



# MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island  
33 Tafts Avenue  
Boston, MA 02128

**Frederick A. Laskey**  
**Executive Director**

*Chair:* R. Tepper  
*Vice-Chair:* A. Pappastergion  
*Secretary:* B. Peña  
*Board Members:*  
P. Flanagan  
J. Foti  
B. Swett  
L. Taverna  
H. Vitale  
J. Walsh  
P. Walsh  
J. Wolowicz

## **BOARD OF DIRECTORS' MEETING**

Telephone: (617) 242-6000  
Fax: (617) 788-4899  
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**Date:** Wednesday, January 15, 2025  
**Time:** 1:00pm  
**Location:** MWRA Administration Facility, Conference Rooms 2C and 2D  
2 Griffin Way, Chelsea, MA 02150

**A photo ID will be required for entry.**

The meeting will also be available via Webex. The Webex link, event number and password to attend virtually are below:

Webex meeting link (registration required)

<https://mwra.webex.com/weblink/register/rb624327c143a0729a755c2f9b5898116>

Event number: 2343 364 3294 Password: 011525

## **AGENDA**

### **I. APPROVAL OF MINUTES**

### **II. REPORT OF THE CHAIR**

### **III. REPORT OF THE EXECUTIVE DIRECTOR**

### **IV. EXECUTIVE SESSION**

i. Approval of December 11, 2024 Executive Session Minutes

#### **A. Real Estate**

1. Watershed Land Acquisition Approval
2. Memorandum of Agreement between the Authority, Lynn Harborpark, LLC and the City of Lynn related to MWRA Contract 7454-Section 56 Replacement of Saugus River Crossing
3. MWRA Contract 7454-Section 56 Replacement of Saugus River Crossing: Acceptance of Grants of Permanent Water Easements from the Cities of Lynn and Revere and from SEB Lynn Harbor Property, LLC
4. MWRA Contract 7454-Section 56 Replacement of Saugus River Crossing-Cities of Lynn and Revere Approval of Orders of Taking
5. Metropolitan Tunnel Redundancy Program Land Acquisition - verbal

#### **B. Litigation**

1. Annual Litigation Update
2. Barletta Heavy Division, Inc. v. MWRA, Suffolk Superior Court No 2484-CV-02185- BLS2

**V. ADMINISTRATION, FINANCE AND AUDIT**

**A. Information**

1. Delegated Authority Report – December 2024
2. FY25 Financial Update and Summary as of December 2024

**B. Approvals**

1. Transmittal of the FY26 Proposed Capital Improvement Program (CIP) to the MWRA Advisory Board

**VI. WATER POLICY & OVERSIGHT**

**A. Contract Amendments/Change Orders**

1. Intermediate High Pipeline Improvements, Design and Engineering Services During Construction: CDM Smit, Contract 6955, Amendment 2
2. John J. Carroll Water Treatment Plant SCADA System Upgrade – Design, Engineering Services During Construction and Resident Engineering Services: Arcadis U.S., Inc. Contract 7581, Amendment 5

**VII. CORRESPONDENCE TO THE BOARD**

**VIII. OTHER BUSINESS**

**IX. ADJOURNMENT**

## MASSACHUSETTS WATER RESOURCES AUTHORITY

### Meeting of the Board of Directors

December 11, 2024

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A meeting of the Massachusetts Water Resources Authority (“MWRA”) Board of Directors was held on December 11, 2024 at Headquarters at Deer Island, Boston, and via remote participation.

Chair Tepper presided at MWRA Headquarters. Board Members Flanagan, Pappastergion, Peña, Taverna, Jack Walsh, and Patrick Walsh participated at MWRA Headquarters. Board Members Swett, Vitale and Wolowicz participated remotely. Board Member Foti was absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Director of Administration Michele Gillen; Chief of Staff Katherine Ronan; Associate General Counsel Angela Atchue; IT Asset Management Analyst Michael Curtis; and, Assistant Secretary Kristin MacDougall attended at MWRA Headquarters.

Matt Romero, MWRA Advisory Board, also attended at MWRA Headquarters.

Special Assistant for Affirmative Action Tomeka Cribb attended remotely.

Vandana Rao, EEA, also attended remotely.

Chair Tepper called the meeting to order at 1:06pm.

#### ROLL CALL

MWRA General Counsel Francisco Murphy took roll call of Board Members in attendance and announced that Board Members Swett, Vitale, and Wolowicz were participating remotely. The Chair announced that the meeting was being held at MWRA Headquarters and virtually, via a link posted on MWRA’s website. She added that the meeting would be recorded, and that the agenda and meeting materials were available on MWRA’s website.

#### APPROVAL OF NOVEMBER 13, 2024 MINUTES

**A motion was duly made and seconded to approve the minutes of the Board of Directors’ meeting of November 13, 2024.**

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		

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*Documents used for this meeting and cited in these minutes, including meeting materials/staff summaries, presentations, and approved minutes, are posted on MWRA’s website: <https://www.mwra.com/about-mwra/governance-management/board-directors/archive-agendas-and-minutes>*

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Pappastergion		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. I)

#### REPORT OF THE CHAIR

Chair Tepper reported on two pieces of legislation recently signed by Governor Healey. First, she discussed the Mass Leads Act economic development bill, which includes \$1 billion in initiatives to attract and support the climatetech and life sciences sectors. She also noted the passing of the Climate Bill to accelerate clean energy development and create an equitable infrastructure siting process through significant permitting and siting reform, including for distribution and transmission lines. (ref. II)

#### REPORT OF THE EXECUTIVE DIRECTOR

##### Presentation – Quinapoxet Dam Removal Project Update

Marty McGowan, MWRA Construction Director, described the project's specialized contractors, SLR International Corporation and Lucianos Excavation, Inc., and presented photos of the dam's location on the Quinapoxet River near the Oakdale Power Station.

Mr. McGowan then described the dam removal process and site conditions. He noted that the ongoing drought has caused Wachusett Reservoir's levels to drop, necessitating water transfers from the Quabbin to the Wachusett, through the dam project's work zone.

Next, Mr. McGowan explained how the project team developed a plan to make the transfers with minimal work delays by accelerating the construction of a riprapped peninsula that separates the Quabbin diversion channel from the riverbed. He reported that the transfer had successfully resumed on December 9, 2024, and presented photos of construction activities on the riverbed adjacent to the diversion channel. Finally, Mr. McGowan noted that the Quabbin transfer is expected to continue in the foreseeable future.

In response to a question from Board Member Taverna, Mr. McGowan explained that the project's diversion channel was designed by an engineering firm, SLR International Corporation. Board Member Pappastergion asked if the Quinapoxet River would be returned to its original flow pattern when the dam removal project is completed. Mr. McGowan responded in the

affirmative, and noted that the riverbed will be relined with native stone and regraded to its natural configuration. Chair Tepper asked when staff expect project completion. Mr. McGowan relayed that staff's goal is to complete in-river work by April 2025 and to conduct some riverbank restoration in fall 2025, with expected project completion in December 2025.

Chair Tepper noted that this project would provide helpful insights for similar dam removals planned at locations across Massachusetts.

#### Executive Director's Report

Citing recent Board discussion about community water interconnections (ref. VI A.3, November 13, 2024), MWRA Executive Director Fred Laskey noted that emergency interconnections between several communities are currently being used in support of a water pipeline repair in the City of Waltham. Mr. Laskey then updated the Board on the Section 4 Walnut Street Bridge Pipe Restraint Replacement Project, which is expected to be complete in late December 2024. Finally, he reported that staff met with Lt. Governor Driscoll to discuss potential water supply solutions for the Union Point Development in Weymouth. There was brief, general discussion about the MWRA Advisory Board's upcoming Open House. (ref. III)

#### EXECUTIVE SESSION

Chair Tepper requested that the Board move into Executive Session to discuss Litigation and Real Estate, since discussing such in Open Session could have a detrimental effect on the litigating and negotiating positions of the Authority. She announced that the planned topics for Executive Session were discussion of strategy with respect to litigation, and a Metropolitan Tunnel Redundancy land acquisition update, and that the Board would return to Open Session after the conclusion of Executive Session.

**A motion was duly made and seconded to enter Executive Session for these purposes, and to resume Open Session after Executive Session adjournment.**

General Counsel Francisco Murphy reminded Board members that under the Open Meeting Law members who were participating remotely in Executive Session must state that no other person is present or able to hear the discussion at their remote location. A response of "yes" to the Roll Call to enter Executive Session when their name was called would also be deemed their statement that no other person was present or able to hear the Executive Session discussion.

Upon a motion duly made and seconded, a roll call vote was taken in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Pappastergion		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

Voted: to enter Executive Session, and to resume Open Session after Executive Session adjournment.

\*\*\* EXECUTIVE SESSION \*\*\*

The meeting entered Executive Session at 1:20pm and adjourned at 1:45pm.

\*\*\* CONTINUATION OF OPEN SESSION \*\*\*

PRESENTATION

FY21-FY25 Strategic Business Plan: Annual Update for FY24

Denise Breiteneicher, MWRA Energy and Environmental Program Manager, presented an annual update on the FY21-FY25 Strategic Business Plan (“Business Plan”). She summarized the plan’s purpose, guiding principles and structure.

Next, Ms. Breiteneicher discussed FY24 Business Plan highlights, including over 4,000 lead and copper tests for childcare facilities in 35 communities; the completion of the Nut Island Headworks Odor Control Improvements Project, which was awarded Best Water/Environmental project in New England by Engineering News Record; the launch of a new MWRA website with additional functionalities; the first annual STEM fair at the Deer Island Treatment Plant (“DITP”); updated decarbonization standard procedures; approval of funding to install Electric Vehicle infrastructure at MWRA’s Chelsea Facility; the development of a DITP instrumentation training program; and, the start of the Quinapoxet Dam Removal Project.

Ms. Breiteneicher then presented Business Plan objectives completed in FY24, including the implementation of a subscriber-based Combined Sewer Overflow Public Notification Program and Sanitary Sewer Overflow reporting system; a wastewater metering system update; expanded integration between MAXIMO, Lawson, Process Information and Automated Vehicle Location systems; expanded use of predicative management tasks; dam stability evaluations and other earthquake preparedness studies; and, expanded recycling efforts.

Hearing no discussion or questions from the Board, Chair Tepper moved to Personnel and Compensation. (ref. V.1)

#### PERSONNEL AND COMPENSATION

##### Personnel and Compensation Committee Meeting Summary for the Board Chair

Committee Chair Wolowicz noted that the December 11, 2024 Personnel and Compensation Committee meeting included discussion on a proposed compensation study of non-union management salaries. Ms. Wolowicz then explained that she had worked with MWRA Director of Human Resources Wendy Chu to develop the Staff Summary on the study that was presented at the Committee meeting, and that conducting such a study had been suggested by the Board of Directors in June 2024 (ref. P&C C.1, June 26, 2024). Finally, Ms. Wolowicz reported that the December 11 Personnel and Compensation Committee had unanimously voted to present to the full Board a motion that outlines parameters for the scope of a third-party compensation study.

##### Approvals

##### Compensation Study of Non-Union Management Salaries

**A motion was duly made and seconded that the scope for the Compensation Study of Non-Union Management Salaries include: all non-union manager positions; a review of the entire compensation packages plus benefits; a review of job descriptions; comparisons of public and private sector entities around the country, with a normalization of the data to reflect, for example, cost of living; a review of MWRA non-union manager compensation philosophy and structure; and a recommendation from the third party consultant performing the study on how often such studies should be conducted.**

Chair Tepper asked if the proposed study would include comparisons of compensation at other Massachusetts quasi-public agencies. MWRA General Counsel Carolyn Francisco-Murphy responded in the affirmative.

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Pappastergion		
Peña		
Swett		
Taverna		
Vitale		

Yes                      No                      Abstain

J. Walsh

P. Walsh

Wolowicz

(ref. P&C A.1)

Appointment of Director, Wastewater Operations and Maintenance

**A motion was duly made and seconded to approve the appointment of Mr. John Parkhurst to the position of Director, Wastewater Operations and Maintenance (Non-Union, Grade 15) in the Operations Division, at the recommended annual salary of \$168,205, commencing on a date to be determined by the Executive Director.**

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes                      No                      Abstain

Tepper

Flanagan

Pappastergion

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

Wolowicz

(ref. P&C B.1/VI A.1)

Appointment of Rita C. Mercado, Special Assistant for Affirmative Action

**A motion was duly made and seconded to approve the appointment of Rita C. Mercado to the position of Special Assistant for Affirmative Action and Compliance (Non-Union, Grade 16) at an annual salary of \$175,219, commencing on a date to be determined by the Executive Director.**

Chair Tepper asked if there was any discussion or questions from the Board, and expressed her support for filling this position and appointing the recommended job candidate. Hearing no further discussion, she requested a roll call vote in which the members were recorded as follows:



Yes                      No                      Abstain

Tepper

Flanagan

Pappastergion

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

Wolowicz

(ref. P&C B.2/VI A.2)

#### ADMINISTRATION, FINANCE AND AUDIT

##### Administration, Finance and Audit Committee Meeting Summary for the Board Chair

Committee Chair Flanagan summarized the discussion that took place during the December 11, 2024 Administration, Finance and Audit Committee meeting. He reported that after deliberating on proposed Amendments to the Memorandums of Agreement (“MOAs”) with the City of Quincy and the Town of Winthrop, the Committee voted non-unanimously to defer recommendations to present these items for full Board approval pending further discussion at this Board of Directors’ meeting.

##### Approvals

##### First Amendment to the Memorandum of Agreement (MOA) with the City of Quincy

**A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to execute the First Amendment to the Memorandum of Agreement with the City of Quincy, substantially in the form attached to the December 11, 2024 Staff Summary, to extend the term of the agreement for an additional ten years and to continue to provide mitigation to the City of Quincy as detailed in said Staff Summary presented and filed with the records of this meeting.**

Board Vice-Chair Pappastergion requested that Chair Tepper entertain a stipulation on this motion. He then recommended that the motion as written be amended to include a clause that would, at the five-year mark, permit all parties to reopen negotiations on the MOA’s term length. There was discussion about this recommendation; the impacts of MWRA’s major infrastructure on host communities, such as on first responders; and, the history of the Quincy and Winthrop MOAs. Mr. Pappastergion withdrew his suggested stipulation on the motion.

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
	Pappastergion	
Peña		
Swett		
	Taverna	
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. AF&A B.1/VII A.1)

First Amendment to the Memorandum of Agreement with the Town of Winthrop

**A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority to execute the First Amendment to the Memorandum of Agreement with the Town of Winthrop, substantially in the form attached in the December 11, 2024 Staff Summary, to extend the term of the agreement for an additional ten years and to continue to provide mitigation to the Town of Winthrop as detailed in said Staff Summary presented and filed with the records of this meeting.**

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
	Pappastergion	
Peña		
Swett		
	Taverna	
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. AF&A B.2/VII A.2)

## WASTEWATER POLICY AND OVERSIGHT

### Wastewater Policy and Oversight Committee Meeting Summary for the Board Chair

Committee Chair Patrick Walsh reviewed the agenda items discussed at the December 11, 2024 Wastewater Policy and Oversight Committee meeting, and advised that the Committee voted to advance all motions presented for full Board approval.

### Contract Awards

Hayes Pump Station Rehabilitation Resident Engineering/Resident Inspection Services: Hazen and Sawyer, P.C., Contract 7668

**A motion was duly made and seconded to approve the recommendation of the Consultant Selection Committee to award Contract 7668, Hayes Pump Station Rehabilitation Resident Engineering/Resident Inspection Services, to Hazen and Sawyer, P.C. and to authorize the Executive Director, on behalf of the Authority, to execute said contract in an amount not to exceed \$1,759,118, for a contract term of 39 months from the Notice to Proceed.**

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
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Tepper

Flanagan

Pappastergion

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

Wolowicz

(ref. WW A.1/VIII.A.1)

### Contract Amendments/Change Orders

Ward Street and Columbus Park Headworks Upgrade: CDM Smith, Contract 7429,

### Amendment 1

**A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Amendment 1 to Contract 7429, Ward Street and Columbus Park Headworks Upgrade, with CDM Smith Inc. in an amount not to exceed \$4,023,000, increasing the contract amount from \$28,896,530 to \$32,919,530 and extending the contract term by 32 months from January 22, 2030 to September 22, 2032.**

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
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Tepper

Flanagan

Pappastergion

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

Wolowicz

(ref. WW B.1/VIII.B.1)

Management, Operation and Maintenance of the Union Park Pump Station/CSO Facility and Unstaffed Pump Stations: Woodard & Curran, Contract S606, Amendment 1

**A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Amendment 1 to Contract S606, Management, Operation, and Maintenance of the Union Park Pump Station/CSO Facility and the Unstaffed Pump Stations, with Woodard & Curran, Inc., exercising the two-year extension, and to execute said Amendment jointly with the Boston Water and Sewer Commission to: (i) increase the contract service fee by \$4,339,180, of which MWRA will pay \$1,171,578.60 (27%) and Boston Water and Sewer Commission will pay \$3,167,601.40 (73%), and to increase the allowance for preventative and corrective maintenance and repairs by \$700,000, which includes \$200,000 for MWRA and \$500,000 for Boston Water and Sewer Commission, for a total Amendment amount of \$5,039,180, increasing the contract sum from \$7,231,262 to a total not to exceed amount of \$12,270,442; and, (ii) extend the contract term by two-years, from March 1, 2025 to February 28, 2027.**

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
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Tepper

Flanagan

Pappastergion

Peña

Yes                      No                      Abstain

Swett

Taverna

Vitale

J. Walsh

P. Walsh

Wolowicz

(ref. WW B.2/VIII B.2)

Braintree-Weymouth Pump Station Improvements: Walsh Construction Co. II, LLC, Contract 7366, Change Order 10

**A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Change Order 10 to Contract 7366, Braintree-Weymouth Pump Station Improvements, with Walsh Construction Co. II, LLC for an amount not to exceed \$100,000, increasing the contract amount from \$14,289,550.90 to \$14,389,550.90, and extending the contract term by 120 calendar days from November 28, 2024 to March 28, 2025.**

**Further, a motion was duly made and seconded to authorize the Executive Director to approve additional change orders as may be needed to Contract 7366 in an amount not to exceed the aggregate of \$1,000,000, and 180 days in accordance with the Management Policies and Procedures of the Board of Directors.**

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

Yes                      No                      Abstain

Tepper

Flanagan

Pappastergion

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

Wolowicz

(ref. WW B.3/VIII B.3)

Braintree-Weymouth Pump Station Improvements Design and ESDC Services: Wright-Pierce, Contract 7435, Amendment 4

**A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Amendment 4 to Contract 7435, Braintree-Weymouth Pump Station Improvements, Design and Engineering Services During Construction, with Wright-Pierce, increasing the contract amount by \$207,700 from \$2,488,567 to \$2,696,267, and the contract term by 16 months from December 17, 2024 to April 17, 2026.**

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
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Tepper

Flanagan

Pappastergion

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

Wolowicz

(ref. WW B.4/VIII B.4)

Harbor and Outfall Monitoring, Benthic, Fish and Shellfish Monitoring: Normandeau Associates, Inc., Contract OP-401B, Amendment 3

**A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Amendment 3 to Contract OP-401B, Harbor and Outfall Monitoring, Benthic, Fish and Shellfish Monitoring, with Normandeau Associates, Inc., increasing the contract amount by \$488,799.27 from \$2,498,043.34 to \$2,986,842.61 and extending the contract term by one year from October 31, 2025 to October 31, 2026.**

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
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Tepper

Flanagan

Pappastergion

Peña

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
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Swett

Taverna

Vitale

J. Walsh

P. Walsh

Wolowicz

(ref. WW B.5/VIII B.5)

WATER POLICY AND OVERSIGHTWater Policy and Oversight Committee Meeting Summary for the Board Chair

Committee Chair Taverna summarized the items discussed during the December 11, 2024

Water Policy and Oversight Committee meeting, and reported that the Committee voted to advance all motions presented for full Board approval.

ApprovalsWater Supply Continuation Agreements for Cambridge, Canton, Framingham, Lynn Water and Sewer Commission, Needham, Northborough, Peabody, Weston and Winchester

**A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to execute Water Supply Continuation Agreements with Cambridge, Canton, Framingham, Lynn Water and Sewer Commission, Needham, Northborough, Peabody, Weston, and Winchester, each for a term of ten years, substantially in the form filed as Attachments One through Nine of the December 11, 2024 Staff Summary presented and filed with the records of this meeting.**

Hearing no discussion or questions from the Board, Chair Tepper requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
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Tepper

Flanagan

Pappastergion

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

Wolowicz

(ref. W A.1/IX A.1)

Contract Awards

Intermediate High Pipeline Improvements, CP1 Sections 75A and 47 – Belmont, Boston, Newton and Watertown, P. Gioioso & Sons, Inc., Contract 7484

**A motion was duly made and seconded to approve the award of Contract 7484, Intermediate High Pipeline Improvements, CP1 Sections 75A and 47, Belmont, Boston, Newton and Watertown, to the lowest responsible and eligible bidder, P. Gioioso & Sons, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of \$22,580,000 with a contract term of 912 calendar days from the Notice to Proceed.**

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Pappastergion		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. W B.1/IX B.1)

Intermediate High Pipeline Improvements, CP1 Sections 75A and 47 Resident Engineering and Inspection Services: CDM Smith Inc., Contract 8067

**A motion was duly made and seconded to approve the recommendation of the Consultant Selection Committee to award Contract 8067, Intermediate High Pipeline Improvements CP1 Sections 75A and 47 Resident Engineering and Inspection Services, to CDM Smith Inc. and to authorize the Executive Director, on behalf of the Authority, to execute said contract in an amount not to exceed \$1,821,258.30 for a contract term of 33 months from the Notice to Proceed.**

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		



<u>Yes</u>	<u>No</u>	<u>Abstain</u>
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Flanagan

Pappastergion

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

Wolowicz

(ref. W B.2/IX B.2)

Contract Amendments/Change OrdersNorthern Intermediate High Section 89 Replacement Pipeline: P. Gioioso & Sons, Inc., Contract 7117, Change Order 10

**A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Change Order 10 to Contract 7117, Northern Intermediate High Section 89 Replacement Pipeline, with P. Gioioso & Sons, Inc. for an amount not to exceed \$255,655.68, increasing the contract amount from \$36,242,127.69 to \$36,497,783.37 with no increase in contract term.**

**Further, a motion was duly made and seconded to authorize the Executive Director to approve additional change orders as may be needed to Contract 7117 in an amount not to exceed the aggregate of \$1,000,000, and 180 days in accordance with the Management Policies and Procedures of the Board of Directors.**

Chair Tepper asked if there was any further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
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Tepper

Flanagan

Pappastergion

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Wolowicz		

(ref. W C.1/IX C.1)

#### OTHER BUSINESS

Mr. Laskey congratulated Board Member Vitale for receiving the Greater Boston Labor Guild's 2024 Cushing-Gavin Management Award. (ref. X)

#### CORRESPONDENCE TO THE BOARD

There was no correspondence to the Board. (ref. XI)

#### ADJOURNMENT

**A motion was duly made and seconded to adjourn the meeting.**

Hearing no discussion or questions from the Board, Chair Tepper requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Pappastergion		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		
Wolowicz		

(ref. XII)

The meeting adjourned at 2:28pm.

Approved: January 15, 2024

Attest:

\_\_\_\_\_  
Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- Draft Minutes of the November 13, 2024 MWRA Board of Directors' Meeting (ref. I)
- Presentation: Quinapoxet Dam Removal Project Update (ref. III)
- December 11, 2024 Staff Summary and Presentation – FY21-FY25 Strategic Business Plan: Annual Update for FY24 (ref. V.1)
- December 11, 2024 Staff Summary – Compensation Study of Non-Union Management Salaries (ref. P&C A.1)
- December 11, 2024 Staff Summary – Appointment of Director, Wastewater Operations and Maintenance (ref. P&C B.1)/VI A.1)
- December 11, 2024 Staff Summary – Appointment of Special Assistant for Affirmative Action and Compliance (ref. P&C B.2/VI A.2)
- December 11, 2024 Staff Summary – First Amendment to the Memorandum of Agreement with the City of Quincy (ref. AF&A B.1/VII B.1)
- December 11, 2024 Staff Summary – First Amendment to the Memorandum of Agreement with the Town of Winthrop (ref. AF&A B.2/VII B.2)
- December 11, 2024 Staff Summary and Presentation – Hayes Pump Station Rehabilitation Resident Engineering/Resident Inspection Services: Hazen and Sawyer, P.C., Contract 7668 (ref. WW A.1/VIII A.1)
- December 11, 2024 Staff Summary and Presentation – Ward Street and Columbus Park Headworks Upgrade: CDM Smith Inc., Contract 7429, Amendment 1 (ref. WW B.1/VIII B.1)
- December 11, 2024 Staff Summary and Presentation – Management, Operation, and Maintenance of the Union Park Pump Station/CSO Facility and the Unstaffed Pump Stations: Woodard & Curran, Inc., Contract S606, Amendment 1 (ref. WW B.2/VIII B.2)
- December 11, 2024 Staff Summary and Presentation – Braintree-Weymouth Pump Station Improvements: Walsh Construction Co. II, LLC, Contract 7366, Change Order 10 (ref. WW B.3/VIII B.3)
- December 11, 2024 Staff Summary – Braintree-Weymouth Pump Station Improvements, Design and Engineering Services During Construction: Wright-Pierce, Contract 7435, Amendment 4 (ref. WW B.4/VIII B.4)
- December 11, 2024 Staff Summary – Harbor and Outfall Monitoring, Benthic, Fish, and Shellfish Monitoring: Normandeau Associates, Inc., Contract OP-401B, Amendment 3 (ref. WW B.5/VIII B.5)
- December 11, 2024 Staff Summary – Water Supply Continuation Agreements for Cambridge, Canton, Framingham, Lynn Water and Sewer Commission, Needham, Northborough, Peabody, Weston and Winchester (ref. W A.1/IX A.1)
- December 11, 2024 Staff Summary and Presentation – Intermediate High Pipeline

Improvements, CP1 Sections 75A and 47 – Belmont, Boston, Newton and Watertown, P. Gioioso & Sons, Inc., Contract 7484 (ref. W B.1/IX B.1)

- December 11, 2024 Staff Summary – Intermediate High Pipeline Improvements, CP1 Sections 75A and 47 Resident Engineering and Inspection Services: CDM Smith Inc., Contract 8067 (ref. W B.2/IX B.2)
- December 11, 2024 Staff Summary and Presentation – Northern Intermediate High Section 89 Replacement Pipeline: P. Gioioso & Sons, Inc., Contract 7117, Change Order 10 (ref. W C.1/IX C.1)

## STAFF SUMMARY

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** January 15, 2025  
**SUBJECT:** Delegated Authority Report – December 2024


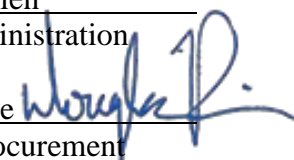


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**COMMITTEE:** Administration, Finance & Audit

X INFORMATION  
    VOTE

Barbara Aylward, Administrator A & F  
Julio Esperas, Assistant Buyer  
Preparer/Title

  
Michele S. Gillen  
Director, Administration  
Douglas J. Rice  
Director of Procurement

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### RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period December 1-31, 2024.

This report is broken down into three sections:

- Awards of Construction, non-professional and professional services contracts and change orders and amendments in excess of \$25,000, including credit change orders and amendments in excess of \$25,000;
- Awards of purchase orders in excess of \$90,000; and
- Amendments to the Position Control Register, if applicable.

### DISCUSSION:

The Board of Directors' Management Policies and Procedures, as amended by the Board's vote on February 16, 2022, delegate authority to the Executive Director to approve the following:

Construction Contract Awards:

Up to \$3.5 million if the award is to the lowest bidder.

Change Orders:

Up to 25% of the original contract amount or \$1,000,000.00, whichever is less, where the change increases the contract amount, and for a term not exceeding an aggregate of six months; and for any amount and for any term, where the change decreases the contract amount. The delegations for cost increases and time can be restored by Board vote.

Professional Service Contract Awards:

Up to \$1,000,000 and three years with a firm; or up to \$200,000 and two years with an individual.

Non-Professional Service Contract Awards:

Up to \$1,000,000 if a competitive procurement process has been conducted, or up to \$100,000 if a procurement process other than a competitive process has been conducted.

Purchase or Lease of Equipment, Materials or Supplies:

Up to \$3.5 million if the award is to the lowest bidder.

Up to \$15 million for purchases of chemicals that are required for normal day-to-day operations where the award is to the lowest responsive bidder under a competitive procurement.

Amendments:

Up to 25% of the original contract amount or \$500,000, whichever is less, and for a term not exceeding an aggregate of twelve months.

Amendments to the Position Control Register:

Amendments which result only in a change in cost center.

**BUDGET/FISCAL IMPACT:**

Recommendations for delegated authority approval include information on the budget/fiscal impact related to the action. For items funded through the capital budget, dollars are measured against the approved capital budget. If the dollars are in excess of the amount authorized in the budget, the amount will be covered within the five-year CIP spending cap. For items funded through the Current Expense Budget, variances are reported monthly and year-end projections are prepared at least twice per year. Staff review all variances and projections so that appropriate measures may be taken to ensure that overall spending is within the MWRA budget.

## Construction & Professional Services Delegated Authority Items December 1 – 31, 2024

No.	Date of Award	Title and Explanation	Contract	Amend/CO	Company	Value
C-1	12/05/24	<b>Spill Prevention Control and Countermeasure (SPCC) Plans and Related Training</b> Award of a contract to the highest ranked proposer for spill prevention control and countermeasure plans and related training for a term of 36 months.	OP-473	Award	Pennoni Associates, Inc.	\$309,440.00

**Purchasing Delegated Authority Items December 1-31**

<b>No.</b>	<b>Date of Award</b>	<b>Title and Explanation</b>	<b>Company</b>	<b>Value</b>
<b>P-1</b>	<b>12/5/24</b>	<b>Sole Source Purchase Order for Two Primary Sludge Pump Rotating Assemblies and Various Spare Pump Parts</b> This procurement is for replacement parts for the Wemco pumps used in primary residuals pumping at the Deer Island Treatment Plant. Wescor Associates, Inc. has been identified as the sole source provider of the requested Wemco pumps and parts.	<b>Wescor Associates, Inc.</b>	<b>\$105,555.00</b>
<b>P-2</b>	<b>12/5/24</b>	<b>Sole Source Purchase Order for One 36-Inch Ross Valve Globe Body Line Break Valve</b> Purchase of one 36-inch Ross Valve Globe Body Line Break Valve, for installation in Section 89 in the Northern Intermediate High (NIH) service area. Atlantic Fluid Technology, Inc. has been identified as the sole source provider of the Ross line control valves.	<b>Atlantic Fluid Technology, Inc.</b>	<b>\$227,952.00</b>
<b>P-3</b>	<b>12/5/24</b>	<b>Purchase Order for Replacement Air Conditioning and Condensing Units</b> Replacements for end-of-life air conditioning and condensing units used for the Management Information Systems Data Center at the Deer Island Treatment Plant.	<b>Multitech Traders, LLC</b>	<b>\$427,899.90</b>
<b>P-4</b>	<b>12/17/24</b>	<b>One-Year Purchase Order Contract for the Analysis of Perfluoroalkyl and Polyfluoroalkyl Substances in Wastewater Samples</b> This contract will provide for wastewater PFAS analysis for up to 500 wastewater samples, 250 field quality control samples and four sludge cakes.	<b>R.I. Analytical Services, Inc.</b>	<b>\$208,350.00</b>
<b>P-5</b>	<b>12/30/24</b>	<b>One-Year Purchase Order Contract for Maximo Software Maintenance and Support—<i>State Contract ITS75</i></b> Maintenance and support for Maximo applications, including Maximo’s Control Desk, Asset Management, Scheduler, Calibration, Spatial and Transportation modules.	<b>Insight Public Sector, Inc.</b>	<b>\$330,031.66</b>



## STAFF SUMMARY

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** January 15, 2025  
**SUBJECT:** FY25 Financial Update and Summary through December 2024




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**COMMITTEE:** Administration, Finance & Audit

Michael J. Cole, Budget Director  
James J. Coyne, Budget Manager  
Preparer/Title

X INFORMATION

     VOTE



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Thomas J. Durkin  
Director, Finance

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### RECOMMENDATION:

For information only. This staff summary provides the financial results and variance highlights for Fiscal Year 2025 through December 2024, comparing actual spending to the budget.

### DISCUSSION:

The total Year-to-Date variance for the FY25 CEB is \$14.2 million, due to lower direct expenses of 6.4% or \$10.0 million, indirect expenses of 1.4% or \$0.6 million, and debt service costs of 0.8% or \$1.8 million, and higher revenue of 0.4% or \$1.9 million.

### FY25 Current Expense Budget

The CEB expense variances through December 2024 by major budget category were:

- Lower Direct Expenses of \$10.0 million or 6.4% under budget. Spending was lower for Wages & Salaries, Other Services, Professional Services, Fringe Benefits, Utilities, Overtime, and Training & Meetings. Spending was higher than budget for Maintenance, Other Materials, Workers' Compensation, and Chemicals.
- Lower Indirect Expenses of \$0.6 million or 1.4% under budget due primarily to lower Watershed reimbursements.
- Debt Service expenses were \$1.8 million or 0.8% under budget driven by lower than budgeted variable interest expense.
- Revenue was \$1.9 million or 0.4% over the estimate driven by Investment Income of \$1.3 million due to higher than budgeted interest rates and other Revenue of \$0.5 million and Other User Charges of \$0.2 million.

**FY25 Budget and FY25 Actual Variance by Expenditure Category  
(In millions)**

	<b>FY25 Budget</b>	<b>FY25 Actual</b>	<b>\$ Variance</b>	<b>% Variance</b>
Direct Expenses	\$156.0	\$146.0	-\$10.0	-6.4%
Indirect Expenses	\$40.6	\$40.1	-\$0.6	-1.4%
Capital Financing	\$223.2	\$221.4	-\$1.8	-0.8%
<b>Total</b>	<b>\$419.8</b>	<b>\$407.5</b>	<b>-\$12.3</b>	<b>-2.9%</b>

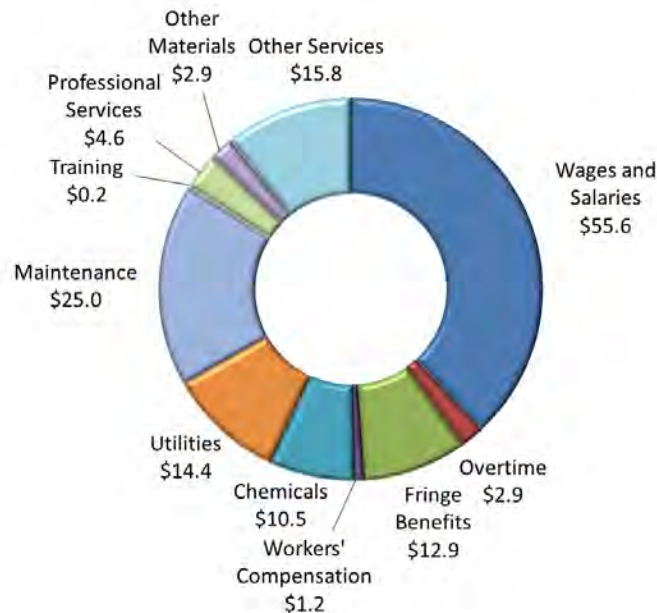
*Totals may not add due to rounding*

*Please refer to Attachment 1 for a more detailed comparison by line item of the budget variances for FY25.*

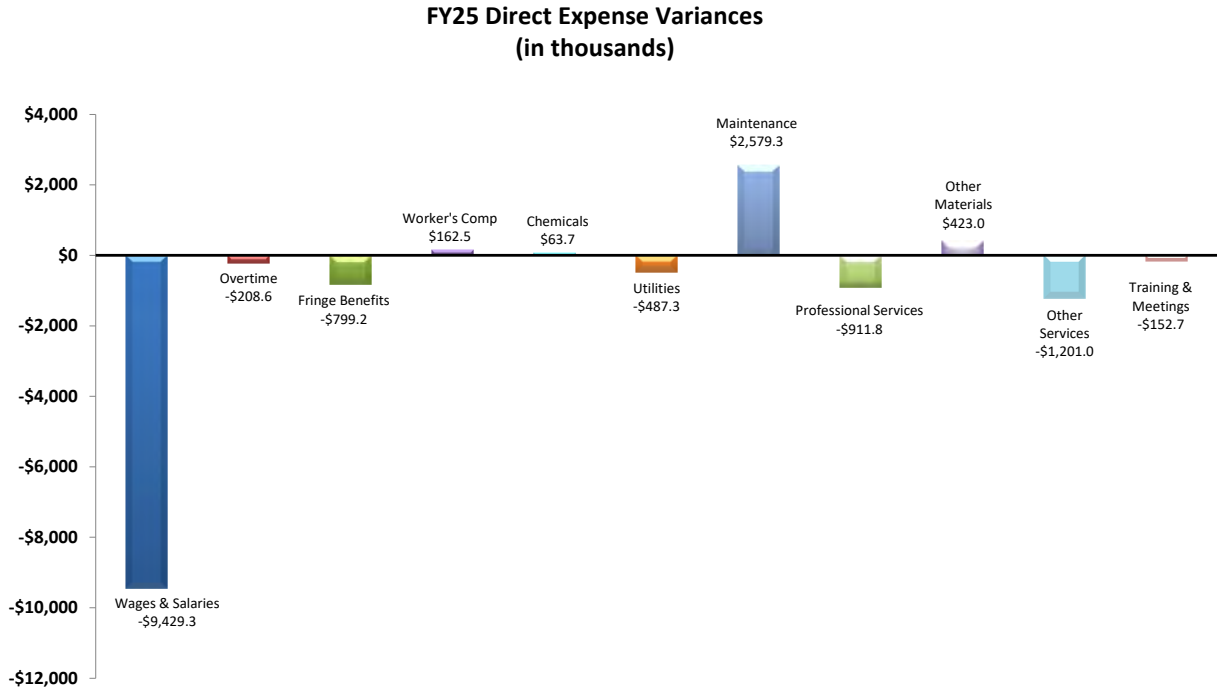
**Direct Expenses**

FY25 direct expenses through December totaled \$146.0 million, which was \$10.0 million or 6.4% less than budgeted.

**FY25 Direct Expenses  
(in millions)**



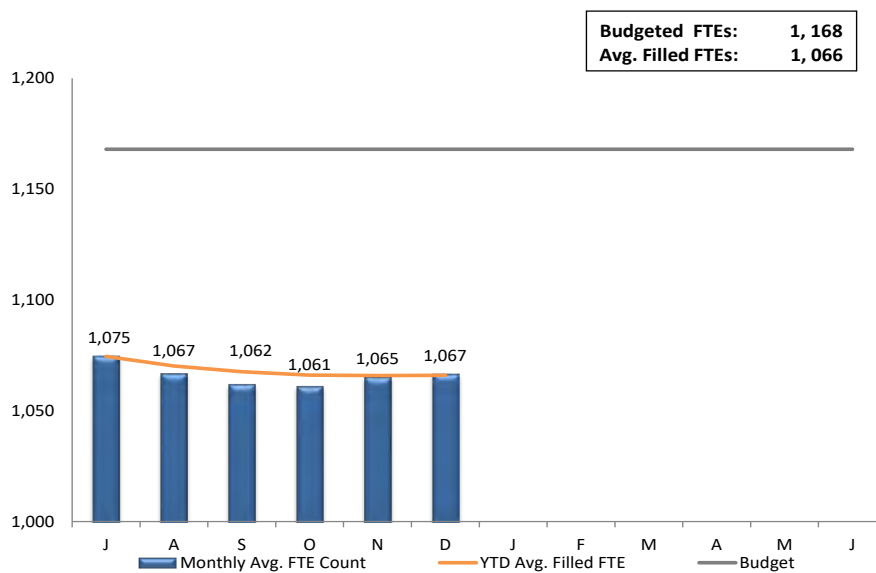
Spending was lower than budget for Wages & Salaries, Other Services, Professional Services, Fringe Benefits, Utilities, Overtime, and Training & Meetings. These were partially offset by higher than budgeted spending for Maintenance, Other Materials, Workers' Compensation, and Chemicals.



## Wages and Salaries

Wages and Salaries was under budget by \$9.4 million or 14.5%. Through December, there were 102 fewer average FTEs (1,066 versus 1,168 budget) or 8.7% and lower average salaries for new hires versus retirees. The timing of backfilling vacant positions also contributed to Regular Pay being under budget.

**FY25 MWRA Full Time Equivalent (FTE) Position Trend**



## **Maintenance**

Maintenance was greater than budget by \$2.6 million or 11.5%. Maintenance Services were greater than budget by \$3.1 million driven by higher Plant & Machinery Services of \$3.0 million due to greater than anticipated work performed for annual boiler maintenance and earlier than anticipated work of the hydro wicket gate replacement project for the Deer Island Treatment Plant (DITP) Thermal Plant, Hydro Power and Wind Turbine maintenance contract, Deer Island Treatment Plant centrifuge maintenance, and earlier than anticipated work for the Norumbega Covered Storage tank cleaning contract, and Electrical Services \$293,000 primarily due to greater than anticipated Electrical Service maintenance work in Water Operations through December. This was partially offset by lower Computer Services of \$201,000 due to less than anticipated spending through December. Maintenance Materials were lower than budget by \$518,000 driven by Special Equipment Materials of \$584,000 due to the later than anticipated purchases of hatch covers at Loring Road Covered Storage and HVAC Materials of \$512,000 due to less than anticipated purchases through December including the Chelsea Facility roof top units. These are partially offset by higher Warehouse Inventory of \$443,000 due to the need for spare parts and purchase of materials early due to long lead times, Plant & Machinery Materials of \$143,000 and Electrical Materials of \$143,000 are both due to greater than anticipated purchases through December.

## **Other Services**

Other Services were lower than budget by \$1.2 million or 7.1% driven by Sludge Pelletization of \$489,000 and Grit & Screenings Removal of \$331,000, both primarily due to lower quantities, and lower than anticipated Telecommunications of \$182,000 through December.

## **Professional Services**

Professional Services were less than budget by \$912,000 or 16.6% driven by lower Other Services of \$649,000 due to later than anticipated services which includes the Disparity Study, Lab & Testing Analysis of \$163,000 and Engineering of \$158,000, both due to less than anticipated spending through December.

## **Fringe Benefits**

Fringe Benefits spending was lower than budget by \$799,000 or 5.8%. This is primarily driven by lower Health Insurance costs of \$743,000, due to fewer than budgeted participants in health insurance plans, increased contribution by external new hires vs. lower contribution rates of staff retiring, and the shift from family to individual plans which are less expensive.

## **Utilities**

Utilities were lower than budget by \$487,000 or 3.3%. Lower than budgeted spending for Electricity of \$659,000 primarily at Deer Island Treatment Plant (DITP) of \$501,000 was due primarily to lower pricing by Eversource. Electricity in Field Operations was less than budget by \$226,000 primarily due to lower demand as a result of fewer wet weather events, resulting in less pumping. This was partially offset by higher Water costs of \$200,000 primarily due to greater than projected usage at DITP through December.

## **Other Materials**

Other Materials were greater than budget by \$423,000 or 17.1% driven by higher Computer Hardware of \$363,000 primarily due to additional purchases of materials through December which include switches at DITP, storage replacements, and audiovisual upgrades at the Chelsea Facility. In addition, higher spending on Equipment/Furniture of \$208,000 was due to greater than anticipated lab equipment purchases through December as well as higher Lab & Testing Supplies of \$154,000. These were partially offset by lower Vehicle Expense of \$165,000 and Other Materials of \$128,000 due to less than anticipated spending through December.

## **Overtime**

Overtime expenses were lower than budget by \$209,000 or 6.8%. Lower than budgeted spending for the Field Operations Department (FOD) of \$56,000 is primarily due to less emergency overtime due to less rain events. Lower spending in Engineering & Construction of \$34,000 and Occupational Health and Safety of \$18,000 are both due to less than anticipated needs through December. Year-to-date rainfall was a major contributor for the less than anticipated overtime.

## **Worker's Compensation**

Worker's Compensation expenses were greater than budget by \$162,000 or 15.7%. The variance is due to higher than budgeted expenses for Medical Payments of \$94,000, Administrative Expenses of \$47,000, and Compensation Payments of \$21,000. Due to uncertainties of when spending will happen, the budget was spread evenly throughout the year.

## **Training & Meetings**

Training & Meetings was lower than budget by \$153,000 or 46.5% primarily due to less than anticipated spending on meetings and conferences through December.

## **Chemicals**

Chemicals were greater than budget by \$64,000 or 0.6%. Higher spending on Hydrogen Peroxide of \$796,000 was to reduce elevated H<sub>2</sub>S levels for odor pretreatment and corrosion control and allows staff to perform maintenance activities and ongoing tank work more safely within the tanks due to the low flows. Higher spending on Ferric Chloride of \$139,000 was to keep the orthophosphate levels within the target levels. This is partially offset by lower than budgeted spending on Sodium Hypochlorite of \$252,000 was driven by DITP of \$137,000 due to below average plant flows, and Field Operations of \$116,000 due to lower than anticipated wet weather events. Lower Liquid Oxygen of \$189,000 was due to lower dosing at the John Carroll Water Treatment Plant. Lower Activated Carbon of \$135,000 was due to fewer carbon change-outs this fiscal year. Lower spending on Sodium Bisulfite of \$126,000 was primarily driven by Wastewater Operations of \$70,000 due to lower dose and volume as a result of less than anticipated CSO activations, and lower volume at DITP of \$36,000 due to lower quantities to dechlorinate the effluent. DITP flows are 20.3% less than assumed in the budget and the CWTP flows are 0.7% greater than assumed through December. It is important to note that Chemical variances are also based on deliveries which in general reflect the usage patterns. However, the timing of deliveries is an important factor.

## **Indirect Expenses**

Indirect Expenses totaled \$40.1 million, which is \$562,000 or 1.4% lower than budget. The variance is driven by lower Watershed reimbursements.

Based on FY25 operating activity only, the Watershed Division is \$577,000 or 5.5% under budget. Lower spending on Maintenance, Equipment, and Fringe Benefits are driving the variance. When factoring in the FY24 balance forward of \$156,000 which was paid during Q1 of FY25, Watershed Reimbursement is \$733,000 or 7.0% below budget through December 2024.

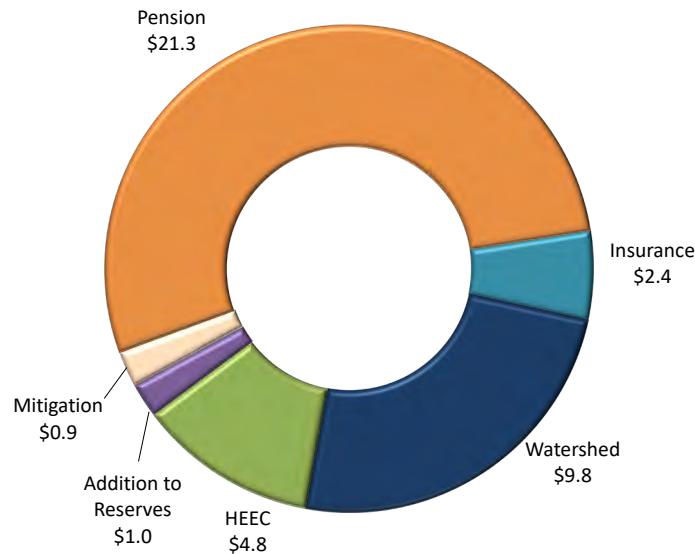
### **FY25 Watershed Protection Variance**

<b>\$ in millions</b>	<b>YTD Budget</b>	<b>YTD Actual</b>	<b>YTD \$ Variance</b>	<b>YTD % Variance</b>
Operating Expenses	11.3	10.6	-0.7	-6.3%
Operating Revenues - Offset	0.8	0.7	-0.1	-17.1%
<b>FY25 Operating Totals</b>	<b>10.5</b>	<b>10.0</b>	<b>-0.6</b>	<b>-5.5%</b>
DCR Balance Forward (FY24 year-end accrual true-up)	0.0	-0.2	-0.2	
<b>FY25 Adjusted Operating Totals</b>	<b>10.5</b>	<b>9.8</b>	<b>-0.7</b>	<b>-7.0%</b>
PILOT	0.0	0.0	0.0	0.0%
<b>Total Watershed Reimbursement</b>	<b>10.5</b>	<b>9.8</b>	<b>-0.7</b>	<b>-7.0%</b>

*Totals may not add due to rounding*

MWRA reimburses the Commonwealth of Massachusetts Department of Conservation (DCR) and Recreation - Division of Water Supply Protection – Office of Watershed Management for expenses. The reimbursements are presented for payment monthly in arrears. Accruals are being made monthly based on estimated expenses provided by DCR and true-up monthly based on the monthly invoice. MWRA's budget is based on the annual Fiscal Year Work Plan approved by the Massachusetts Water Supply Protection Trust. The FTE count at the end of December was 145 (147.3 on a year-to-date basis) vs. a budget of 151.

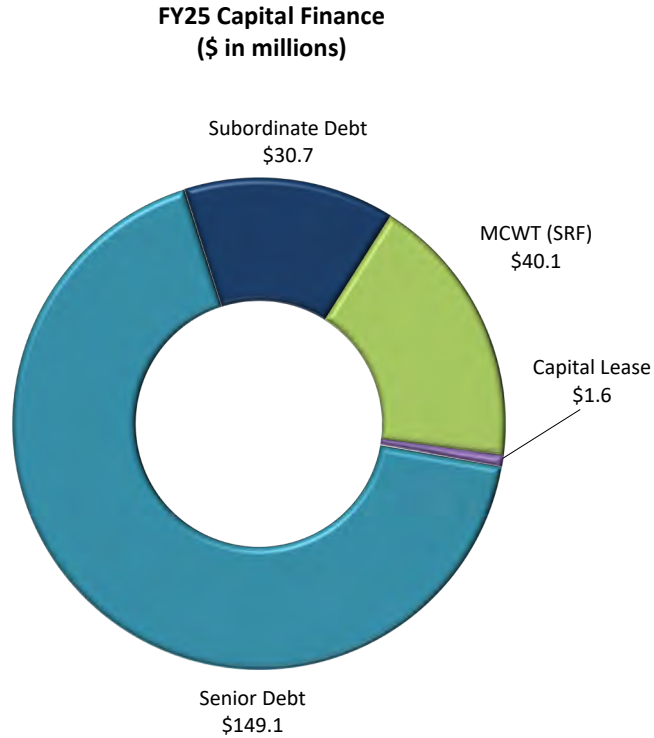
**FY25 Indirect Expenses  
(in millions)**



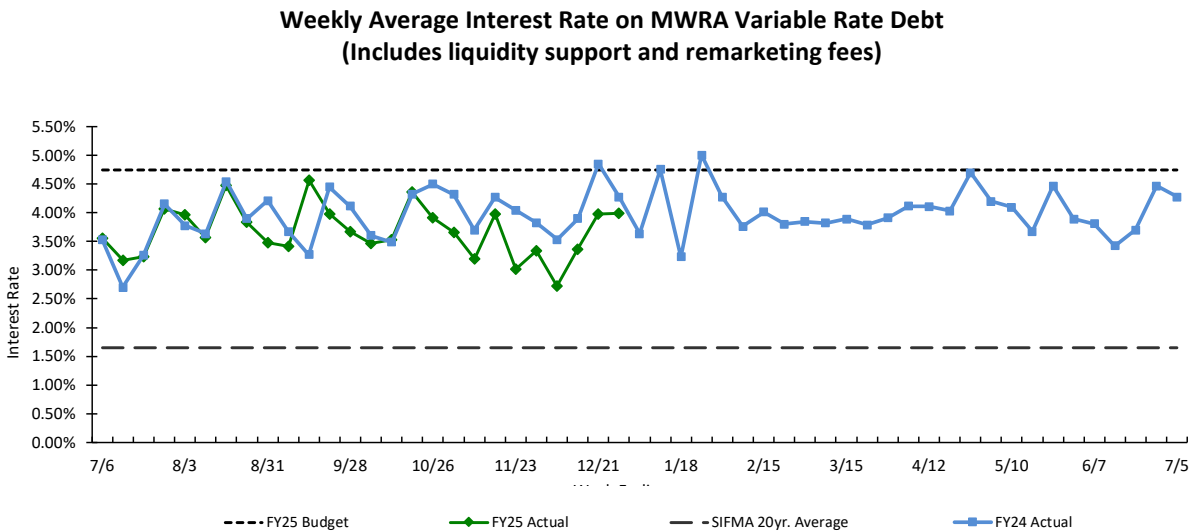
**Capital Financing**

Capital Financing expenses include the principal and interest payments for fixed senior debt, the variable subordinate debt, the Massachusetts Clean Water Trust (SRF) obligation, the commercial paper program for the local water pipeline projects, current revenue for capital, Optional Debt Prepayment, and the Chelsea Facility lease payment.

Capital Financing expenses for FY25 through December totaled \$221.4 million, which is \$1.8 million or 0.8% less than budget. This favorable variance is the result of lower than budgeted variable interest rates.



The graph below reflects the FY25 actual variable rate trend by week against the FY25 Budget.



## **Revenue & Income**

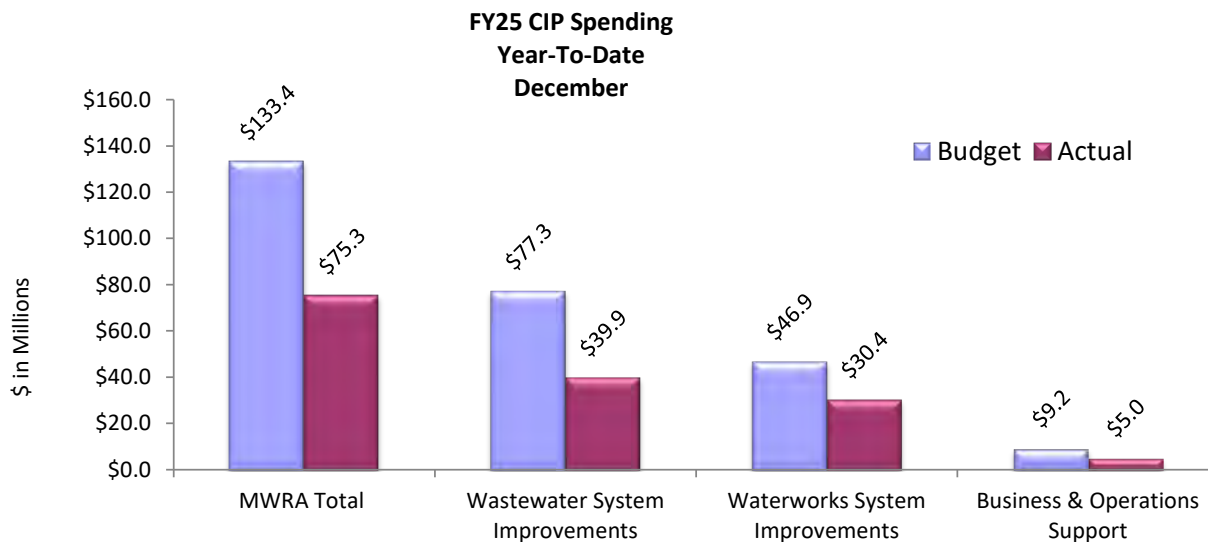
Revenues of \$452.4 million were \$1.9 million or 0.4% over the estimate driven by Investment Income which was \$1.3 million or 9.7% over the estimate due to higher than assumed interest rates. Also, Other Revenue of \$456,000 and Other User Charges of \$153,000 contributed to this variance.



## FY25 Capital Improvement Program

Capital expenditures in Fiscal Year 2025 through December total \$75.3 million, \$58.1 million or 43.6% under planned spending.

After accounting for programs which are not directly under MWRA's control, most notably the Inflow and Infiltration (I/I) grant/loan program, the Local Water System Assistance loan program, and the community managed Combined Sewer Overflow (CSOs) projects, capital spending totaled \$79.4 million, \$21.1 million or 21.0% under planned spending.



Overall, CIP spending reflects the less than planned spending in Wastewater Improvements (\$37.4 million), Waterworks (\$16.5 million) and Business and Operations Support (\$4.2 million). Major variances in Wastewater are primarily due to less than anticipated requests for community grants and loans for the I/I Local Financial Assistance Program, delays with getting materials on a timely basis for DITP Roofing Replacement, lower than projected task order work for DITP As-Needed Design contracts, schedule change for Siphon Structure Rehabilitation Construction contract, work delayed due to contractor in process of submitting dive and safety plan for West Roxbury Tunnel Inspection, award slightly later than anticipated for Hayes Pump Station Rehab – Construction, and planned FY25 work completed in FY24 for Nut Island Odor Control and HVAC Improvements. This was partially offset by greater than anticipated contractor progress for the Deer Island Treatment Plant (DITP) Clarifier Rehab Phase 2 contract, consultant progress for the Digester & Storage Tank Rehabilitation Design/ESDC, and work scheduled for FY24 performed in FY25 for Clinton Screw Pumps Replacement Phase 1 Construction.

Waterworks variances are primarily due to less than anticipated requests for community loans for the Water Loan Program, less than anticipated spending on Metropolitan Water Tunnel Program administration, legal and public acquisition costs, a change in the Notice-to-Proceed of the Metro Water Tunnel Program Final Design/ESDC contract as it was not awarded until October 2024, and less than anticipated services for Metro Water Tunnel Program Support and Geotechnical Services.

This was partially offset by greater than planned contractor progress for Waltham Water Pipeline Construction.

\$ in Millions	Budget	Actuals	\$ Var.	% Var.
<b>Wastewater System Improvements</b>				
Interception & Pumping	8.8	4.4	(4.5)	-50.5%
Treatment	33.7	33.6	(0.1)	-0.2%
Residuals	0.0	0.0	0.0	0.0%
CSO	3.2	0.8	(2.4)	-74.9%
Other	31.6	1.1	(30.5)	-96.6%
<b>Total Wastewater System Improvements</b>	<b>\$77.3</b>	<b>\$39.9</b>	<b>(\$37.4)</b>	<b>-48.4%</b>
<b>Waterworks System Improvements</b>				
Drinking Water Quality Improvements	2.6	1.2	(1.4)	-54.9%
Transmission	28.6	21.2	(7.4)	-25.9%
Distribution & Pumping	14.1	11.2	(2.8)	-20.0%
Other	1.6	(3.2)	(4.8)	-296.9%
<b>Total Waterworks System Improvements</b>	<b>\$46.9</b>	<b>\$30.4</b>	<b>(\$16.5)</b>	<b>-35.2%</b>
<b>Business &amp; Operations Support</b>	<b>\$9.2</b>	<b>\$5.0</b>	<b>(\$4.2)</b>	<b>-45.5%</b>
<b>Total MWRA</b>	<b>\$133.4</b>	<b>\$75.3</b>	<b>(\$58.1)</b>	<b>-43.6%</b>

### **FY25 Spending by Program:**

The main reasons for the project spending variances in order of magnitude are:

#### **Other Wastewater:** Less than planned spending of \$30.5 million

- \$30.5 million for Community I/I due to less than anticipated requests for community grants and loans.

#### **Waterworks Transmission:** Less than planned spending of \$7.4 million

- \$2.5 million for Metro Water Tunnel Program Administration, Legal & Public Outreach due to less than anticipated costs.
- \$2.4 million for Final Tunnel Design/ESDC due to contract awarded later than anticipated.
- \$1.7 million for Metro Water Tunnel Program Support and Geotechnical Services due to less than anticipated services.
- \$1.6 million for Wachusett Lower Gatehouse Pipe & Boiler Replacement Construction due to longer lead-time on some larger items and a change in design for the multi-orifice valve.
- \$1.0 million for WASM 3 MEPA/Design/CA/RI due to less than anticipated consultant work.
- \$0.7 million for Sudbury Dam Improvements – Construction due to additional change order work delaying original completion date by 75 days.
- \$0.6 million for Shaft 5 CP2 Construction due to contractor running behind on the concrete rehab work.
- \$0.3 million for Watershed Land Acquisition due to less than anticipated land purchases.
- This under planned spending was partially offset by greater than planned contractor progress of \$3.6 million for Waltham Water Pipeline.

**Other Waterworks:** Less than planned spending of \$4.8 million

- \$4.4 million for Local Financial Assistance due to greater than anticipated requests for community loans.
- \$0.6 million for Beacon St. Line Design/ESDC due to schedule change.

**Interception & Pumping:** Less than planned spending of \$4.5 million

- \$1.1 million for Siphon Structure Rehabilitation Construction due schedule change.
- \$0.8 million for West Roxbury Tunnel Inspection due to work delayed due to contractor in process of submitting dive and safety plan.
- \$0.7 million for Hayes Pump Station Rehab – Construction due to award being slightly later than anticipated.
- \$0.5 million for Nut Island Odor Control & HVAC Improvements Design/CA/REI & Construction Phase 2 due to work scheduled for FY25 performed in FY24.

**Business & Operations Support:** Less than planned spending of \$4.2 million

- \$1.2 million for As-Needed Design Contracts due to lower than projected task order work.
- \$1.0M for Cabling due to delays in development of the scope of work caused by challenges in locating available conduit paths on Deer Island.
- \$0.8 million for Security Equipment & Installation due to project delays including upgrades to communication circuits and Incident Management System, and less than anticipated fencing work.
- \$0.4 million for Oracle Database Appliance v.2 due to schedule shift.
- \$0.3 million for MAXIMO Interface Enhancements due to less than anticipated completion of final work.
- This under planned spending was partially offset by greater than planned spending of \$0.6 million for Lawson Upgrade due to software subscription renewal that was forecasted over months when it is a one-time annual expense).

**Water Distribution and Pumping:** Less than planned spending of \$2.8 million

- \$1.5 million for Section 75 Extension CP-1 Construction due to later than anticipated contract award.
- \$0.6 million for Section 89/29 Replacement Construction due to less than planned contractor progress
- \$0.5 million for Northern Extra High Service (NEH) - New Pipelines Legal due to less than planned legal/easement expenses.
- \$0.5 million for Sections 25 & 24 CP-2 Construction due to contractor behind original schedule as a result of a holiday break.
- \$0.3 million for Section 56 Replacement/Saugus River Design/CA due to a change in Construction schedule affecting Construction Administration services schedule.
- This under planned spending was partially offset by \$1.1 million for CP-1 NEH Improvements and \$0.6 million for New Connecting Mains CP3-Sections 23, 24 & 47 Rehabilitation due to work scheduled for FY24 including paving performed in FY25.

**Combined Sewer Overflow:** Less than planned spending of \$2.4 million

- \$2.1 million for Fort Point Channel & Mystic due to the timing of Community Managed CSO payments.

**Drinking Water Quality Improvements:** Less than planned spending of \$1.4 million

- \$1.0 million for the John Carroll Water Treatment Plant (JCWTP) Technical Assistance due to lower than projected task order work.
- \$0.4 million for JCWTP Parapet Wall Repairs due to contractor progress being less than planned.

**Wastewater Treatment:** Less than planned spending of \$0.1 million

- \$2.7 million for due to equipment scheduled for FY25 received in FY24.
- \$0.9 million for DITP As-Needed Design due to lower than projected task order work.
- This under planned spending was partially offset by greater than planned spending of \$2.9M for Clarifier Rehabilitation Phase 2 Construction due to contractor progress greater than planned, \$0.6 million for Digester & Storage Tank Rehabilitation Design/ESDC due to consultant progress greater than anticipated, and \$0.2 million for Clinton Wastewater Treatment Plant Screw Pump Replacement due to work scheduled for FY24 performed in FY25.

**Construction Fund Balance**

The construction fund balance was \$102.1 million as of the end of December. Commercial Paper/Revolving Loan available capacity was \$250 million.

**ATTACHMENTS:**

Attachment 1 – Variance Summary December 2024

Attachment 2 – Current Expense Variance Explanations

Attachment 3 – Capital Improvement Program Variance Explanations

ATTACHMENT 1  
FY25 Actuals vs. FY25 Budget

	Dec 2024 Year-to-Date				
	Period 6 YTD Budget	Period 6 YTD Actual	Period 6 YTD Variance	%	FY25 Approved
<b><u>EXPENSES</u></b>					
WAGES AND SALARIES	\$ 65,077,326	\$ 55,648,066	\$ (9,429,260)	-14.5%	\$ 133,658,955
OVERTIME	3,071,741	2,863,105	(208,636)	-6.8%	6,133,078
FRINGE BENEFITS	13,677,443	12,878,203	(799,240)	-5.8%	27,834,124
WORKERS' COMPENSATION	1,036,717	1,199,178	162,461	15.7%	2,073,434
CHEMICALS	10,434,270	10,497,945	63,675	0.6%	19,706,033
ENERGY AND UTILITIES	14,936,649	14,449,368	(487,281)	-3.3%	32,048,176
MAINTENANCE	22,446,498	25,025,780	2,579,282	11.5%	46,653,201
TRAINING AND MEETINGS	328,410	175,683	(152,727)	-46.5%	568,346
PROFESSIONAL SERVICES	5,506,323	4,594,567	(911,756)	-16.6%	11,121,730
OTHER MATERIALS	2,478,268	2,901,279	423,011	17.1%	7,270,879
OTHER SERVICES	16,981,459	15,780,428	(1,201,031)	-7.1%	33,945,804
<b>TOTAL DIRECT EXPENSES</b>	<b>\$ 155,975,104</b>	<b>\$ 146,013,602</b>	<b>\$ (9,961,503)</b>	<b>-6.4%</b>	<b>\$ 321,013,760</b>
INSURANCE	\$ 2,235,523	\$ 2,370,892	\$ 135,369	6.1%	\$ 4,471,045
WATERSHED/PILOT	10,531,407	9,798,435	(732,972)	-7.0%	32,507,642
HEEC PAYMENT	4,725,101	4,761,181	36,080	0.8%	8,185,722
MITIGATION	911,782	911,782	-	0.0%	1,823,564
ADDITIONS TO RESERVES	953,139	953,139	-	0.0%	1,906,278
RETIREMENT FUND	21,264,519	21,264,519	-	0.0%	21,264,519
POST EMPLOYEE BENEFITS	-	-	-	---	5,280,806
<b>TOTAL INDIRECT EXPENSES</b>	<b>\$ 40,621,471</b>	<b>\$ 40,059,948</b>	<b>\$ (561,522)</b>	<b>-1.4%</b>	<b>\$ 75,439,576</b>
STATE REVOLVING FUND	\$ 40,075,151	\$ 40,075,151	\$ -	0.0%	\$ 85,449,151
SENIOR DEBT	149,070,903	149,070,903	-	0.0%	315,206,721
DEBT SERVICE ASSISTANCE	-	-	-	---	-
CURRENT REVENUE/CAPITAL	-	-	-	---	20,200,000
SUBORDINATE MWRA DEBT	32,434,234	32,434,234	-	0.0%	64,768,074
LOCAL WATER PIPELINE CP	-	-	-	---	9,827,661
CAPITAL LEASE	1,608,530	1,608,530	-	0.0%	3,217,060
VARIABLE DEBT	-	(1,765,600)	(1,765,600)	---	-
DEFEASANCE ACCOUNT	-	-	-	---	-
DEBT PREPAYMENT	-	-	-	---	5,500,000
<b>TOTAL CAPITAL FINANCE EXPENSE</b>	<b>\$ 223,188,818</b>	<b>\$ 221,423,218</b>	<b>\$ (1,765,600)</b>	<b>-0.8%</b>	<b>\$ 504,168,667</b>
<b>TOTAL EXPENSES</b>	<b>\$ 419,785,393</b>	<b>\$ 407,496,768</b>	<b>\$ (12,288,625)</b>	<b>-2.9%</b>	<b>\$ 900,622,003</b>
<b><u>REVENUE &amp; INCOME</u></b>					
RATE REVENUE	\$ 427,744,000	\$ 427,744,000	\$ -	0.0%	\$ 855,488,000
OTHER USER CHARGES	5,367,690	5,520,646	152,956	2.8%	10,668,572
OTHER REVENUE	4,325,472	4,781,842	456,370	10.6%	6,066,670
RATE STABILIZATION	-	-	-	---	-
INVESTMENT INCOME	13,056,720	14,323,529	1,266,809	9.7%	28,398,761
<b>TOTAL REVENUE &amp; INCOME</b>	<b>\$ 450,493,882</b>	<b>\$ 452,370,017</b>	<b>\$ 1,876,136</b>	<b>0.4%</b>	<b>\$ 900,622,003</b>

**ATTACHMENT 2**  
**Current Expense Variance Explanations**

Total MWRA	FY25 Budget YTD December	FY25 Actuals December	FY25 Actual vs. FY25 Budget		Explanations
			\$	%	
Direct Expenses					
Wages & Salaries	65,077,326	55,648,066	(9,429,260)	-14.5%	Wages and Salaries were lower than budget by \$9.4 million or 14.5%. Year to date, there have been 102 fewer average FTEs (1,066 versus 1,168 budget), lower average new hire salaries versus retirees, the timing of backfilling vacant positions.
Overtime	3,071,741	2,863,105	(208,636)	-6.8%	Overtime expenses were lower than budget by \$209,000 or 6.8%. Lower than budgeted spending for the Field Operations Department (FOD) of \$56,000 is primarily due to less emergency overtime due to less rain events, and Engineering & Construction of \$34,000 and Occupational Health and Safety of \$18,000 due to less than anticipated needs through December. Year-to-date rainfall was a major contributor for the less than anticipated overtime.
Fringe Benefits	13,677,443	12,878,203	(799,240)	-5.8%	Fringe Benefits spending was lower than budget by \$799,000 or 5.8%. This is primarily driven by lower <b>Health Insurance</b> costs of \$743,000, due to fewer than budgeted participants in health insurance plans, increased contribution by external new hires vs. lower contribution rates of staff retiring, and the shift from family to individual plans which are less expensive.
Worker's Compensation	1,036,717	1,199,178	162,461	15.7%	Worker’s Compensation expenses were greater than budget by \$162,000 or 15.7%. The variance is due to higher than budgeted expenses for <b>Medical Payments</b> of \$94,000, <b>Administrative Expenses</b> of \$47,000, and <b>Compensation Payments</b> of \$21,000. Due to uncertainties of when spending will happen, the budget was spread evenly throughout the year.
Chemicals	10,434,270	10,497,945	63,675	0.6%	Chemicals were greater than budget by \$64,000 or 0.6%. Higher <b>Hydrogen Peroxide</b> of \$796,000 to reduce elevated H2S levels for odor pretreatment and corrosion control and allows staff to perform maintenance activities and ongoing tank work more safely within the tanks due to the low flows. Higher <b>Ferric Chloride</b> of \$139,000 to keep the orthophosphate levels within the target levels. This is partially offset by lower than budget spending on <b>Sodium Hypochlorite</b> of \$252,000 million was driven by DITP of \$137,000 due to below average plant flows and Field Operations of \$116,000 due to lower than anticipated wet weather events. Lower <b>Liquid Oxygen</b> of \$189,000 due to lower dosing at Carroll Water Treatment Plant. Lower <b>Activated Carbon</b> of \$135,000 due to fewer carbon change outs this fiscal year. Lower <b>Sodium Bisulfite</b> of \$126,000 was primarily driven by Wastewater Operations of \$70,000 due to lower dose and volume as a result of less than anticipated CSO activations, and lower volume at DITP of \$36,000 due to lower quantities to dechlorinate the effluent. DITP flows are 20.3% less than the budget and the CWTP flows are 0.3% greater than the budget through December. It is important to note that Chemical variances are also based on deliveries which in general reflect the usage patterns. However, the timing of deliveries is an important factor.

**ATTACHMENT 2**  
**Current Expense Variance Explanations**

Total MWRA	FY25 Budget YTD December	FY25 Actuals December	FY25 Actual vs. FY25 Budget		Explanations
			\$	%	
Utilities	14,936,649	14,449,368	(487,281)	-3.3%	Utilities were lower than budget by \$487,000 or 3.3%. Lower than budgeted spending for <b>Electricity</b> of \$659,000 primarily at Deer Island Treatment Plant (DITP) of \$501,000 was driven primarily by lower pricing by Eversource. Electricity in Field Operations was less than budget by \$226,000 primarily due to lower demand as a result of fewer wet weather events, resulting in less pumping. This was partially offset by Water of \$200,000 primarily due to greater than projected water usage at DITP through December.

**ATTACHMENT 2**  
**Current Expense Variance Explanations**

Total MWRA	FY25 Budget YTD December	FY25 Actuals December	FY25 Actual vs. FY25 Budget		Explanations
			\$	%	
Maintenance	22,446,498	25,025,780	2,579,282	11.5%	Maintenance was greater than budget by \$2.6 million or 11.5%. <i>Maintenance Services</i> were greater than budget by \$3.1 million driven by higher <b>Plant &amp; Machinery Services</b> of \$3.0 million due to greater than anticipated work performed for annual boiler maintenance and earlier than anticipated work of the hydro wicket gate replacement project for the Deer Island Treatment Plant (DITP) Thermal Plant, Hydro Power and Wind Turbine maintenance contract, Deer Island Treatment Plant centrifuge maintenance, and earlier than anticipated work for the Norumbega Covered Storage tank cleaning contract, and <b>Electrical Services</b> \$293,000 primarily due to greater than anticipated Electrical Service maintenance work in Water Operations through December. This was partially offset by <b>Computer Services</b> of \$201,000 due to less than anticipated spending through December. <i>Maintenance Materials</i> were lower than budget by \$518,000 driven by <b>Special Equipment Materials</b> of \$584,000 due to the timing of purchasing hatch covers at Loring Road Covered Storage and <b>HVAC Materials</b> of \$512,000 due to less than anticipated purchases through December including the Chelsea Facility roof top units. These are partially offset by higher <b>Warehouse Inventory</b> of \$443,000 due to the need for spare parts and purchase of materials early due to long lead times, <b>Plant &amp; Machinery Materials</b> of \$143,000 and <b>Electrical Materials</b> of \$143,000 due to greater than anticipated purchases through December.
Training & Meetings	328,410	175,683	(152,727)	-46.5%	Training & Meetings was lower than budget by \$153,000 or 46.5% primarily due to less than anticipated spending on meetings and conferences through December driven by MIS (\$110,000), Deer Island Treatment Plant (\$14,000), and Procurement (\$12,000), partially offset by higher spending in Field Operations of \$13,000 and Operations Administration of \$10,000.
Professional Services	5,506,323	4,594,567	(911,756)	-16.6%	Professional Services were less than budget by \$912,000 or 16.6% driven by lower <b>Other Services</b> of \$649,000 due to later than anticipated services which includes the Disparity Study, <b>Lab &amp; Testing Analysis</b> of \$163,000 and <b>Engineering</b> of \$158,000, both due to less than anticipated spending through December.
Other Materials	2,478,268	2,901,279	423,011	17.1%	Other Materials were greater than budget by \$423,000 or 17.1% driven by <b>Computer Hardware</b> of \$363,000 primarily due to additional purchases of materials through December which include switches at DITP, storage replacements, and audiovisual upgrades at the Chelsea Facility. In addition, higher spending on <b>Equipment/Furniture</b> of \$208,000 was due to greater than anticipated lab equipment purchases through December as well as <b>Lab &amp; Testing Supplies</b> of \$154,000. These were partially offset by <b>Vehicle Expense</b> of \$165,000 and <b>Other Materials</b> of \$128,000 due to less than anticipated spending through December.



**ATTACHMENT 2**  
**Current Expense Variance Explanations**

Total MWRA	FY25 Budget YTD December	FY25 Actuals December	FY25 Actual vs. FY25 Budget		Explanations
			\$	%	
Other Services	16,981,459	15,780,428	(1,201,031)	-7.1%	Other Services were lower than budget by \$1.2 million or 7.1% driven by <b>Sludge Pelletization</b> of 489,000 and <b>Grit &amp; Screenings Removal</b> of \$331,000, both primarily due to lower quantities, and lower than anticipated <b>Telecommunications</b> of \$182,000.
<b>Total Direct Expenses</b>	<b>155,975,104</b>	<b>146,013,602</b>	<b>(9,961,502)</b>	<b>-6.4%</b>	
<b>Indirect Expenses</b>					
Insurance	2,235,523	2,370,892	135,369	6.1%	Higher payments/claims of \$68,000 and premiums of \$68,000 than budgeted.
Watershed/PILOT	10,531,407	9,798,435	(732,972)	-7.0%	Lower Watershed Reimbursement of \$733,000 driven by lower spending on Maintenance, Equipment, and Fringe Benefits.
HEEC Payment	4,725,101	4,761,181	36,080	0.8%	
Mitigation	911,782	911,781	(1)	0.0%	
Addition to Reserves	953,139	953,139	-	0.0%	
Pension Expense	21,264,519	21,264,519	-	0.0%	
Post Employee Benefits	-	-	-		
<b>Total Indirect Expenses</b>	<b>40,621,471</b>	<b>40,059,947</b>	<b>(561,524)</b>	<b>-1.4%</b>	
<b>Debt Service</b>					
Debt Service	223,188,818	221,423,218	(1,765,600)	-0.8%	Capital Financing was \$1.8 million less than budget as a result of lower than budgeted variable interest rates.
Debt Service Assistance	-	-	-		
<b>Total Debt Service Expenses</b>	<b>223,188,818</b>	<b>221,423,218</b>	<b>(1,765,600)</b>	<b>-0.8%</b>	
<b>Total Expenses</b>	<b>419,785,393</b>	<b>407,496,767</b>	<b>(12,288,625)</b>	<b>-2.9%</b>	

**ATTACHMENT 2**  
**Current Expense Variance Explanations**

Total MWRA	FY25 Budget YTD December	FY25 Actuals December	FY25 Actual vs. FY25 Budget		Explanations
			\$	%	
Revenue & Income					
Rate Revenue	427,744,000	427,744,000	-	0.0%	
Other User Charges	5,367,690	5,520,646	152,956	2.8%	Higher than estimated DI water of \$146,000.
Other Revenue	4,325,472	4,781,842	456,370	10.6%	Other Revenue was \$456,000 or 10.6% greater than budget due to <b>Miscellaneous Revenue</b> of \$178,000, <b>Permit Fees</b> of \$103,000, <b>Energy Revenue</b> of \$104,000, <b>Emergency Water Supply</b> of \$101,000 for the Town of Wayland, <b>Energy Rebates</b> of \$80,000, partially offset by <b>Profit &amp; Loss on Disposal of Equipment</b> of \$85,000.
Rate Stabilization	-	-	-		
Investment Income	13,056,720	14,323,529	1,266,809	9.7%	Investment Income is over budget due to higher than budgeted interest rates and higher average balances.
Total Revenue	450,493,882	452,370,017	1,876,135	0.4%	
Net Revenue in Excess of Expenses	30,708,489	44,873,250	14,164,760		

**ATTACHMENT 3**  
**FY25 CIP Variance Report (\$000s)**

	FY25 Budget December	FY25 Actuals December	Actuals vs. Budget		Explanations
			\$	%	
Wastewater					
Interception & Pumping (I&P)	\$8,827	\$4,372	(\$4,455)	-50.5%	<u>Less than planned spending</u> Siphon Structure Rehabilitation Construction: \$1.1M (schedule change) West Roxbury Tunnel Inspection: \$800k (work delayed due to contractor in process of submitting dive and safety plan) Hayes Pump Station Rehab - Construction: 687k (award slightly later than anticipated) Nut Island Odor Control & HVAC Improvements - Design/CA/REI & Construction Phase 2: \$472k (work scheduled for FY25 performed in FY24) Ward St. & Columbus Park Headworks Design/CA: \$370k (schedule change) Columbus Park Headworks Air Handling Equipment: \$304k (delayed delivery of new makeup air units)
Treatment	\$33,678	\$33,625	(\$54)	-0.2%	<u>Less than planned spending</u> DITP Roofing Replacement: \$1.4M (Contractor is behind original schedule due to delays with getting materials on a timely basis) DITP As-Needed Design: \$1.1M (lower than projected task order work) Clinton Wastewater Treatment Plant Digester Cover Replacement: \$417k (schedule change) <u>Greater than planned spending</u> Clarifier Rehabilitation Phase 2 Construction: \$2.9M (contractor progress greater than planned) Digester & Storage Tank Rehabilitation - Design/ESDC: \$629k (consultant progress greater than anticipated) Clinton Wastewater Treatment Plant Screw Pump Replacement: \$200k (work scheduled for FY24 performed in FY25)
Residuals	\$0	\$1	\$1	0.0%	
CSO	\$3,202	\$804	(\$2,398)	-74.9%	<u>Less than planned spending</u> Fort Point Channel & Mystic: \$2.1M (later than planned Community Managed CSO payments) Somerville Marginal New Pipe Connection: \$500k (Notice-to-Proceed issued later than anticipated) <u>Greater than planned spending</u> CSO Performance Assessment: \$428k (consultant progress greater than originally planned)
Other Wastewater	\$31,601	\$1,063	(\$30,538)	-96.6%	<u>Less than planned spending</u> I/I Local Financial Assistance: \$30.5M (less than anticipated requests for community grants and loans)

**ATTACHMENT 3**  
**FY25 CIP Variance Report (\$000s)**

	FY25 Budget December	FY25 Actuals December	Actuals vs. Budget		Explanations
			\$	%	
<b>Total Wastewater</b>	<b>\$77,308</b>	<b>\$39,864</b>	<b>(\$37,444)</b>	<b>-48.4%</b>	
<b>Waterworks</b>					
Drinking Water Quality Improvements	\$2,610	\$1,177	(\$1,433)	-54.9%	<u>Less than planned spending</u> CWTP Technical Assistance: \$1.0M (lower than projected task order work) CWTP Parapet Wall Repairs: \$400k (contractor progress less than planned)
Transmission	\$28,602	\$21,194	(\$7,408)	-25.9%	<u>Less than planned spending</u> Metropolitan Water Tunnel Program Administration, Legal & Public Outreach: \$2.5M (less than anticipated costs) Metropolitan Water Tunnel Program Final Design/ESDC: \$2.4M (change in Notice-to-Proceed as contract was not awarded until October 23, 2024 Board meeting) Wachusett Lower Gatehouse Pipe & Boiler Replacement Construction and REI: \$1.6M (longer lead time on some larger items and a change in design for the multi-orifice valve) Program Support Services: \$1.0M and Geotechnical Support Services: \$663k (less than anticipated services) WASM 3 - MEPA/Design/CA/RI: \$968k (less than planned consultant work) Sudbury/Foss Dam Improvements - Construction: \$713k (additional change order work delayed original completion date by 75 days) Shaft 5, CP2 - Construction: \$571k (contractor running behind on the concrete rehab work) Watershed Land Acquisition: \$255k (less than planned land purchases) <u>Greater than planned spending</u> Waltham Water Pipeline Construction: \$3.6M (greater than planned contractor progress)

**ATTACHMENT 3**  
**FY25 CIP Variance Report (\$000s)**

	FY25 Budget December	FY25 Actuals December	Actuals vs. Budget		Explanations
			\$	%	
Distribution & Pumping	\$14,058	\$11,246	(\$2,813)	-20.0%	<u>Less than planned spending</u> Section 75A and 47 Extension Extension - CP-1 Construction: \$1.5M (awarded later than anticipated) Section 89/29 Replacement Construction: \$635k (less than planned contractor progress) Northern Extra High Service (NEH) - New Pipelines Legal: \$488k (less than planned legal/easement expenses) Sections 25 & 24 - CP-2 Construction: \$466k (contractor behind original schedule) Section 56 Replacement/Saugus River - Design/CA: \$332k (change in Construction schedule affects CA services schedule) <u>Greater than planned spending</u> NEH Improvements CP-1: \$1.1M and New Connecting Mains CP3-Sections 23, 24 & 47 Rehabilitation: \$567k (work scheduled for FY24 including final paving performed in FY25)
Other Waterworks	\$1,629	(\$3,208)	(\$4,837)	n/a	<u>Less than planned spending</u> Local Water Pipeline Financial Assistance Program: \$4.4M (less than anticipated requests for community loans) Beacon St. Line - Design/ESDC: \$595k (schedule change) Steel Tank Improvements: \$409k (less than planned consultant progress)
<b>Total Waterworks</b>	<b>\$46,900</b>	<b>\$30,409</b>	<b>(\$16,491)</b>	<b>-35.2%</b>	
<b>Business &amp; Operations Support</b>					
<b>Total Business &amp; Operations Support</b>	<b>\$9,151</b>	<b>\$4,991</b>	<b>(\$4,160)</b>	<b>-45.5%</b>	<u>Less than planned spending</u> As-Needed Design Contracts: \$1.2M (lower than projected task order work) Cabling: \$974k (delays in development of the scope of work caused by challenges in locating available conduit paths on Deer Island) Security Equipment & Installation: \$753k (delays with projects including upgrades to communication circuits and Incident Management System, and less than anticipated fencing work) Oracle Database Appliance v.2: \$388k, and PI Vision Process Book Replacement: \$221k (schedule changes) MAXIMO Interface Enhancements: \$309k (less than anticipated completion of final work) <u>Greater than planned spending</u> Lawson Upgrade: \$581k (cost for software subscription renewal was forecasted over months when it is a one-time annual expense)
<b>Total MWRA</b>	<b>\$133,359</b>	<b>\$75,264</b>	<b>(\$58,095)</b>	<b>-43.6%</b>	

## STAFF SUMMARY




**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** January 15, 2025  
**SUBJECT:** Transmittal of the FY26 Proposed Capital Improvement Program to the MWRA Advisory Board

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**COMMITTEE:** Administration, Finance & Audit

Michael J. Cole, Budget Director  
James J. Coyne, Budget Manager  
Preparer/Title

           INFORMATION  
  X   VOTE  
  
Thomas J. Durkin  
Director, Finance

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### RECOMMENDATION:

To approve the transmittal of the FY26 Proposed Capital Improvement Program to the MWRA Advisory Board for its 60-day review and comment period.

### DISCUSSION:

The Fiscal Year 2026 Proposed Capital Improvement Program (CIP) represents an update to the program approved by the Board in June 2024 for Fiscal Year 2025. The FY26 Proposed CIP includes the latest cost estimates, revised schedules, and new projects.

The FY26 Proposed Capital Improvement Program projects \$401.4 million in spending for FY26, of which \$204.2 million supports Wastewater System Improvements, \$165.9 million supports Waterworks System Improvements, and \$31.2 million is for Business and Operations Support. The projects with significant spending in FY26 include Deer Island Clarifier Rehabilitation Phase 2 Construction (\$50.0 million), Metropolitan Tunnel Redundancy Final Design/Engineering Services During Construction (\$23.0 million), New Connecting Mains Section 75 Extension Construction CP-1 (\$12.0 million), Metropolitan Tunnel Redundancy Admin, Legal & Public Outreach (\$12.0 million) and Northern High Service (NHS) – Section 56 Replacement – Construction (\$10.2 million).

The CIP continues to address critical redundancy improvements for the Metropolitan Tunnel System. The FY26 Proposed CIP includes \$2.1 billion in spending for this project, a decrease of \$12.8 million from the FY25 Approved CIP reflecting a reduction to projected inflation, partially offset by a higher cost estimate for the recently awarded final design contract. The initial contract for Program Support Services began in April 2019. This contract provides assistance with program-wide activities, such as risk management, quality management, design and construction package planning, independent technical reviews, construction practices review and implementation, independent cost estimates, critical path scheduling, and budget tracking. Preliminary Design and MEPA Review was awarded in May 2020 and was completed in January 2024. The third contract, Metropolitan Water Tunnel Program Geotechnical Support Services, for \$12.8 million and a term of 36 months was awarded in December 2022. This contract focuses on

the collection of geotechnical/geological data to support final design, bidding and construction of the Program. The Final Design/ESDC was awarded in October 2024 for \$93.6 million and commenced in November 2024. A full update on the Water Tunnel Program was presented to MWRA Board of Directors this past September.

The FY26 Proposed CIP includes \$31.6 million for projects supporting DCR's Division of Water Supply Protection. Upcoming projects with spending in the FY24-28 Cap Period include the Quabbin Administration Building Design and Construction (\$14.8 million), Quabbin Maintenance Garage Design and Construction (\$7.9 million), and the New Salem Building Design and Construction (\$6.1 million).

The FY26 Proposed Capital Program reaffirms MWRA's commitment to the community financing assistance programs on both the water and wastewater sides. Today, the Authority is better positioned to reinvest in rehabilitation and replacement of aging facilities as a result of conservative fiscal management which includes judicious control of expenses, and the fact that MWRA has implemented the practice of utilizing available funds for defeasances resulting in the reduction of debt service expenses. MWRA projects an overall reduction in outstanding indebtedness during the FY24-28 period.

The Baseline Cap (FY24-28) of \$1,364.2 million was set in the June 2023 and included a Spend Rate Adjustment to account for the historic underspending of the capital program. In addition to the proposed Spend Rate Adjustment, the format of the Cap table has been adjusted to account separately for MWRA spending, which excludes the local I/I grant and loan program and the local water pipeline loan spending which are both outside of MWRA's control. As in past Caps, contingency for each fiscal year is incorporated into the CIP to fund the uncertainties inherent to construction. The contingency budget is calculated as a percentage of budgeted expenditure outlays. Specifically, contingency is 7% for non-tunnel projects and 15% for tunnel projects. Inflation is added for unawarded construction contracts. Finally, the Cap excludes Chicopee Valley Aqueduct system projects.

**FY24 Approved Baseline Cap**

FY24-28 Baseline CAP		FY24	FY25	FY26	FY27	FY28	FY24-28
	Projected Expenditures excl. Metro Tunnel	\$288.2	\$357.9	\$313.5	\$349.8	\$349.1	\$1,658.5
	Metropolitan Tunnel	\$14.4	\$25.2	\$23.9	\$23.9	\$78.6	\$166.2
	I/I Program	(42.9)	(41.5)	(27.5)	(28.4)	(34.2)	(174.5)
	Water Loan Program	(14.1)	(10.9)	(5.0)	(2.6)	8.6	(24.0)
	<b>MWRA Spending</b>	<b>\$245.6</b>	<b>\$330.8</b>	<b>\$304.9</b>	<b>\$342.8</b>	<b>\$402.2</b>	<b>\$1,626.3</b>
	Contingency	15.2	21.8	20.7	23.6	31.7	113.0
	Inflation on Unawarded Construction	1.9	8.1	12.2	22.1	36.1	80.4
	Chicopee Valley Aqueduct Projects	(0.3)	(0.5)	0.0	0.0	0.0	(0.8)
	<b>Projected Spending before Adjustment</b>	<b>\$262.4</b>	<b>\$360.2</b>	<b>\$337.8</b>	<b>\$388.5</b>	<b>\$469.9</b>	<b>\$1,818.9</b>
	Spend Rate Adjustment (25%)*	(65.6)	(90.1)	(84.5)	(97.1)	(117.5)	(454.7)
	<b>FY24 Final FY24-28 Spending</b>	<b>\$196.8</b>	<b>\$270.2</b>	<b>\$253.4</b>	<b>\$291.4</b>	<b>\$352.5</b>	<b>\$1,364.2</b>

It is important to note that the spending on capital programs is largely determined by the nature, magnitude, and number of upcoming projects. In the prior five-year Caps, specifically FY04-08 and FY09-13, the majority of spending was driven by court-mandated projects and building new facilities whereas the FY19-23 period began to the focus on Asset Protection and Water Redundancy. The FY24-28 continues to focus on these two spending initiatives.

Shown in the following, the Proposed FY26 CIP Cap of \$1,363.1 million does not exceed the Baseline 5-year Cap. Future spending continues to focus on Asset Protection and Redundancy initiatives.

#### FY26 Proposed Cap

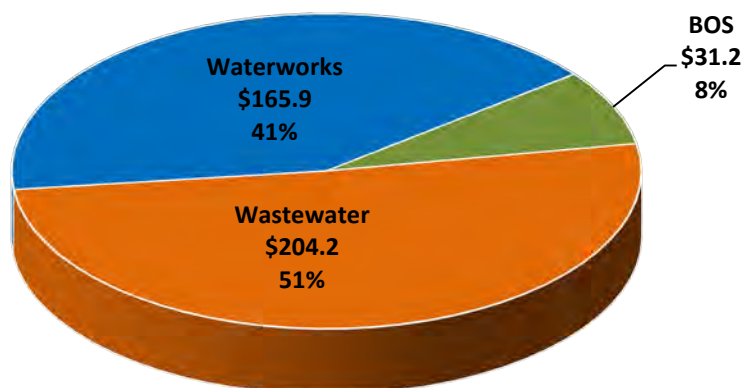
	FY24	FY25	FY26	FY27	FY28	FY24-28
<b>FY26 Proposed CAP</b>						
Projected Expenditures excl. Metro Tunnel	\$199.2	\$295.6	\$358.2	\$437.4	\$496.9	\$1,787.3
Metropolitan Tunnel	\$9.0	\$28.1	\$43.2	\$39.7	\$73.9	\$194.0
I/I Program	(22.0)	(62.5)	(51.3)	(48.6)	(53.4)	(237.9)
Water Loan Program	(26.2)	(27.7)	(30.4)	(18.9)	(16.9)	(120.1)
<b>MWRA Spending</b>	<b>\$160.1</b>	<b>\$233.5</b>	<b>\$319.7</b>	<b>\$409.5</b>	<b>\$500.5</b>	<b>\$1,623.3</b>
Contingency	0.0	14.7	21.3	28.1	36.5	100.5
Inflation on Unawarded Construction	0.0	0.0	3.1	12.1	25.5	40.6
Chicopee Valley Aqueduct Projects	0.0	0.0	(0.0)	(0.3)	0.0	(0.3)
<b>Projected Spending before Adjustment</b>	<b>\$160.1</b>	<b>\$248.2</b>	<b>\$344.0</b>	<b>\$449.4</b>	<b>\$562.4</b>	<b>\$1,764.2</b>
Spend Rate Adjustment (25%)*	0.0	(62.0)	(86.0)	(112.4)	(140.6)	(401.0)
<b>FY26 Proposed FY24-28 Spending</b>	<b>\$160.1</b>	<b>\$186.1</b>	<b>\$258.0</b>	<b>\$337.1</b>	<b>\$421.8</b>	<b>\$1,363.1</b>

\*Based on historical underspending FY04-FY22 excluding community loan programs

#### Proposed FY26 Spending

The FY26 Proposed Capital Improvement Program projects \$401.4 million in spending for FY26 (projected expenditures including the metro tunnel, illustrated in the first two lines in the table above), of which \$204.2 million supports Wastewater System Improvements, \$165.9 million supports Waterworks System Improvements, and \$31.2 million is for Business and Operations Support.

#### FY26 Spending



The FY26 Proposed CIP includes \$81.7 million for community assistance programs, which are a combination of loan and partial grant programs, with net expenditures of \$51.3 million for the local Infiltration/Inflow program and net expenditures of \$30.4 million for the local water pipeline program, of which \$21.0 million is for lead service line replacement loans for FY26. To date, 17 communities have taken these loans totaling \$43.8 million.

The \$401.4 million in projected spending is driven by 42 active wastewater and water projects. Of this \$401.4 million in spending, project contracts with spending greater than \$5.0 million in FY26, excluding local community assistance programs, total \$161.8 million and account for 40.3% of the total annual spending. These projects are presented in the following table:



Project	Subphase	FY26 \$s in Millions
DI Treatment Plant Asset Protection	Clarifier Rehab Phase 2 - Construction	\$50.0
Metro Water Tunnel Program	Final Design/ESDC	\$23.0
New Connect Mains-Shaft 7 to WASM3	Section 75 Extension - Construction CP-1	\$12.0
Metro Water Tunnel Program	Admin Legal & Public Outreach	\$12.0
NHS - Revere & Malden Pipelines	Section 56 Replacement- Construction	\$10.2
Facility Asset Protection	Hayes Pump Station Rehab Construction	\$8.8
Northern Extra High Service New Pipelines	CP-2 NEH Improvements	\$8.5
NHS - Revere & Malden Pipelines	CP-1 Section 68 Construction	\$8.0
Residuals Asset Protection	Various Equipment Replacement	\$6.8
DI Treatment Plant Asset Protection	DI Digester Storage Membrane Replacements	\$6.0
Alternative Energy Initiatives	Future Renewable Energy Projects	\$6.0
Metro Redundancy Interim Improvements	Waltham Water Pipeline Construction	\$5.4
DI Treatment Plant Asset Protection	MCC & Switchgear Replace Construction	\$5.3
<b>Total Contracts ≥ \$5 million (excluding Loan Programs)</b>		<b>\$161.8</b>
<b>% of FY26 Spending</b>		<b>40.3%</b>
<b>Other Project Spending</b>		<b>\$239.5</b>
<b>Total FY26 Spending</b>		<b>\$401.4</b>

**Clarifier Rehabilitation Phase 2 Construction** - \$50.0 million (\$290.4 million total construction cost). This project will rehabilitate the sludge removal system in the primary tanks and the aeration/recirculation systems in the secondary tanks. The influent gates, effluent launders and aeration systems, and concrete corrosion in primary clarifiers will also be addressed and repaired.

**Metro Tunnel Program Final Design/ESDC** - \$23.0 million (\$135.4 million total project cost). Final Design and Engineering Services During Construction of the Northern and Southern Tunnels, including connecting mains.

**New Connecting Mains to WASM 3 Section 75 Extension Construction CP-1** - \$12.0 million (\$17.3 million total project cost). Addition of approximately 4,000 feet of new 30-inch diameter pipe to extend Section 75 easterly to Section 24 in Newton, to provide a redundant feed to the Intermediate High pressure zone supplying Arlington, Belmont and Watertown, and rehabilitation of a portion of Section 47, and replacement of Meters 111 and 81.

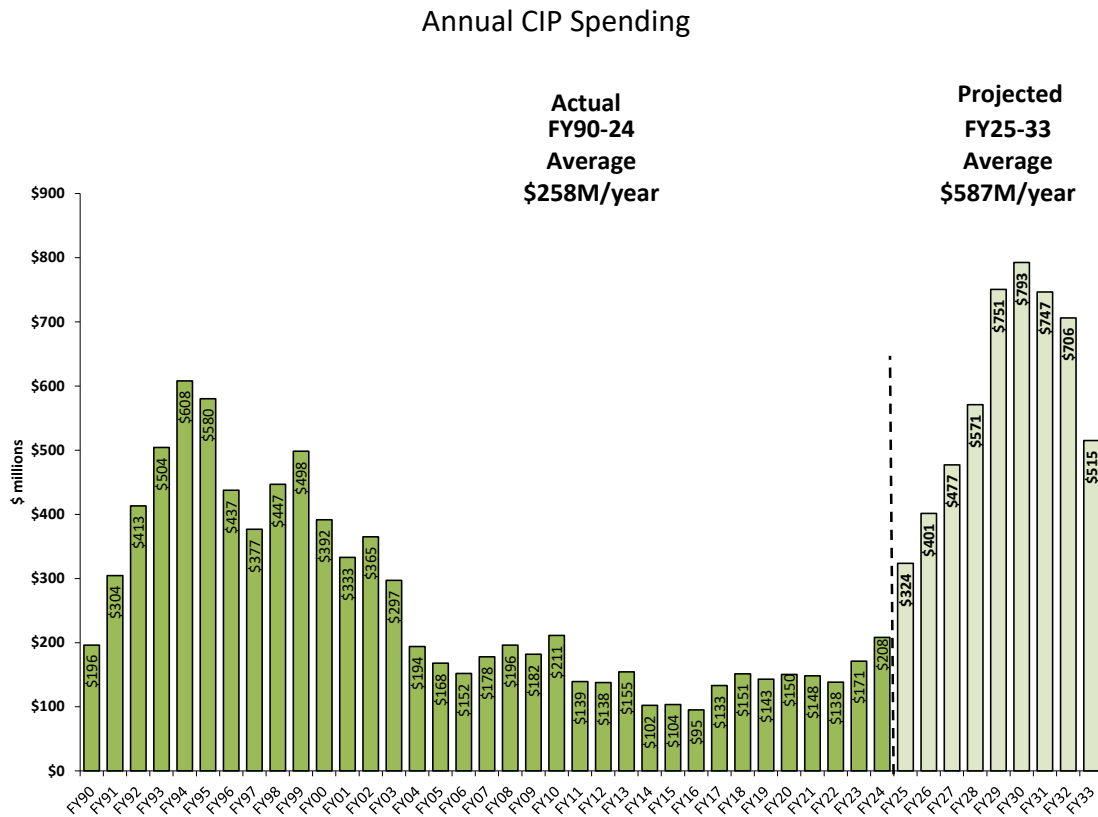
**Metro Tunnel Program Administration Legal and Public Outreach** - \$12.0 million (\$156.6 million total project cost). Includes Community agreements, land acquisition and possible Owner Controlled Insurance Program for the North and South Tunnels.

**Northern High Service Revere & Malden Pipelines Section 56 Replacement Construction** - \$10.2 million (\$11.2 million total project cost). Construction to replace failed 20/30-inch diameter steel water main crossing of the Saugus River by trenchless methods. Main was installed in 1934 and no longer conveys water through Lynn to NH system over the General Edwards Bridge. This main used to provide redundancy to Section 26.

**Hayes Pump Station Rehab Construction** - \$8.8 million (\$25.6 million total project cost). Construction of improvements to Hayes Pump Station, which was constructed in 1987. Due to its age, all major facility components require replacement or rehabilitation.

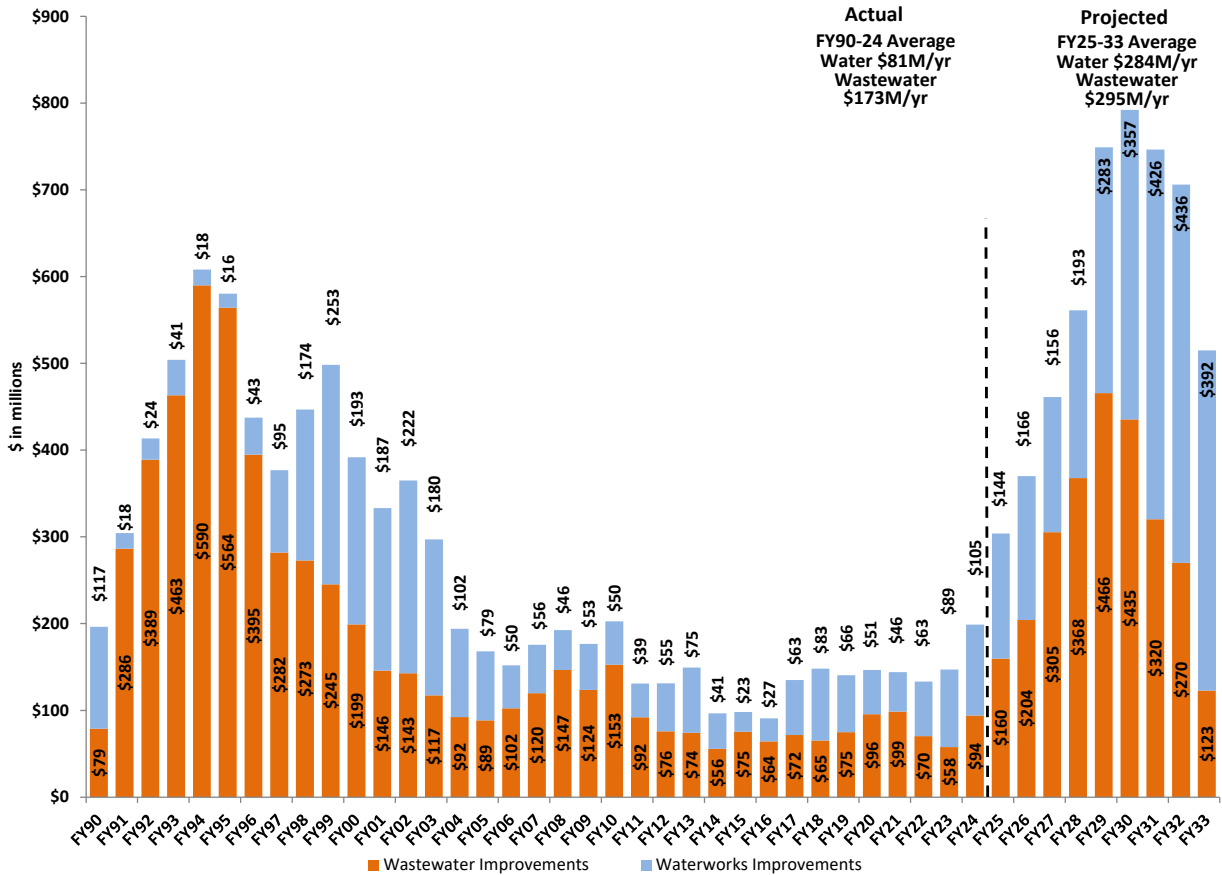
## Historical & Projected Spending

The following chart captures the historical CIP spending through FY24 and projects spending through FY33 based on the FY26 Proposed CIP. Average annual CIP spending through FY24 was \$258 million. Average annual CIP spending for the proposed FY25-33 period is projected to be \$587 million.



The following chart shows the historical CIP spending from FY90 through FY24 by utility with projections through FY33. Average annual CIP spending through FY24 was \$81 million for Waterworks and \$173 million for Wastewater. Average annual CIP spending for FY25-33 is projected to be \$284 million for Waterworks and \$295 million for Wastewater.

## Annual CIP Spending by Utility



### FY24-28 Spending

Spending during the FY24-28 timeframe is projected to be \$2.0 billion, including local community spending of \$237.9 million for the I/I loan and grant program and \$120.1 million for the water pipeline loan program. Spending under the Wastewater and Waterworks programs is projected at \$1,131.1 million and \$764.4 million, respectively, followed by Business and Operations at \$85.8 million. The spending projections set forth here include updates to the approved FY25 CIP with the latest cost estimates, revised schedules, and new projects.

Yearly projected expenditures for the Proposed FY24-28 period by program are shown in the following table in millions:

	Future Spending Beyond FY24	FY24	FY25	FY26	FY27	FY28	Total FY24-28	Beyond 28
<b>Wastewater System Improvements</b>	<b>\$2,644.9</b>	<b>\$94.0</b>	<b>\$159.6</b>	<b>\$204.2</b>	<b>\$305.4</b>	<b>\$367.8</b>	<b>\$1,131.1</b>	<b>\$1,607.8</b>
Interception & Pumping	872.9	20.4	21.3	40.0	76.1	97.3	255.1	638.3
Treatment	1,442.3	41.4	70.5	101.4	172.1	205.0	590.2	893.5
Residuals	108.4	0.0	0.0	7.6	7.8	10.7	26.0	82.4
CSO	16.0	10.2	5.3	4.0	0.9	1.5	21.9	4.3
Other Wastewater	205.2	22.0	62.5	51.3	48.6	53.4	237.9	-10.7
<b>Waterworks System Improvements</b>	<b>\$3,121.1</b>	<b>\$105.0</b>	<b>\$144.4</b>	<b>\$165.9</b>	<b>\$155.8</b>	<b>\$193.4</b>	<b>\$764.4</b>	<b>\$2,461.6</b>
Drinking Water Quality Improvements	73.6	2.6	5.0	3.4	4.1	6.1	21.2	54.9
Transmission	2,413.8	39.3	61.5	65.5	59.0	97.8	323.1	2,130.0
Distribution & Pumping	656.5	31.3	35.5	54.5	61.6	61.0	243.9	444.0
Other Waterworks	(22.8)	31.8	42.3	42.6	31.1	28.5	176.2	-167.2
<b>Business &amp; Operations Support</b>	<b>\$78.6</b>	<b>\$9.3</b>	<b>\$19.8</b>	<b>\$31.2</b>	<b>\$15.8</b>	<b>\$9.7</b>	<b>\$85.8</b>	<b>2.1</b>
<b>Total MWRA</b>	<b>\$5,844.6</b>	<b>\$208.2</b>	<b>\$323.7</b>	<b>\$401.4</b>	<b>\$477.1</b>	<b>\$570.9</b>	<b>\$1,981.3</b>	<b>\$4,071.5</b>

It is important to emphasize that the majority of spending within the Wastewater and Waterworks programs is concentrated in several larger projects with significant spending in the FY24-28 timeframe. The top 20 project contracts in terms of spending for the FY24-28 period total \$810.0 million, which excludes local community assistance programs. These 20 projects account for 40.9% of total projected period spending. Largest construction initiatives in terms of FY24-28 spending include the Clarifier Rehabilitation at Deer Island of \$227.7 million (total cost of \$290.4 million), Final Design Metro Water Tunnel Program of \$82.5 million (total cost of \$135.4 million), CP-2 Section 116 of \$62.0 million (total cost of \$70.0 million), Prison Point Rehabilitation of \$38.7 million (total cost of \$38.7 million), South System Pump Station VFD Replacement of \$38.0 million (total cost of \$120.0 million), Metro Water Tunnel Program Admin, Legal & Public Outreach 37.8 million (total cost of \$156.6 million), and Combined Heat & Power Construction of \$33.5 million (total cost of \$114.0 million).

The following table highlights major project spending in the FY24-28 timeframe:

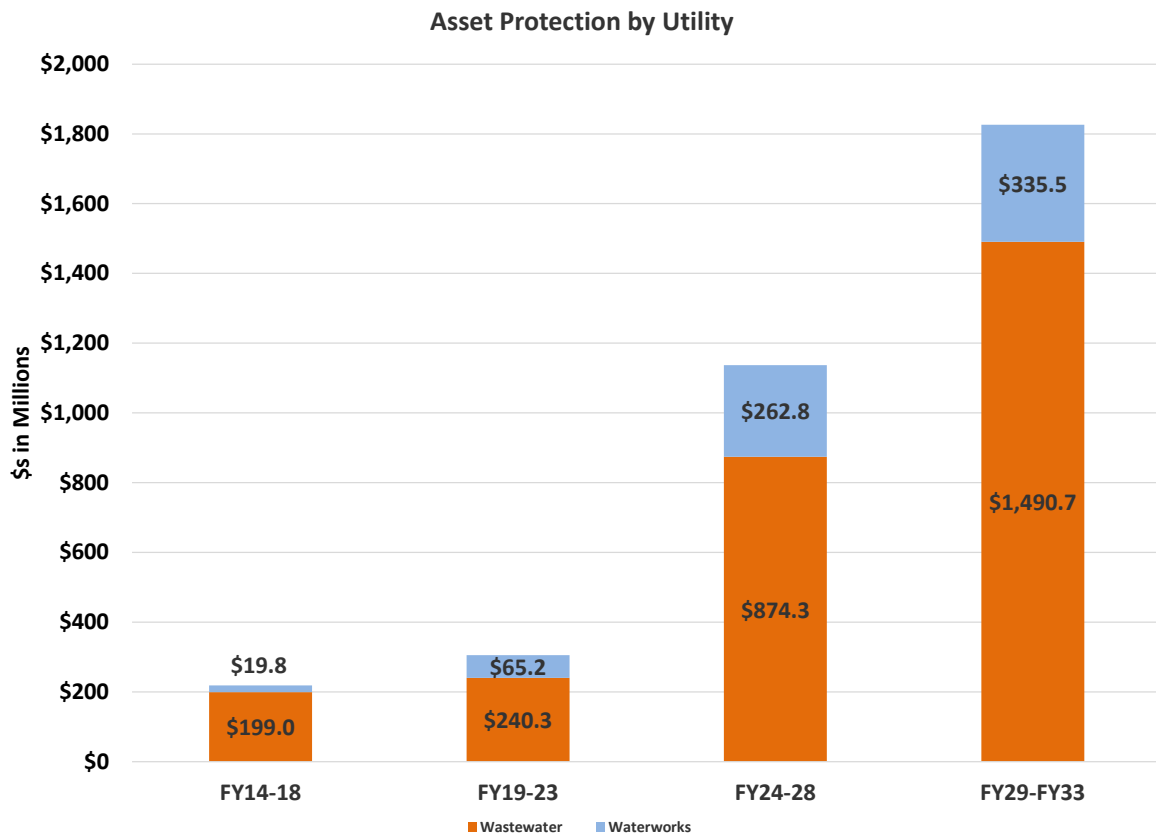
Project	Subphase	FY24-FY28 \$s in Millions
DI Treatment Plant Asset Protection	Clarifier Rehab Phase 2 - Construction	\$227.7
Metro Water Tunnel Program	Final Design/ESDC	\$82.5
NHS - Revere & Malden Pipelines	CP-2 Section 116	\$62.0
Facility Asset Protection	Prison Point Rehab Repackaged	\$38.7
DI Treatment Plant Asset Protection	SSPS VFD Replace Construcion	\$38.0
Metro Water Tunnel Program	Admin Legal & Public Outreach	\$37.8
DI Treatment Plant Asset Protection	Combined Heat & Power - Construction	\$33.5
Metro Redundancy Interim Improvements	Waltham Water Pipeline Construction	\$28.6
DI Treatment Plant Asset Protection	Digester/Storage Tank Rehab Construction	\$27.9
Facility Asset Protection	Hayes Pump Station Rehab Construction	\$25.6
Metro Water Tunnel Program	Tunnel Construction South CP2	\$24.6
Northern Extra High Service New Pipelines	CP-2 NEH Improvements	\$22.8
DI Treatment Plant Asset Protection	Fire Alarm System Replacement - Construction	\$22.0
New Connect Mains-Shaft 7 to WASM3	Sect 25 & 24 - Const CP-2	\$21.2
Facility Asset Protection	Ward St Headworks Construction	\$21.0
DI Treatment Plant Asset Protection	MCC & Switchgr Replace Construction	\$21.0
Quabbin Transmission System	Wach LGH Pipe&Boiler Rpl Construction	\$20.5
NIH Redundancy & Storage	Section 89 & 29 Repl - Construction	\$19.2
DI Treatment Plant Asset Protection	Eastern Seawall Construction - 1	\$18.1
New Connect Mains-Shaft 7 to WASM3	Section 75 Extension - Construction CP-1	\$17.3
<b>Total Top 20 Spending Subphases (excluding Loan Programs)</b>		<b>\$810.0</b>
<b>% of FY24-28 Spending</b>		<b>40.9%</b>
<b>Other Proiect Spending</b>		<b>\$1,171.3</b>
<b>Total FY24-FY28 Spending</b>		<b>\$1,981.3</b>

Asset Protection is a strategy that involves managing assets to ensure that service levels are met. Asset Protection accounts for the largest share of capital expenditures for the FY24-28 period. The FY26 Proposed CIP includes \$1.2 billion for asset protection initiatives, representing 58.3% of total MWRA spending during this timeframe. Asset protection spending by program is as follows: Wastewater (\$874.3 million), Waterworks (\$262.8 million), and Business and Operations Support (\$18.9 million). Spending for water system redundancy projects totals \$355.6 million in the same FY24-28 period, accounting for 18.0% of total spending.

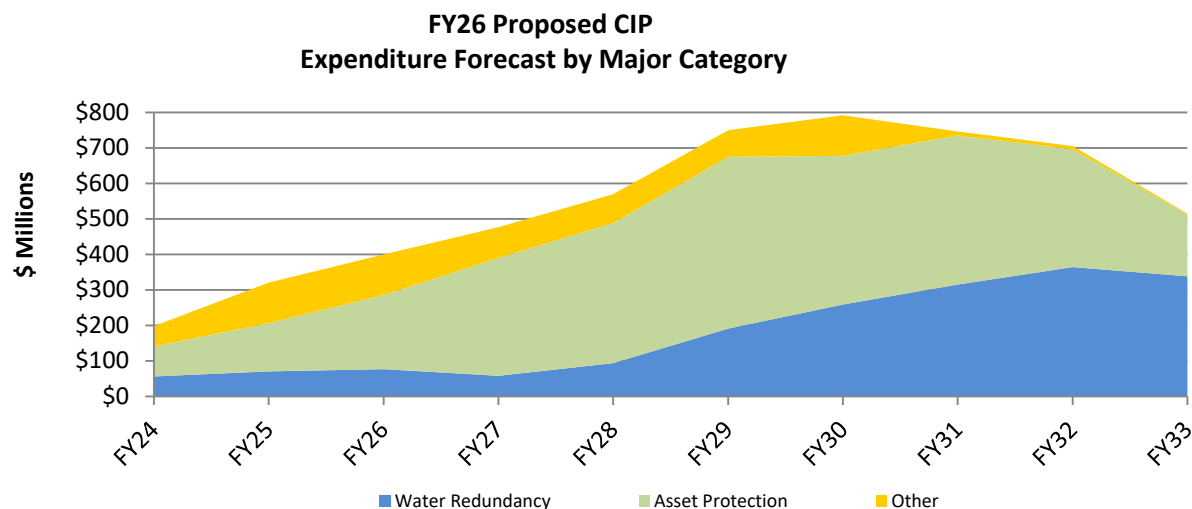
**Changing nature of the CIP by Category**  
(\$s in millions)

Project Category	FY19-23	FY24-28	FY29-33
Asset Protection	\$313.4	\$1,156.0	\$1,827.8
Water Redundancy	\$186.9	\$355.6	\$1,467.5
CSO	\$12.6	\$17.0	\$4.3
Other	\$238.4	\$452.7	\$211.6
<b>Total</b>	<b>\$751.3</b>	<b>\$1,981.3</b>	<b>\$3,511.2</b>
<b>Asset Protection</b>	<b>41.7%</b>	<b>58.3%</b>	<b>52.1%</b>
<b>Water Redundancy</b>	<b>24.9%</b>	<b>18.0%</b>	<b>41.8%</b>
CSO	1.7%	0.9%	0.1%
Other	31.7%	22.8%	6.0%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

In terms of utility spending, wastewater asset protection accounts for 75.6% of the FY24-28 projected asset projection spending at \$874.3 million of which \$568.8 million is designated for the Deer Island Wastewater Treatment Plant and \$305.5 million for headworks and pipelines. The \$262.8 million targeted for waterworks asset protection includes \$180.1 million for water pipeline projects.



As illustrated by the following graph, the next two waves of spending over the FY24-28 and the FY29-33 periods will be for asset protection and water redundancy. This reflects MWRA's commitment to maintaining its physical plant and addressing the need for water system redundancy in some critical service areas. Total asset protection spending for FY24-28 is projected at \$1.2 billion or 58.3% of projected spending. Similarly, water redundancy spending for FY24-28 is projected at \$355.6 million or 18.0% of projected spending. For the FY29-33 spending window, total asset protection expenditures are projected at \$1.8 billion, 52.1% of projected spending. Similarly, water redundancy spending for FY29-33 is projected at \$1.5 billion or 41.8% of projected spending as the Metro Tunnel Redundancy program gears up.



### **FY26 Proposed CIP Future Expenditures**

The FY26 Proposed CIP contains future spending (beyond FY24) estimated at \$5.8 billion, including \$2.6 billion for Wastewater (primarily Asset Protection of \$2.4 billion) and \$3.1 billion for Waterworks (primarily Redundancy projects of \$2.5 billion). Wastewater Asset Protection includes \$1.4 billion for Deer Island and \$780.4 million for Wastewater Facility Asset Protection (primarily pump station rehabilitation). Redundancy projects include the Metro Tunnel Redundancy and Metro Redundancy Interim Improvement projects with future spending of \$2.1 billion and \$172.9 million, respectively. FY24-FY28 spending is projected at \$2.0 billion or 33.9% of future spending.

The following table represents the projected spending by the major project categories:

	Future Spending Beyond FY24	Total FY24-28	Total FY29-33	Beyond FY33
<b>Wastewater System Improvements</b>	<b>\$2,644.9</b>	<b>\$1,131.1</b>	<b>\$1,614.5</b>	<b>-\$6.7</b>
Interception & Pumping	872.9	255.1	605.0	33.3
Treatment	1,442.3	590.2	835.6	57.9
Residuals	108.4	26.0	58.0	24.5
CSO	16.0	21.9	4.3	0.0
Other Wastewater	205.2	237.9	111.6	-122.3
<b>Waterworks System Improvements</b>	<b>\$3,121.1</b>	<b>\$764.4</b>	<b>\$1,894.8</b>	<b>\$566.8</b>
Drinking Water Quality Improvements	73.6	21.2	54.9	0.0
Transmission	2,413.8	323.1	1,444.9	685.1
Distribution & Pumping	656.5	243.9	335.0	109.0
Other Waterworks	(22.8)	176.2	60.1	-227.3
<b>Business &amp; Operations Support</b>	<b>\$78.6</b>	<b>\$85.8</b>	<b>\$2.0</b>	<b>0.1</b>
<b>Total MWRA</b>	<b>\$5,844.6</b>	<b>\$1,981.3</b>	<b>\$3,511.2</b>	<b>\$560.3</b>

## New Projects

The FY26 Proposed CIP includes 5 new projects at a total cost of \$11.9 million with projected spending of \$11.9 million over the FY24-28 period. There are 2 water projects for \$2.9 million and a single wastewater project for \$2.0 million. Business & Operation Systems has two Alternative Energy Projects totaling \$7.0 million. The largest new project is the replacement of the damaged wind turbine at Deer Island for \$4.5 million with total spending expected to be entirely offset by insurance and grant proceeds. A complete listing of projects is included as Attachment C.

### \$s in Millions

Project	Total Contract Amount	FY24-28 Spending	Beyond 28
Lonergan Intake Building Walkway/Wall Improvement	\$2.0	\$2.0	\$0.0
Pipe Bridge Inspection/Structural Analysis	\$0.9	\$0.9	\$0.0
<b>Total Waterworks (#2)</b>	<b>\$2.9</b>	<b>\$2.9</b>	<b>\$0.0</b>
Ward Street Air Handling Replacement	\$2.0	\$2.0	\$0.0
<b>Total Wastewater (#1)</b>	<b>\$2.0</b>	<b>\$2.0</b>	<b>\$0.0</b>
DITP Wind Turbine 1 Replacement	\$4.5	\$4.5	\$0.0
Chelsea Admin Heat Pumps	\$2.5	\$2.5	\$0.0
<b>Total Business &amp; Operation Systems (#2)</b>	<b>\$7.0</b>	<b>\$7.0</b>	<b>\$0.0</b>
<b>5 New Projects</b>	<b>\$11.9</b>	<b>\$11.9</b>	<b>\$0.0</b>



## **CIP Review and Adoption Process**

The Advisory Board will have no less than 60 days from the transmittal of the FY26 Proposed CIP to review the budget and prepare comments and recommendations. During the review period, Advisory Board and MWRA staff will continue to meet and discuss the changes to the capital budget. The Advisory Board will then transmit its comments and recommendations to MWRA in the spring after its review. Staff will prepare draft responses to the Advisory Board's recommendations for discussion at the budget hearing. During the spring, MWRA will update the CIP to incorporate the latest information into the Draft Final budget. In June, staff will present the FY26 Final for the Board's consideration and adoption.

## **ATTACHMENTS:**

- A. FY26 Proposed Project Level Expenditure Forecast
- B. Overview of the FY26 Proposed CIP and Changes from the FY25 Final CIP
- C. FY26 Proposed New Projects

**Attachment A**  
**FY26 Proposed Capital Expenditure Forecast**  
**at Project Level**  
**(\$000s)**

Program / Project Name	Total Program/Project Budget Amount	Life-to-Date Spending through FY24	Remaining Balance	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
<b>Total MWRA</b>	<b>11,077,826</b>	<b>5,233,260</b>	<b>5,844,565</b>	<b>323,740</b>	<b>401,365</b>	<b>477,059</b>	<b>570,868</b>	<b>1,981,269</b>	<b>3,511,240</b>	<b>560,293</b>
<b>Wastewater</b>	<b>5,197,309</b>	<b>2,552,438</b>	<b>2,644,871</b>	<b>159,625</b>	<b>204,233</b>	<b>305,387</b>	<b>367,815</b>	<b>1,131,060</b>	<b>1,614,469</b>	<b>(6,658)</b>
<b>Interception &amp; Pumping</b>	<b>1,657,197</b>	<b>784,269</b>	<b>872,928</b>	<b>21,333</b>	<b>40,006</b>	<b>76,056</b>	<b>97,260</b>	<b>255,066</b>	<b>604,950</b>	<b>33,323</b>
102 Quincy Pump Facilities	25,907	25,907	-	Completed Project						
104 Braintree-Weymouth (B/W) Relief Facilities	249,888	240,969	8,919	5,272	156			13,986	3,492	
105 New Neponset Valley Relief Sewer	30,300	30,300	-	Completed Project						
106 Wellesley Extension Replacement Sewer	64,359	64,359	-	Completed Project						
107 Framingham Extension Relief Sewer	47,856	47,856	-	Completed Project						
127 Cummingsville Replacement Sewer	8,999	8,999	-	Completed Project						
130 Siphon Structure Rehabilitation	24,401	3,382	21,019	2,749	5,134	3,114	2,352	13,629	7,669	
131 Upper Neponset Valley Sewer System	54,174	54,174	-	Completed Project						
132 Corrosion & Odor Control	104,577	73,683	30,894	934				5,175	26,008	3,952
136 West Roxbury Tunnel	11,970	10,314	1,656	1,105	552			1,656		
137 Wastewater Central Monitoring	27,482	19,926	7,556			627	1,328	1,955	5,601	
139 South System Relief Project	4,939	3,439	1,500						1,500	
141 Wastewater Process Optimization	8,310	2,200	6,111						6,111	
142 Wastewater Meter System - Equipment Replacement	21,057	11,930	9,126		135	540	540	1,196	1,485	6,426
143 Regional I/I Management & Planning	169	169	-	Completed Project						
145 Facility Asset Protection	967,112	186,662	780,449	11,273	34,029	71,775	93,040	217,469	552,387	17,945

**Attachment A**  
**FY26 Proposed Capital Expenditure Forecast**  
**at Project Level**  
**(\$000s)**

Program / Project Name	Total Program/Project Budget Amount	Life-to-Date Spending through FY24	Remaining Balance	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
146 Deer Island (DI) Cross Harbor Tunnel	5,000	-	5,000							5,000
147 Randolph Trunk Sewer Relief	698	-	698						698	
<b>Treatment</b>	<b>1,848,194</b>	<b>405,878</b>	<b>1,442,316</b>	<b>70,464</b>	<b>101,368</b>	<b>172,050</b>	<b>204,961</b>	<b>590,235</b>	<b>835,608</b>	<b>57,865</b>
182 Deer Island (DI) Primary and Secondary Treatment	(958)	(958)	-	Completed Project						
200 DI Plant Optimization	33,279	33,279	-	Completed Project						
206 Deer Island Treatment Plant (DITP) Asset Protection	1,767,111	351,760	1,415,351	67,137	93,933	166,674	200,851	568,762	828,891	57,865
210 Clinton Wastewater Treatment Plant (CWWTP)	46,551	19,586	26,965	3,327	7,435	5,376	4,110	21,473	6,718	
211 Laboratory Services	2,212	2,212	-	Completed Project						
<b>Residuals</b>	<b>189,126</b>	<b>80,696</b>	<b>108,429</b>	<b>7,550</b>	<b>7,750</b>	<b>10,692</b>	<b>25,992</b>	<b>57,961</b>	<b>24,476</b>	
261 Residuals	63,811	63,811	-	Completed Project						
271 Residuals Asset Protection	125,315	16,886	108,429	7,550	7,750	10,692	25,992	57,961	24,476	
<b>CSO</b>	<b>941,176</b>	<b>925,206</b>	<b>15,971</b>	<b>5,284</b>	<b>4,016</b>	<b>901</b>	<b>1,453</b>	<b>21,892</b>	<b>4,321</b>	
<b>CSO MWRA Managed</b>	<b>440,355</b>	<b>435,419</b>	<b>4,936</b>	<b>2,080</b>	<b>2,836</b>	<b>20</b>	<b>5,491</b>			
339 North Dorchester Bay	221,510	221,510	-	Completed Project						
347 East Boston Branch Sewer Relief	85,637	85,637	-	Completed Project						
348 BOS019 Storage Conduit	14,288	14,288	-	Completed Project						
349 Chelsea Trunk Sewer	31,664	31,664	-	Completed Project				555		
350 Union Park Detention Treatment Facility	49,583	49,583	-	Completed Project						
353 Upgrade Existing CSO Facilities	22,385	22,385	-	Completed Project						

**Attachment A**  
**FY26 Proposed Capital Expenditure Forecast**  
**at Project Level**  
**(\$000s)**

Program / Project Name	Total Program/Project Budget Amount	Life-to-Date Spending through FY24	Remaining Balance	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
354 Hydraulic Relief Projects	7,231	2,295	4,936	2,080	2,836	20		4,936		
355 MWR003 Gate & Siphon	4,424	4,424	-	Completed Project						
357 Charles River CSO Controls	3,633	3,633	-	Completed Project						
CSO Community Managed	435,658	433,530	2,128	2,131				11,128		
340 Dorchester Bay Sewer Separation (Fox Point)	55,029	55,029	-	Completed Project						
341 Dorchester Bay Sewer Separation (Commercial Point)	61,440	61,443	(3)	Completed Project						
342 Neponset River Sewer Separation	2,492	2,492	-	Completed Project						
343 Constitution Beach Sewer Separation	3,731	3,731	-	Completed Project						
344 Stony Brook Sewer Separation	44,319	44,319	-	Completed Project						
346 Cambridge Sewer Separation	104,552	104,552	-	Completed Project						
351 BWSC Floatables Controls	946	946	-	Completed Project						
352 Cambridge Floatables Control	1,127	1,127	-	Completed Project						
356 Fort Point Channel Sewer Separation	23,389	21,257	2,131	2,131				11,131		
358 Morrissey Boulevard Drain	32,181	32,181	-	Completed Project						
359 Reserved Channel Sewer Separation	70,524	70,524	-	Completed Project						
360 Brookline Sewer Separation	24,715	24,715	-	Completed Project						
361 Bulfinch Triangle Sewer Separation	9,032	9,032	-	Completed Project						
362 East Boston CSO Control	2,182	2,182	-	Completed Project						
CSO Planning & Support	65,163	56,257	8,907	1,073	1,180	881	1,453	5,273	4,321	
324 CSO Support	65,163	56,257	8,907	1,073	1,180	881	1,453	5,273	4,321	

**Attachment A**  
**FY26 Proposed Capital Expenditure Forecast**  
**at Project Level**  
**(\$000s)**

Program / Project Name	Total Program/Project Budget Amount	Life-to-Date Spending through FY24	Remaining Balance	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
Other Wastewater	561,616	356,389	205,227	62,548	51,293	48,630	53,449	237,874	111,630	(122,323)
128 I/I Local Financial Assistance	561,335	356,108	205,227	62,548	51,293	48,630	53,449	237,874	111,630	(122,323)
138 Sewerage System Mapping Upgrades	281	281	-	completed project						
Waterworks	5,651,943	2,530,818	3,121,124	144,351	165,900	155,839	193,395	764,441	1,894,818	566,821
Drinking Water Quality Improvements	736,937	663,369	73,569	5,034	3,383	4,088	6,147	21,248	54,916	
542 Carroll Water Treatment Plant (CWTP)	448,545	430,440	18,105	3,855	2,500	2,500		9,492	9,250	
543 Quabbin Water Treatment Plant	19,973	19,973								
544 Norumbega Covered Storage Facility	106,674	106,674								
545 Blue Hills Covered Storage	40,083	40,083								
550 Spot Pond Storage Facility	60,126	60,126								
555 Carroll Water Treatment Plant (CWTP) Asset Protection	61,536	6,072	55,463	1,179	883	1,588	6,147	11,756	45,666	
Transmission	3,383,817	970,035	2,413,782	61,478	65,471	59,038	97,832	323,093	1,444,871	685,092
597 Winsor Station Pipeline	72,470	7,475	64,995	(1)				(1)	58,686	6,310
601 Sluice Gate Rehabilitation	9,158	9,158	-	completed project						
604 MetroWest Tunnel	709,574	697,182	12,392	1	321	155	2,520	2,997	9,395	
615 Chicopee Valley Aqueduct Redundancy	8,666	8,666	-	completed project						
616 Quabbin Transmission System	43,177	27,174	16,003	8,585	1,278	2,250	2,775	27,489	1,115	
617 Sudbury/Weston Aqueduct Repairs	18,275	4,870	13,405		306	1,530	1,024	2,860	10,545	
620 Wachusett Reservoir Spillway Improvements	9,287	9,287	-	completed project						

**Attachment A**  
**FY26 Proposed Capital Expenditure Forecast**  
**at Project Level**  
**(\$000s)**

Program / Project Name	Total Program/Project Budget Amount	Life-to-Date Spending through FY24	Remaining Balance	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
621 Watershed Land	34,000	29,075	4,925	1,000	1,000	1,000	1,925	5,121		
622 Cosgrove Tunnel Redundancy	58,619	58,619	-	completed project						
623 Dam Projects	12,356	4,293	8,063	3,992	2,871	400	800	8,625		
625 Metropolitan Water Tunnel Program	2,129,559	36,850	2,092,709	28,132	43,162	39,700	73,940	193,975	1,315,858	591,918
628 Metropolitan Redundancy Interim Improvements	247,085	74,221	172,864	16,457	12,924	12,203	13,295	71,684	31,121	86,864
630 Watershed Division Capital Improvements	31,589	3,164	28,425	3,312	3,609	1,800	1,554	10,343	18,150	
<b>Distribution And Pumping</b>	<b>1,280,077</b>	<b>623,534</b>	<b>656,543</b>	<b>35,518</b>	<b>54,463</b>	<b>61,619</b>	<b>60,953</b>	<b>243,862</b>	<b>334,967</b>	<b>109,025</b>
618 Peabody Pipeline Project	1,448	1,448	-	completed project						
677 Valve Replacement	12,016	12,016	-	completed project						
678 Boston Low Service - Pipe & Valve Rehabilitation	23,691	23,691	-	completed project						
683 Heath Hill Road Pipe Replacement	19,358	19,358	-	completed project						
689 James L. Gillis Pump Station Rehabilitation	33,419	33,419	-	completed project						
692 Northern High Service (NHS) - Section 27 Improvements	2,136	124	2,013						2,013	
693 NHS - Revere & Malden Pipeline Improvements	165,933	37,101	128,833	3,977	19,913	38,350	36,650	100,422	29,942	
702 New Connecting Mains - Shaft 7 to WASM 3	109,392	55,323	54,069	15,183	15,605	4,735	1,029	58,831	17,417	100
704 Rehabilitation of Other Pump Stations	51,572	30,090	21,482			594	793	1,387	20,095	
706 NHS-Connecting Mains from Section 91	2,360	2,360	-	completed project						
708 Northern Extra High Service (NEH) - New Pipelines	68,625	16,182	52,443	5,154	10,227	13,197	12,285	39,997	11,581	
712 Cathodic Protection of Distribution Mains	8,252	1,160	7,092		3,665	2,443	984	7,092		

**Attachment A**  
**FY26 Proposed Capital Expenditure Forecast**  
**at Project Level**  
**(\$000s)**

Program / Project Name	Total Program/Project Budget Amount	Life-to-Date Spending through FY24	Remaining Balance	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
713 Spot Pond Supply Mains Rehabilitation	66,977	65,675	1,302	502				505	800	
714 Southern Extra High Sections 41 & 42	3,657	3,657	-	completed project						
719 Chestnut Hill Connecting Mains	59,475	18,287	41,188						23,205	17,983
720 Warren Cottage Line Rehabilitation	1,205	1,205	-	completed project						
721 Southern Spine Distribution Mains	127,034	38,715	88,319	1	150	299	5,562	6,065	69,056	13,252
722 Northern Intermediate High (NIH) Redundancy & Storage	158,866	101,819	57,047	10,639	4,817	1,347	1,545	26,588	38,700	
723 Northern Low Service Rehabilitation - Section 8	68,982	5,557	63,425	9	12	12	12	56	63,380	
725 Hydraulic Model Update	598	598	-	completed project						
727 Southern Extra High (SEH) Redundancy & Storage	176,133	65,077	111,055	51	73	83	1,310	1,572	31,849	77,690
730 Weston Aqueduct Supply Mains (WASM)	80,403	80,403	-	completed project						
731 Lynnfield Pipeline	5,626	5,626	-	completed project						
732 Walnut St. & Fisher Hill Pipeline Rehabilitation	2,717	2,717	-	completed project						
735 Section 80 Rehabilitation	30,201	1,925	28,276	1	2	560	784	1,347	26,929	
Other Waterworks	251,111	273,881	(22,770)	42,321	42,583	31,094	28,463	176,239	60,064	(227,295)
753 Central Monitoring System	45,315	37,619	7,696	2,873	1,992	844	423	10,647	1,564	
763 Distribution Systems Facilities Mapping	3,087	1,700	1,387	106	19	346	345	941	572	
764 Local Water Infrastructure Rehabilitation	7,488	7,488	-	completed project						
765 Local Water System Assistance Program (LWSAP)	38,459	210,672	(172,213)	27,707	30,400	18,900	16,900	120,107	5,122	(271,242)
766 Waterworks Facility Asset Protection	156,762	16,402	140,360	11,636	10,172	11,004	10,796	44,545	52,806	43,947
Business & Operations Support	228,573	150,004	78,570	19,764	31,232	15,834	9,658	85,768	1,952	130

**Attachment A**  
**FY26 Proposed Capital Expenditure Forecast**  
**at Project Level**  
**(\$000s)**

Program / Project Name	Total Program/Project Budget Amount	Life-to-Date Spending through FY24	Remaining Balance	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
881 Equipment Purchase	43,348	27,343	16,004	3,934	4,730	3,558	3,263	15,862	390	130
925 Technical Assistance	1,055	-	1,055	510	252	294		1,055		
930 MWRA Facility - Chelsea	9,812	9,812	-	completed project						
931 Business Systems Plan	24,562	24,562	-	completed project						
932 Environmental Remediation	1,479	1,479	-	completed project						
933 Capital Maintenance Planning & Development	41,484	23,974	17,510	3,173	5,275	3,438	4,062	17,843	1,562	
934 MWRA Facilities Management & Planning	22,935	20,135	2,800	100	873	1,195	633	4,245		
935 Alternative Energy Initiatives	36,481	18,184	18,297	297	14,000	4,000		18,297		
940 Application Improvement Program	24,027	10,665	13,362	4,502	3,810	3,350	1,700	17,732		
942 Information Security Program (ISP)	4,493	3,101	1,392	1,032	360			1,381		
944 Information Technology Management Program	2	2	-	completed project						
946 IT Infrastructure Program	18,896	10,747	8,149	6,216	1,933			9,352		



**ATTACHMENT B**  
**Overview of the FY26 Proposed CIP and Changes from the FY25 Final CIP**

Program and Project	FY25 Final			
	Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>Total MWRA</b>	<b>10,801,815</b>	<b>1,977,459</b>	<b>3,264,170</b>	<b>535,163</b>
<b>Wastewater</b>	<b>5,009,056</b>	<b>1,143,293</b>	<b>1,420,487</b>	<b>(13,169)</b>
<b>Interception &amp; Pumping</b>	<b>1,649,003</b>	<b>282,853</b>	<b>568,264</b>	<b>34,029</b>
102 Quincy Pump Facilities	25,907	-	-	-
104 Braintree-Weymouth Relief Facilities	249,042	13,081	3,551	-
105 New Neponset Valley Relief Sewer	30,300	-	-	-
106 Wellesley Extension Replacement Sewer	64,359	-	-	-
107 Framingham Extension Relief Sewer	47,856	-	-	-
127 Cummingsville Replacement Sewer	8,999	-	-	-
130 Siphon Structure Rehabilitation	24,362	13,590	7,669	-
131 Upper Neponset Valley Sewer	54,174	-	-	-
132 Corrosion & Odor Control	104,633	5,168	26,008	4,015
136 West Roxbury Tunnel	11,514	1,200	-	-
137 Wastewater Central Monitoring	27,482	1,955	5,601	-
139 South System Relief Project	4,939	-	1,500	-
141 Wastewater Process Optimization	8,310	-	6,111	-
142 Wastewater Meter System-Equipment	21,057	1,736	945	6,426
143 Regional I/I Management Planning	169	-	-	-
145 Facility Asset Protection	960,202	246,123	516,181	18,588
146 D.I. Cross Harbor Tunnel Inspection	5,000	-	-	5,000
147 Randolph Trunk Sewer Relief	698	-	698	-
<b>Treatment</b>	<b>1,686,865</b>	<b>575,836</b>	<b>693,377</b>	<b>53,164</b>
182 DI Primary and Secondary	(958)	-	-	-
200 DI Plant Optimization	33,279	-	-	-
206 DI Treatment Plant Asset Protection	1,613,142	558,449	689,934	53,165
210 Clinton Wastewater Treat Plant	39,190	17,387	3,443	-
211 Laboratory Services	2,212	-	-	-
<b>Residuals</b>	<b>171,326</b>	<b>20,892</b>	<b>45,261</b>	<b>24,476</b>
261 Residuals	63,811	-	-	-
271 Residuals Asset Protection	107,515	20,892	45,261	24,476

FY26 Proposed			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>11,077,825</b>	<b>1,981,274</b>	<b>3,511,237</b>	<b>560,294</b>
<b>5,197,312</b>	<b>1,131,059</b>	<b>1,614,472</b>	<b>(6,659)</b>
<b>1,657,198</b>	<b>255,066</b>	<b>604,951</b>	<b>33,323</b>
25,907	-	-	-
249,888	13,986	3,492	-
30,300	-	-	-
64,359	-	-	-
47,856	-	-	-
8,999	-	-	-
24,401	13,629	7,669	-
54,174	-	-	-
104,577	5,175	26,008	3,952
11,970	1,656	-	-
27,482	1,955	5,601	-
4,939	-	1,500	-
8,310	-	6,111	-
21,057	1,196	1,485	6,426
169	-	-	-
967,112	217,469	552,387	17,945
5,000	-	-	5,000
698	-	698	-
<b>1,848,195</b>	<b>590,235</b>	<b>835,609</b>	<b>57,864</b>
(958)	-	-	-
33,279	-	-	-
1,767,111	568,762	828,891	57,865
46,551	21,473	6,718	-
2,212	-	-	-
<b>189,126</b>	<b>25,992</b>	<b>57,961</b>	<b>24,476</b>
63,811	-	-	-
125,315	25,992	57,961	24,476

Change from Final FY25			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>276,009</b>	<b>3,808</b>	<b>247,074</b>	<b>25,131</b>
<b>188,256</b>	<b>(12,235)</b>	<b>193,984</b>	<b>6,509</b>
<b>8,195</b>	<b>(27,787)</b>	<b>36,687</b>	<b>(706)</b>
-	-	-	-
846	905	(59)	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
39	39	-	-
-	-	-	-
(56)	7	-	(63)
456	456	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	(540)	540	-
-	-	-	-
6,910	(28,654)	36,206	(643)
-	-	-	-
-	-	-	-
<b>161,330</b>	<b>14,399</b>	<b>142,232</b>	<b>4,700</b>
-	-	-	-
-	-	-	-
153,969	10,313	138,957	4,700
7,361	4,086	3,275	-
-	-	-	-
<b>17,800</b>	<b>5,100</b>	<b>12,700</b>	<b>-</b>
-	-	-	-
17,800	5,100	12,700	-

**ATTACHMENT B**  
**Overview of the FY26 Proposed CIP and Changes from the FY25 Final CIP**

Program and Project	FY25 Final			
	Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>CSO</b>	<b>940,246</b>	<b>21,099</b>	<b>4,179</b>	<b>-</b>
324 CSO Support	64,068	4,318	4,180	-
339 North Dorchester Bay	221,510	-	-	-
340 Dorchester Bay Sewer Separation (Fox Point)	55,029	-	-	-
341 Dorchester Bay Sewer Separation (Commercial Point)	61,443	-	-	-
342 Neponset River Sewer Separation	2,492	-	-	-
343 Constitution Beach Sewer Separation	3,731	-	-	-
344 Stony Brook Sewer Separation	44,319	-	-	-
346 Cambridge Sewer Separation	104,552	-	-	-
347 East Boston Branch Sewer Relief	85,637	-	-	-
348 BOS019 Storage Conduit	14,288	-	-	-
349 Chelsea Trunk Sewer	31,683	573	-	-
350 Union Park Detention Treatment Facility	49,583	-	-	-
351 BWSC Floatables Controls	946	-	-	-
352 Cambridge Floatables Control	1,127	-	-	-
353 Upgrade Existing CSO Facilities	22,385	-	-	-
354 Hydraulic Relief Projects	7,373	5,078	-	-
355 MWR003 Gate & Siphon	4,424	-	-	-
356 Fort Point Channel Sewer Separation	23,389	11,131	-	-
357 Charles River CSO Controls	3,633	-	-	-
358 Morrissey Boulevard Drain	32,181	-	-	-
359 Reserved Channel Sewer Separation	70,524	-	-	-
360 Brookline Sewer Separation	24,715	-	-	-
361 Bulfinch Triangle Sewer Separation	9,032	-	-	-
362 East Boston CSO Control	2,182	-	-	-
<b>Other Wastewater</b>	<b>561,616</b>	<b>242,613</b>	<b>109,406</b>	<b>(124,838)</b>
128 I/I Local Financial Assistance	561,335	242,613	109,406	(124,838)
138 Sewerage System Mapping Upgrade	281	-	-	-
<b>Total Waterworks</b>	<b>5,575,803</b>	<b>760,016</b>	<b>1,841,730</b>	<b>548,205</b>
<b>Drinking Water Quality</b>	<b>736,137</b>	<b>23,047</b>	<b>52,316</b>	<b>-</b>
542 Carroll Water Treatment Plant	448,432	9,379	9,250	-
543 Quabbin Water Treatment Plant	19,973	-	-	-
544 Norumbega Covered Storage	106,674	-	-	-
545 Blue Hills Covered Storage	40,083	-	-	-
550 Spot Pond Storage Facility	60,126	-	-	-
555 CWTP Asset Protection	60,849	13,668	43,066	-

FY26 Proposed			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>941,177</b>	<b>21,891</b>	<b>4,320</b>	<b>-</b>
65,163	5,273	4,321	-
221,510	-	-	-
55,029	-	-	-
61,440	(3)	-	-
2,492	-	-	-
3,731	-	-	-
44,319	-	-	-
104,552	-	-	-
85,637	-	-	-
14,288	-	-	-
31,664	555	-	-
49,583	-	-	-
946	-	-	-
1,127	-	-	-
22,385	-	-	-
7,231	4,936	-	-
4,424	-	-	-
23,389	11,131	-	-
3,633	-	-	-
32,181	-	-	-
70,524	-	-	-
24,715	-	-	-
9,032	-	-	-
2,182	-	-	-
<b>561,616</b>	<b>237,874</b>	<b>111,630</b>	<b>(122,323)</b>
561,335	237,874	111,630	(122,323)
281	-	-	-
<b>5,651,939</b>	<b>764,443</b>	<b>1,894,817</b>	<b>566,823</b>
<b>736,937</b>	<b>21,248</b>	<b>54,916</b>	<b>-</b>
448,545	9,492	9,250	-
19,973	-	-	-
106,674	-	-	-
40,083	-	-	-
60,126	-	-	-
61,536	11,756	45,666	-

Change from Final FY25			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>931</b>	<b>792</b>	<b>141</b>	<b>-</b>
1,095	955	141	-
-	-	-	-
-	-	-	-
(3)	(3)	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
(19)	(18)	-	-
-	-	-	-
-	-	-	-
-	-	-	-
(142)	(142)	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
<b>-</b>	<b>(4,739)</b>	<b>2,224</b>	<b>2,515</b>
-	(4,739)	2,224	2,515
-	-	-	-
<b>76,137</b>	<b>4,427</b>	<b>53,090</b>	<b>18,622</b>
<b>800</b>	<b>(1,799)</b>	<b>2,600</b>	<b>-</b>
113	113	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
687	(1,912)	2,600	-

**ATTACHMENT B**  
**Overview of the FY26 Proposed CIP and Changes from the FY25 Final CIP**

Program and Project	FY25 Final			
	Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>Transmission</b>	<b>3,392,177</b>	<b>314,789</b>	<b>1,463,232</b>	<b>683,401</b>
597 Winsor Station Pipeline	71,835	-	58,110	6,251
601 Sluice Gate Rehabilitation	9,158	-	-	-
604 MetroWest Tunnel	709,574	8,524	3,868	-
615 Chicopee Valley Aqueduct Redundancy	8,666	-	-	-
616 Quabbin Transmission System	42,487	26,799	1,115	-
617 Sudbury/Weston Aqueduct Repairs	18,284	2,860	10,554	-
620 Wachusett Reservoir Spillway Improvement	9,287	-	-	-
621 Watershed Land	34,000	5,121	-	-
622 Cosgrove/Wachusett Redundancy	58,619	-	-	-
623 Dam Projects	12,222	8,491	-	-
625 Metro Water Tunnel Program	2,142,343	180,410	1,343,842	590,283
628 Metro Redundancy Interim Improvement	245,418	70,016	31,121	86,865
630 Watershed Division Capital Improvement	30,282	12,566	14,620	-
<b>Distribution &amp; Pumping</b>	<b>1,207,525</b>	<b>231,082</b>	<b>290,722</b>	<b>93,500</b>
618 Peabody Pipeline	1,448	-	-	-
677 Valve Replacement	12,016	-	-	-
678 Boston Low Service-Pipe & Valve Rehabilitation	23,691	-	-	-
683 Heath Hill Road Pipe Replacement	19,358	-	-	-
689 James L. Gillis Pump Station Rehabilitation	33,419	-	-	-
692 NHS - Section 27 Improvements	2,136	-	2,013	-
693 NHS - Revere & Malden Pipeline Improvement	128,739	78,227	14,942	-
702 New Connect Mains-Shaft 7 to WASM 3	106,475	56,452	16,980	-
704 Rehabilitation of Other Pump Stations	51,572	2,180	19,302	-
706 NHS-Connecting Mains from Section 91	2,360	-	-	-
708 Northern Extra High Service New Pipelines	67,511	38,914	11,550	-
712 Cathodic Protection Of Distrubution Mains	7,268	6,108	-	-
713 Spot Pond Supply Mains Rehabilitation	67,285	813	800	-
714 Southern Extra High Sections 41 & 42	3,657	-	-	-
719 Chestnut Hill Connecting Mains	55,509	-	23,205	14,017
720 Warren Cottage Line Rehabilitation	1,205	-	-	-
721 South Spine Distribution Mains	111,964	4,709	66,754	1,839
722 NIH Redundancy & Storage	156,075	40,712	21,785	-
723 Northern Low Service Rehabilitation Section 8	68,970	48	63,377	-
724 Northern High Service - Pipeline Rehabilitation	-	-	-	-
725 Hydraulic Model Update	598	-	-	-
727 Southern Extra High Redundancy & Storage	172,202	1,572	27,963	77,644
730 Weston Aqueduct Supply Mains	80,403	-	-	-
731 Lynnfield Pipeline	5,626	-	-	-
732 Walnut St. & Fisher Hill Pipeline Rehabilitation	2,717	-	-	-
733 NHS Pipeline Rehabilitation 13-18 & 48	-	-	-	-

FY26 Proposed			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>3,383,817</b>	<b>323,093</b>	<b>1,444,870</b>	<b>685,093</b>
72,470	(1)	58,686	6,310
9,158	-	-	-
709,574	2,997	9,395	-
8,666	-	-	-
43,177	27,489	1,115	-
18,275	2,860	10,545	-
9,287	-	-	-
34,000	5,121	-	-
58,619	-	-	-
12,356	8,625	-	-
2,129,559	193,975	1,315,858	591,918
247,085	71,684	31,121	86,865
31,589	10,343	18,150	-
<b>1,280,076</b>	<b>243,862</b>	<b>334,967</b>	<b>109,025</b>
1,448	-	-	-
12,016	-	-	-
23,691	-	-	-
19,358	-	-	-
33,419	-	-	-
2,136	-	2,013	-
165,933	100,422	29,942	-
109,392	58,831	17,417	100
51,572	1,387	20,095	-
2,360	-	-	-
68,625	39,997	11,581	-
8,252	7,092	-	-
66,977	505	800	-
3,657	-	-	-
59,475	-	23,205	17,983
1,205	-	-	-
127,034	6,065	69,056	13,252
158,866	26,588	38,700	-
68,982	56	63,380	-
-	-	-	-
598	-	-	-
176,133	1,572	31,849	77,690
80,403	-	-	-
5,626	-	-	-
2,717	-	-	-
-	-	-	-

Change from Final FY25			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>(8,360)</b>	<b>8,306</b>	<b>(18,360)</b>	<b>1,694</b>
635	(1)	576	59
-	-	-	-
-	(5,527)	5,527	-
-	-	-	-
690	690	-	-
(9)	-	(9)	-
-	-	-	-
-	-	-	-
-	-	-	-
134	134	-	-
(12,784)	13,565	(27,984)	1,635
1,667	1,668	-	-
1,307	(2,223)	3,530	-
<b>72,550</b>	<b>12,779</b>	<b>44,246</b>	<b>15,525</b>
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
37,194	22,195	15,000	-
2,917	2,379	437	100
-	(793)	793	-
-	-	-	-
1,114	1,083	31	-
984	984	-	-
(308)	(308)	-	-
-	-	-	-
3,966	-	-	3,966
-	-	-	-
15,070	1,356	2,302	11,413
2,791	(14,124)	16,915	-
12	8	3	-
-	-	-	-
-	-	-	-
3,931	-	3,886	46
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

**ATTACHMENT B**  
**Overview of the FY26 Proposed CIP and Changes from the FY25 Final CIP**

Program and Project	FY25 Final			
	Total Budget Amount	FY24-28	FY29-33	Beyond 33
734 Southern Extra High Pipelines-Sections 30, 39,40, & 44	-	-	-	-
735 Section 80 Rehabilitation	25,322	1,348	22,050	-
<b>Other</b>	<b>239,964</b>	<b>191,098</b>	<b>35,460</b>	<b>(228,698)</b>
753 Central Monitoring System	45,061	10,392	1,564	-
763 Distribution Systems Facilities Mapping	3,087	941	572	-
764 Local Water Infrastructure Rehabilitation Assistance Program	7,488	-	-	-
765 Local Water Pipeline Improvement Loan Program	38,459	130,894	(12,979)	(263,928)
766 Waterworks Facility Asset Protection	145,869	48,872	46,303	35,230
<b>Business &amp; Operations Support</b>	<b>216,956</b>	<b>74,150</b>	<b>1,953</b>	<b>130</b>
881 Equipment Purchase	43,107	15,621	390	130
925 Technical Assistance	1,055	1,055	-	-
930 MWRA Facility - Chelsea	9,812	-	-	-
931 Business Systems Plan	24,562	-	-	-
932 Environmental Remediation	1,479	-	-	-
933 Capital Maintenance Planning	39,362	15,721	1,562	-
934 MWRA Facilities Management	22,213	3,523	-	-
935 Alternative Energy Initiatives	28,184	10,000	-	-
940 Applicat Improv Program	24,027	17,732	-	-
942 Info Security Program ISP	4,493	1,381	-	-
944 Info Tech Mgmt Program	2	-	-	-
946 IT Infrastructure Program	18,662	9,118	-	-

FY26 Proposed			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
-	-	-	-
30,201	1,347	26,929	-
<b>251,111</b>	<b>176,240</b>	<b>60,064</b>	<b>(227,295)</b>
45,315	10,647	1,564	-
3,087	941	572	-
7,488	-	-	-
38,459	120,107	5,122	(271,242)
156,762	44,545	52,806	43,947
<b>228,574</b>	<b>85,767</b>	<b>1,952</b>	<b>130</b>
43,348	15,862	390	130
1,055	1,055	-	-
9,812	-	-	-
24,562	-	-	-
1,479	-	-	-
41,484	17,843	1,562	-
22,935	4,245	-	-
36,481	18,297	-	-
24,027	17,732	-	-
4,493	1,381	-	-
2	-	-	-
18,896	9,352	-	-

Change from Final FY25			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
-	-	-	-
4,879	(1)	4,879	-
<b>11,147</b>	<b>(14,859)</b>	<b>24,604</b>	<b>1,403</b>
254	255	-	-
-	-	-	-
-	-	-	-
-	(10,787)	18,101	(7,314)
10,893	(4,327)	6,503	8,717
<b>11,616</b>	<b>11,616</b>	<b>-</b>	<b>-</b>
241	241	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
2,122	2,122	-	-
722	722	-	-
8,297	8,297	-	-
-	-	-	-
-	-	-	-
-	-	-	-
234	234	-	-

## Attachment C

### New Capital Projects Added to the FY26 CIP

Program	Project	Subphase	Contract Number	Total Contract Amount	NTP	SC	FY26	FY27	FY28	FY24-28	Beyond FY28	Total Expenditures
Interception & Pumping	145 Facility Asset Protection	Ward Street Headworks Air Handling Replacement	8151	\$ 2,000,000	Jan-26	Jan-27	\$ 500,000	\$ 1,500,000	\$ -	\$ 2,000,000	\$ -	\$ 2,000,000
Transmission	616 Quabbin Transmission System	Loneragan Intake Bldg Walkway and Wall Improvements	8138	\$ 2,000,000	Feb-26	Jun-27	\$ -	\$ 2,000,000	\$ -	\$ 2,000,000	\$ -	\$ 2,000,000
Other Waterworks	766 Waterworks Facility Asset Protection	Pipe Bridge Inspections/Structural Analysis	8137	\$ 900,000	Mar-25	Mar-26	\$ 900,000	\$ -	\$ -	\$ 900,000	\$ -	\$ 900,000
Business & Operations Support	935 Alternative Energy Initiatives	DITP Wind Turbine 1 Replacement	8148	\$ 4,500,000	May-25	May-26	\$ 4,500,000	\$ -	\$ -	\$ 4,500,000	\$ -	\$ 4,500,000
Business & Operations Support	935 Alternative Energy Initiatives	Chelsea Administration Building Heat Pumps	8147	\$ 2,500,000	Mar-25	Oct-25	\$ 2,500,000	\$ -	\$ -	\$ 2,500,000	\$ -	\$ 2,500,000
<b>SUMMARY:</b>												
Total Wastewater Projects				\$ 2,000,000			\$ 500,000	\$ 1,500,000	\$ -	\$ 2,000,000	\$ -	\$ 2,000,000
Total Water Projects				\$ 2,900,000			\$ 900,000	\$ 2,000,000	\$ -	\$ 2,900,000	\$ -	\$ 2,900,000
Total Business & Operations Support Projects				\$ 7,000,000			\$ 7,000,000	\$ -	\$ -	\$ 7,000,000	\$ -	\$ 7,000,000
Total Projects				\$ 11,900,000			\$ 8,400,000	\$ 3,500,000	\$ -	\$ 11,900,000	\$ -	\$ 11,900,000

## STAFF SUMMARY


**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** January 15, 2025  
**SUBJECT:** Intermediate High Pipeline Improvements  
Design and Engineering Services During Construction  
CDM Smith Inc.  
Contract 6955, Amendment 2



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**COMMITTEE:** Water Policy & Oversight

Brian L. Kubaska, P.E., Chief Engineer  
Renie A. Jesanis, Project Manager  
Preparer/Title

           INFORMATION  
  X   VOTE  
  
David W. Coppes, P.E.  
Chief Operating Officer

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### RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 2 to Contract 6955, Intermediate High Pipeline Improvements, with CDM Smith Inc., extending the contract term by 24 months from July 23, 2026 to July 23, 2028, with no increase in contract price.

### DISCUSSION:

The Board of Directors approved the award of Contract 6955 to CDM Smith Inc. in an amount not to exceed \$6,451,907 on December 19, 2018 to provide design and engineering services during construction (ESDC) to interconnect two geographically distinct and hydraulically unconnected Intermediate High Pressure Zones to provide redundancy and operational flexibility in the event of pipe failure. The project will also improve water quality by reducing the length of unlined cast iron water mains in the system. The key project elements are shown on Attachment 1 and were originally planned for implementation through three construction contracts (CP1, CP2 and CP3).

Construction Contract 7484 (CP1) was awarded to P. Gioioso & Sons, Inc. at the December 11, 2024 Board meeting. CP1 includes extending MWRA's Section 75 water main with approximately 3,500 linear feet of 24-inch diameter water main from Commonwealth Avenue, in Newton, continuing on Grafton Street, Centre Street and Ward Street to the intersection of Ward Street and Waverly Avenue. CP1 also includes installation of a new revenue meter in Newton, replacement of Belmont Meter 111 and installation of a backup pressure reducing valve in Belmont. With a construction duration of 30 months, substantial completion is expected in July 2027. Contract 6955 with CDM Smith expires July 23, 2026, falling short of the anticipated construction completion and the one-year warranty period. This amendment is needed to provide additional time for ESDC and CP1 construction warranty period.

Construction Contract 6956 (CP2) was awarded to Albanese D&S, Inc. at the May 24, 2023 Board meeting. CP2 includes replacement of 5,900 linear feet of Section 25 with larger pipe (16-inch to 20-inch diameter) and rehabilitation by cleaning and lining approximately 3,300 linear feet of Section 24, along with replacement of Watertown revenue Meters 2 and 40. The construction

notice to proceed was issued on July 20, 2023 with substantial completion expected in January 2026.

As set forth in the October 18, 2023 staff summary, Construction Contract 6548 (CP3) was originally planned to include rehabilitation of approximately 18,400 linear feet of 20-inch diameter Sections 47, 59 and 60 water mains in Arlington, Belmont and Watertown, and replacement of revenue meters 81, 110 and 121. During the pipeline condition assessment phase of CP3's design, a test coupon from Section 60 revealed that the pipeline had a cement mortar liner contrary to the 1939 record drawings. The information obtained from this test coupon was not sufficient to make a recommendation regarding rehabilitation of the entire pipeline. In addition, it was not possible to isolate the adjoining Section 59 at the time to determine whether this pipeline is also cement mortar lined and assess the integrity of the liner. Accordingly, Amendment 1, approved under delegated authority, reduced the scope and budget for field testing for CP3 and eliminated some of the scope originally proposed for CP3 construction (design for Section 59 and Section 60) while retaining design of Section 47 rehabilitation and Meter 81 replacement to be combined with CP1. The ESDC budget for CP3 was not modified at that time. The deleted CP3 services will be procured under a future contract, once additional existing pipe data is collected which will be possible after CP1 and CP2 are operational. The budget for the deleted field testing work was reallocated to fund additional project administration costs associated with a longer design duration for CP1 and CP2. The remainder of the field services budget was reallocated to the Technical Assistance Allowance to be used for services authorized and approved through the execution of task orders to support completion of Contract 6955 as may be needed.

### **This Amendment**

If approved, Amendment 2 will increase the contract term by 24 months from July 23, 2026 to July 23, 2028, with no increase in the overall contract price. Through the course of this project, a number of small setbacks have resulted in cumulative project delays. Delays were initially experienced with COVID-19 precautions taken by the host municipalities (Newton and Watertown), slowing the review of boring locations and utility mark outs for the field testing program. In addition, the collection of pipe coupons to determine the condition of the pipe was hampered by the inability to deactivate portions of the system until work performed under a separate contract was completed. For CP2, project delays were experienced due to extensive coordination with Watertown's department of public works resulting in realignments and additional survey and geotechnical investigation requirements, followed by delays to allow National Grid to relocate portions of its infrastructure prior to CP2 construction beginning. Further, during the CP1 design, schedule delays resulted from including replacement of Newton's 20-inch diameter water main in design documents and execution of a memorandum of agreement with Newton to perform this work. Also, changes in the Section 75 Extension alignment resulted in additional utility survey work and coordination with Newton and other utilities.

The construction duration for CP1 was originally 24 months and as the design progressed and the segment of Section 47 and Meter 81 (previously in CP3) were added to the CP1 scope the construction duration was increased to 30 months. This time extension will allow CDM Smith to complete engineering services required to support CP1 followed by a 12-month warranty period, during which CDM Smith will assist with warranty related engineering services post construction, as well as provide a first year certification report. There are costs associated with the longer construction duration as well as salary escalation costs given that the ESDC services for CP1 will occur later than anticipated for a total of \$197,831. However, the original ESDC budget for CP3

remains available and can accommodate these costs resulting in no changes to the original amount of Contract 6955.

**CONTRACT SUMMARY:**

	<b>Amount</b>	<b>Time</b>	<b>Dated</b>
Original Contract	\$6,451,904	90 Months	2/06/2019
Amendment 1*	\$0	0 Months	4/23/2024
Amendment 2	<u>\$0</u>	<u>24 Months</u>	Pending
Adjusted Contract Amount	\$6,451,904	114 Months	

\*Approved under delegated authority

**BUDGET/FISCAL IMPACT:**

There is no increase to the contract amount as a result of this amendment.

**MBE/WBE PARTICIPATION:**

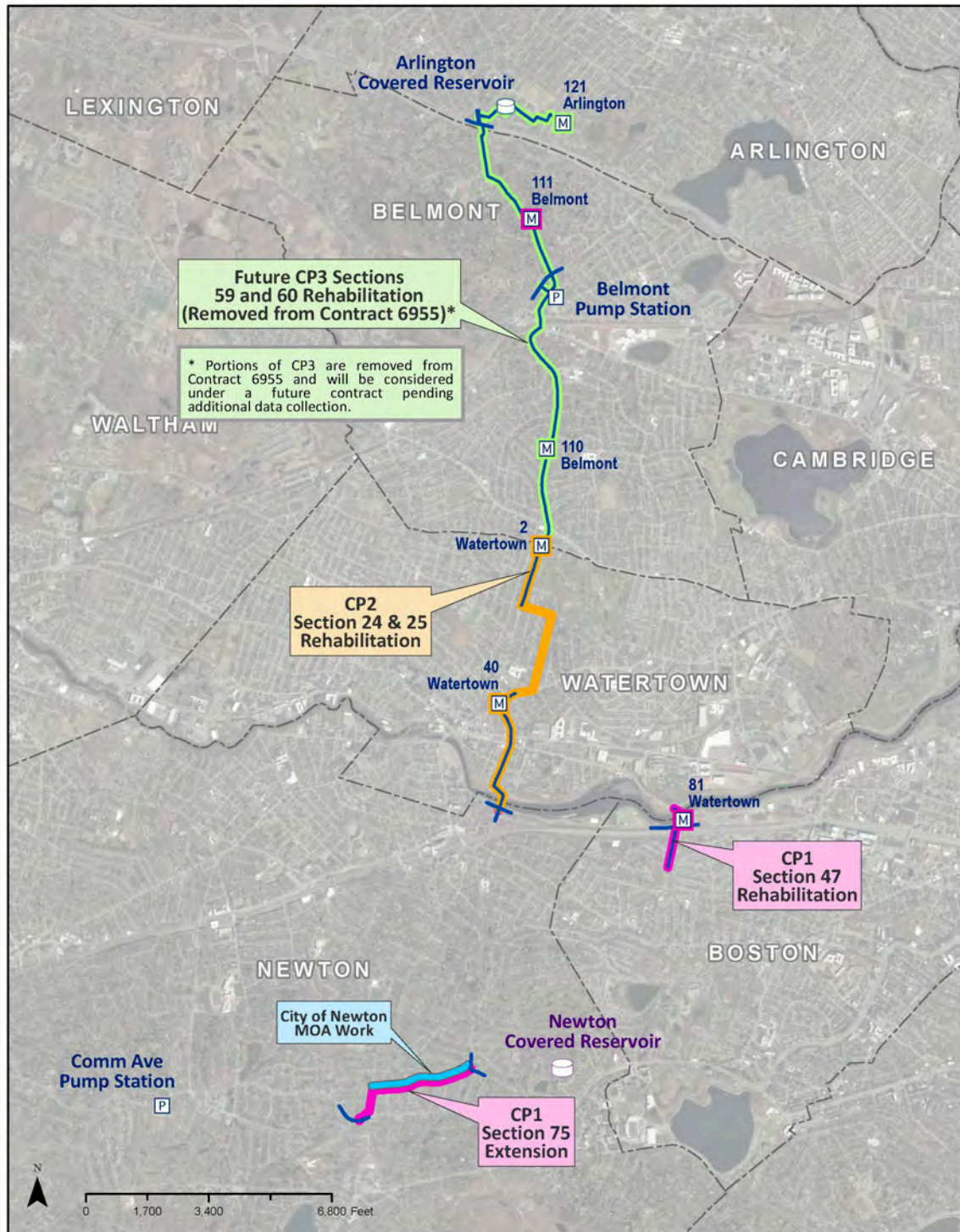
The MBE and WBE participation requirements for this contract were established at 7.18% and 5.77%, respectively. CDM Smith committed to 28.4% MBE and 7.76% WBE participation. On January 21, 2021, MWRA waived the WBE participation requirement for this contract only, due to the unexpected closure of Geologic-Earth Exploration before the geotechnical program began. The requirements for MBE participation remain unchanged by this amendment.

**ATTACHMENT:**

Attachment 1 – Contract 6955, IHPI Project Location Map



## ATTACHMENT 1



ATTACHMENT 1: INTERMEDIATE HIGH PIPELINE IMPROVEMENTS – CONTRACT 6955

## STAFF SUMMARY




**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** January 15, 2025  
**SUBJECT:** John J. Carroll Water Treatment Plant SCADA System Upgrade  
Design, Engineering Services During Construction and Resident Engineering Services  
Arcadis U.S., Inc.  
Contract 7581, Amendment 5

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**COMMITTEE:** Water Policy and Oversight

       INFORMATION  
  X   VOTE

Ethan Wenger, P.E., Director, SCADA  
Valerie Moran, P.E., Director, Waterworks  
Preparer/Title

  
David W. Coppes, P.E.  
Chief Operating Officer

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### RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 5 to Contract 7581, John J. Carroll Water Treatment Plant SCADA System Improvements, Design, Engineering Services During Construction and Resident Engineering Services, with Arcadis U.S., Inc. in the amount of \$1,323,864, increasing the contract amount from \$7,243,295.04 to \$8,567,159.04 and extending the contract term by 548 calendar days from October 2, 2025 to April 3, 2027.

### DISCUSSION:

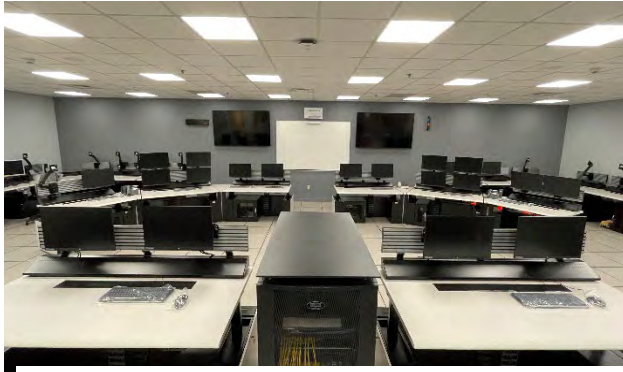
On December 19, 2018, the Board of Directors approved the award of Contract 7581, John J. Carroll Water Treatment Plant SCADA System Improvements, Design, Engineering Services During Construction and Resident Engineering Services to Arcadis U.S., Inc. This is a complex project involving critical water processes that cannot be interrupted. This contract involves upgrades to vital components of the current Supervisory Control and Data Acquisition (SCADA) system at the Carroll Treatment Plant that are reaching the end of their useful life. The Carroll Treatment Plant is in operation 24 hours per day, seven days per week and the SCADA system is essential to maintaining continuous operation of the facility. This contract allows MWRA to replace legacy SCADA equipment at the Carroll Treatment Plant, implement updated control system standards to enhance redundancy, ensure future reliability, and maintain secure Plant operations. Unlike typical Authority projects, the Carroll Treatment Plant project has a much higher proportion of work that is the responsibility of the design engineer. The SCADA programming work, network configuration, certain testing, and preparation of testing plans and documents have been included in



*Figure 1: Carroll Water Treatment Plant*



the engineer's scope of services, rather than the contractor's work. These highly technical tasks more closely align with an engineering firm's skill set than that of a general contractor.



*Figure 2 New Control Room*

As previously reported to the Board, the replacement of the SCADA system at the Carroll Treatment Plant involves unique challenges because the Plant must continually treat and supply water during the project. A plan was ultimately developed whereby a second parallel SCADA network was built alongside the existing network, and control signals are moved one by one to the new network. The new parallel system includes multiple control cabinets with over 15,000 wires, a new SCADA operator interface with over 800 new computer display

screens, new Programmable Logic Controllers (PLCs) connected to over 25,000 I/O points, as well as a new state-of-the-art control room and server room. The new system also contains two independent sub-networks for controlling Plant hydraulics. In the event that the primary sub-network is compromised (e.g., catastrophic failure or cyberattack), the second sub-network can continue to operate the critical portions of the Plant. After significant programming and configuration effort by Arcadis, all of these components are tested by the Arcadis team in the factory and again at the Plant to minimize errors prior to putting them into service. While this plan reduces risk, it does not eliminate it completely. The risk is being managed and mitigated with sufficient testing and oversight, and the team continually searches for ways to reduce risk.



*Figure 3 New Server Room*

Significant progress has been made this contract, as well as the construction contract (7582) with LeVangie Electric Co., Inc. Over the last few months, Arcadis and LeVangie have begun migrating ("cutting over") control wires to the new SCADA system while portions of the Plant are off-line for winter maintenance. This process is extremely labor intensive and requires significant onsite time by Arcadis and its subcontractor.

### **Prior Amendments**

This contract has been amended four times. Amendment 1 extended the design period by six months due to COVID impacts and scope changes at a cost of \$75,000, not including labor escalation.

Amendment 2 added 687 calendar days to Contract 7581. Additional time was needed due to challenges procuring the

construction contract and the decision to construct a parallel SCADA system. Building a parallel SCADA system reduced risk, but required additional time. The construction contract was extended due to supply chain challenges for computer and electronics equipment, resulting in longer lead times for SCADA components. The extended construction contract increased costs for Engineering Services During Construction and Resident Engineering and Inspection services. Escalation from Amendment 1 was also included. The total cost of Amendment 2 was \$1,095,716.97.

Amendment 3 increased the pre-determined level of effort for the review of submittals and resubmittals from 300 submittals to 540 submittals. The complexity of the project and changes during the design phase required more submittal review hours than originally expected. Amendment 3 was executed under delegated authority in the amount of \$187,645.

Amendment 4 added \$1,232,905 to the programming and testing services portion of Contract 7581. This was primarily due to an increase in the number of SCADA screens and changes in requirements for the screen development. It also included costs for additional meeting and testing time.

### **This Amendment**

This proposed amendment would add \$1,323,864 and 548 calendar days to the contract.

The increase in funding and time extension is requested for the following changes from the original scope.

#### 548 Calendar Days/Resident Engineer and Engineering Services During Construction      \$586,700

Construction Contract 7582 associated with this project was extended by 18 months at the July 24, 2024 Board meeting (primarily due to delays in obtaining SCADA system components). To complete the project it is necessary to extend Arcadis' contract 548 calendar days and fund the associated resident engineering and administrative costs. This includes a full-time resident engineer with SCADA experience for the duration of the contract to ensure that the contractor's work is completed correctly. It also pays for the cost of administering the construction contract, anticipated overtime costs for the cutover work, and escalation costs due to inflation for the hours in the original contract.

#### Increase to Submittals and Request for Information (RFI) Funding      \$93,800

Due to the complexity of the project and changes made during the design phase, the number of submittals and RFIs have exceeded expectations. Amendment 3 added a level of effort for review of 240 submittals. If approved, this amendment would add funding for review of an additional 40 submittals and 60 RFIs, bringing the total numbers for the contract to 580 submittals and 260 RFIs.

#### Additional Meetings      \$122,476

The challenge of gradually moving the Plant's control signals from the old SCADA system to the new one, while keeping the Plant operational, requires a great deal of coordination and numerous discussions between MWRA SCADA staff, MWRA Operations staff, Arcadis staff, and contractor staff. If approved, this amendment would add funding for an additional 36 biweekly onsite meetings and an additional 31 meetings dedicated to SCADA-specific and cutover issues that are expected to arise during this phase of the project. These additional 31 meetings will only be used when necessary and will be held remotely when appropriate to reduce costs.

#### Training      \$81,188

Appropriate training is required to ensure that MWRA Operations staff are properly educated on the new SCADA system. The change to the redundant network and cutover strategy requires more training sessions for Operations staff than was originally anticipated; trainings will be needed for each phase of the cutover. Staff estimate an additional 200 training hours are necessary to ensure that staff are prepared to operate the facility during the cutover periods and after cutover is complete.

#### Additional Level of Effort for Field Testing

\$439,700

Arcadis staff and its subcontractor are responsible for ensuring that the new parallel SCADA system is tested and operating correctly alongside the existing SCADA system during the months when the plant processes are moved from the old SCADA system to the new SCADA system. This requires multiple engineers and programmers stationed in the control room and on the plant floor to test and verify correct operation. As mentioned in the December 13, 2023 staff summary regarding Amendment 4, staff continued to assess the budget relative to the project startup requirements. It has become clear to staff that additional hours of time on site for Arcadis will be necessary for field testing. At the time of Amendment 4, the final schedule was not clear and total on-site hours needed for Arcadis staffing were not yet known. These costs can now be quantified; staff are making this request as part of Amendment 5. This request is based on several factors. First, the testing approach was adjusted because the design approach changed to using the parallel SCADA system, and (to mitigate risk) points are now being cut over one at a time while the Plant continues to operate. Second, the complexity of the cutovers are such that additional hours of testing and observing the plant operation are necessary to ensure the process works correctly. Finally, the increased duration of the contract has increased the overall time on site necessary to complete the cutovers. The process of cutting over began in November. With this effort, started staff have assessed the level of effort utilized to date and can better estimate the level of effort needed to complete this testing.

#### **CONTRACT SUMMARY:**

	<u>AMOUNT</u>	<u>TIME</u>	<u>DATED</u>
Original Contract:	\$4,652,028.07	1,581 Days	12/19/2018
Amendment 1*:	\$75,000.00	184 Days	01/11/2021
Amendment 2:	\$1,095,716.97	687 Days	10/21/2021
Amendment 3*:	\$187,645.00	0 Days	02/02/2023
Amendment 4:	\$1,232,905.00	0 Days	12/13/2023
Proposed Amendment 5	<u>\$1,323,864.00</u>	<u>548 Days</u>	
Adjusted Contract	\$8,567,159.04	3,000 Days	

\*Approved under delegated authority

#### **BUDGET/FISCAL IMPACTS:**

The FY25 CIP includes \$7,243,295 for contract 7581. Including this amendment for \$1,323,864, the adjusted contract value will be \$8,567,159.04 or \$1,323,864.04 over the amount in the CIP. This amount will be absorbed in the FY24-28 CIP Spending Cap.

#### **MBE/WBE PARTICIPATION:**

No minimum MBE and WBE participation requirements were established for this project. However, Arcadis has committed to 15.09% MBE participation. The contractual MBE and WBE requirements remain unchanged by this amendment.