page 49 illustrates the capital expenditures by program of the Total Sewer Program for 2027-2029. Three-year total expenditures are $144.8 million, of which $57.0 million is allocated in 2027. Graph 12 on page 51 illustrates Sewer Expenditure by Funding Source for 2027-2029.

TABLE 13 - SEWER DISTRIBUTION SYSTEM BY CATEGORY

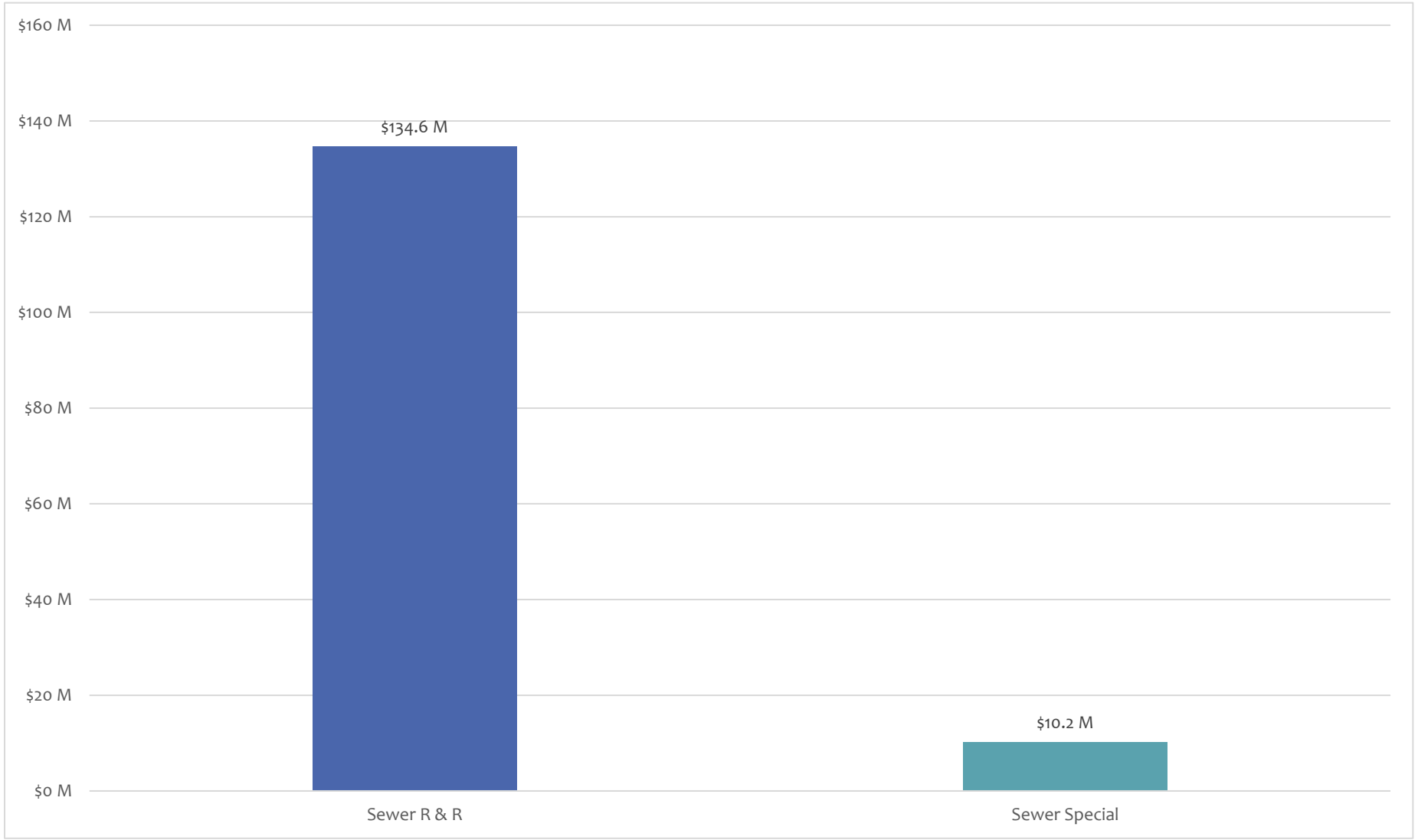
Capital Improvement Program
2027 - 2029
Sewer Total

	2027	2028	2029	Total 2027 - 2029
Sewer Replacement	**54,142,600**	**52,013,800**	**28,453,725**	**134,610,125**
BONDS	21,573,400	18,629,000	3,022,600	43,225,000
MWRA II	7,308,800	4,378,400	1,071,000	12,758,200
RATE	13,450,400	23,458,400	17,279,800	54,188,600
SRF	11,810,000	5,548,000	7,080,325	24,438,325
Sewer Special	**2,835,200**	**4,332,800**	**3,054,050**	**10,222,050**
BONDS	1,349,600	835,200	674,050	2,858,850
MWRA II	240,000	960,000	170,000	1,370,000
RATE	710,400	537,600	510,000	1,758,000
SRF	535,200	2,000,000	1,700,000	4,235,200
Total				
BONDS	22,923,000	19,464,200	3,696,650	46,083,850
MWRA II	7,548,800	5,338,400	1,241,000	14,128,200
RATE	14,160,800	23,996,000	17,789,800	55,946,600
SRF	12,345,200	7,548,000	8,780,325	28,673,525
Total	56,977,800	56,346,600	31,507,775	144,832,175

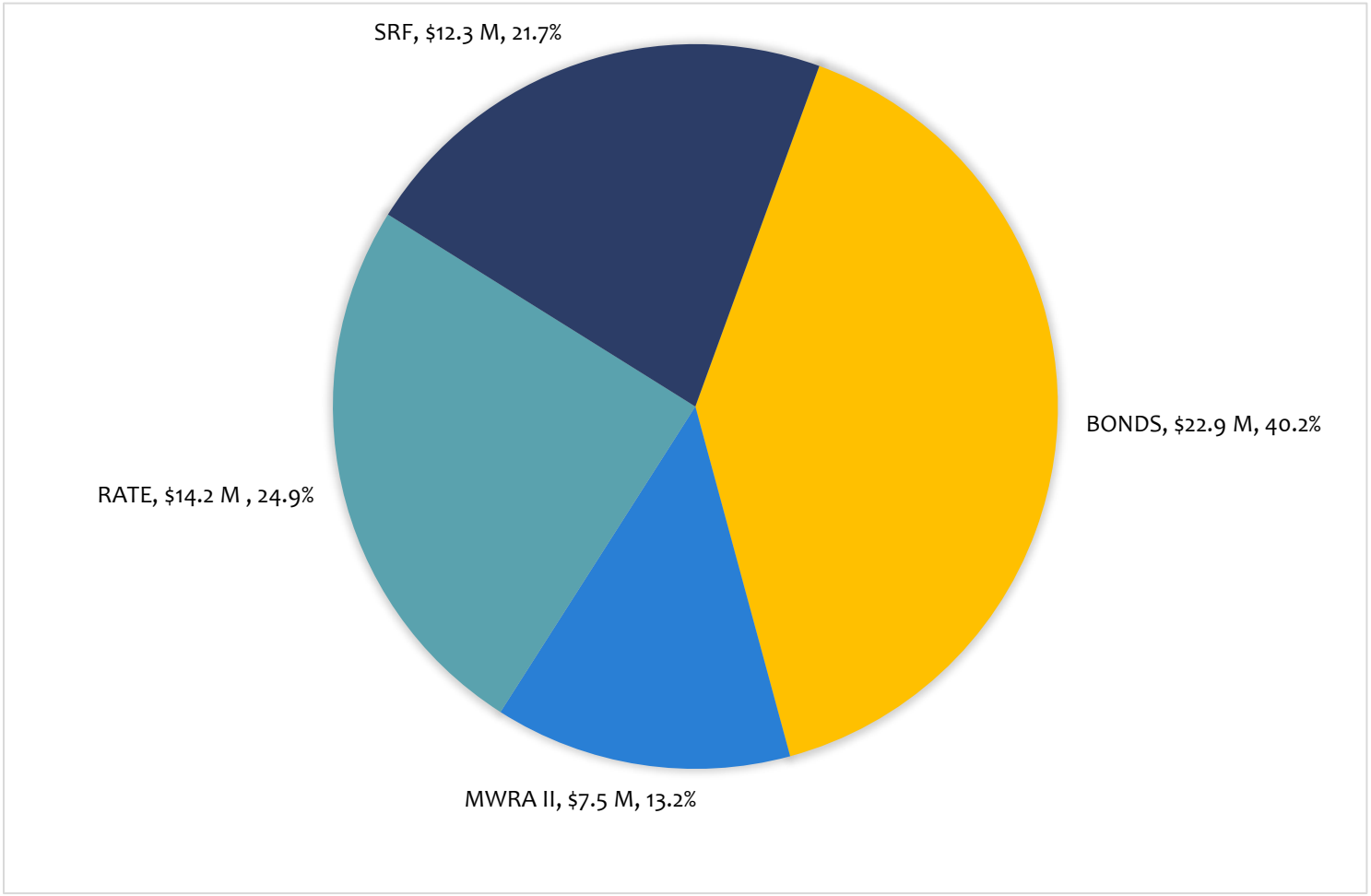
Graph 9 – 2027 Total Sewer Expenditures by Program $57.0 Million



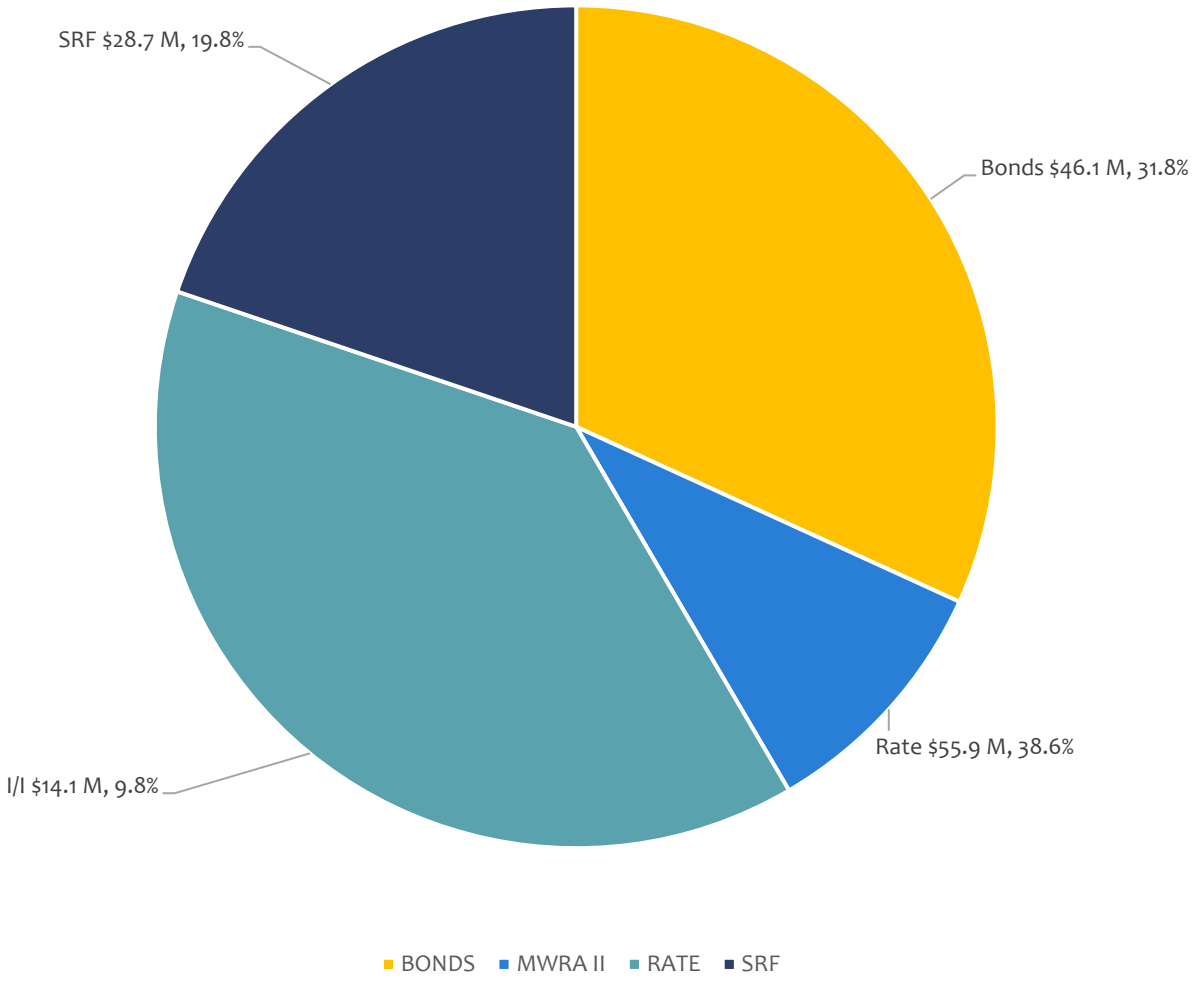
Graph 10 – 2027 - 2029 Total Sewer Expenditures by Funding Source $144.8 Million



Graph 11 – 2027 Total Sewer Expenditures by Funding Source $57.0 Million



Graph 12 - 2027 - 2029 Sewer Expenditures by Funding Source $144.8 Million





New Boston Main Interceptor - Pipe Jacking Pit and Shaft in South Boston

SEWER RENEWAL AND REPLACEMENT

DESCRIPTION AND JUSTIFICATION

Renewal and replacement projects involve the trenchless rehabilitation or replacement of sewers and storm drains in response to persistent malfunction, structural deterioration, excessive emergency repairs and other operation and maintenance problems.

The Commission identifies sewer and drain lines that require renewal or replacement through television inspections, sewer system evaluation surveys and routine maintenance activities. Renewal and replacement projects are coordinated with the Boston DPWD's Roadway Resurfacing and Reconstruction Programs to ensure that the Commission avoids excavating newly resurfaced street, unless under emergency circumstances.

The objectives of the renewal and replacement program are to ensure the operability of sewers and storm drains, protect the structural integrity of the sewer system, reduce long-term capital and maintenance costs and minimize disruptions of service caused by sewerage back-ups or other related problems.

PROJECTS

Sewer Lateral Testing and CCTV Inspection of Sewers and Drains 27-309-015: The new lateral testing contract will enable the Commission to continue testing sewer laterals for leakage and continue televising sewers and drains to identify illicit sanitary connections to the storm drain and structural deficiencies which may allow sewage to enter storm drains (cross contamination). The total three-year budget is $518,000**.**

CCTV Inspections of Sewers and Storm Drains/CMOM - Future Contracts 27-309-009, 27-309-010, 28-309-009, 28-309-010, 29-309-009, 29-309-010: These projects entail the inspection of sewers and drains through the use of closed-circuit TV cameras utilizing the SCREAM coding system to assess the structural condition of the pipes. Approximately seventy (70) miles of various sized pipes will be cleaned and inspected annually with a goal of completing the entire system over a 10 year period. These projects entail the inspection of sewers and drains through the use of closed-circuit TV cameras utilizing the SCREAM coding system to assess the structural condition of the pipes. Approximately seventy (70) miles of various sized pipes will be cleaned and inspected annually with a goal of completing the entire system over a 10-year period. The total three-year budget is $2,583,000.

East Boston Sewer Separation Phase IV - Contract 3 27-309-002: Construction of new storm drains to separate approximately 230 acres in East Boston and is a continuation of sewer separation work that has been implemented in the neighborhood over the last 20 years. The project also includes upgrades of the sanitary sewer and water main systems to continue to provide the highest-level service to the community. Construction Contract No. 3 is one of five (5) planned contracts to construct new storm drains to separate approximately 230 acres in East Boston to further mitigate CSOs and improve water quality. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community. The total three-year budget is $1,101,000.

Citywide Interceptor Inspection and Cleaning Phase II 27-309-001: Television inspection and cleaning of interceptors. The total three-year budget is $4,110,00.

Replacement of Water Mains in Back Bay 27-308-005: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. The total three-year budget is $158,750.

Replacement of Water Mains in Roxbury 27-308-004: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. The total three-year budget is $158,750.

Replacement of Water Mains in Jamaica Plain and West Roxbury 27-308-003: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. The total three-year budget is $158,750.

Replacement of Water Mains in Allston/Brighton 27-308-002: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. The total three-year budget is $158,750.

Replacement of Water Mains in Dorchester 27-308-001: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. The total three-year budget is $158,750.

Charlestown Sewer and Drain Construction 26-309-011: This project will modify the sewer and drainage system to eliminate infiltration and inflow into the Charlestown sanitary sewer system. The Commission under contract 23-206-001 is conducting a sewer system evaluation survey in Charlestown. The project has two discrete parts. The parts are field investigation to identify and quantify specific sources of infiltration and inflow into the sanitary sewer system, followed by preparation construction documents for modification to sewer and drainage system that will eliminate infiltration and inflow into the sanitary sewer system. The total three-year budget is **$**5,625,000**.**

Cleaning and Television Inspection of Sewers and Drains in the City of Boston II 26-309-010: This project entails the inspection of sewers and drains through the use of closed circuit TV cameras utilizing the SCREAM coding system in order to assess the structural condition of the pipes. Approximately thirty five (35) miles of various sized pipes will be cleaned and inspected. The total three-year budget is $258,400.

Cleaning and Television Inspection of Sewers and Drains in The City of Boston I 26-309-009: This project includes the inspection of sewers and drains through the used of closed circuit TV (CCTV) cameras and the SCREAM coding system to assess the structural condition of segments throughout the city. Approximately thirty five (35) miles of pipes varying in size will be cleaned and inspected for this contract. The total three-year budget is $277,600**.**

Sewer Separation/Outflow 26-309-008: Correction of sanitary building connections that are found connected to storm drains. The Commission conducts investigation to locate building connections that are incorrectly connected to storm drains. This contract will involve reconnection of these laterals to sanitary sewers. The Consent Decree requires that the Commission eliminate direct raw sewage disharges to bodies of water. This contract will continue the work done on previous contracts that removed raw sewage connections from storm drains from past investigations, which will further reduce the amount of untreated sewage currently flowing to brooks, rivers, ponds, and the harbor. The total three-year budget is $1,231,050.

Replacement and Rehabilitation of Sewer and Drainpipes in various locations as identified by operations and CMOM 26-309-005: Replacement and Rehabilitation of Sewer and Drainpipes in various locations as identified by operations and CMOM. The total three-year budget is

Replacement and Rehabilitation of Sewer and Drainpipes in various locations as identified by operations and CMOM. 26-309-003: Replacement and Rehabilitation of Sewer and Drainpipes in various locations as identified by operations and CMOM. The total three-year budget is $3,202,650.

Replacement and Rehabilitation of Sewers and Drains in Roslindale 26-309-001: The total three-year budget is $1,600,300.

Water Relay Dorchester/ City Proper 26-308-005: Relay of old water mains. The associated replacement of sewers and drains that have reached the end of their design life. The total three-year budget is $770,000.

Water Relay Dorchester 26-308-002: Relay of old water mains**.** The total three-year budget is $229,250.

Replacement of Water Mains in the City of Boston 26-308-001: Relay old water mains. Water pipes have reached end of predicted design life, and many have history of breaks. Nearby sewer and drain work is expected to be included. The total three-year budget is $250,000.

Inflow and Infiltration Discovery 25-309-011: This project entails the inspection of sewers and drains through the use of closed circuit TV cameras utilizing the SCREAM coding system in order to assess for inflow and infiltration in sewer and drain lines citywide with a priority in the Back Bay/Beacon Hill neighborhood. This contract will include lining and grouting work as part of its scope. The total three-year budget is $84,800.

NBMI Phase III 25-309-005: This is the third and final phase of the rehabilitation of the New Boston Main Interceptor, a 102” diameter reinforced concrete pipe that services approximately 3,000 acres including downtown Boston. This pipe was installed in the 1980’s and had experienced severe hydrogen sulfide corrosion and required structural rehabilitation. Work under this phase includes the sliplining of approximately 2,080 linear feet of 102” diameter reinforced concrete pipe with 90” fiberglass reinforced pipe. Additionally, this contract includes cleaning and televising of existing conduits and the rehabilitation three special manholes and 8 typical manholes. The total three-year budget is $10,400,000.

Sewer and Drain Replacement and Rehabilitation for North End 25-309-003: The intent of this project will be to rehab and replace water/sewers/drains where SSOs and other issues have occurred in order to mitigate future issues. This will be on an as needed basis due to receiving emergency design requests from the Chief Engineer and OPS during year after CIP is developed. The total three-year budget is $5,971,500.

Replacement and Rehabilitation of Water and Sewer Pipes AB 25-309-002: Replacement and rehabilitation of sewer and drainpipes as identified from previous CCTV inspections. Replacement of water pipes on streets requiring sewer work. The total three-year budget is $2,162,700.

Citywide Interceptor Inspection and Cleaning Phase I 25-309-001: Television inspection and cleaning of interceptors. The total three-year budget is $4,080,000.

Water Relay Hyde Park 25-308-003: Relay of old water mains Water main breaks and age criterion. The total three-year budget is $2,486,000.

Water Relay Chinatown 25-308-001: Relay of old water mains Water main breaks and age criterion. The total three-year budget is $2,050,000.

Sewer Lateral Testing and CCTV Inspection of Sewers and Drains 24-309-015: The new lateral testing contract will enable the Commission to continue testing sewer laterals for leakage and continue televising sewers and drains to identify illicit sanitary connections to the storm drain and structural deficiencies which may allow sewage to enter storm drains (cross contamination). The total three-year budget is **$**64,000.

South Boston Sewer Separation - Contract 5 24-309-012: Construction of new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water main systems to continue to provide the highest-level service to the community and support future development along Dorchester Avenue. Construction Contract No. 5 is one of five (5) planned contracts to construct new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community and to support the BPDA's initiative to foster future development along Dorchester Avenue. The total three-year budget is $3,031,950.

Charlestown Sewer Separation 24-309-006: Sewer Separation and water and sewer pipe replacement in Charlestown in the area known as Lost Village. Sewer separation to reduce CSO volumes. Replacement and rehabilitation of old or damaged water and sewer pipes. The total three-year budget is $1,400,000.

Replacement and Rehabilitation of Water, Sewers and Drains in Jamaica Plain and Roxbury 24-309-003: This project involves the rehabilitation and replacement of sewers/drains where SSOs and other issues have occurred in order to mitigate future overflows. Additionally, water pipes that are beyond their predicted design life on associated streets will be replaced. The total three-year budget is **$**3,441,600.

Citywide R&R 24-309-002: The intent of this project will be to rehab and replace water/sewers/drains where SSOs and other issues have occurred in order to mitigate future issues. This will be on an as needed basis due to receiving emergency design requests from the Chief Engineer and OPS during year after CIP is developed. The total three-year budget is **$**5,720,000.

Citywide R&R 24-309-001: The intent of this project will be to rehab and replace sewers/drains where SSOs and other issues have occurred in order to mitigate future overflows. The total three-year budget is $4,050,000.

Sewage and Drainage Works Improvements 24-308-14A: The replacement and rehabilitation of water, sewer and drainpipes. The total three-year budget is $5,102,400.

Water Relay Back Bay/ Rehabilitation of Drains and sewer 24-308-003: Associated replacement of sanitary sewer, storm drain and combined sewer pipes. The total three-year budget is $868,250.

Water Main Replacement Heath Street 24-308-002: Replacement of 12-inch and 36-inch water mains and replacement/rehabilitation of associated sewers and drains. Awaiting CCTV videos for approximately 3,085 ft of sewer and drain pipe, which may alter replacement v. lining footages. Water main repairs;

sewer and drain work developed from CCTV inspection video review. Project schedule highly dependent on permitting and coordination with the MBTA for work near South Huntington Avenue. The total three-year budget is $3,200,000.

Sewer Drain Sensor Deployment Phase 2 24-206-005: The purpose of this project is to continue the real-time sewer and drain level monitoring program currently deployed in Commission's system. The monitoring program tracks water levels in 75 sewer and drain pipes across the city and displays the data on a web-based dashboard. The dashboard and data is used to inform operation and planning objectives. This project will expand the number of sensors deployed in the sewer and drain system from 75 to 125. The total three-year budget is $421,600.

South Boston Sewer Separation - Contract 4 23-309-012: Construction Contract No. 4 is one of five (5) planned contracts to construct new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community and to support the BPDA's initiative to foster future development along Dorchester Avenue. The total three-year budget is $3,800,000.

Replacement and Rehabilitation of Sanitary Sewer and Drainpipes in Fenway 23-309-011: Replacement and rehabilitation of sanitary sewer and drainpipes. The pipes in this contract have been inspected and reviewed and are found to be in poor condition. Associated water work. The total three-year budget is $2,298,100.

Separation of House Laterals 23-309-008: The total three-year budget is $16,000.

R&R in Dorchester, Mattapan, & Roxbury 23-309-005: Sewer and Drain Replacement and Rehabilitation in Dorchester, Mattapan and Roxbury. The intent of this project will be to rehab and replace sewers/drains where SSOs and other issues have occurred in order to mitigate future overflows. The total three-year budget is $962,400.

Sewer and Drain Replacement and Rehabilitation 23-309-003: Sewer and Drain Replacement and Rehabilitation Citywide. The total three-year budget is $6,400,000.

East Boston Sewer Separation Phase IV - Contract 2 23-309-002: Construction Contract No. 2 is one of five (5) planned contracts to construct new storm drains to separate approximately 230 acres in East Boston to further mitigate CSOs and improve water quality. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community. The total three-year budget is $11,269,375.

Liner in Allston-Brighton 23-309-001: Associated replacement of sanitary sewer, storm drain and combined sewer pipes. The total three-year budget is $772,000.

Water Relay City Proper 23-308-003: Associated replacement of sanitary sewer, storm drain and combined sewer pipes. The total three-year budget is $850,000.

Water Relay South End Phase IV 23-308-002: Associated replacement of sanitary sewer, storm drain and combined sewer pipes. The total three-year budget is $775,850.

Sewer R&R in Low Roxbury 23-308-001: Associated replacement of sanitary sewer, storm drain and combined sewer pipes. The total three-year budget is $539,200.

South Boston Sewer Separation - Contract 3 - 22-309-012: Construction Contract No. 3 is one of five (5) planned contracts to construct new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community and to support the BPDA's initiative to foster future development along Dorchester Avenue. The total three-year budget is $3,334,400.

R&R in Upper Roxbury 22-309-003: Associated replacement of sanitary sewer, storm drain and combined sewer pipes. The total three-year budget is $1,582,400.

Replacement of Sewer and Drains Citywide, R&R 22-309-002: The intent of this project will be to rehab and replace sewers/drains where SSOs have occurred in order to mitigate future overflows. The total three-year budget is $2,759,200.

Replacement and Rehabilitation of Sewer and Drainpipes and Replacement of Water Mains in Roxbury 21-309-001: Sewer and Storm Drain Improvements in Hyde Park based on the findings of the CMOM group which identified sewer and drain defects in this area. The contract also includes associated water relay for pipes within project limits. The total three-year budget is $2,350,400.

R&R in Allston Brighton, Fenway-Kenmore, Jamaica Plain, and Roxbury 20-309-007: Includes sanitary sewer & drain replacement and rehabilitation in Allston-Brighton, Fenway-Kenmore, Jamaica Plain, and Roxbury. The total three-year budget is $598,400.

Citywide R&R 20-309-006: Sewer Replacement/Rehabilitation based on findings of the CMOM group, some water main replacement. The total three-year budget is $5,136,800.

South End Water Improvements Phase III 20-308-002: Water Relay for 6,330 feet of 12- and 16-inch water mains on Shawmut Avenue, Waltham, Hanson and Bond Street in the South End. As part of the design work, associated sewers and drains found in disrepair will be structurally rehabilitated or replaced if found damaged beyond rehabilitation. At this time, the project also includes the lining of 1,600 linear feet of 10" thru 24" sewer pipe and the rehabilitation of 590 linear feet of 15" and 18" drainpipe. The total three-year budget is $691,200.

Water Relay Beacon Hill 19-308-004: Associated replacement of sanitary sewer, storm drain and combined sewer pipes. The total three-year budget is $728,800.

Water Replacement and Rehabilitation w/associated Sewer and Drain R&R 19-308-002: This project will replace 8,800 feet of 8- and 12-inch water mains on Bunker Hill Street, Chelsea Street, School Street, Vine Street, and Bartlett Street in Charlestown. This contract is being programmed as a response to a request by the Operations Division for Water Relay on Chelsea Street, in conjunction with break history (School Street), and scoring on cast iron mains in Bunker Hill and Vine Streets. The total three-year budget is $1,967,200.

Citywide R&R 18-309-003: Replacement and rehabilitation of sewers and drains**.** The total three-year budget is $4,319,200.

Replacement of Water Mains Replacement in Fenway/Kenmore 18-309-001: Replacement of Water Mains on Jersey Street, Peterborough Street, and Public Alley 931. The total three-year budget is $1,174,400.

Roxbury SSES: This project will entail an Infiltration and Inflow Sewer System Evaluation Survey (SSES) to identify sources of extraneous flow in the Commission's wastewater collection system. The SSES will include flow monitoring, manhole inspection, smoke testing, dye testing and television inspection of sewer pipes. Findings will be provided to the Commission in a report with recommendations for capital improvements to eliminate sources of extraneous flows. The total three-year budget is $2,000,000.

West Roxbury & Hyde Park Sewer & Drain Rehabilitation and Replacement: Replacement of sanitary sewer, storm drain. The total three-year budget is $3,200,000.

PROJECT CASH FLOW

Table 14 on page 60 presents the cash flow expenditures for the Sewer Renewal and Replacement Program. Total 2027-2029 expenditures are $134.6 million, of which $54.1 million is allocated in 2027.

Table 14 - Sewer Renewal & Replacement

Description	Contract	Class	2027	2028	2029	2027-2029
Sewer Lateral Testing and CCTV Inspection of Sewers and Drains	27-309-015	BONDS	259,000	259,000		518,000
CCTV Inspections of Sewers and Storm Drains/CMOM - Future Contracts	27-309-009, 27-309-010 28-309-009, 28-309-010 29-309-009, 29-309-010	MWRA II	504,000	1,008,000	1,071,000	2,583,000
East Boston Sewer Separation Phase IV - Contract 4	27-309-002	SRF			1,101,000	1,101,000
Citywide Interceptor Inspection and Cleaning Phase II	27-309-001	RATE		2,240,000	1,870,000	4,110,000
Replacement of Water Mains in Back Bay	27-308-005	RATE		16,800	141,950	158,750
Replacement of Water Mains in Roxbury	27-308-004	RATE		16,800	141,950	158,750
Replacement of Water Mains in Jamaica Plain and West Roxbury	27-308-003	RATE		16,800	141,950	158,750
Replacement of Water Mains in Allston/Brighton	27-308-002	RATE		16,800	141,950	158,750
Replacement of Water Mains in Dorchester	27-308-001	RATE		16,800	141,950	158,750
Charlestown Sewer and Drain Construction	26-309-011	BONDS	-	5,200,000	425,000	5,625,000
Cleaning and Television Inspection of Sewers and Drains in the City of Boston II	26-309-010	MWRA II	258,400	-	-	258,400
Cleaning and Television Inspection of Sewers and Drains in The City of Boston I	26-309-009	MWRA II	277,600	-	-	277,600
Sewer Separation/Outflow	26-309-008	RATE	440,000	440,000	351,050	1,231,050
Replacement and Rehabilitaion of Sewer and Drain pipes in various locations as identified by operations and CMOM.	26-309-005	RATE	-	-	-	-
Replacement and Rehabilitaion of Sewer and Drain pipes in various locations as identified by operations and CMOM.	26-309-003	RATE	-	1,552,800	1,649,850	3,202,650
East Boston Sewer Separation Phase IV - Contract 3	26-309-002	SRF	-	-	-	-
Replacement and Rehabilitation of Sewers and Drains in Roslindale	26-309-001	RATE	-	616,000	984,300	1,600,300
Water Relay Dorchester/ City Proper	26-308-005	BONDS	-	42,400	535,500	577,900
Water Relay Dorchester/ City Proper	26-308-005	RATE	-	13,600	178,500	192,100
Water Relay Dorchester	26-308-002	BONDS	-	33,600	138,550	172,150
Water Relay Dorchester	26-308-002	RATE	-	11,200	45,900	57,100
Replacement of Water Mains in Back Bay/Beacon Hill, Central, Fenway/Kenmore and South End	26-308-001	RATE	-	80,000	170,000	250,000
Inflow and Infiltration Discovery	25-309-011	MWRA II	84,800	-	-	84,800
NBMI Phase III	25-309-005	BONDS	8,000,000	2,400,000		10,400,000
Sewer and Drain Replacement and Rehabilitation for North End	25-309-003	RATE	-	1,016,000	4,955,500	5,971,500
Replacement and Rehabilitation of Water and Sewer Pipes AB	25-309-002	RATE	159,200	856,000	1,147,500	2,162,700
Citywide Interceptor Inspection and Cleaning Phase I	25-309-001	RATE	480,000	2,240,000	1,360,000	4,080,000
Water Relay Hyde Park	25-308-003	BONDS	916,000	1,570,000		2,486,000
Water Relay Chinatown	25-308-001	RATE	400,000	800,000	850,000	2,050,000
Sewer Lateral Testing and CCTV Inspection of Sewers and Drains	24-309-015	BONDS	64,000	-	-	64,000
South Boston Sewer Separation - Contract 5	24-309-012	SRF	-	-	3,031,950	3,031,950
Charlestown Sewer Separation	24-309-006	BONDS	-	720,000	680,000	1,400,000
Replacement and Rehabilitation of Water, Sewers and Drains JPROX	24-309-003	RATE	1,120,000	2,321,600	-	3,441,600
Citywide R&R	24-309-002	RATE	1,144,000	3,300,000	1,276,000	5,720,000
Citywide R&R	24-309-001	RATE	1,600,000	1,600,000	850,000	4,050,000
Sewage and Drainage Works Improvements	24-308-14A	MWRA II	3,280,000	1,822,400	-	5,102,400
Water Relay Back Bay/ Rehabilition of Drains and sewer	24-308-003	RATE	418,400	418,400	31,450	868,250
Water Main Replacement Heath Street	24-308-002	BONDS	1,200,000	2,000,000	-	3,200,000
Sewer Drain Sensor Deployment Phase 2	24-206-005	BONDS	297,600	124,000	-	421,600
South Boston Sewer Separation - Contract 4	23-309-012	SRF	3,800,000	-	-	3,800,000
Replacement and rehabilitation of sanitary sewer and drain pipes in Fenway	23-309-011	BONDS	750,400	750,400	797,300	2,298,100
Seperation of House Laterals	23-309-008	RATE	16,000	-	-	16,000
R&R in Dor, Matt, & Rox	23-309-005	BONDS	962,400	-	-	962,400
Sewer and Drain Replacement and Rehabilitation	23-309-003	BONDS	1,600,000	4,800,000	-	6,400,000
East Boston Sewer Separation Phase IV - Contract 2	23-309-002	SRF	2,774,000	5,548,000	2,947,375	11,269,375
Liner in ALBR	23-309-001	MWRA II	772,000	-	-	772,000
Water Relay City Proper	23-308-003	RATE	-	-	850,000	850,000
Water Relay South End Phase IV	23-308-002	BONDS	-	329,600	446,250	775,850
Sewer R&R in Low Rox	23-308-001	RATE	539,200	-	-	539,200
S. Bos Sep Contr 3	22-309-012	SRF	3,334,400	-	-	3,334,400
R&R in Upper Roxbury	22-309-003	BONDS	1,582,400	-	-	1,582,400
Replacement of Sewer and Drains Citywide, R&R	22-309-002	MWRA II	438,400	-	-	438,400
Replacement of Sewer and Drains Citywide, R&R	22-309-002	RATE	419,200	-	-	419,200
East Boston Sewer Separation Phase IV	21-309-002	SRF	1,901,600	-	-	1,901,600
Replacement and Rehabilitation of Sewer and Drain Pipes and Replacement of Water Mains in Roxbury	21-309-001	RATE	1,175,200	1,175,200	-	2,350,400
East Boston Sewer Separation Phase IV	21-206-003	DEDII	864,000	864,000	918,000	2,646,000
R&R in AB, FK, JP, Rox	20-309-007	MWRA II	598,400	-	-	598,400
Citywide R&R	20-309-006	RATE	2,054,400	3,082,400	-	5,136,800
South End Water Improvements Phase III	20-308-002	MWRA II	375,200	268,000	-	643,200
South End Water Improvements Phase III	20-308-002	RATE	28,000	20,000	-	48,000
Water Relay Beacon Hill - Addendum 3	19-308-004	RATE	728,800	-	-	728,800
Water Replacement and Rehabilitation w/associated Sewer and Drain R&R	19-308-002	BONDS	1,967,200	-	-	1,967,200
Citywide R&R	18-309-003	RATE	2,728,000	1,591,200	-	4,319,200
Peterborough and Jersey	18-309-001	BONDS	1,174,400	-	-	1,174,400
West Roxbury & Hyde Park Sewer & Drain Rehabilitation and Replacement		BONDS	2,800,000	400,000	-	3,200,000
Roxbury SSES		MWRA II	720,000	1,280,000	-	2,000,000

SEWER SYSTEM SPECIAL

DESCRIPTION AND JUSTIFICATION

The Sewer System Special Projects category provides funding for a variety of system planning and other studies and for professional services associated with the rehabilitation and operation of the sewer system.

Overall, the objectives of the Sewer System Special Projects are to extend the design life of the Commission's wastewater facilities, comply with the requirements of the NPDES Permit regulations and plan for future sewer system projects.

PROJECTS

On-Call Geotechnical Design Services: Professional services contract to provide geotechnical services to aid in the design of CIP projects in citywide. Further the Commission's compliance with the Consent Decree. Prior studies conducted by the Commission have shown that the Dorchester Interceptor has insufficient capacity to convey flows during large storm events. The purpose of this project is to provide construction monitoring services for construction of approximately 9,300 linear feet of new 60-inch diameter relief sewer to improved hydraulic of the sewer system. The design is nearing completion and Commission's Construction Engineering Division staffing shortage will make it difficult to adequately monitor construction. The total three-year budget is $205,000.

Citywide Illicit Connections Phase 6 25-206-001: Illicit sanitary connections to storm drains are prohibited under the Commission's NPDES Stormwater Permit. Also, under the Consent Decree with EPA the Commission is required to identify and eliminate illicit connections and annually screen all of the Commission's storm drain and combined sewer outfalls. The total three-year budget is $543,200.

Inundation Model Update and Maintenance 24-206-003: The purpose of this program is to utilize the updated Commission's Sewer and Drain Models to update the inundation model, add new LIDAR data and coastal sea level and storm surge data and rerun the updated inundation model to determine what areas of the city may experience inundation with the implementation of the City's flood barriers, implementation of the Coastal Stormwater discharge recommendations and stormwater detention recommendations. The project will also prepare conceptual designs for locations inland to address potential inland inundation. The total three-year budget is $288,000.

On-Call Geotechnical Design Services 24-206-002: Professional services contract to provide geotechnical services to aid in the design of CIP projects in citywide. Further the Commission's compliance with the Consent Decree. The total three-year budget is $72,800.

West Roxbury and Hyde Park Sewer System Evaluation Survey 23-206-005: This project involves engineering services to conduct a sewer system evaluation survey (SSES) in West Roxbury and Hyde Park. The SSES project will identify sources of extraneous flow in the wastewater system and may include flow monitoring, manhole inspections, smoke testing, dyed water testing, and television inspection of sewer pipes to identify defects. Defects may include cracked or broken pipe that allow groundwater to enter the sewer system and drainage structures such as catch basins, yard drains and building roof drains that are connected to the sanitary sewer system. Sewer defects found will be provided to the Commission in a report that includes recommendation for preparation of construction

drawing for repair or replacement of defective infrastructure. Based on the recommendations and cost-effective analysis the Commission will authorize the preparation of construction of documents repair or replacement. "The Massachusetts Department of Environmental Protection (DEP) developed regulations requiring sewer system operators to create and implement a long-term infiltration and inflow (I/I) reduction plan to remove extraneous flows from the wastewater collection system. The I/I Master Plan was completed in May of 2017. The I/I Master Plan recommends that the Commission conduct sewer system evaluation surveys in sections of the wastewater collection system exhibiting excessive flows. This project is intended to identify sources of extraneous flows in the wastewater collection system serving West Roxbury and Hyde Park. The total three-year budget is $240,000.

Sewer Drain Model Update 22-206-011: The purpose of this project is to update and recalibrate the Commission's Sewer and Drain model. Utilizing models that are up to date and are representative of the Commissions infrastructure is critical to long term planning goals and to meet regulatory milestones. The total three-year budget is $135,200.

South Boston Sewer Separation 16-206-003: Installation of New Storm Drain, Sanitary Sewers and Water Mains in South Boston. The total three-year budget is $720,000.

Dorchester Interceptor Storage Tank Design: This project entails engineering services for design and preparation construction document suitable for public bidding. The engineering firm will prepare bid documents include plans, specification and cost estimates for construction of a tank and appurtenances for the temporary storage excess wastewater flows that occur in strategic locations during extreme storm events. The Dorchester Interceptor SSO Control Plan, completed by Kleinfelder in December of 2021 evaluate several alternatives to reduce the sanitary sewer overflows (SSO), during extreme storms events, in sections of the city served by the Dorchester Interceptor. The selected alternative was construction of a 60-inch diameter relief sewer and storage tank, that will retain excess flow and slowly release it back into the wastewater system after the storm event has passed. The total three-year budget is $4,100,000.

Owner Correction of Illicit Connections: Correction of illicit sanitary connections to storm drains are prohibited under the Commission's NPDES Stormwater Permit. The total three-year budget is $19,600.

CCTV Inspections for Tidal Infiltration: This project involves CCTV inspections of sanitary sewer and combined sewer in sections of the City with high groundwater level resulting from tide water levels. This modified SSES project will identify sources of extraneous flow in the wastewater system by closed circuit television inspection of sewers and combined sewer. Defects may include cracked or broken pipe that allow groundwater to enter the sewer system. The defects found will be evaluated and included in a capital improvements design project to rehabilitate or replace the cracked and broken pipe. The total three-year budget is $1,130,000.

City Of Boston Casting Fees: This project involves the payment to the City of Boston's roadway and sidewalk reconstruction contractors for the repair or replacement of the Commission's iron castings during the paving of the City of Boston streets or pouring of sidewalks by the Boston Public Works Department. The Commission is required to pay the City of Boston's contractors for the repairs and/or replacement of the Commission's iron castings as a result of the permanent restoration of streets or sidewalks under the City contracts. The total three-year budget is $1,470,000.

Summer St Pump: Upgrades/replacement of mechanical components/equipment/flood protection. The total three-year budget is $243,750.

Trilling Way Pump Station: Upgrades/replacement of mechanical components/equipment. The total three-year budget is $269,500.

Union Park Pump Station: Upgrades/replacement of mechanical components, equipment, gates, structure, Cyber Security. The total three-year budget is $1,505,000.

PROJECT CASH FLOW

Table 15 on page 64 illustrates the cash flow expenditures for Sewer Special Projects for the period 2027-2029. The total expenditures for the Sewer Special program are $10.2 million, of which $2.8 million is allocated in 2027.

TABLE 15 - SEWER SPECIAL

Description	Contract	Prog	Class	2027	2028	2029	2027-2029
On-Call GeoTechnical Design Services	27-206-xxx	20500	BONDS	40,000	80,000	85,000	205,000
Citywide Illicit Connections Phase 6	25-206-001	20500	BONDS	362,400	180,800	-	543,200
Inundation Model Update and Maintenance	24-206-003	20500	RATE	230,400	57,600	-	288,000
On-Call GeoTechnical Design Services	24-206-002	20500	BONDS	72,800	-	-	72,800
West Roxbury and Hyde ParkSewer System Evaluation Survey	23-206-005	20500	MWRA II	240,000	-	-	240,000
Sewer Drain Model Update	22-206-011	20500	SRF	135,200	-	-	135,200
South Boston Sewer Separation	16-206-003	20500	DEDII	720,000	-	-	720,000
Summer St Pump		20500	BONDS	100,000	80,000	63,750	243,750
Trilling Way Pump Station		20500	BONDS	88,000	88,000	93,500	269,500
Union Park Pump Station		20500	BONDS	680,000	400,000	425,000	1,505,000
Dorchester Interceptor - Relief Sewer Construction Monitoring		20500	SRF				-
Owner Correction of Illicit Connections		20500	BONDS	6,400	6,400	6,800	19,600
CCTV Inspections for Tidal Infiltration		20500	MWRA II	-	960,000	170,000	1,130,000
City Of Boston Casting Fees		20500	RATE	480,000	480,000	510,000	1,470,000
Dorchester Interceptor Storage Tank Design		20500	SRF	400,000	2,000,000	1,700,000	4,100,000

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SUPPORT PROJECTS

Various Support Projects are included in the 2027-2029 CIP, which the Commission firmly believes will improve the overall efficiency of Commission's functions and enhance its ability to collect revenues and track information. Funds are also allocated for software licenses and upgrades, hardware and peripheral equipment, metering, and vehicles.

Primary Objectives of the 2027-2029 Support Category are as follows:

- Upgrade of Automatic Meter Reading System Data Base
- Replacement of Garage Floor
- Replacement of Commission Vehicles

Support Projects are divided into three sections. These sections are:

- Metering
- Information Technology
- Administrative Equipment

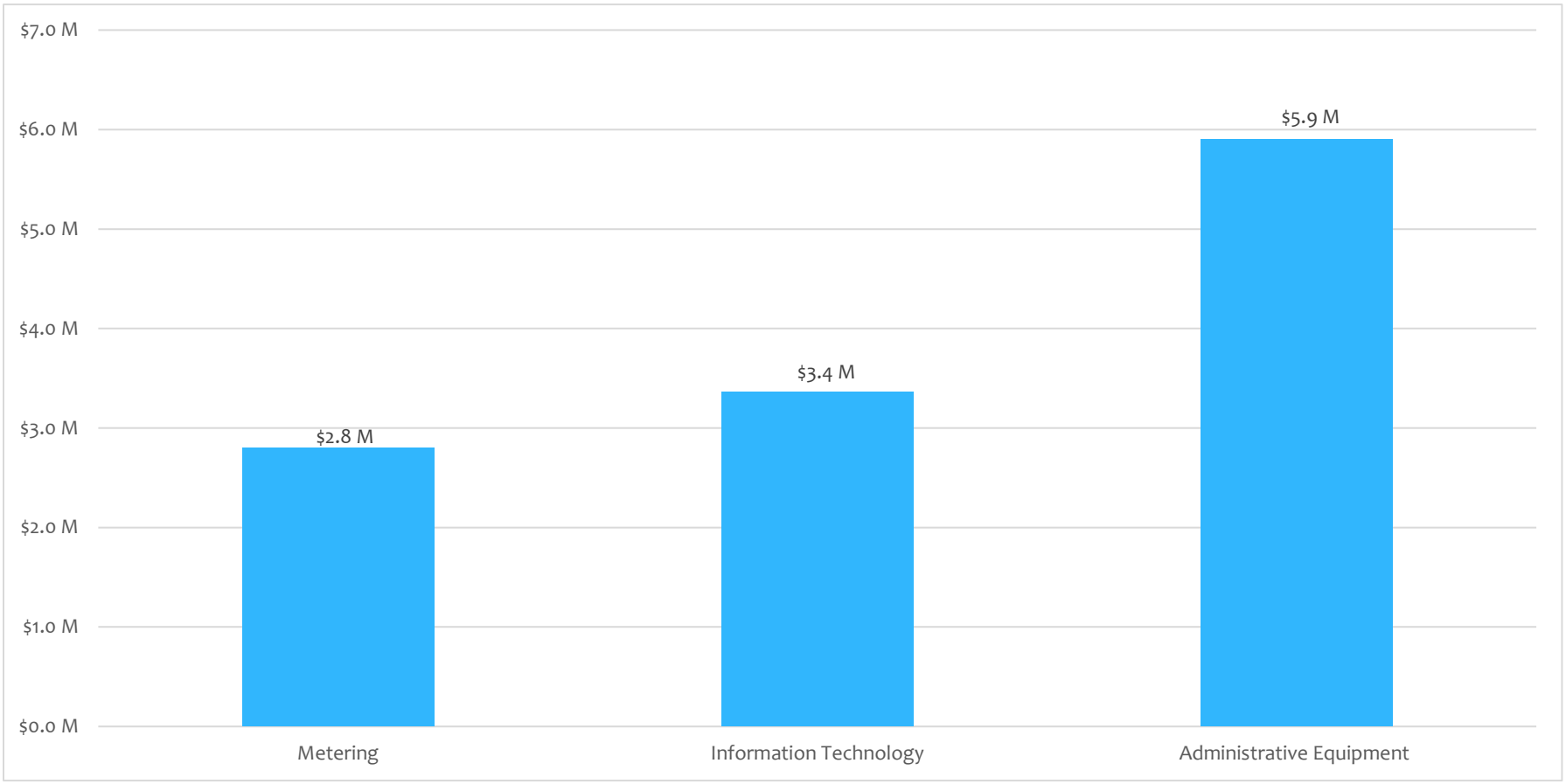
Table 16 on page 66 illustrates the Support Projects in the 2027-2029 Capital Improvement Program total $32.0 million, of which $12.0 million is allocated for 2027. Graph 14 on page 68 illustrates the Total Support expenditures for 2027-2029. Graph 13 on page 67 illustrates Support Distributions Spending by category for 2027.

Table 16 - Support Category

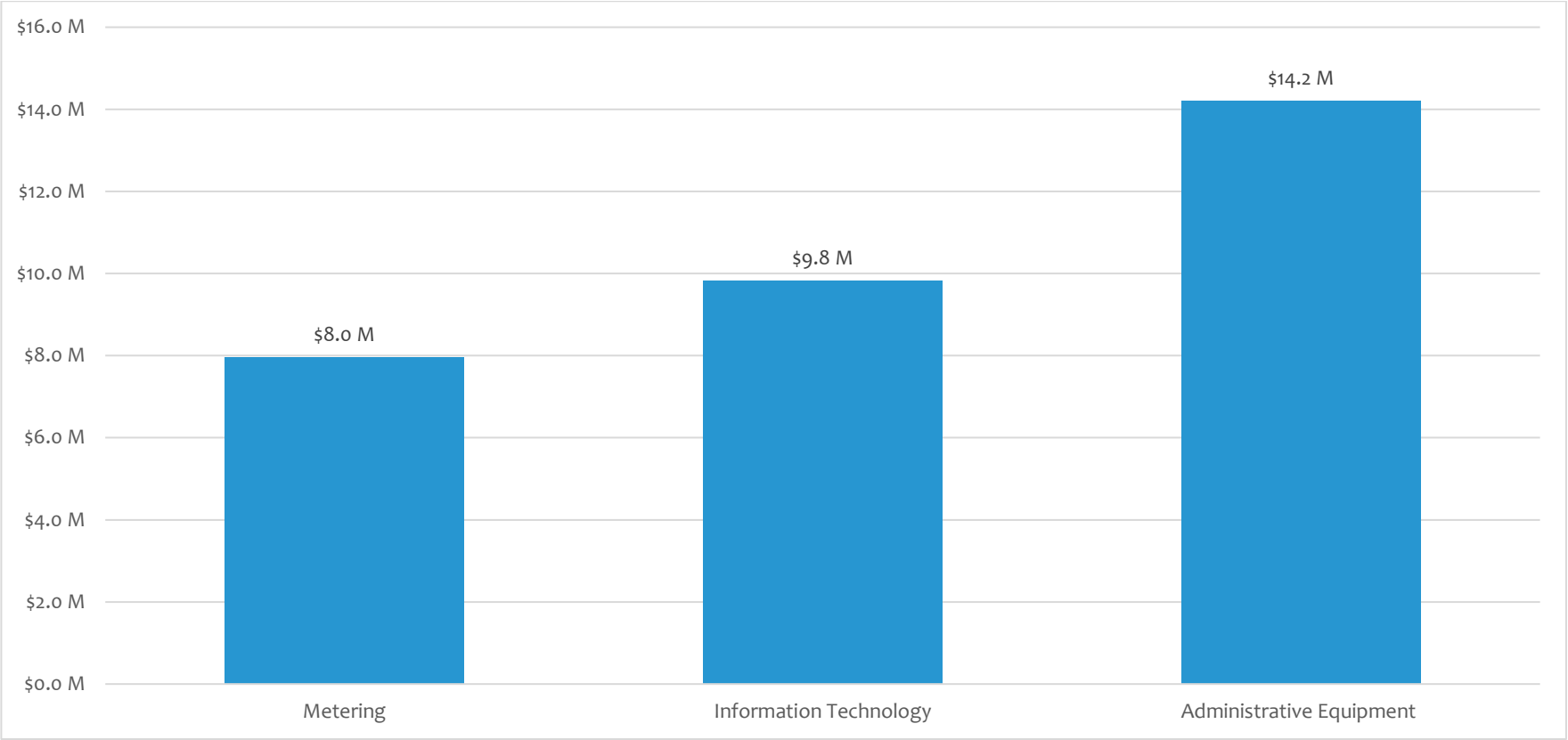
Capital Improvement Program
2027 - 2029
Support Total

	2027	2028	2029	Total 2027 - 2029
Metering	2,800,000	2,800,000	2,350,000	7,950,000
BWSC Bonds	2,800,000	2,800,000	2,350,000	7,950,000
Information Technology	3,360,000	3,240,000	3,230,000	9,830,000
BWSC Bonds	3,360,000	3,240,000	3,230,000	9,830,000
Administrative Equipment	5,900,000	6,440,000	1,862,500	14,202,500
BWSC Bonds	5,900,000	6,440,000	1,862,500	14,202,500
Total				
BWSC Bonds	**12,060,000**	**12,480,000**	**7,442,500**	**31,982,500**
Total	12,060,000	12,480,000	7,442,500	31,982,500

GRAPH 13 -2027 TOTAL SUPPORT EXPENDITURES
$12.1 MILLION



GRAPH 14 – 2027-2029 SUPPORT DISTRIBUTION SPENDING
$32.0 MILLION



METERING

DESCRIPTION AND JUSTIFICATION

The Meter Services Department maintains the efficient operation of approximately 91,000 water meters and associated automatic meter reading devices in the system thus insuring accurate registration of consumption. Metering programs include meter downsizing, which involves the replacement of large meters with smaller meters, where hydraulically feasible. On an annual basis, the Meter Services Department repairs, replaces, tests and installs water meters and automatic reading devices and maintains all field components of the Commission's Automatic Meter Reading system. All meters that are removed are tested on a fully equipped test bench, which was purchased in 2009. Meters 3" and larger are field tested, based on size, at intervals of: every year (6" to 10", every other year (4") and every three years (3"), in accordance with American Water Works Association standards. In addition, usage is evaluated utilizing the AMR system and recommendations are made to downsize identified meters to more accurately account for low flow.

PROJECTS

AMR System: The total three-year budget is $2,500,000.

Large Meter Work: The Commission closely follows AWWA recommendations and tests all large meters in accordance with AWWA parameters. In the course of its large meters work, the Commission prioritizes the repair/replacement of any malfunctioning parts and/or replaces large meters, as necessary. Wherever feasible, the Commission downsizes large meters to improve accuracy of registration. The three- year budget for this project is $3,000,000.

Residential Metering: The residential metering program is an ongoing project to replace approximately 4,000 residential meters sizes 5/8" through 2" annually**.** The three- year budget for this project is $2,450,000.

PROJECT CASH FLOW

Table 17 on page 70 illustrates cash flow for Metering projects for 2027-2029 CIP totals $8.0 million, of which $2.8 million is allocated for 2027.

Table 17 - Metering Category

Description	Prog	Class	2027	2028	2029	2027-2029
Residential Meters	30100	BONDS	800,000	800,000	850,000	2,450,000
Large Meters	30100	BONDS	1,000,000	1,000,000	1,000,000	3,000,000
AMR System	30100	BONDS	1,000,000	1,000,000	500,000	2,500,000

INFORMATION TECHNOLOGY

Effective use of the right technologies enables BWSC to provide more efficient and high-quality water and sewer services to the City of Boston. Strategic planning, careful selection of technological tools, and effective use of such tools has enabled BWSC to continue to improve the level of service associated with emergency responses, preventative maintenance, infrastructure improvements, and most importantly, quality customer service. Providing staff with appropriate training and utilizing the right mix of hardware and software is something BWSC continues to assess and act upon as new technologies continue to evolve.

A number of mission critical software applications are utilized to support BWSC's daily operations and provide for emergency response services 24 hours a day, 7 days a week. BWSC is actively upgrading and replacing various systems. The following are projects that have been completed to date and projects projected to be completed during the next several years.

- Implement new Project Management Information System
- Move Customer Information System to the Cloud
- Implement new Geographic Information System Viewing Application
- Upgrade Virtualization Hardware

Cybersecurity: BWSC adheres to the NIST (National Institute of Standards and Technology) Cybersecurity Framework (the "NIST Framework"). As the Cybersecurity landscape evolves so does the NIST Framework. The only way to accelerate detection and response to sophisticated threats is to understand the behavior of all individual components of an attack across your organization. BWSC has selected security products from different vendors which integrate to offer an overlapping layered approach to security with multiple levels of protection. In the event of a breach BWSC has multiple levels of backups in place to mitigate data loss. Most of the deployed security products are now cloud based and rely on analysis of datasets to identify threats based on patterns. These products also include remote monitoring and response. BWSC has deployed security products to cover each functional level of the NIST Framework: Identify, Protect, Detect, Respond and Recover. BWSC has recently completed a cybersecurity assessment, which is compliant with the AWIA Cybersecurity and Resilience assessment requirement.

PROJECTS

Server / Network Hardware & Peripheral Equipment: New Server/Network Hardware is used to upgrade and add to the Commission's Computing Infrastructure, which provides sufficient capacity and performance to support computing activities including: billing, HRIS, payroll, financials, work order system and GIS. The total three-year budget for this project is $2,165,000. Hardware and upgrades consist of the following:

- Backup disk/tape
- Communications/Networking
- Server Upgrades
- Disaster Recovery Hardware
- Replace/Upgrade PC's
- Tablets/Ipads/Phones
- Laptops
- Peripherals (cables, adapters, cases etc.)

Server/Network Software Licenses and Upgrades: Funding is included for software upgrades and additions to the Commission's Computer Infrastructure. Software and related upgrades to support Commission computing activities include: Billing, HRIS, Payroll, Financials, Work Order system, GIS, Document Management and Construction Management System. The total three-year budget for this project is $7,665,000. Software and upgrades consist of the following:

- Workorder Mgt. System (Cityworks)
- CIS
- Database Software
- Application Development Tools
- Construction Management Software
- Website
- GIS Software/Upgrade
- Management Dashboard
- Information Security
- Disaster Recovery Software & Services
- AutoCAD & Design Software/upgrades
- Peoplesoft Upgrade

PROJECT CASH FLOW

Table 18 on page 73 illustrates cash flow expenditures for IT projects for 2027-2029. Total three-year expenditure is $9.8 million, of which $3.4 million is allocated for 2027.

Table 18 - Information Technology Category

Description	Prog	Class	2027	2028	2029	2027-2029
Hardware	30300	BONDS	720,000	680,000	765,000	2,165,000
Software	30300	BONDS	2,640,000	2,560,000	2,465,000	7,665,000

ADMINISTRATIVE EQUIPMENT

DESCRIPTION AND JUSTIFICATION

The projects contained in the administrative equipment category provide funding for improvements to administrative facilities and equipment. The Fleet department manages and coordinates all activities required for the efficient operation and maintenance of the Commission's fleet of vehicles including heavy equipment. To minimize fleet total cost of ownership (operating and capital cost) and ensure the ability to provide required customer services using reliable transportation and equipment, vehicles should be replaced at regular intervals, derived from optimal replacement cycle analyses. Vehicle replacement cycles provide the basis for long-term replacement plans for year-to-year replacement earmarking and budgeting. A recent study of the Commission's fleet by a professional management consulting firm has determined that optimum replacement cycles for all classes of vehicles range from 7 to 12 years with a weighted average replacement cycle of 8.8 years for all vehicles.

PROJECTS

Garage Floor Repairs 25-201-006: Garage Floor Repairs at BWSC Headquarters. The total three-year budget is $800,000.

BWSC Parking Garage 24-201-003: The total three-year budget is $1,500,000.

Replacement of 1st Floor Carpet Tiles and Stairwell Treads 25-201-003: The carpet tiles on the 3rd Floor are aged and in need of replacement. This will be performed in conjunction with the Roof Replacement Project. The stairwell treads are original to the building and will be replaced at the conclusion of the RRP. The total three-year budget is $720,000.

House Doctor Services 24-201-001B: House Doctors provide specialized architectural and engineering design services and reviews of Commission-related projects and initiatives. The total three-year budget is $1,470,000.

Owner's Project Manager (OPM) Services: OPM services are required for municipal construction projects exceeding $1,500,000. Design commenced in April 2025 and is scheduled to be completed in September 2028. The total three-year budget is $1,500,000.

New Office Furniture and Moving and Storage in Association with Roof Replacement Project: The office furniture on the 1st and 2nd Floor is original to the building's online date of 2002 and is being removed and replaced as part of the Roof Replacement Project. Some exiting items will be temporarily stored and returned as the project progresses in phases. The total three-year budget is $3,040,000.

Replacement of Fuel Tanks: The Commission's underground fuel tanks are original to the building's online date of 2002 and require replacement to ensure environmental standards. The total three-year budget is $2,000,000.

Fleet Vehicle Maintenance and Replacement: The Commission's Fleet Department is required to ensure the operational needs of the organization are met. In order to guarantee continuous operations, upgrades to vehicles and equipment are required. Each year the department evaluates the fleet and determines vehicles that are in need of an upgrade. Additionally, the need for servicing equipment such as lifts also have a shelf life that will require upgrades. The total three-year budget is $2,600,000.

Electronic Security Speed Gates: The total three-year budget is $400,000.

Electrical Upgrades: The total three-year budget is $447,500.

PROJECT CASH FLOW

The 2027-2029 cash flow is presented in Table 19 on page 76. Total three-year expenditure for administrative equipment is $14.2 million, of which $5.9 million is allocated for 2027.

Table 19 - Administrative Equipment Category

Description	Contract	Prog	Class	2027	2028	2029	2027-2029
Fleet Vehicle Maintenance and Replacement		30400	BONDS	1,000,000	800,000	800,000	2,600,000
Furtniture Replacement Storage		30400	BONDS	-	3,040,000	-	3,040,000
Facilities OPM		30400	BONDS	400,000	400,000	425,000	1,225,000
Garage		30400	BONDS	800,000	-	-	800,000
Fuel Tanks		30400	BONDS	2,000,000	-	-	2,000,000
Electrical Upgrades		30400	BONDS	160,000	160,000	127,500	447,500
Carpet and Starirwell Treads		30400	BONDS	160,000	560,000	-	720,000
BWSC Parking Garage	24-201-003	30400	BONDS	500,000	1,000,000		1,500,000
House Doctor Services	24-201-001A	30400	BONDS	480,000	480,000	510,000	1,470,000
Electronic Security Speed Gates		30400	BONDS	400,000			400,000

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STORMWATER/GREEN INFRASTRUCTURE/LOW IMPACT DEVELOPMENT PROJECTS

DESCRIPTION AND JUSTIFICATION

Funding is provided in the 2027-2029 CIP for the Commission's Stormwater Program. This program consists of studies of existing and new drainage infrastructure, best management practices and implementation of programs designed to improve water quality, the environment and manage stormwater resources.

The primary purpose of the Stormwater Program is to participate in the Boston Harbor pollution abatement projects, implement green infrastructure/low impact development to improve the water quality of discharges to the local receiving waters and promote public awareness of stormwater quality issues. The goal is also to study existing conditions and make recommendations for placement of new best management practices designed to promote improved water quality, ensure compliance with state and federal regulations, minimize flooding and manage stormwater throughout the City of Boston.

The Green Infrastructure/Low Impact Development ("GI/LID") category provides funding for ("GI/LID") projects as needed in collaboration with public improvements in the City of Boston.

The Commission was required by its Consent Decree with the U.S. EPA to develop a stormwater model to identify pollutant loadings (including phosphorus) from land areas that contribute stormwater runoff to the Commission's storm drain system. The Commission is under an obligation to meet the Phosphorus Total Maximum Daily Load ("TMDL") for the Lower Charles River Basin by reducing elevated levels of phosphorus discharged from its stormwater outfalls. In addition, the Commission prepared a Best Management Practice ("BMP") Recommendations Report in compliance with the terms of the Consent Decree, which was approved by EPA October 23, 2018. The BMP Recommendations Report provides a scheduled plan for implementation of structural BMPs, Green Infrastructure and Low Impact Development ("LID") to reduce pollutant loadings discharged to the twenty-seven sub-watersheds of the City of Boston.

The BMP Recommendations Report provides a plan for the Commission's whole stormwater collection system. According to the interim findings, the cost to implement this plan could be substantial. The purpose of this program is to make available funding to implement GI/LID projects (in collaboration with other city departments and/or private landowners) in the City of Boston as they become available. This program will further the Commission's goal of compliance with the Consent Decree.

As a result of the aforementioned Consent Decree, the commission began charging for stormwater on April 1, 2024. The stormwater charge is a charge to all parcels in the City of Boston with greater than 400 square feet of impervious (hard/impermeable) surface. The stormwater charge is charged based on Equivalent Residential Unit (ERU). Each ERU is equal to 2,164 square feet of impervious surface which represents the average amount of impervious area on one to six unit residential properties in the City of Boston. The rate per ERU for 2026 is currently $9.06 per month. The stormwater charge implemented as follows: (1) Every one to six unit residential properties are charged only one ERU per month, (2) all other parcels are charged per ERU based on the amount of square feet of impervious area. The total amount of impervious area is divided by 2,164 and rounded to the next whole number to calculate the number of ERUs a parcel will be charged.

Stormwater is water from rain or other precipitation. Stormwater runoff is stormwater that does not soak into the ground. Stormwater flows off hard surfaces, like streets, parking lots, construction sites, and rooftops during heavy rainstorms and when the snow melts. The water then goes into BWSC's stormwater system. As stormwater flows over these hard surfaces, it collects trash, sediment, and pollutants like motor oil and fertilizer. Most of the City's storm drains take that water directly to our brooks and streams without treatment. The City of Boston lies within the Charles, Neponset, and Mystic River watersheds, which means that our city's streams ultimately drain into Boston Harbor. Managing stormwater helps prevent pollution in our waterways.

The Commission's separation projects involve the replacement of combined sanitary and storm sewers with two separate systems, one for sanitary sewage and one for stormwater. The purpose of the separation program is to reduce the frequency and volume of wet weather CSO discharges and ensure the continued compliance with state and federal permits. Combined systems will be separated where it is appropriate and cost effective to do so. Sewer separation work most often involves converting the combined sewer to a separate sanitary sewer and constructing a new storm drain.

Since 1996, the Commission has spent approximately $300 million on sewer separation projects. Projects were designed with the intent of eliminating combined sewer overflow ("CSO") discharge, improving water quality in Boston Harbor and its tributaries and diverting stormwater from environmentally sensitive areas. The Commission's ability to remove extraneous flow from its sewers will result in a reduction in its metered wastewater flow and wholesale sewer charges. Thus far, these projects have reduced annual discharge of CSO by 124.3 million gallons.

In addition to addressing CSO concerns, the Commission is identifying sanitary sewage that is being discharge into the storm drain system. In 2025, the Commission eliminated illicit discharges at 34 locations, thereby eliminating the discharge of an estimated 2,598 gallons per day (gpd) of wastewater to the drainage system and receiving waters. Between 1986, when the Commission first began correcting illicit discharges, and the end of 2025, the Commission removed 2,013 illicit discharges, thereby eliminating the discharge of an estimated total of 880,120 gallons of wastewater per day to the storm drainage system and receiving waters.

The Commission regularly inspects, cleans, and maintains its catch basins citywide. Cleaning restores the effective capacity of catch basins, thereby allowing for greater solids removal from stormwater flows. Hoods and traps are replaced on catch basins as needed. The Commission's site plan review process has been upgraded and enhanced in recent years. The Commission now exercises greater control over non-stormwater discharges and ensures that

construction sites and new development projects conform to its requirements, as well as state and federal requirements for stormwater management.

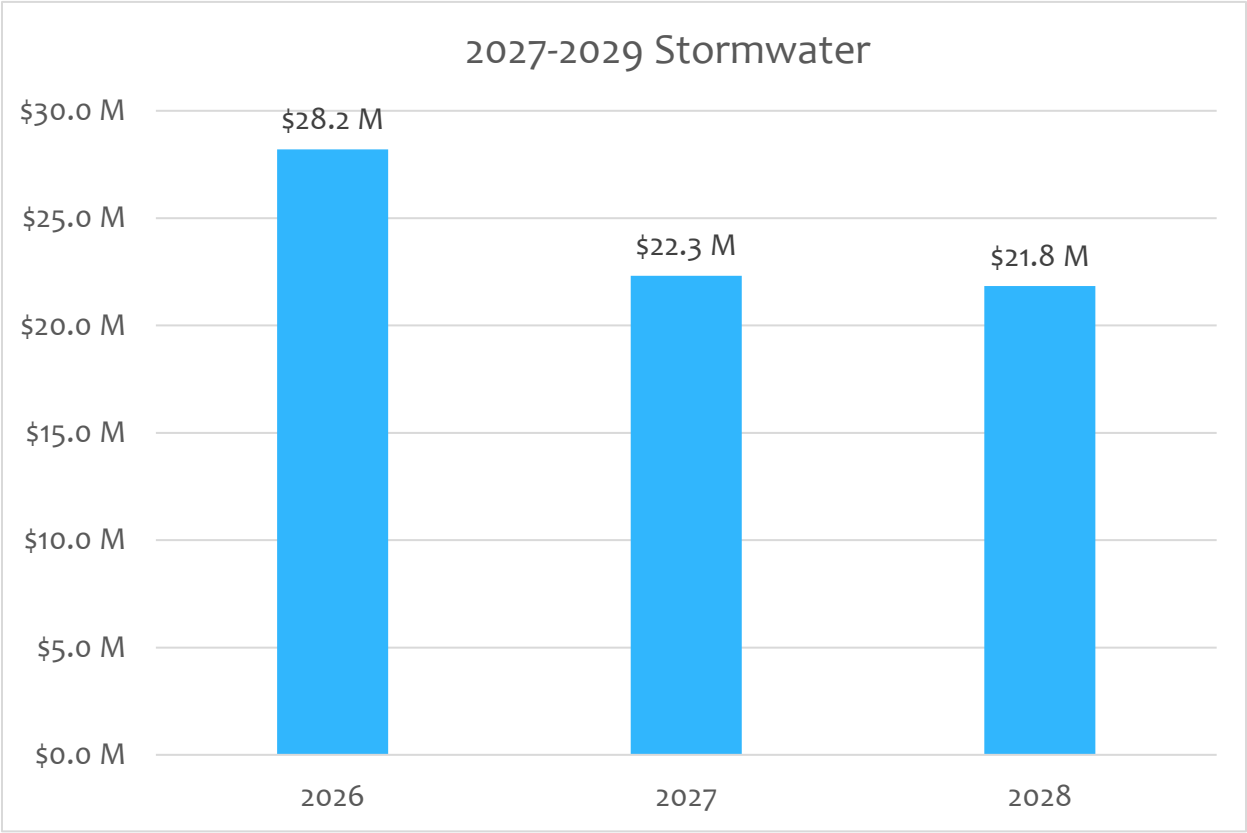
Table 20 on page 80 illustrates Stormwater by category. Three-year total expenditures are $72.3 million, of which $28.2 million is anticipated to be spent in 2027.

Table 20 - Stormwater

Capital Improvement Program
2027 - 2029
Stormwater Total

	2027	2028	2029	Total 2027 - 2029
Stormwater Total	**28,198,800**	**22,311,000**	**21,836,875**	**72,346,675**
BWSC Bonds	6,647,200	6,263,000	1,652,400	14,562,600
MWRA II	2,662,400	2,402,400	2,159,000	7,223,800
Rate Revenue	7,929,600	9,441,600	11,491,950	28,863,150
SRF	10,959,600	4,204,000	6,533,525	21,697,125
Total				
BWSC Bonds	6,647,200	6,263,000	1,652,400	14,562,600
MWRA II	2,662,400	2,402,400	2,159,000	7,223,800
Rate Revenue	7,929,600	9,441,600	11,491,950	28,863,150
SRF	10,959,600	4,204,000	6,533,525	21,697,125
Total	28,198,800	22,311,000	21,836,875	72,346,675

Graph 15 - 2027-2029 Total Stormwater Expenditures $72.3 Million



CLIMATE CHANGE PREPARATIONS

As the frequency and intensity of wet weather events continue to increase due to climate change, the potential for flooding during large storm events will also increase. Sea level rise will further exacerbate flooding issues as it will impede the ability of storm drains to discharge to the ocean during higher tides and storm surge. BWSC is coordinating and sharing data with various City of Boston departments, state agencies such as Mass DOT, MWRA and the MBTA, local communities such as Cambridge and Somerville, and organizations such as Boston Harbor Now and the Mystic River Collaborative to develop resilient solutions to prepare for impacts caused by climate change. BWSC is also collaborating with institutions such as the Woods Hole Research Center and UMASS Boston to incorporate their work on rising sea levels and coastal impacts into plans and projections for mitigating the impacts of climate change.

To address the issues associated with climate change BWSC has undertaken several projects:

Stormwater Detention Facilities: BWSC has completed a study to identify sites where stormwater runoff can be temporarily stored during large storm events. Storing stormwater at these locations will free up conveyance capacity in the storm drainage system and reduce the potential for flooding. The detained stormwater will be slowly released back to the storm drain system after storms have ended and capacity in the storm drain system is back to normal. The study included the preliminary design of the detention facilities that could be installed at these locations.

Stormwater Retention-Arnold Arboretum / Boston Nature Center: BWSC prepared conceptual designs for a large constructed wetland that could be installed at the Arnold Arboretum and a stormwater detention design for an area near the Boston Nature Center. The wetland will retain and treat stormwater, thereby maintaining the conveyance capacity of BWSC's storm drain system and reducing the potential for upstream and downstream flooding. An additional benefit of the wetland is that it will be designed to improve stormwater quality by reducing the City's stormwater phosphorus load to the Charles River. The Commission is working with agencies to determine what process could be taken to move these concepts to design.

Fort Point Channel Storage Feasibility: BWSC is evaluating the feasibility of having a flood control gate structure installed at the harbor end of the Fort Point Channel to mitigate the impacts of tidal surge and increased wet weather discharges from outfalls located within the channel. When a large storm event is anticipated the gate would be closed, and waters in the channel pumped out, thus providing storage capacity for the stormwater discharges from outfalls located within the Channel. After storms have passed stormwater detained in the storage basin would be pumped out and the gates reopened to allow for normal discharges and tidal flow. Preliminary analysis indicates that installation of a gate structure will prevent flooding in almost 10 percent of the City of Boston, including significant portions of the critical downtown, South End and seaport districts during a 10 year design event. To handle storms larger than this design storm, pumps within the dam4structure would maintain levels within the channel until the higher tides recede.

Installation and Inspection of Tide Gates on Outfall Pipes: BWSC continues to install new tide gates on coastal storm drain outfall pipes where they will be needed in the future, but don't currently exist. The tide gates will prevent back-water flow resulting from higher tides and storm surge from entering BWSC's storm drain system and causing inundation of inland low-lying areas. New tide gates will be installed in storm drains outfalls located in the City Proper, East Boston, South Boston, Charlestown, and Dorchester.



New Boston Main Interceptor – Pipe Jacking Pit and Shaft



New Boston Main Interceptor – Pipe Jacking Pit and Shaft

PROJECTS

Sewer Lateral Testing and CCTV Inspection of Sewers and Drains 27-309-015: The new lateral testing contract will enable the Commission to continue testing sewer laterals for leakage and continue televising sewers and drains to identify illicit sanitary connections to the storm drain and structural deficiencies which may allow sewage to enter storm drains (cross contamination). The total three-year budget is $130,000.

CCTV Inspections of Sewers and Storm Drains/CMOM - Future Contracts 27-309-009, 27-309-010, 28-309-009, 28-309-010, 29-309-009, 29-309-010: These projects entail the inspection of sewers and drains through the use of closed circuit TV cameras utilizing the SCREAM coding system in order to assess the structural condition of the pipes. Approximately ninety (90) miles annually of various sized pipes will be cleaned and inspected with a goal of completing the entire system over a 10 year period. These contracts complete 60 miles annually. The total three-year budget is $1,107,000.

Tidegates, Citywide 27-309-006: The total three-year budget is $4,925,750.

East Boston Sewer Separation Phase IV - Contract 4 27-309-002: Construction of new storm drains to separate approximately 230 acres in East Boston and is a continuation of sewer separation work that has been implemented in the neighborhood over the last 20 years. The project also includes upgrades of the sanitary sewer and water main systems to continue to provide the highest-level service to the community. Construction Contract No. 4 is one of five (5) planned contracts to construct new storm drains to separate approximately 230 acres in East Boston to further mitigate CSOs and improve water quality. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community. The total three-year budget is $850,000.

Replacement of Water Mains in Back Bay 27-308-005: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. The total three-year budget is $158,750.

Replacement of Water Mains in Roxbury 27-308-004: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. The total three-year budget is $158,750.

Replacement of Water Mains in Jamaica Plain and West Roxbury 27-308-003: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. The total three-year budget is $158,750.

Replacement of Water Mains in Allston/Brighton 27-308-002: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. The total three-year budget is $158,750.

Replacement of Water Mains in Dorchester 27-308-001: Relay old water mains. Water pipes have reached end of predicted design life and many have history of breaks. Nearby sewer and drain work is expected to be included. The total three-year budget is $158,750.

Cleaning and Television Inspection of Sewers and Drains in the City of Boston II 26-309-010: This project entails the inspection of sewers and drains through the use of closed circuit TV cameras utilizing the SCREAM coding system in order to assess the structural condition of the pipes. Approximately thirty five (35) miles of various sized pipes will be cleaned and inspected. The total three-year budget is $100,800.

Cleaning and Television Inspection of Sewers and Drains in The City of Boston I 26-309-009: This project includes the inspection of sewers and drains through the use of closed circuit TV (CCTV) cameras and the SCREAM coding system to assess the structural condition of segments throughout the city. Approximately thirty five (35) miles of pipes varying in size will be cleaned and inspected for this contract. The total three-year budget is $124,800.

Water Relay Dorchester 26-308-002: Associated drain improvements and the replacement of water mains that have reached the end of their design life. The total three-year budget is $229,250.

Replacement of Water Mains in Back Bay/Beacon Hill, Central, Fenway/Kenmore and South End 26-308-001: Relay old water mains. Water pipes have reached end of predicted design life, and many have history of breaks. Nearby sewer and drain work are expected to be included. The total three-year budget is $250,000.

Inflow and Infiltration Discovery 25-309-011: This project entails the inspection of sewers and drains through the use of closed circuit TV cameras utilizing the SCREAM coding system in order to assess for inflow and infiltration in sewer and drain lines citywide with a priority in the Back Bay/Beacon Hill neighborhood. This contract will include lining and grouting work as part of its scope. The total three-year budget is $29,600.

Tidegates, Citywide 25-309-006: The total three-year budget is $8,740,000.

Sewer and Drain Replacement and Rehabilitation for North End 25-309-003: The intent of this project will be to rehab and replace water/sewers/drains where SSOs and other issues have occurred in order to mitigate future issues. This will be on an as needed basis due to receiving emergency design requests from the Chief Engineer and OPS during year after CIP is developed. The total three-year budget is $436,500.

Replacement and Rehabilitation of Water and Sewer Pipes in Allston-Brighton 25-309-002: The intent of this project will be to rehab and replace water/sewers/drains where SSOs and other issues have occurred in order to mitigate future issues. This will be on an as needed basis due to receiving emergency design requests from the Chief Engineer and OPS during year after CIP is developed. The total three-year budget is $1,214,400.

Water Relay Hyde Park 25-308-003: Replacement of water mains and associated sewer and drainpipes. The total three-year budget is $1,225,000.

Citywide Illicit Connections Phase 6 25-206-001: Illicit sanitary connections to storm drains are prohibited under the Commission's NPDES Stormwater Permit. Also, under the Consent Decree with EPA the Commission is required to identify and eliminate illicit connections and annually screen all of the Commission's storm drain and combined sewer outfalls. The total three-year budget is $543,200.

Sewer Lateral Testing and CCTV Inspection of Sewers and Drains 24-309-015: The new lateral testing contract will enable the Commission to continue testing sewer laterals for leakage and continue televising sewers and drains to identify illicit sanitary connections to the storm drain and structural deficiencies. The total three-year budget is $16,000.

South Boston Sewer Separation - Contract 5 24-309-012: Construction Contract No. 5 is one of five (5) planned contracts to construct new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community and to support the BPDA's initiative to foster future development along Dorchester Avenue. The total three-year budget is $3,450,150.

Charlestown Sewer Separation 24-309-006: Sewer Separation and water and sewer pipe replacement in Charlestown in the area known as Lost Village. Sewer separation to reduce CSO volumes. Replacement and rehabilitation of old or damaged water and sewer pipes. The total three-year budget is $3,620,000.

Replacement and Rehabilitation of Water, Sewers and Drains Jamaica Plain and Roxbury 24-309-003: The replacement and rehabilitation of water, sewer and drain pipes in Roxbury and Jamaica Plain. This project involves the rehabilitation and replacement of sewers/drains where SSOs and other issues have occurred to mitigate future overflows. Additionally, water pipes on associated streets will be replaced. The total three-year budget is $1,404,000.

Citywide R&R 24-309-002: Water, Sewer and Drain Replacement and Rehabilitation Citywide on an as needed basis. The intent of this project will be to rehab and replace water/sewers/drains where SSOs and other issues have occurred to mitigate future issues. This will be on an as needed basis due to receiving emergency design requests from the Chief Engineer and OPS during year after CIP is developed. The total three-year budget is $544,800.

Citywide R&R 24-309-001: The intent of this project will be to rehab and replace sewers/drains where SSOs andother issues have occurred to mitigate future overflows. The total three-year budget is $2,420,000.

Sewage and Drainage Works Improvements 24-308-14A: The replacement and rehabilitation of water, sewer and drainpipes. The total three-year budget is $140,000.

Water Relay Back Bay/ Rehabilitation of Drains and Sewer 24-308-003: Associated replacement of sanitary sewer, storm drain and combined sewer pipes. The total three-year budget is $868,250.

Sewer Drain Sensor Deployment Phase 2 24-206-005: The purpose of this project is to continue the real-time sewer and drain level monitoring program currently deployed in Commission’s system. The monitoring program tracks water levels in 75 sewer and drainpipes across the city and displays the data on a web-based dashboard. The dashboard and data are used to inform operation and planning objectives. This project will expand the number of sensors deployed in the sewer and drain system from 75 to 125. The total three-year budget is $421,600.

On-Call Green Infrastructure Design Services 24-206-004: Transmission main study and Design Contract. To evaluate the state of the water transmission system and design the first rehabilitation contract. The total three-year budget is $636,800.

South Boston Sewer Separation - Contract 4 23-309-012: Construction Contract No. 4 is one of five (5) planned contracts to construct new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water 56 main systems

to continue providing the highest level of service to the community and to support the BPDA's initiative to foster future development along Dorchester Avenue. The total three-year budget is $3,285,600.

Replacement and Rehabilitation of Sanitary Sewer and Drainpipes in Fenway 23-309-011: Replacement and rehabilitation of sanitary sewer and drainpipes. The pipes in this contract have been inspected and reviewed and are found to be in poor condition. Associated water work. The total three-year budget is $3,219,300.

R&R in Dorchester, Mattapan, & Roxbury 23-309-005: Sewer and Drain Replacement and Rehabilitation in Dorchester, Mattapan and Roxbury. The intent of this project will be to rehab and replace sewers/drains where SSOs and other issues have occurred in order to mitigate future overflows. The total three-year budget is $320,800.

Sewer and Drain Replacement and Rehabilitation 23-309-003: Sewer and Drain Replacement and Rehabilitation Citywide. The total three-year budget is $800,000.

East Boston Sewer Separation Phase IV - Contract 2 23-309-002: Construction Contract No. 2 is one of five (5) planned contracts to construct new storm drains to separate approximately 230 acres in East Boston to further mitigate CSOs and improve water quality. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community. The total three-year budget is $8,539,375.

Sewer R&R in Lower Roxbury 23-308-001: Associated replacement of sanitary sewer, storm drain and combined sewer pipes. The total three-year budget is $539,200.

South Boston Sewer Separation - Contract 3 - 22-309-012: Construction Contract No. 3 is one of five (5) planned contracts to construct new storm drains to separate approximately 400 acres in South Boston along the Dorchester Avenue Corridor. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community and to support the BPDA's initiative to foster future development along Dorchester Avenue. The total three-year budget is $2,516,800.

R&R in Upper Roxbury 22-309-003: Replacement of sanitary sewer, storm drain and combined sewer pipes. The total three-year budget is $1,896,000.

Replacement of Sewer and Drains Citywide, R&R 22-309-002: The intent of this project will be to rehab and replace sewers/drains where SSOs have occurred to mitigate future overflows. The total three-year budget is $523,200.

Sewer Drain Model Update 22-206-011: The purpose of this project is to update and recalibrate the Commission’s Sewer and Drain model. The model has not been updated and calibrated since 2016. Utilizing models that are up to date and are representative of the Commissions infrastructure is critical to long term planning goals and to meet regulatory milestones. The total three-year budget is $203,200.

East Boston Sewer Separation Phase IV 21-309-002: Construction Contract No. 1 is one of five (5) planned contracts to construct new storm drains to separate approximately 230 acres in East Boston to further mitigate CSOs and improve water quality. The project also includes upgrades of the sanitary sewer and water main systems to continue providing the highest level of service to the community. The total three-year budget is $2,852,000.

Replacement and Rehabilitation of Sewer and Drain Pipes and Replacement of Water Mains in Roxbury 21-309-001: Sewer and Storm Drain Improvements in Hyde Park based on the findings of the CMOM group which identified sewer and drain defects in this area. The contract also includes associated water relay for pipes within project limits. The total three-year budget is $1,249,600.

East Boston Sewer Separation Phase IV 21-206-003: Engineering Services for Design of sewer separation in a 230 acre area of East Boston. The total three-year budget is $2,499,000.

R&R in Allston-Brighton, Fenway-Kenmore, Jamaica Plain, and Roxbury 20-309-007: Includes sanitary sewer & drain replacement and rehabilitation in Allston/Brighton, Fenway/Kenmore, Jamaica Plain, and Roxbury. The total three-year budget is $359,200.

Citywide R&R 20-309-006: Sewer Replacement/Rehabilitation based on findings of the CMOM group, and associated water main replacement. The total three-year budget is $1,656,000.

South End Water Improvements Phase III 20-308-002: Water Relay for 6,330 feet of 12- and 16-inch water mains on Shawmut Avenue, Waltham, Hanson and Bond Street in the South End. As part of the design work, associated sewers and drains found in disrepair will be structurally rehabilitated or replaced if found damaged beyond rehabilitation. At this time, the project also includes the lining of 1,600 linear feet of 10" thru 24" sewer pipe and the rehabilitation of 590 linear feet of 15" and 18" drainpipe. The total three-year budget is $189,600.

Installation of New Tide Gates in Central, Charlestown, East Boston and South Boston 19-309-001: This contract identified the need for and provided design for the installation of four tide gates on drainage systems of various sizes in City Proper, Charlestown, East Boston and South Boston (Seaport). The Design Department is worked with the Planning and Operations department to identify outfalls which may not be protected from extreme tides to prevent street flooding from surcharged drainage systems. The total three-year budget is $1,227,200.

Water Replacement and Rehabilitation with associated Sewer and Drain R&R 19-308-002: Replacement and rehabilitation of water, sewers and drains in Charlestown. The total three-year budget is $1,967,200.

Citywide R&R 18-309-003: Replacement of sanitary sewer, storm drain and combined sewer pipes in need of structural repair as identified by various Commission inspection programs. Replacement of water main associates with sewerage works. The total three-year budget is $772,800.

Replacement of Water Mains Replacement in Fenway/Kenmore 18-309-001: Replacement of Water Mains on Jersey Street, Peterborough Street, and Public Alley 931**.** The total three-year budget is $912,800.

Fort Point Channel and Dorchester Bay Basin Design Adaptation Advancement: 1-year professional services contract expected to be complete in Fall 2027. The total three-year budget is $88,000.

Inundation Model Update and Maintenance: The purpose of this program is to utilize the updated Commission's Sewer and Drain Models to update the inundation model, add new LIDAR data and coastal sea level and storm surge data and rerun the updated inundation model to determine what areas of the city may experience inundation with the implementation of the City's flood barriers, implementation of the Coastal Stormwater discharge recommendations and stormwater detention recommendations. The project will also prepare conceptual designs for locations inland to address potential inland inundation. The total three-year budget is $672,000.

Owner Correction of Illicit Connections: Funds will be used to reimburse owners who must pay to install ejector pumps or redirect internal building sewers in order to correct illicit connections. In some instances, homeowners must alter internal plumbing and/or install ejector pumps in order to correct an illicit connection. In these instances, the Commission will reimburse owners for up to $7,500 for the work. Illicit connections are a violation of Federal law and must be promptly corrected. This program was instituted and approved by the Commission to assist property owners with costly alterations required to correct illicit connections. The total three-year budget is $17,150.

Willow Pond Road Stormwater Treatment Vault: Installation of a stormwater treatment vault on Willow Pond Road to remove phosphorus and other pollutants from the Charles River. The total three-year budget is $1,600,000.

Austin St Pump Station: Upgrades and replacement of mechanical components and equipment. The total three-year budget is $73,000.

Comm Ave Pump Station: Upgrades and replacement of mechanical components and equipment. The total three-year budget is$73,000.

Port Norfolk Pump Station: Upgrades and replacement of mechanical components and equipment. The total three-year budget is $73,000.

PROJECT CASH FLOW

Table 21 on page 91 illustrates Stormwater by Category. Three-year total expenditures are $72.3 million, of which $28.2 million is anticipated to be spent in 2027.

Table 21 – Stormwater/GI/LID PROJECTS

Description	Contract	Prog	Class	2027	2028	2029	2027-2029
East Boston Sewer Separation Phase IV - Contract 5	28-309-002	40100	SRF				-
Sewer Lateral Testing and CCTV Inspection of Sewers and Drains	27-309-015	40100	BONDS	65,000	65,000		130,000
CCTV Inspections of Sewers and Storm Drains/CMOM - Future Contracts	27-309-009, 27-309-010 28-309-009, 28-309-010 29-309-009, 29-309-010	40100	MWRA II	216,000	432,000	459,000	1,107,000
Tidegates, Citywide	27-309-006	40100	RATE			4,925,750	4,925,750
East Boston Sewer Separation Phase IV - Contract 4	27-309-002	40100	SRF			850,000	850,000
Replacement of Water Mains in Back Bay	27-308-005	40100	RATE		16,800	141,950	158,750
Replacement of Water Mains in Roxbury	27-308-004	40100	RATE		16,800	141,950	158,750
Replacement of Water Mains in Jamaica Plain and West Roxbury	27-308-003	40100	RATE		16,800	141,950	158,750
Replacement of Water Mains in Allston/Brighton	27-308-002	40100	RATE		16,800	141,950	158,750
Replacement of Water Mains in Dorchester	27-308-001	40100	RATE		16,800	141,950	158,750
Cleaning and Television Inspection of Sewers and Drains in the City of Boston II	26-309-010	40100	BONDS	100,800	-	-	100,800
Cleaning and Television Inspection of Sewers and Drains in The City of Boston I	26-309-009	40100	BONDS	124,800	-	-	124,800
East Boston Sewer Separation Phase IV - Contract 3	26-309-002	40100	SRF	-	-	-	-
Water Relay Dorchester	26-308-002	40100	BONDS	-	33,600	138,550	172,150
Water Relay Dorchester	26-308-002	40100	RATE	-	11,200	45,900	57,100
Replacement of Water Mains in Back Bay/Beacon Hill, Central, Fenway/Kenmore and South End	26-308-001	40100	RATE	-	80,000	170,000	250,000
Inflow and Infiltration Discovery	25-309-011	40100	RATE	29,600	-	-	29,600
Tidegates, Citywide	25-309-006	40100	RATE	800,000	3,560,000	4,380,000	8,740,000
Sewer and Drain Replacement and Rehabilitation for North End	25-309-003	40100	RATE	-	74,400	362,100	436,500
Replacement and Rehabilitation of Water and Sewer Pipes AB	25-309-002	40100	RATE	-	1,214,400	-	1,214,400
Water Relay Hyde Park	25-308-003	40100	BONDS	451,000	774,000		1,225,000
Citywide Illicit Connections Phase 6	25-206-001	40100	BONDS	362,400	180,800	-	543,200
Sewer Lateral Testing and CCTV Inspection of Sewers and Drains	24-309-015	40100	BONDS	16,000	-	-	16,000
South Boston Sewer Separation - Contract 5	24-309-012	40100	SRF	-	-	3,450,150	3,450,150
Charlestown Sewer Separation	24-309-006	40100	MWRA II	-	1,920,000	1,700,000	3,620,000
Replacement and Rehabilitation of Water, Sewers and Drains JPROX	24-309-003	40100	RATE	560,000	844,000	-	1,404,000
Citywide R&R	24-309-002	40100	RATE	108,800	436,000	-	544,800
Citywide R&R	24-309-001	40100	BONDS	640,000	1,440,000	340,000	2,420,000
Sewage and Drainage Works Improvements	24-308-14A	40100	MWRA II	89,600	50,400	-	140,000
Water Relay Back Bay/ Rehabilition of Drains and sewer	24-308-003	40100	RATE	418,400	418,400	31,450	868,250
Sewer Drain Sensor Deployment Phase 2	24-206-005	40100	BONDS	297,600	124,000	-	421,600
On-Call Green Infrastructure Design Services	24-206-004	40100	BONDS	509,600	127,200	-	636,800
South Boston Sewer Separation - Contract 4	23-309-012	40100	SRF	3,285,600	-	-	3,285,600
Replacement and rehabilitation of sanitary sewer and drain pipes in Fenway	23-309-011	40100	BONDS	1,051,200	1,051,200	1,116,900	3,219,300
R&R in Dor, Matt, & Rox	23-309-005	40100	RATE	320,800	-	-	320,800
Sewer and Drain Replacement and Rehabilitation	23-309-003	40100	BONDS	200,000	600,000	-	800,000
East Boston Sewer Separation Phase IV - Contract 2	23-309-002	40100	SRF	2,102,000	4,204,000	2,233,375	8,539,375
Sewer R&R in Low Rox	23-308-001	40100	RATE	539,200	-	-	539,200
S. Bos Sep Contr 3	22-309-012	40100	SRF	2,516,800	-	-	2,516,800
R&R in Upper Roxbury	22-309-003	40100	MWRA II	1,896,000	-	-	1,896,000
Replacement of Sewer and Drains Citywide, R&R	22-309-002	40100	MWRA II	101,600	-	-	101,600
Replacement of Sewer and Drains Citywide, R&R	22-309-002	40100	RATE	421,600	-	-	421,600
Sewer Drain Model Update	22-206-011	40100	SRF	203,200	-	-	203,200
East Boston Sewer Separation Phase IV	21-309-002	40100	SRF	2,852,000	-	-	2,852,000
Replacement&Rehabilitation of Sewer and Drain Pipes and Replacement of Water Mains in Roxbury	21-309-001	40100	RATE	624,800	624,800	-	1,249,600
East Boston Sewer Separation Phase IV	21-206-003	40100	RATE	816,000	816,000	867,000	2,499,000
R&R in AB, FK, JP, Rox	20-309-007	40100	MWRA II	359,200	-	-	359,200
Citywide R&R	20-309-006	40100	RATE	662,400	993,600	-	1,656,000
South End Water Improvements Phase III	20-308-002	40100	BONDS	22,400	16,000	-	38,400
South End Water Improvements Phase III	20-308-002	40100	BONDS	88,000	63,200	-	151,200
Installation of New Tide Gates in Central, Charlestown, East Boston and South Boston	19-309-001	40100	RATE	1,227,200	-	-	1,227,200
Water Replacement and Rehabilitation w/associated Sewer and Drain R&R	19-308-002	40100	BONDS	1,967,200	-	-	1,967,200
Citywide R&R	18-309-003	40100	RATE	488,000	284,800	-	772,800
Peterborough and Jersey	18-309-001	40100	RATE	912,800	-	-	912,800
Austin St Pump Station		40100	BONDS	40,000	16,000	17,000	73,000
Comm Ave Pump Station		40100	BONDS	40,000	16,000	17,000	73,000
Port Norfolk Pump Station		40100	BONDS	40,000	16,000	17,000	73,000
Fort Point Channel and Dorchester Bay Basin Design Adaptation Advancement		40100	BONDS	88,000	-	-	88,000
Inundation Model Update and Maintenance		40100	BONDS	537,600	134,400	-	672,000
Owner Correction of Illicit Connections		40100	BONDS	5,600	5,600	5,950	17,150
Willow Pond Road Stormwater Treatment Vault		40100	BONDS	-	1,600,000	-	1,600,000

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APPENDIX A - GLOSSARY

ARB: A trademark for Schlumberger remote meter reader interfaces. See also R.M.I.

Board of Commissioners: The three-member governing board of the Commission.

Bond: A written promise to pay a specific sum of money (called the face value or principal amount) at a specific date or dates in the future (called the maturity dates), together with periodic interest at a specific or variable rate.

Bond Resolution: A document that contains terms and conditions relating to the issuance and sale of bonds and sets forth the obligations to bondholders.

BWSC: The Boston Water and Sewer Commission.

Capital Improvement Program (CIP): A plan which identifies and estimates the nature, schedule, cost, priority, and financing of long-term assets that the Commission intends to build or acquire during a specific period.

Cleaning and Lining: A process to improve unlined but structurally sound, older cast iron mains. The mains are cleaned and lined with cement (while still in place) to improve hydraulic capacity and extend useful life.

Collection System: The pipes, conduits, pumping stations and appurtenances involved in the collection and transport of wastewater and storm-water.

Combined Sewer: A sewer designed to receive both sanitary sewage and storm-water runoff.

CSO (Combined Sewer Overflow): The discharge from combined sewers which collect both sanitary sewage and storm-water runoff for wastewater treatment under normal (dry) weather conditions. During rainstorms, the system becomes overloaded and the excess is discharged directly into neighboring waterways from CSO outlets. In the City of Boston area there are 37 permitted combined sewer overflow outlets.

Current Expense Budget (CEB): A financial plan which estimates the revenues and expenses associated with the Commission's operations for a fiscal year.

Debt Service: In a given fiscal year, the amount of money necessary to pay interest and principal on outstanding debt instruments.

DEP (Department of Environment Protection): The Massachusetts agency that regulates water pollution control, water supplies, drinking water quality and waterways and certifies projects for eligibility under the Water Pollution Abatement Trust Loan programs.

Department: A sub-unit of a division.

Division: A major organizational unit within the Commission, encompassing the activities and resources for providing a major service or function.

Drain: A pipe or conduit which conveys storm-water.

Enabling Act: Chapter 436 of the Acts of the Commonwealth of Massachusetts of 1977, the legislation which established the BWSC and defined its purpose and responsibilities as of August 5, 1977.

EPA (Environmental Protection Agency): The federal government agency responsible for environmental enforcement and investigation. The EPA enforces the provisions of the Safe Drinking Water Act and the Clean Water Act.

Expenditures: Actual payment within a specified period for goods and services received.

Fiscal Year: The 12-month financial period used by the Commission which begins January 1 and ends December 31 of the same calendar year.

General Revenue Bonds: Bonds which are general obligations of the issuer where the full faith and credit of the issuer is pledged to the payment of the principal and interest thereon utilizing the revenue to be generated through the sale of a particular commodity, service or toll.

Hydrant: A device connected to a public water main for the purpose of providing water for firefighting or other authorized purposes.

Illegal Connection: A sanitary sewer service which is connected to a storm drain system, thus contributing sewerage.

Infiltration/Inflow: Extraneous sources of water that enter the sanitary system and are transported unnecessarily to the treatment facility. Infiltration is groundwater that leaks into the sanitary sewerage system through pipe joints and defects. Inflow refers to water that enters sewers from improperly connected catch basins, sump pumps, downspouts, basement drains and defective manholes. Inflow also enters through defective harbor CSO tide-gates when the tide is high.

Interceptors: The large pipes or culverts that convey wastewater from the localized collection system to the treatment plant.

Meter: An instrument for measuring the flow of water.

Meter Pit: An underground vault enclosing a meter.

MWRA (Massachusetts Water Resources Authority): An agency created by the Massachusetts Legislature through the passage of Chapter 372 of the Acts of 1984, responsible for providing wholesale potable water and wastewater collection, transport, delivery and treatment services to user Communities in Eastern Massachusetts. The Communities provide retail services directly to their customers or end users.

NPDES (National Pollutant Discharge Elimination System): A permit issued by EPA in conjunction with DEP to govern discharges into waterways.

Potable Water: Water fit for human consumption in conformance with the regulations of the Environmental Protection Agency and the Massachusetts Department of Environmental Protection.

Program: An organized group of activities and the resources to carry them out, aimed at achieving related goals.

Public Water Main: The piping and associated valves, hydrants and appurtenances installed in a public way, Commission-owned easement, or private way open to public travel, for the purpose of supplying water to one or more customers or for public fire protection.

R.M.I: Remote Meter Interface. A device for reading water meters using a hand held computer which is plugged into an outside box wired to the meter.

Rate Revenue: Income received in a specified period from user charges for providing water and sewer services.

Rehabilitation: Any process which serves to extend the useful life of a pipe or structure which is in need of repair.

Residential Meter: A meter two inches in size or smaller used to measure the flow of water to predominantly residential properties.

Sanitary Sewage: Liquid and water-carried human and domestic wastes from buildings, exclusive of ground, storm and surface water.

Sanitary Sewers: In a separated system, pipes that carry only domestic or commercial sanitary sewage as opposed to rainwater runoff.

Sewer: A pipe or conduit that carries wastewater

Sewer System: The combined Wastewater System and Storm Drainage System.

Storm Drain: A pipe or conduit designed to carry storm-water or surface water runoff.

Storm Drainage System: Storm drains, tidegates, flow regulators, catch basins, storm-water pumping stations and appurtenant facilities.

Storm Sewers: Storm drains or storm drainage system.

Stormwater: Any water resulting from rainfall or other precipitation that runs off surfaces during or after a storm.

Unaccounted-for Water: The difference between the volume of water withdrawn from the source of supply and the volume of water billed to customers. Unaccounted for water is caused by system losses, fire protection and construction activities.

Valve: A device used in water systems to control the flow of water.

Wastewater: The spent water of a community, which may be a combination of the liquid and water-carried domestic or industrial wastes from buildings, together with any groundwater and stormwater that may be present

Wastewater System: The totality of the devices, equipment or works used in transportation, pumping, storage, treatment, recycling, or reclamation of wastewater or in the disposal of the effluent.

Water Service Pipe: The connection, piping and associated valves and appurtenances that extend from a public water main to a building or property for the purpose of supplying water.

APPENDIX B - KEY ABBREVIATIONS

SIZE	DESCRIPTION
4 W/ 8	4" PIPE IS REPLACED WITH 8" PIPE
6 W/ 8	6" PIPE IS REPLACED WITH 8" PIPE
8 W/ 12	8" PIPE IS REPLACED WITH 12" PIPE

TYPE	TYPE OF SEWER PIPE
D	STORM DRAIN
S	SEWER
W	WATER

APPENDIX C – STREET LISTING

28-309-002:

STREETS	LIMITS	Neighborhood
Bennington St	Havre St To Putnam St	East Boston
Brooks St	White St To Chelsea St	East Boston
Chelsea St	Marion St To Putnam St	East Boston
Eutaw St	#75 To White St	East Boston
Lexington St	Marion St To Putnam St	East Boston
Marion St	#78 To #102	East Boston
Morris St	#5 To Putnam St	East Boston
Paris St	Marion St To Putnam St	East Boston
Princeton St	#87 To #147	East Boston
Putnam St	Bennington St To Chelsea St	East Boston
Saratoga St	Brooks St To #214	East Boston
Trenton St	#78 To #155	East Boston
White St	Brooks St To Eutaw St	East Boston

27-308-006:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Southampton Street			TBD		

27-308-007:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Columbus Avenue	Clarendon Street to Berkeley Street	Boston Proper	450	20, 24	WS

27-309-002:

STREETS	LIMITS	Neighborhood
Appian Pl	#4 To Marion St	East Boston
Bennington St	Porter St To Brooks St	East Boston
Chelsea St	George R Visconti Rd To Marion St	East Boston
Chelsea Ter	#3 To Chelsea St	East Boston
Davis Ct	London St To #3	East Boston
Decatur St	London St To Havre St	East Boston
George R Visconti Rd	London St To Chelsea St	East Boston
Gove St	Havre St To Paris St	East Boston
Havre St	Maverick St To Brooks St	East Boston
London Ct	London St To #2	East Boston
London St	Porter St To Bennington St	East Boston
Marion St	Chelsea St To Lexington St	East Boston
Meridian St	London St To Paris St	East Boston
Morris St	Marion St To #5	East Boston
Morton Pl	#3 To Saratoga St	East Boston
Paris Pl	Paris St To #1	East Boston
Paris St	Emmons St To Brooks St	East Boston
Porter St	London St To Chelsea St	East Boston
Princeton St	Meridian St To #87	East Boston
Saratoga Pl	#2 To Saratoga St	East Boston
Saratoga St	Saratoga Pl To Brooks St	East Boston

Dorchester Interceptor:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Gallivan Boulevard	Hallet Street to Neponset Avenue	Dorchester	1,200 ft.	60 in.	Sewer
Morrissey Boulevard	Neponset Avenue to Freeport Street.	Dorchester	6,100 ft.	60 in.	Sewer
Freeport Street	Morrissey Boulevard to Beach Street	Dorchester	2,000 ft.	60 in.	Sewer

Willow Pond Road Stormwater Treatment Vault:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Willow Pond Road	Jamaicaway and Pond Ave	Jamaica Plain	NA	NA	SD

26-309-003:

STREET	STREET LIMIT 1	STREET LIMIT 2	NEIGHBORHOOD	TYPE	Size	Length
DORCHESTER AVENUE	Brookville Street	Gallivan Blvd	South Dorchester	SS	10"	160
DORCHESTER AVENUE	Brookville Street	Gallivan Blvd	South Dorchester	SS	10"	
DORCHESTER AVENUE	Brookville Street	Gallivan Blvd	South Dorchester	SS	10"	150
Athens Street	D Street	E Street	South Boston	CS	20"	435
Morton Street	at Cemetery Rd		Roslindale	SS	10"	75
Morton Street	at Cemetery Rd		Roslindale	SS	10"	80
Morton Street	at Cemetery Rd		Roslindale	SS	10"	85
Morton Street	at Cemetery Rd		Roslindale	SS	10"	125
Cemetery Road	Morton Street	Forest Hills Street	Roslindale	SS	10"	
Cemetery Road	Morton Street	Forest Hills Street	Roslindale	SS	10"	173
Cemetery Road	Morton Street	Forest Hills Street	Roslindale	SS	10"	250
Cemetery Road	Morton Street	Forest Hills Street	Roslindale	SS	10"	250
Georgia Street	Hartwell Street	Blue Hill Avenue	Roxbury	CS	10"	50
Public Alley 423	Claredon Street		Back Bay	CS	16" x 18"	647
Otis Place	Mount Vernon Street	end	Back Bay	SS	12"	85
Otis Place	Mount Vernon Street	end	Back Bay	SS	12"	85
Brimmer Street	Mount Vernon Street		Back Bay	SS	12"	20
Clarendon Street	Saint James Avenue	Stuart Street	Back Bay	CS	12"	205
Clarendon Street	Saint James Avenue	Stuart Street	Back Bay	sd	12"	90
DORCHESTER AVENUE	Brookville Street	Gallivan Blvd	South Dorchester	SS	10"	160
DORCHESTER AVENUE	Brookville Street	Gallivan Blvd	South Dorchester	SS	10"	
DORCHESTER AVENUE	Brookville Street	Gallivan Blvd	South Dorchester	SS	10"	150
Athens Street	D Street	E Street	South Boston	CS	20"	435
Morton Street	at Cemetery Rd		Roslindale	SS	10"	75
Morton Street	at Cemetery Rd		Roslindale	SS	10"	80
Morton Street	at Cemetery Rd		Roslindale	SS	10"	85
Morton Street	at Cemetery Rd		Roslindale	SS	10"	125
Cemetery Road	Morton Street	Forest Hills Street	Roslindale	SS	10"	
Cemetery Road	Morton Street	Forest Hills Street	Roslindale	SS	10"	173
Cemetery Road	Morton Street	Forest Hills Street	Roslindale	SS	10"	250
Cemetery Road	Morton Street	Forest Hills Street	Roslindale	SS	10"	250
Georgia Street	Hartwell Street	Blue Hill Avenue	Roxbury	CS	10"	75
Public Alley 423	Claredon Street		Back Bay	CS	16" x 18"	647
Otis Place	Mount Vernon Street	end	Back Bay	SS	12"	85
Otis Place	Mount Vernon Street	end	Back Bay	SS	12"	85
Brimmer Street	Mount Vernon Street		Back Bay	SS	12"	20
Clarendon Street	Saint James Avenue	Stuart Street	Back Bay	CS	12"	205
Clarendon Street	Saint James Avenue	Stuart Street	Back Bay	SD	12"	90
Cambridge Street	Somerset Street		Back Bay	SS	15"	120
Hudson Street			Central	SS	20" x26"	330
705 Commonwealth Av	Granby Street	Private Rd	Fenway/kenmore	SS	18"	760
River Terrace	River Street	END	Hyde Park	SS	12"	260
Valencia Road	Linwood Street	End	Hyde Park	SS	12"	355
Bearse Avenue	Butler Street	end	Mattapan	SS	12"	160
Bearse Avenue	Butler Street	end	Mattapan	SS	18"	
Southhampton Street	Atkinson Street	Topeka Street	Dorchester	SS	12"	295
Southhampton Street	Atkinson Street	Topeka Street	Dorchester	SS	20"	255
Lesher Street	Washington Street		Roslindale	SS	10"	160
Washington Street	Mosgrove Avenue	Archdale Road	Roslindale	SS	12", 10"	485
Archdale Road	South Street	Weashington Street	Roslindale	SS	10"	230
Archdale Road	South Street	Weashington Street	Roslindale	SS	10"	170
Kenilworth Street	Dudley Street	Dudley Street	Roxbury	CS	10"	25
Lambert Avenue	Dudley Street	Barlett Street	Roxbury	CS	6"	150
Beacon Street	Charlesgateeast	Massachusetts Avenue	Beacon Hill	CS	30x36	330
Boylston Street	Fairfield Street	Exeter Street	Beacon Hill	SS	30	210
Boylston Street	Fairfield Street	Exeter Street	Beacon Hill	SS	30	190
Chestnut Street	Brimmer Street	River Street	Beacon Hill	CS	30x36	355
Belvidere Street	Huntington Avenue	Dalton Street	Fenway	CS	24	155

26-309-011:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Main Street	Albion Place to Armory Street	Charlestown	30'	12"	Drain
Medford Street	Carney Ct at Medford Street	Charlestown	20'	12"	Drain
Main Street	310 Main Street	Charlestown	30'	12"	Drain
High Street	Bolton Place at High Street	Charlestown	20'	12"	Drain
Monument Square	Monument Square at Monument Street	Charlestown	30'	12"	Drain
Union Street	Union Street at Main Street	Charlestown	20'	12"	Drain
Rutherford Ave	Rutherford Ave at Devens Street	Charlestown	50'	12"	Drain
Henley Street	Harvard Square to Main Street	Charlestown	60'	12"	SS/SD
High Street	105 High Street	Charlestown	20'	12"	Drain
Sullivan Street	High Street to Wesley Street	Charlestown	70'	12"	Drain
Bunker Hill Street	55 Bunker Hill Street	Charlestown	60'	18"	Sewer
Chestnut Street	Chestnut Street at Monumnet Square	Charlestown	100'	12"	Sewer
Sixth Street	Sixth Street at Third Avenue	Charlestown	10'	8"	Sewer
Parker Street	Parker Street at Hadley Street	Charlestown	40'	8"	W/SS
Lowney Way	Lowney Way at Chestnut Street	Charlestown	10'	6"	Sewer
Various Locations (Lining)	Various	Charlestown	6,400'	Varies	Lining

26-309-002:

STREETS	LIMITS	Neighborhood
Appian Pl	#4 To Marion St	East Boston
Bennington St	Porter St To Brooks St	East Boston
Chelsea St	George R Visconti Rd To Marion St	East Boston
Chelsea Ter	#3 To Chelsea St	East Boston
Davis Ct	London St To #3	East Boston
Decatur St	London St To Havre St	East Boston
George R Visconti Rd	London St To Chelsea St	East Boston
Gove St	Havre St To Paris St	East Boston
Havre St	Maverick St To Brooks St	East Boston
London Ct	London St To #2	East Boston
London St	Porter St To Bennington St	East Boston
Marion St	Chelsea St To Lexington St	East Boston
Meridian St	London St To Paris St	East Boston
Morris St	Marion St To #5	East Boston
Morton Pl	#3 To Saratoga St	East Boston
Paris Pl	Paris St To #1	East Boston
Paris St	Emmons St To Brooks St	East Boston
Porter St	London St To Chelsea St	East Boston
Princeton St	Meridian St To #87	East Boston
Saratoga Pl	#2 To Saratoga St	East Boston
Saratoga St	Saratoga Pl To Brooks St	East Boston

26-309-001:

STREET	STREET LIMIT 1	STREET LIMIT	NEIGHBORHOOD	TYPE	Size
Westover Street	Weld Street	Farmington Rd	Roslindale	SS	12"
Westover Street	Weld Street	Farmington Rd	Roslindale	SD	27"
Westover Street	Weld Street	Farmington Rd	Roslindale	SD	22"
Westover Street	Weld Street	Farmington Rd	Roslindale	SD	12"
Glendower Street	Kittedge Street	Popalar Street	Roslindale	SD	12
Glendower Street	Kittedge Street	Popalar Street	Roslindale	SD	10
Glendower Street	Kittedge Street	Popalar Street	Roslindale	SS	12
Halliday Street	Bourne Street	Neoponset Avenue	Roslindale	SS	12
Halliday Street	Bourne Street	Neoponset Avenue	Roslindale	SS	12
Halliday Street	Bourne Street	Neoponset Avenue	Roslindale	SS	12
Halliday Street	Bourne Street	Neoponset Avenue	Roslindale	SD	12
Walnut Ave	Seaver Street	Homestead Street	Roxbury	SS	10
Walnut Ave	Seaver Street	Homestead Street	Roxbury	SD	15
Elm Street	Ashland Street to	Everett Street	Dorchester	SS	12
Elm Street	Mapes Street	Ashland Street	Dorchester	SS	15
Ashland Street	Park Street	Elm Street	Dorchester	SS	12
Ashmont Street	Bruce Street	Louis Terrace	Dorchester	SD	24
Ashmont Street	Bruce Street	Louis Terrace	Dorchester	SS	15
Edwin Street	Denvir Street	Florida Street	Dorchester	SD	15
Edwin Street	Denvir Street	Florida Street	Dorchester	SS	12
Columbia Road	Wasington Street	Geneva Avenue	Dorchester	SS	12
Geneva Avenue	Columbia Road	Bishop Joseph Smith Way	Dorchester	SS	12
Geneva Avenue	Columbia Road	Vaughan Avenue	Dorchester	SD	12
Larchmont Street	Larchmont Street	Park Street	Dorchester	SD	24
Larchmont Street	Greenbrier Street	Waldeck Street	Dorchester	SS	12
Longfellow	Topliff Street	Draper Street	Dorchester	SS	12
Neponset	Victory Road	Parkman Street	Dorchester	SD	18
Neponset	Victory Road	Parkman Street	Dorchester	SS	12

26-308-006:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Columbus Avenue	Tremont Street (between Ruggles Street and Station) through Southwest Corridor Park	Roxbury	1500	30"	W

26-308-005:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Beacon St	Arlington St to Exeter St	City Proper	2,480	8	Wrelay
City Hall Plaza/Franklin Ave	Washington Mall to Franklin Ave	City Proper	190	12	Wrelay
Washington St	at State St	City Proper	60	16	Wrelay
State St	Washington St to Congress St	City Proper	210	16/12	Wrelay
Congress St	at New Sudbury St	City Proper	100	Valves	Wrelay
Congress St	at Merrimac St	City Proper	280	12	Wrelay
I-93	Southeast Expressway Exit Ramp to Boston St Overpass	North Dorchester		20/12	Wrelay
Boston St	Dorchester Ave to Rawson St	North Dorchester	980	16	Wrelay
Hubbardston Rd	Savin Hill Ave to Bay St	North Dorchester	530	12	Wrelay
L St	Columbia Rd to Emerson St	South Boston	1,750	12	Wrelay
Mercer St	Columbia Rd to Rev. Burke St	South Boston	140	16	Wrelay
Mercer St	Telegraph St to East Eighth St	South Boston	530	8	Wrelay
East Ninth St	Dorchester St to Mercer St	South Boston	760	8	Wrelay
Mercer St	Rev. Burke St to East Eighth St	South Boston	400	12	Wrelay

26-308-004:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE
Itasca St	Mattapan St to Almont St	Mattapan	570	10/8
Page St	McLellan St to Glenway St	Mattapan	450	8
Charlotte St	Bradshaw St. to Blue Hill Ave.	Mattapan	900	8
Frederika St	Gallivan Blvd. to Minot St.	South Dorchester	500	8
Riley Rd & Sierra Rd	Loop between Neponset Valley Pkwy	Hyde Park	1,540	8
Hyde Park Ave	West St to Collins St	Hyde Park	3,250	10
			7,210	

26-308-003:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE
Allandale	Centre to Elwell	Jamaica Plain	1,700	8
Arborview Rd	Whitcomb Ave to Malcolm Rd	Jamaica Plain	660.00	12
Centre	Allandale to May	Jamaica Plain	3,400	12
Hopkins Rd	Pond St to St Paul's Ave	Jamaica Plain	830	8
Iroquois St	Sachem St to Calumet St	Jamaica Plain	1,200	8
Jamaicaway	Arborway to Perkins	Jamaica Plain	4,000	12
Malcolm Rd	Whitcomb Ave to Whitcomb Ave	Jamaica Plain	1,100	8,12
Parker St	Fisher Ave to Parker Hill Ave	Roxbury	390	12
Pond St	Avon St to St Paul's Ave	Jamaica Plain	330.00	12
Sachem St	Parker Hill Ave to Hillside St	Jamaica Plain	790	12
St Paul's Ave	Hopkins Rd to End	Jamaica Plain	390	8
Whitcomb Ave	Lila Rd to Allandale St	Jamaica Plain	1900.00	12
			13,800	

26-308-001:

STREETS	**LIMITS**	**Neighborhood**	**PIPE LENGTH**	**SIZE**	**TYPE**
Aguadilla Street and San Juan Street	Tremont St to Shawmut Ave	South End	775	8	W
Boylston Street	Arlington St to Dartmouth St	Back Bay/Beacon Hill	2000	12	W
Clarendon St	Marlborough St to Newbury St	Back Bay/Beacon Hill	775	12	W
Cortes St	Berkeley St to Arlington St	Central	550	10	W
Haviland St	Massachusetts Ave to Hemenway St	Fenway/Kenmore	500	12	W
Park St	Tremont St to Beacon St	Back Bay/Beacon Hill	575	16	W
Shawmut St	Church St to Cocoanut Grove Ln	Central	150	8	W

25-309-003:

Location:	Neighborhood:
Court Street	Central
44 Batterymarch Street	Central
342 Hanover Street	Central (North End)
821 Washington Street	Central
7-9 Hudson Street	Central
294 Congress Street	Central
600 Washington Street	Central
558-580 Washington Street	Central
2 Avery Street	Central
131 State Street	Central
88 Blackstone Street	Central
23-41 Union Street 1 Union Street	Central
436 Commercial Street	Central (North End)
315 Hanover Street (Lathrop Place)	Central (North End)
139-141 Richmond Street Mechanic Street	Central (North End)
161 Berkley Street (CIP work is on Stuart St)	Central
Hanover St	Central (North End)
61 Cross Street (@ Hanover Street)	Central (North End)
Parmenter Street @ Hanover Street	Central (North End)
454 Hanover Street (CIP work on Commercial St)	Central (North End)
Paul Revere Mall	Central (North End)
Fulton Street @ Richmond Street	Central (North End)
2 Battery Wharf 366-380 Commercial Street 386 Commercial Street	Central (North End)
South Cedar Place	Central
Knapp Street	Central
North Washington Street (between Cooper St and Causway St)	Central (North End)

25-309-002:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Electric Avenue	Parsons Street to Goodenough Street	Alston/Brighton	840	10",8"	W
Electric Avenue	Parsons Street to Goodenough Street	Alston/Brighton	710	10"	SS
Converse Street	Parsons Street to End	Alston/Brighton	320	8"	W
Converse Street	Parsons Street to End	Alston/Brighton	375	10"	SS
Travis Street	Bertram Street to Rena Street	Alston/Brighton	460	8"	W
Nottinghill Road	Colborne Road to End	Alston/Brighton	1875	10"	W
Beacon Street	1950 Beacon Street to Pendergast Avenue	Alston/Brighton	250	72" x 72"	SD
Commonwealth Avenue	Gordon Street to Redford Street	Alston/Brighton	1500	72"	SD
Gordan Street	Cambridge Street to North Beacon Street	Alston/Brighton	435	8"	SS
North Beacon Street	Cambridge Street to Everett Street	Alston/Brighton	365	12"	SS
Kirkwood Road	Chestnut Hill Avenue to Foster Street	Alston/Brighton	1000	10"	SS
Kirkwood Road	Chestnut Hill Avenue to Foster Street	Alston/Brighton	780	10",12",18"	SD
Surrey Street	Foster Street Market Street	Alston/Brighton	570	12" 15"	SS
Western Avenue	Everett Street to South Compus Drive	Alston/Brighton	740	12"	SS
Beacon Street	Ayr Street to Chestnut Hill Avenue	Alston/Brighton	450	8"	SS
Soldiers Field Road	Leo M Birmingham Parkway	Alston/Brighton	550	10"	SS
Foster Street	Surrey Street to Washington Street	Alston/Brighton	375	12"	SS
Commonwealth Avenue	at Armory Street	Alston/Brighton	40	12"	SS
Western Avenue	Litchfield Street to Antwerp Street	Alston/Brighton	285	18"	SS
Malvern Street	Gardemer Street to Brighton Street	Alston/Brighton	30	12"	SS
Faneuil Street	Sanderson Place	Alston/Brighton	10"	90	SS
Faneuil Street	Sanderson Place	Alston/Brighton	15"	225	SS
Everett Street	Guest Street to North Beacon Street	Alston/Brighton	12"	40	SS
Everett Street	Guest Street to North Beacon Street	Alston/Brighton	12"	280	SS

25-309-001:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
East Side Interceptor					
Roxbury Canal Conduit					
New Albany Street Interceptor			**14,200**		**Total**

25-308-004:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE
Woodrow Ave	Dorchester	Blue Hill Ave to Norfolk	3700	12
St Marks Road	Dorchester	Dorchester Ave to Adams	1600	8
Semont	Dorchester	Dorchester Ave to St Marks Rd	750	8
Glenrose	Dorchester	Adams to St Marks Rd	625	8
Fairlawn Ave	Mattapan	Greenfield to Bismarck	1250	8
			7925	

25-308-003:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
West Milton St.	Ernest Ave. to Milton St.	Hyde Park	2,545	8, 12	Wrelay
Milton St.	West Milton St. to Neponset Valley Pkwy.	Hyde Park	775	12	Wrelay
Neponset Valley Pkwy.	Milton St. to Westinghouse Plaza	Hyde Park	1,730	8, 12	Wrelay
Readville St.	West Milton St. to River St.	Hyde Park	3,735	8, 12	Wrelay
Ernest Ave.	West Milton St. to River St.	Hyde Park	890	8,12	Wrelay
Norton St.	Readville St. to River St.	Hyde Park	1,365	8	Wrelay
Westinghouse Plaza	Readville St. to End	Hyde Park	50	12	Wrelay
Robert Pl	West Milton St. to End	Hyde Park	215	8	Wrelay
West Milton St.	Ernest Ave. to Milton St. Hyde Park	Hyde Park	2,830	8,15	SDlining
Neponset Valley Pkwy.	Milton St. to Westinghouse Plaza	Hyde Park	1430	12,18	SDlining
Readville St.	West Milton St. to River St.	Hyde Park	3070	10,12,18	SDlining
Norton St.	Readville St. to River St.	Hyde Park	1300	8,12	SDlining
Ernest Ave.	West Milton St. to River St.	Hyde Park	85	8	SDlining
Chesterfield St.	Edson St. to Manila Ave.	Hyde Park	540	10,24	SDlining
Como Rd.	Vallaro Rd. to Readville St.	Hyde Park	230	10	SDlining
Danny Rd.	Vallaro Rd. to Reynold Rd.	Hyde Park	205	8	SDlining
Manila Ave. (Easement)	Norton St. to Neponset Valley Pkwy.	Hyde Park	810	18	SDlining
Sanford St.	Danny Rd. to Vallaro Rd.	Hyde Park	300	10	SDlining
Westinghouse Plaza	Readville St. to End	Hyde Park	275	20	SDlining
Readville St.	West Milton St. to River St.	Hyde Park	740	8,10,12	SDrelay
Chesterfield St.	Edson St. to Manila Ave.	Hyde Park	300	10	SDrelay
Como Rd.	Vallaro Rd. to Readville St.	Hyde Park	600	10,15	SDrelay
Sanford St.	Danny Rd. to Vallaro Rd.	Hyde Park	290	18	SDrelay

25-308-002:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Byron Street	Horace Street to Homer Street	East Boston	200	12"	W
Harmony Street	Bennington Street to Horace Street	East Boston	220	8"	W
Moore Street	Cowper Street to Saratoga Street	East Boston	985	8"	W
Chelsea Street	East Eagle Street to Curtis Street	East Boston	1610	12"	W

25-308-001:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Tai Tung Street	Tyler Street to Hudson Street	City Proper	260	8"	W
Tyler Street	Harvard Street to Oak Street	City Proper	600	12"	W
Oak Street	Harrison Street to Tyler Street	City Proper	240	12"	W
Maple Place	Oak Street to Johnny Ct	City Proper	150	8"	W
Johnny Ct	Harrison Avenue to Maple Pl	City Proper	235	8"	W
Harrison Ave	Nassau Street to Herald Street	City Proper	770	12"	W
Harrison Ave	Beach Street to Kneeland Street	City Proper	330	12"	W
Harrison Ave	Essex Street to Beach Street	City Proper	410	12"	W
Marginal road	Tremont Street to Washington Street	City Proper	1,005	12"	W
Stuart Street	Marginal Street to Shawmut Street	City Proper	760	12"	W
Shawmut Avenue	Marginal Street to Tremont Street	City Proper	345	12"	W
Oak St W	Shawmut Street to Washington Street	City Proper	460	12"	W
Washington Street	Marginal Street to Kneeland Street	City Proper	1,430	12"	W
Tremont Street	Shawmut Street to Stuart Street	City Proper	960	12"	W
Stuart Street	Tremont Street to Washington Street	City Proper	600	12"	W

24-309-012:

STREETS	LIMITS	Neighborhood
Alger St	Dorcester Ave to end	South Boston
Boston St	#7 to Dorchester Ave	South Boston
Carpenter St	Devine Way to Preble St	South Boston
Devine Way	Carpenter St to Rogers St	South Boston
Dexter St	Ellery St to Dorchester Ave	South Boston
Dorchester Ave	Greenbaum St to Kemp St	South Boston
Dorchester St	Dorchester Ave to Jenkins St	South Boston
Ellery St	Boston St to Humboldt Pl	South Boston
Father Songin Way	#46 to Dorchester Ave	South Boston
Foundry St	Gillette Park to West Fourth St	South Boston
Gifford Pl	Ward St to end	South Boston
Gillette Park	Foundry St to Dorchester Ave	South Boston
Goodwin Ct	Entire Street	South Boston
Greenbaum St	Foundry St to Dorchester Ave	South Boston
Humboldt Pl	Entire Street	South Boston
Jenkins St	Dorchester St to Old Colony Way	South Boston
Kemp St	Dorchester Ave to O'Conner Way	South Boston
Leeds St	Dorchester Ave to Woodward St	South Boston
Liberty Pl	Preble St to Devine Way	South Boston
Mohawk St	Devine Way to #19, #5 to Preble St	South Boston
O'Conner Way	#5 to #248	South Boston
Old Colony Way	Preble St to Dorchester St	South Boston
Preble St	Dorcester Ave to Old Colony Ave	South Boston
Rogers St	Devine Way to Preble St	South Boston
Southampton St	#440 to Preble St	South Boston
Transit Way	Entire Street	South Boston
Traveler St	on Foundry St	South Boston
Vinton St	Dorchester St to Preble St	South Boston
Wadleigh Pl	Entire Street	South Boston
Ward Ct	Entire Street	South Boston
Ward St	Dorchester St to end	South Boston
Wendell Pl	Entire Street	South Boston
Wendeller St	Devine Way to Preble St	South Boston
Widett Cir	Entire Street	South Boston

24-309-006:

	STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE	Recommended Work
	Cambridge St	Cambridge St from 28IMH2 to 28JMH5	Charlestown	235	24"	Sanitary	Lining
	Caldwell St	Caldwell St from Perkins St to 23 Caldwell St	Charlestown	185	12"	Sanitary	Lining
	Brighton St	Segment of pipe on Brighton St north of Perkins St	Charlestown	100	12"	Sanitary	Lining
	Parker St	Parker St from 13 Parker St to Perkins St	Charlestown	245	12"	Sanitary	Lining
	Stark St	Stark St from Cambridge St to Roland St	Charlestown	150	10"	Sanitary	Lining
	Roland St	Roland St from the East side of 92-100 Cambridge St to Carter	Charlestown	345	12"	Sanitary	Lining
	Carter St	Carter from Cambridge St to Roland St	Charlestown	170	12"	Sanitary	Lining
	Crescent St	Crescent St from Cambridge St to Roland St	Charlestown	150	10"	Sanitary	Lining
	Perkins St	Perkins St from Parker St to Clinton Pl	Charlestown	470	12"	Sanitary	New sewer
	Clinton Pl	Clinton Pl from 6 Clinton Pl to Perkins St	Charlestown	150	12"	Sanitary	New sewer
	Brighton St	Brighton St from Perkins St to Cambridge St	Charlestown	610	12"	Sanitary	Replacement
	Brighton St	Brighton St from 29JMH262 to 29JMH261	Charlestown	50	15"	Drain	Lining
	Brighton St	Brighton St from 29JMH260 to 29JMH258	Charlestown	120	18"	Drain	Lining
	Perkins St	Perkins St from Parker St to Brighton St	Charlestown	205	24"	Drain	Lining
	Clinton Pl	Pipe segment along northern portion of Clinton Pl	Charlestown	135	24"	Drain	Lining
	Perkins St	Perkins St from Brighton St to Clinton Pl	Charlestown	130	24"	Drain	Replacement
	Roland St	Segment of Pipe on Roland St from Stark St to Crescent St	Charlestown	110	12"	Drain	Replacement
	Caldwell St	Caldwell St from Maffa Way to Perkins St	Charlestown	615	12"	Drain	New Drain
	Hadley St	Hadley St from Crescent St to 29IMH4	Charlestown	70	12"	Drain	New Drain
	Parker St	Parker St from Hadley St to Cambridge St	Charlestown	100	12"	Drain	New Drain
	Cambridge St	Cambridge St from Crescent St to 99 Cambridge St	Charlestown	505	12"	Drain	New Drain
	Spice St	Spice St from 6 Spice St to Rutherford Avenue	Charlestown	770	12"	Drain	New Drain
	Perkins St	Perkins St from Caldwell St to Clinton Pl	Charlestown	440	12"	WM	Replacment
	Cambridge St	Cambridge St from Interstate 93 Highway Overpass to Sullivan	Charlestown	690	12"	WM	Replacment

24-309-003:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Armstrong Street	Mozart Street to Chestnut Avenue	Jamaica Plain	535	8"	w
Armstrong Street	Mozart Street to Chestnut Avenue	Jamaica Plain	485	10"	SS
Boylston Place	Boylston Street to End	Jamaica Plain	235	10"	SS
Centre Street	Dunster Road to Holbrook Street	Jamaica Plain	120	27"	SD
Centre Street	Dunster Road to Holbrook Street	Jamaica Plain	295	10"	SS
Centre Street	390 Centre Street to 422 Centre Street	Jamaica Plain	530	12"	SS
Centre Street	Boylston Street to Roseway Street	Jamaica Plain	130	12"	SS
Goodrich Road	Centre Street to End	Jamaica Plain	515	12"	SS
Gurney Street	Tremont Street to Halleck Street	Jamaica Plain	280	12"	SS
Huntington Avenue	Saint Albans Road to 200' Easterly	Roxbury	200	12"	SS
Huntington Avenue	Fenwood Road to Tremont Street	City Proper	255	12, 26x39	SS
John A Andrew Street	Carolina Avenue to Newbern Street	Jamaica Plain	45	12"	W
John A Andrew Street	Carolina Avenue to Newbern Street	Jamaica Plain	535	12"	SS
John A Andrew Street	Carolina Avenue to Newbern Street	Jamaica Plain	350	12"	SD
Kenny Street	Day Street to End	Jamaica Plain	500	10"	SS
Kenny Street	Day Street to End	Jamaica Plain	260	12"	SD
Kingsboro Street	Centre Street to End	Jamaica Plain	500	8"	W
Kingsboro Street	Centre Street to End	Jamaica Plain	495	10"	SS
Louder's Lane	Calvin Road to #68 Louder's Lane	Jamaica Plain	340	10"	SS
Minton Street	#1A Minton Street to Armory Street	Jamaica Plain	145	12"	SS
Newbern Street	Carolina Avenue to Bishop Street	Jamaica Plain	670	12"	SS
Newbern Street	Carolina Avenue to Bishop Street	Jamaica Plain	500	20" ,15"	SD
Parker Street	Parker Hill Avenue to Hillside Avenue	Roxbury	490	15", 20"	SS
Parker Hill Avenue	Huntington Avenue to Parker Street	Roxbury	3,705	12"	W
Parker Hill Avenue	Huntington Avenue to Parker Street	Roxbury	1,460	12"	SS
Parker Hill Avenue	Huntington Avenue to Parker Street	Roxbury	1575	20",12"	SD
Riverway	Huntington Avenue to 352 Riverway	City Proper	735	12"	W
Riverway	Huntington Avenue to 352 Riverway	City Proper	765	20" & 15"	SD
Riverway	Huntington Avenue to 352 Riverway	City Proper	715	10"	SS
Roseway Street	Centre Street to End	Jamaica Plain	465	10"	SS
Saint Albans	Fenwood Road to #31 Saint Albans Road	City Proper	365	12"	SS
Saint Albans	Fenwood Road to #31 Saint Albans Road	City Proper	335	12"	SD
South Street	Saint Rose Street to #136 South Street	Jamaica Plain	400	12", 15"	SS
Spring Park Avenue	Centre Street to 30 Spring Park Avenue	Jamaica Plain	575	12"	SS
Terrace Street	Oscar Street to Gore Street	Roxbury	275	12"	SS
Wait Street	12 Wait Street to 70 Huntngton Avenue	Roxbury	155	10"	SS

24-309-001:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Vallar Road	Faywood Ave to End	East Boston	545	12	SS
Vallar Road	Faywood Ave to End	East Boston	180	12	SD
Faywood Avenue	Vallar Rd to Crestway Rd	East Boston	400	10?	SS
Beachview Road	Drumlin Rd to Orient Ave	East Boston	1120	10	SS
Beachview Road	Drumlin Rd to Orient Ave	East Boston	620	24	SD
Barnes Avenue	Saratoga St to End	East Boston	1085	10, 12	SS
Barnes Avenue	Saratoga St to End	East Boston	170	12	SD
Saratoga Street	Swift St to Curtis St	East Boston	335	12	SS
Curtis Street	Saratoga St to Bennington St	East Boston	140	10	SS
Porter Street	Orleans St to Lubec St	East Boston	310	10	SS
Breed Street	Gladstone St to Leyden St	East Boston	435	10, 12	SS
Chatham Street	Merchants Row to Commercial St	Central	520	10, 12	SS
Merchants Row	Chatham St to State St	Central	155	15	SS
Hancock Street	Columbia Rd to Bird St	North Dorchester	190	10	SS
New England Avenue	Southern Ave to Norfolk St	South Dorchester	390	10	SS
Southern Avenue	New England Ave to Ferndale St	South Dorchester	200	10	SS
Burrell Street	Clifton St to Norfolk Ave	Roxbury	735	12	SS-Sep
			735	12	SD-Sep

24-308-003:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Burbank Street	Hemenway Street to Edgerly Road	Fenway/Kenmore	430	12	W
Devonshire Street	Milk Street to Franklin Street	Central	860	12	W
Gladstone Street	Walley Street to End	Easy Boston	3000	8	W
Newbury Street	Massachusetts Ave to Charlesgate East	Fenway/Kenmore	500	12	W
Scotia Street	Saint Cecilia Street to Dalton Street	Fenway/Kenmore	500	8	W
Westland Avenue	Hemenway Street to Edgerly Road	Fenway/Kenmore	900	12	W
Commonwealth Avenue	Washington Street to Fidelis Way	Allston/Brighton	500	12	S
Washington Street	#67 Washington Street to Commonwealth Ave	Allston/Brighton	500	12	S

24-308-002:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Heath Street	South Huntington Avenue to Columbus Avenue	Jamaica Plain	3,660	12	W
Heath Street	South Huntington Avenue to Columbus Avenue	Jamaica Plain	360 Relay	12	SS
Heath Street	South Huntington Avenue to Columbus Avenue	Jamaica Plain	80 Lining	10	SS
Heath Street	South Huntington Avenue to Columbus Avenue	Jamaica Plain	910 Lining	12	SS
Heath Street	South Huntington Avenue to Columbus Avenue	Jamaica Plain	315 Lining	15	SS
Heath Street	South Huntington Avenue to Columbus Avenue	Jamaica Plain	115 Lining	18	SS
Heath Street	South Huntington Avenue to Columbus Avenue	Jamaica Plain	255 Lining	18	SS
New Heath Street	Parker Street to Terrace Street	Jamaica Plain	500	12	W
Heath Street	South Huntington Avenue to Columbus Ave	Jamaica Plain	3500	36	W
	Anticipated after review of additional pipe inspection videos		400 Relay	12	SS
			600 Lining	12,15	SS, SD

23-309-002:

STREETS	LIMITS	Neighborhood
Anthony J Grieco Ter	#8 To Chelsea St	East Boston
Bremen St	Sumner St To Prescott St	East Boston
Brooks St	Chelsea St To Bremen St	East Boston
Chelsea St	Maverick St To George R Visconti Rd	East Boston
Drake Pl	#3 To Chelsea St	East Boston
Elbow St	Meridian St To Chelsea St	East Boston
Emmons St	Paris St To Chelsea St	East Boston
George R Visconti Rd	Chelsea St To Bremen St	East Boston
Gove St	Paris St To Bremen St	East Boston
Marion St	Chelsea St To Bremen St	East Boston
Maverick St	Chelsea St To Bremen St	East Boston
Meridian St	Paris St To Maverick St	East Boston
Paris St	Meridian St To Emmons St	East Boston
Porter St	Chelsea St To Orleans St	East Boston
Putnam St	Chelsea St To Bremen St	East Boston
Rev Anthony Ciao Fw	Bremen St To Orleans St	East Boston

23-309-011:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Water					
Kilmarnock St	Boylston St to Park Drive	Fenway	750	10,8	W
Queensberry	Park Drive to Park Drive	Fenway	1800	8	W
Sewer					
Boylston Street	Kilmarnock St to Jersey St	Fenway	724	32x42	SS
Kilmarnock St	Boylston St to Park Drive	Fenway	656	15x22	SS
Queensberry	Park Drive to Park Drive	Fenway	255	15x18,30x36	SS
Private Alley 914	Jersey St to Queensberry St	Fenway	232	12	SS
Private Alley 925	Kilmarnock St to Jersey St	Fenway	252	15x18, 18	SS
Private Alley 926	Kilmarnock St to Jersey St	Fenway	297	15	SS
Private Alley 930	Peterborough St to Queensberry St	Fenway	343	15x18	SS
Drain					
Boylston Street	Jersey St to Kilmarnock	Fenway	1389	12,15,18,24	SD
Queensberry	Park Drive to Park Drive	Fenway	1745	15, 18, 30x30	SD
Private Alley 914	Jersey St to Queensberry St	Fenway	232	18	SD
Private Alley 925	Kilmarnock St to Jersey St	Fenway	221	18x24	SD
Private Alley 930	Peterborough St to Queensberry St	Fenway	304	36x36	SD

23-308-003:

LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Broad St to India St	Central	230	12"	W
India Pl to State Street	Central	980	12"	W
State Street to Merrimac St	Central	2210	12"	W
Hanover St to Merrimac St	Central	1390	12"	W
State Street to Clinton Street	Central	640	12", 16"	W
Hanover to End	Central	100	4"	W
North to End	Central	150	6"	W
Congress to Blackstone	Central	150	12"	W

23-308-002:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Tremont St	Benton Street to Northampton St	South End	1060	20	WMREL
Tremont St	West Newton to Camden	South End	1820	12	WMREL
Tremont St	West Newton to Northampton	South End	1510	8	WMREL
W. Concord	Tremont to Washington St	South End	1200	10	SL

22-309-002:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Cliffmont Street	Canterbury to #33 Cliffmont (10F329 to 10F280)	Hyde Park	250	10	SLIN
Cliffmont Street	#75 Cliffmont to #61 Cliffmont Street (9F284 to 9F283)	Hyde Park	210	10	SLIN
Cliffmont Street	Canterbury Street to #77 Cliffmont Street (10FV134 to 9FV101)	Hyde Park	1140	8	WREL
Wingate Road	at Neponset Valley Parkwy (DCR) (2F CB42 to DCR drain/drywell)	Hyde Park	50	10	DREL
Easement (under MBTA Fairmont Line)	#237 Hyde Park Ave to #50 Brookway Terrace (12G28 to 12G03)	Roslindale	260	15	SLIN
Easement (under MBTA Fairmont Line)	#237 Hyde Park Ave to #50 Brookway Terrace (20' from 12G03)	Roslindale	20	15	SREL
Geneva Avenue	Vaughn Avenue to MBTA Sta. (14j282 to 14j283)	Roxbury	185	15	DLIN
Geneva Avenue	Vaughn Avenue to MBTA Sta. (14j112 to 14j114)	Roxbury	140	10	SREL
Geneva Avenue	Olney Street to #237 Geneva Ave. (14j212 to 14j211)	Roxbury	210	12	SLIN
Geneva Avenue	#255 Geneva Ave. to Everton Street (14j210 to 14j209)	Roxbury	225	12	SLIN
Columbia Road	Oldfields Rd. to Stanwood St. (#200 Columbia add new drain and CB)	Dorchester	100	18	DREL
Columbia Road	Intervale Street at Columbia Road (new drain to remove from SS)	Dorchester	60	18	DREL
Wenlock Road (Easement)	#14 Wenlock Rd. to #31 Hallet Street (11L147 to 11L152)	Dorchester	425	15	SLIN
Wenlock Road	Gallivan Blvd. to Minot Street (11L160 to 11L161)	Dorchester	100	10	DLIN
Wenlock Road	Gallivan Blvd. to Minot Street (11L148 to 11L474)	Dorchester	85	10	SLIN
Wenlock Road	Gallivan Blvd. to Minot Street (11L474 to 11L147)	Dorchester	90	10	SLIN
Wenlock Road	Gallivan Blvd. to Minot Street (11LV156 ot 11LV30)	Dorchester	230	8	WREL
Gannett Street	Holburn Street to Gaston Street (16iV184 thry 16iV118)	Dorchester	500	8	WREL
Gannett Street	Holburn Street to Gaston Street (16i292 to 16i307)	Dorchester	515	18	DREL
Gannett Street	Holburn Street to Gaston Street (16i289 to 16i290)	Dorchester	250	15	SLIN
Gannett Street	Holburn Street to Gaston Street (16i290 to 16i303)	Dorchester	290	15	SREL
Carlisle Street	#11 Carlisle to Warren Street (16i236 to 16i234)	Dorchester	400	12	SLIN
Carlisle Street (Easement)	#11 Carlisle to Gannett Street (16i236 to SLHs Gannett)	Dorchester	160	12	SLIN
Carlisle Street	Point repairs at #7 and #11 Carlisle Street	Dorchester	30	12	SREL
Gaston Street	#17 Gaston to Gannett Street (16i308 to new 16i307)	Dorchester	200	12	DLIN
Gaston Street	Otisfield Street to Bluehill Avenue (set new MH at 16i307 to 16i306)	Dorchester	215	24	DLIN
Gaston Street	Otisfield Street to Bluehill Avenue (16i304 to 16i258)	Dorchester	310	12	SLIN
Gaston Street	Gannett Street to Otisfield Street (16i303 to 16i304)	Dorchester	140	12	SLIN
Gaston Street	Otisfield Street to Bluehill Avenue (set new MH structure)	Dorchester	10	24	DREL

21-309-001

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Waumbeck Street	Crawford Street to Wabeno Street	Roxbury	730	12	SS
Waumbeck Street	Crawford Street to Humboldt Avenue	Roxbury	330	12	SD
Waumbeck Street	Crawford Street to Humboldt Avenue	Roxbury	640	8	W
Harold St	Harrisof Street to Waumbeck Street	Roxbury	235	15	SS
Harold St	Harrisof Street to Waumbeck Street	Roxbury	320	12,24	SD
Hollander Street	Harold Street to Crawford Street	Roxbury	345	18	SS
Howland St	Harold Street to Humboldt Avenue	Roxbury	205	10	SS
Howland St	Harold Street to Humboldt Avenue	Roxbury	185	10	SD
Holworthy St	Harold Street to End	Roxbury	160	10	SS
Walnut Avenue	Harrisof Street to Holworthy Street	Roxbury	245	12	SS
Walnut Avenue	Harrisof Street to Holworthy Street	Roxbury	230	18	SD
Thwing St (easement)	#55 (rear) to 43 Beech Glen (rear) Thwing (easement)	Roxbury	610	8, 10	SS
Denison St	Hailey Street to END	Roxbury	600	12	SS
Denison St	Hailey Street to END	Roxbury	600	12	SD
Denison St	Hailey Street to END	Roxbury	660	12	W

20-308-002:

STREETS	LIMITS	Neighborhood	PIPE LENGTH	SIZE	TYPE
Shawmut Avenue	Milford Street to West Brookline	South End/City Proper	1700	12	WREL
Walthum Street	Tremont Street to Washington Street	South End/City Proper	1130	12	WREL
Hanson Street	Tremont Street to Shawmut Avenue	South End/City Proper	650	8	WREL
Shawmut Street	Melnea Cass to Massachusetts Avenue	South End/City Proper	1650	16	WREL
Shawmut Street	Massachusetts TrnPk to E.Berkeley Street	South End/City Proper	1000	12	WREL
Bond Street	Milford Street to Hanson Street	South End/City Proper	200	8	WREL
Shawmut Avenue	Pelham Street to Upton Street	South End/City Proper	65	24	SLIN
Shawmut Avenue	West Dedham to Drapers Lane	South End/City Proper	135	15	DLIN
West Dedham	#80 W. Dedham to Shawmut Ave	South End/City Proper	315	10	SLIN
Shawmut Avenue	Massachusetts Turnpike to E.Berkely Street	South End/City Proper	105	15	SLIN
Shawmut Avenue	Massachusetts Turnpike to E.Berkely Street	South End/City Proper	290	15	SLIN
Shawmut Avenue	#140 Shawmut Ave. to #170 Shawmut Ave	South End/City Proper	220	15	SLIN
Emerald Court	Emerald Court (end) to #170 Shawmut Ave	South End/City Proper	150	10	SLIN
Shawmut Avenue	#617 Shawmut Ave. to Lenox Street	South End/City Proper	220	10	SLIN
Shawmut Avenue	Northampton to Campden Street	South End/City Proper	185	18	SLIN
Shawmut Avenue	San Juan to West Brookine St.	South End/City Proper	240	10	SLIN
Shawmut Avenue	Upton Street to Union Park Street	South End/City Proper	145	18	DLIN
Shawmut Avenue	#131 Shawmut, Paul Place to Emerald Court	South End/City Proper	100	10	SLIN
Hanson Street	Ringold Street to Tremont Street	South End/City Proper	310	18	DLIN
Hanson Street	Ringold Street to Tremont Street	South End/City Proper	315	12	SLIN
Waltham Street	Washington Street to Shawmut Ave.	South End/City Proper	205	10	SLIN
Alley #711 (Rear #275 to #293 Shawmut Ave.)	Hanson Street to Waltham Street	South End/City Proper	115	12	SLIN
Bradford Street	#16 Bradford Street to Waltham Street	South End/City Proper	190	12	SLIN
Passageway (Rear #256 to #278 Shawmut Ave.)	Rear #256 Shawmut Ave. to #278	South End/City Proper	220	8	SLIN
Ball Street	Washington to Shawmut Ave	South End/City Proper	245	12	SLIN
Ball Street	Washington to Shawmut Ave	South End/City Proper	40	12	SREL
Ball Street	Washington to Shawmut Ave	South End/City Proper	165	12	DLIN
Ball Street	Washington to Shawmut Ave	South End/City Proper	40	12	DREL
Shawmut Avenue	Hammond Street to Ball Street	South End/City Proper	35	12	SLIN
Ball Street	Washington to Shawmut Ave	South End/City Proper	440	12	WREL



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