

MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island
33 Tafts Avenue
Boston, MA 02128



Frederick A. Laskey
Executive Director

Chair: P. Flanagan
Vice-Chair: H. Vitale
Committee Members:
A. Pappastergion
L. Taverna
J. Walsh
P. Walsh
B. Swett

ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

Date: Wednesday, September 17, 2025
Time: 10:00 am
Location: Deer Island Reception/Training Building, 1st Floor
33 Tafts Avenue – Favaloro Meeting Room
Boston, MA 02128

Photo ID required for entry.

The meeting will also be available virtually via Webex.

Webex meeting link (Registration required):

<https://mwra.webex.com/weblink/register/rb31a10e696470cf2457e912f550a5252>

Meeting Number: 2334 553 9657 Password: 091725

AGENDA

- I. Approval of Administration, Finance & Audit Committee Minutes**
- A. Information**
 1. Delegated Authority Report – July and August 2025
 2. FY2025 Fourth Quarter Orange Notebook
 3. FY25 Year-End Financial Update and Summary
 4. Capital Investment Program Fiscal Year 2025 Year-end
- B. Approvals**
 1. Approval of the Ninety-First Supplemental Bond Resolution
- C. Contract Awards**
 1. Remarketing Agent for the 2008 Series A-1 and 2025 C-F and Commercial, Paper Dealer for the 2025 Notes, BofA Securities, Inc., Goldman Sachs & Co. LLC, Jefferies LLC, RBC Capital Markets, LLC and TD Securities (USA) LLC, Contract F283
 2. Assignment and Assumption of Contract EXE-047 Viscom Systems, Inc. to Sullivan & McLaughlin Companies, Inc.

MASSACHUSETTS WATER RESOURCES AUTHORITY
Meeting of the Administration, Finance and Audit Committee
of the MWRA the Board of Directors
December 11, 2024

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

Committee Chair Flanagan presided at MWRA Headquarters. Board Members Pappastergion, Peña, Taverna, Jack Walsh, and Patrick Walsh participated at MWRA Headquarters. Board Members Vitale and Wolowicz also participated remotely. Board Members Swett and Foti were 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.

Acting Special Assistant for Affirmative Action Tomeka Cribb attended remotely.

Vandana Rao, EEA, also attended remotely.

CALL TO ORDER

Mr. Flanagan called the meeting to order at 10:40am.

INFORMATION

Delegated Authority Report - November 2024

Mr. Chair Flanagan invited Board Members’ questions on the Delegated Authority Report for November, 2024.

In reference to four Report Items (C6-C9: *Installation of Energy Efficient LED Lighting at respective Deer Island locations*), Mr. Jack Walsh asked if staff had performed cost benefit analyses. MWRA Chief Operating Officer David Coppes, responded in the affirmative, adding that these contracts were procured through an Eversource rebate incentive program. Mr. Jack Walsh asked if MWRA had previous experience with the vendor, Guardian Energy Management Solutions, LLC (“Guardian”). Mr. Coppes explained that MWRA engaged with Guardian, Eversource’s approved vendor, as required by the rebate program. There was brief, general discussion about the contracts’ procurements and their environmental and financial benefits.

Hearing no further discussion or questions from the Board, Mr. Flanagan moved to the next Information item. (ref. AF&A A.1)

FY2025 Financial Update and Summary through November 2024

MWRA Finance Director Thomas Durkin explained that today's meeting falls before the November 2024 month-end close and advised that staff would prepare the November 2024 Financial Update and Summary for distribution to Board members and public posting on the MWRA website shortly after closeout. [The Staff Summary was distributed and posted on January 2, 2025.]

Hearing no discussion or questions from the Board, Mr. Flanagan moved to Approvals. (ref. AF&A A.2)

APPROVALS

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

Mr. Flanagan noted that there were two items for approval and that the first item was a proposed Amendment to the Memorandum of Agreement with the City of Quincy.

A motion was duly made and seconded to recommend approval to the full Board of Directors of this Amendment as presented in the December 11, 2024 Staff Summary. ¹

MWRA Executive Director Fred Laskey reviewed the history of respective Memorandums of Agreement ("MOAs") between MWRA and the City of Quincy and the Town of Winthrop. He explained that the two proposed MOA Amendments mirror past agreements. He requested that the Board of Directors approve staff's recommendation to amend the Quincy and Winthrop MOAs, each with a term of 10 years. Finally, Mr. Laskey noted that staff sought approval at this meeting to allow Quincy and Winthrop time to prepare next year's budgets.

Mr. Pappastergion requested more information about staff's rationale for extending the terms by 10 years, rather than five years. Mr. Laskey explained that the proposed terms are consistent with existing agreements. Mr. Pappastergion expressed concern about the 10-year terms and recommended they be reduced to three or five years.

Mr. Jack Walsh described some challenges of negotiating MOAs and advised that in his view, longer terms would benefit all parties. He explained that he would consider Amendments with five-year terms with options to renew for an additional five years, noting that the MOAs mitigate Quincy's and Winthrop's burdens of hosting MWRA's largest wastewater facilities. Mr. Pappastergion reiterated his preference for five-year terms due to a changing landscape.

There was brief, general discussion about the history of the current MOAs' 10-year terms; how MOAs have strengthened the relationship between MWRA and the Town of Winthrop; how a

10-year agreement would allow Winthrop to undertake long-range planning for key public safety infrastructure improvements; and save MWRA \$250,000 per year by providing Town ambulance services for the Deer Island Treatment Plant.

Mr. Durkin reported that inflation rates averaged approximately 3% over the past 10 years, and the maximum inflation factor at 2.5% has historically served these kinds of agreements well and described the budgetary benefits. Brief discussion followed regarding interest rate variability; reducing the terms to five years; MOA Amendment negotiation process; presenting the Amendments for Board approval every five years; municipalities' abilities to conduct long-term planning under MOAs with shorter terms; and benefits that Quincy and Winthrop have realized as MWRA project host communities.

Mr. Jack Walsh noted that a number of MWRA facilities are located in Quincy, including the High Level Sewer, and described a fire at a MWRA facility in Quincy that required a multi-day City firefighting response. He expressed willingness to reach a compromise on the proposed MOA Amendments' term lengths.

Mr. Flanagan discussed how MWRA's Boston Harbor Project ("BHP") has significantly benefited communities across the Greater Boston area and described some impacts of the BHP and Deer Island Treatment Plant on Winthrop residents, such as from trucking and transporting chemicals. He recommended that the Committee vote to advance the original motions as presented.

Recognizing Mr. Pappastergion's perspectives, Mr. Vitale advised that he would support MWRA's recommendation to advance the original motion and requested Mr. Laskey's thoughts on the matter. Mr. Laskey explained that he would be open to MOA Amendments that are reviewed and presented for Board approval on a five-year basis as suggested by Mr. Peña and thanked the Committee for their thoughtful input.

In response to a question from Mr. Pappastergion, Mr. Laskey advised that the current Agreements with Quincy and Winthrop would expire in July, 2025. Mr. Pappastergion recommended that the Committee table votes on the proposed MOA Amendments until the next Board of Directors meeting in January 2025. Mr. Laskey explained that the timing of today's proposed Amendments is coordinated with the host communities' budgeting processes. Mr. Pappastergion advised that he would prefer to table the motions until consensus could be reached.

Ms. Wolowicz noted the timing of the FY26 municipal budget cycle; the importance of providing Quincy and Winthrop advance notice of any prospective changes to the MOAs' terms; and how

MOAs benefit project host community residents. She recommended against tabling the motions.

General Counsel Francisco Murphy reminded Board members that deliberations could continue at today's upcoming Board of Directors' meeting if the Committee voted to advance the motions.

(Mr. Taverna left and returned to the meeting during the discussion.)

Hearing no further discussion or questions from the Board, Mr. Flanagan requested a roll call vote in which the members were recorded as follows:

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

Mr. Flanagan noted the next item was a proposed Amendment to the Memorandum of Agreement with the Town of Winthrop.

A motion was duly made and seconded to recommend approval to the full Board of Directors of this Amendment as presented in the December 11, 2024 Staff Summary.²

There was brief procedural discussion.

Hearing no further discussion or questions from the Board, Mr. Flanagan requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Flanagan		
	Pappastergion	
Peña		
<u>Yes</u>	<u>No</u>	<u>Abstain</u>
	Taverna	

Vitale
 J. Walsh
 P. Walsh
 Wolowicz

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

ADJOURNMENT

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

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

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

The meeting adjourned 11:17am.

Approved: September 17, 2025

Attest:

 Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- December 11, 2024 Staff Summary – Delegated Authority Report - November 2024 (ref. AF&A A.1)
- December 11, 2024 Staff Summary – FY2025 Financial Update and Summary through November 2024 (ref. AF&A 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)\

¹ Board Vote: 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. (ref. AF&A B.1/VII A.1)

² Board Vote: 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. (ref. AF&A B.2/VII A.2)

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Delegated Authority Report – July & August 2025



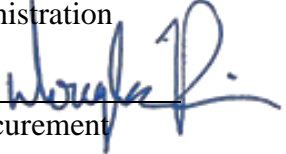
COMMITTEE: Administration, Finance & Audit

INFORMATION
 VOTE



Michele S. Gillen
Director, Administration

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



Douglas J. Rice
Director of Procurement

RECOMMENDATION:

For information only. Attached is a listing of actions taken by the Executive Director under delegated authority for the period July 1 - August 31, 2025.

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 July 1 – 31, 2025

No.	Date of Award	Title and Explanation	Contract	Amend/CO	Company	Value
C-1	07/17/25	Groundskeeping Services – Metropolitan Boston Award of a contract to the lowest responsive bidder for Groundskeeping Services – Metropolitan Boston for a term of 1,096 calendar days.	OP-491	Award	C&W Facility Services	\$547,827.50
C-2	07/17/25	Chelsea Screen House, Caruso and DeLauri Pump Stations Duct Cleaning and Repairs Award of a contract to the lowest responsive bidder for Chelsea Screen House, Caruso and DeLauri Pump Stations Duct Cleaning and Repairs for a term of 365 calendar days.	OP-493	Award	Harding & Smith, LLC	\$1,744,432.00
C-3	07/28/25	Northern Intermediate High Section 89 Replacement Pipeline Increase Police and Fire Detail Services Allowances.	7117	12	P. Gioioso & Sons, Inc.	\$325,000.00

Purchasing Delegated Authority Items July 1-31, 2025

No.	Date of Award	Title and Explanation	Company	Value
P-1	7/1/25	<p>Purchase Order Contract for Gartner IT Executive + Delegate Subscription Renewal—<i>State Contract ITS80</i> Annual subscription renewal for IT research services. Through this subscription, the MWRA will receive unmetered analyst time, document review, and enhanced research specific to MWRA IT Projects.</p>	Gartner, Inc.	\$135,241.00
P-2	7/9/25	<p>Purchase Order for 80 Microsoft Surface Tablets—<i>State Contract ITC73</i> This procurement includes 80 Microsoft Surface Pro 11 devices with keyboard covers and a three-year extended warranty. Thirty of the Surface Pros will have built in wireless 5G capabilities and will be used for the field operations staff. Thirty-five will be used to replace existing hardware that are approaching the end of support, and the remaining 15 devices will be kept for spares and for future new hires.</p>	CDW-G LLC	\$114,094.10
P-3	7/9/25	<p>One-Year Purchase Order Contract for Renewal and Support of 1,500 Okta Subscriptions—<i>State Contract ITS60</i> Okta Single Sign-On provides a secure mechanism for identity and access management authentication within the Internet, and includes pre-built integration to thousands of Internet-based applications. The Okta solution can be used to help the MIS Department protect both SaaS and MWRA network-based resources.</p>	Carahsoft Technology Corporation	\$189,727.05
P-4	7/9/25	<p>Two-Year Purchase Order Contract for Trash Removal and Single Stream Recycling Services Trash Removal and Single Stream Recycling Services at The Deer Island Treatment Plant. Collected waste is disposed of in a landfill licensed to receive non-hazardous waste. Recycling materials are disposed of at a recycling facility.</p>	Casella Waste Management of Massachusetts, Inc.	\$259,865.00
P-5	7/14/25	<p>Three Separate Three-Year Purchase Order Contracts to Provide Vibration Analysis, Training and Support Services Vibration analysis services for predictive maintenance and condition monitoring of equipment. Services for Western Operations (\$35,000.00), Metro Maintenance (\$62,000.00), and Deer Island (\$96,175.00) will be performed under separate contacts.</p>	M&B Engineered Solutions, Inc.	\$35,500.00; \$62,000.00; \$96,175.00

No.	Date of Award	Title and Explanation	Company	Value
P-6	7/28/25	<p>Sole Source Purchase Order for One Year of SCADA Software Maintenance Software upgrades and technical support for MWRA's SCADA system. GE Vernova Electrification Software, LLC is the sole manufacturer of the software and all previous software agreements with GE Platforms have been approved on a sole source basis. The Director of Procurement has approved the sole-source nature of this procurement.</p>	<p>GE Vernova Electrification Software, LLC</p>	\$252,863.39
P-7	7/28/25	<p>One-Year Purchase Order Contract for the Supply and Delivery of Hydrogen Peroxide MWRA uses hydrogen peroxide to control hydrogen sulfide levels in Deer Island's influent, reducing the need for additional odor control chemicals and equipment in other areas of the plant. Compared to the existing contract, the unit price has increased by 4%.</p>	<p>Evonik Corporation</p>	\$1,476,000.00

Construction & Professional Services Delegated Authority Items August 1 – 31, 2025

No.	Date of Award	Title and Explanation	Contract	Amend/CO	Company	Value
C-1	08/28/25	Overhead Door Maintenance Services, Various MWRA Facilities Award of a contract to the lowest responsive bidder for Overhead Door Maintenance Services, Various MWRA Facilities for a term of 1,096 calendar days.	OP-494	Award	D.H. Pace, Inc.	\$302,652.71

Purchasing Delegated Authority Items August 1-31, 2025

No.	Date of Award	Title and Explanation	Company	Value
P-1	8/19/25	<p>Sole Source Purchase Order for Three Years of Maintenance and Support of the Process Instrumentation and Control System Human Machine Interface Software Technical support, software licenses and upgrades for MWRA’s Process Instrumentation and Control System, and its Human Machine Interface system at Deer Island. Emerson Process Management Power & Water Solutions, Inc. has been identified as the sole source provider of the source code and documentation required to support system issues and software upgrades. The Director of Procurement has approved the sole source nature of this procurement.</p>	<p>Emerson Process Management Power & Water Solutions, Inc.</p>	\$242,121.00
P-2	8/19/25	<p>Sole Source Purchase Order for One Complete Split Mechanical Seal Purchase of a spare complete split mechanical seal for the North Main Pump Station’s Fairbanks Morse pumps. Corrosion Products and Equipment, Inc. is the sole vendor for sales of A.W. Chesterton split mechanical seals and the only to certify that the installed mechanical seal meets the Original Equipment Manufacturer’s specifications. The Director of Procurement has approved sole source nature of these procurements.</p>	<p>Corrosion Products and Equipment, Inc.</p>	\$103,090.00
P-3	8/26/25	<p>Purchase Order for File Scanning Services—<i>State Contract FAC126</i> Digitalization of multiple document types of MWRA paper records. This scanning project is a continuation of the scanning project that was initiated during the office move in 2021.</p>	<p>Inception Technologies, Inc.</p>	\$151,340.70
P-4	8/26/25	<p>One-Year Purchase Order Contract for the Supply and Delivery of Sodium Hypochlorite MWRA uses sodium hypochlorite at the Deer Island Treatment Plant to disinfect the plant’s effluent. Compared to the existing contract, the cost per gallon price has increased by 6%.</p>	<p>Borden & Remington Corporation</p>	\$4,068,680.00
P-5	8/28/25	<p>Purchase Order for 100 Hewlett Packard Probook Laptops—<i>State Contract ITC73</i> The 100 laptops in this procurement will be used to replace the older laptops that are more than four years old.</p>	<p>GLI Capital Group, Inc.</p>	\$104,341.00

STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: FY2025 Fourth Quarter Orange Notebook




COMMITTEE: Administration, Finance & Audit

INFORMATION

VOTE

Stephen Estes-Smargiassi, Director, Planning & Sustainability
Malcolm Ragan, Senior Planner
Preparer/Title



Kathleen M. Murtagh, P.E.
Chief Operating Officer

RECOMMENDATION:

For information only. The Quarterly Report on Key Indicators of MWRA Performance (the Orange Notebook) is prepared at the close of each quarter of the fiscal year.

DISCUSSION:

The Orange Notebook presents performance indicators for operational, financial, workforce, and customer service parameters tracked by MWRA management each month. This staff summary includes highlights from the fourth quarter of fiscal year 2025.

Impacts of Precipitation on System Operations

Wastewater

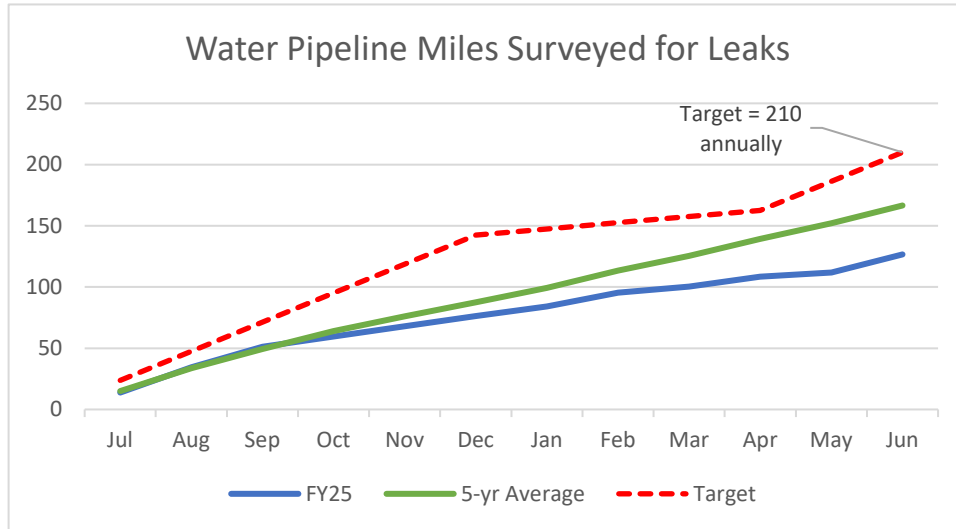
Plant flow at Deer Island was 11.0% higher than the four-year average (340.4 mgd versus 306.7 mgd expected), while precipitation during the fourth quarter was 30.4% higher than the four-year average (11.7 inches versus 8.97 expected). The plant achieved an instantaneous peak flow rate of 1,239.8 mgd on May 23, during a storm event that brought 3.55 inches of precipitation to the metropolitan Boston area. The recent extended period of drought meant that plant flows had been below target for every period in FY25 until March. Annual total plant flow for FY25 was 9.8% below target while precipitation was 7.6% below average.

Water Supply

No part of the MWRA service area was in drought status as of the end of the quarter. The volume of the Quabbin Reservoir was at 93.0% as of June 30, 2025, a 9.3% increase for the quarter driven by significant storms in May, representing a gain of approximately 38.4 billion gallons of storage (see page 30). Quabbin remained in its normal operating range during the previous fiscal year's drought except for several weeks in February and March and the first week of May. The reservoir began refilling toward the end of the third quarter, but the storage target increased over this time. Due to its large volume, there is significant delay between increases in precipitation and Quabbin levels.

Staffing Vacancies Impact Pipeline Leak Surveys

Staffing challenges have resulted in a decline in annual water main leak inspections since FY22. In FY25, 127 miles were inspected, nearly 40% below the annual target of 210 miles (see page 8). The five-year average is 167 miles inspected annually, which is roughly 21% below target.

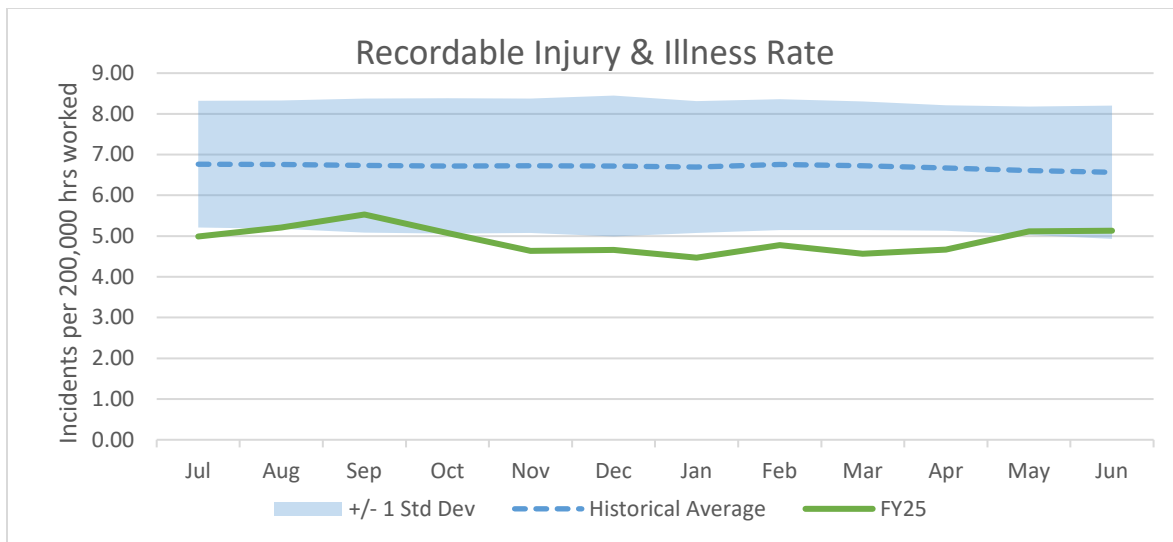


Molybdenum in Sludge Fertilizer Pellets

Molybdenum levels in MWRA’s sludge pellets remained within federal and Massachusetts land application limits for all months in the fourth quarter. Levels previously exceeded the state limit of 40 mg/kg, but remained within the federal limit of 75 mg/kg during the second quarter. Molybdenum levels in the fourth quarter averaged 17.2 mg/kg, 9% below the three-year average, 57% below the Massachusetts state limit, and 77% below the federal limit (see page 4). Pellets produced during the second quarter were shipped to states where the higher federal limit is applicable. NEFCo, operator of the Quincy Pelletizing Plant, submitted a claim for additional distribution costs. (see page 50).

Workplace Injuries Rate Below Historic Average

The rate of recordable workplace injuries, calculated each month as a 12-month rolling average, remains significantly below the historical (FY04-24) average. For most of FY25, this rolling average was more than an entire standard deviation below the 20-year historical average. Workers’ Compensation claims in the fourth quarter were also at a three-year low (see page 53). This progress demonstrates MWRA’s clear commitment to providing a safe working environment for all employees.



Staffing Levels

MWRA completed 90 external hires in FY25 compared to 93 and 91 external hires during FY23 and FY24, respectively. There was an increase in retirements in FY25 with 54, compared to 48 and 46 retirements during FY23 and FY24, respectively. Overall, FTEs at the end of the fiscal year were 1,066.7, an increase of 10.5 FTEs compared to the beginning of the fiscal year and roughly 87 below the budget of 1,154 FTEs. (See page 52.) A number of recruitment and retention efforts were included in the recently negotiated successor collective bargaining agreements, including increases to shift differential and standby pay, modifications to vacation accruals, and an increase to tuition reimbursement. Other initiatives, such as employee referral rates, remain in place.

MASSACHUSETTS WATER RESOURCES AUTHORITY

Board of Directors Report

on

Key Indicators of MWRA Performance

Fourth Quarter FY2025

Q1	Q2	Q3	Q4



Frederick A. Laskey, Executive Director
Kathleen Murtagh, Chief Operating Officer
September 17, 2025

Board of Directors Report on Key Indicators of MWRA Performance

4th Quarter – FY25

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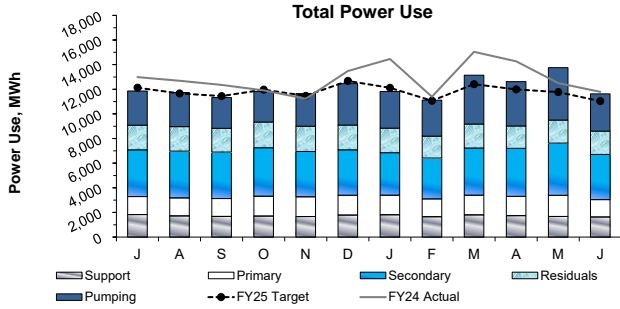
This quarterly report is prepared by MWRA staff to track a variety of performance measures for routine review by the Board of Directors. The content and format of this report is expected to develop as time passes. Information is reported on a preliminary basis as appropriate and available for internal management use and is subject to correction and clarification.

Frederick A. Laskey, Executive Director
Kathleen Murtagh, Chief Operating Officer
September 17, 2025

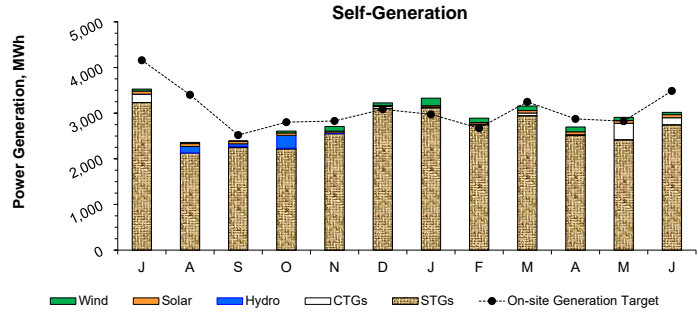
OPERATIONS AND MAINTENANCE

Deer Island Operations

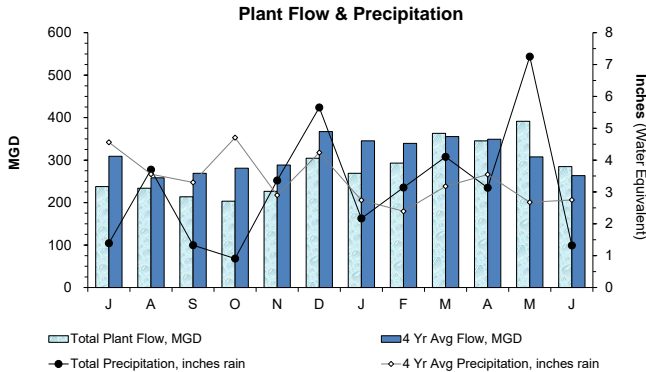
4th Quarter - FY25



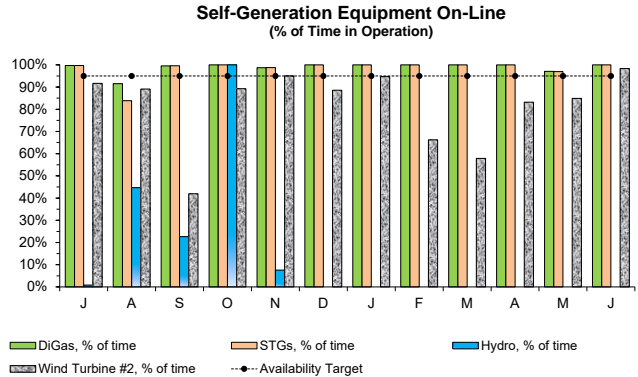
Total power usage in the 4th Quarter was 9.2% above budgetary estimates as plant flow was 11.0% higher than the historical (4 year average) estimate used to generate the electricity model. Power used for raw wastewater pumping was 12.2% above target due to the higher plant flows. Additionally, power used in the primary treatment process was 7.2% above target and for the secondary biological treatment process (with a higher cryogenic oxygen production demand) was 16.5% above target, while power usage for the residuals treatment processes was within 1.0% of target. **Overall, total power usage for FY25 was 2.2% above target, even though total plant flow was 9.8% below the 4 year average plant flow target, driven mostly by higher usage for secondary treatment processes.**



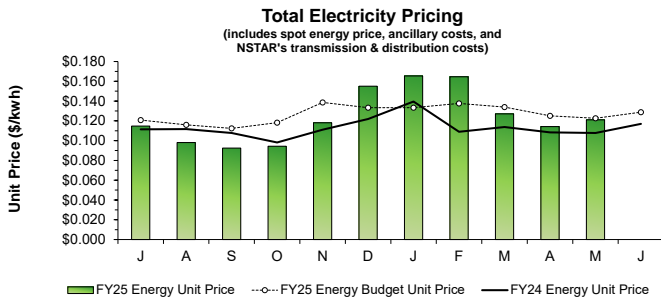
Power generated on-site during the 4th Quarter was 6.1% below target. STGs generation was 8.3% higher than budget due to supplemental fuel oil usage for boiler operation during periods of lower or unstable digester gas production, thus allowing for greater generation by the main STG. CTDs generation was nearly three (3) times the budget estimate as a CTD was operated over 25 continuous hours for backup power during a Nor'easter storm in May. Additionally, the CTDs were operated for an ISO-New England (ISO-NE) Demand Response program summer audit, an ISO-NE Demand Response called event, for peak demand shaving, and for routine maintenance/testing purposes. Both Hydro Turbines remain out of service pending wicket gate rehabilitation and other needed repairs. Solar Panel generation was 26.7% below target due partly to a failed grid inverter on the Residuals Odor Control Facility solar array. Meanwhile, Wind Turbine #2 generation was 43.1% above target due to lengthy periods of generation at maximum capacity as a result of very high winds this quarter. **Overall, power generation was 5.6% below target for FY25 due mostly to the lost generation from the Hydro Turbines, which was 90.4% less than budgeted.**



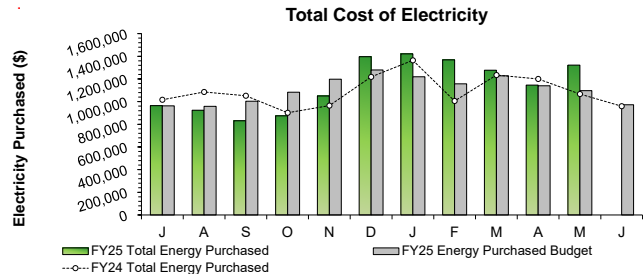
Total Plant Flow for the 4th Quarter was 11.0% above target with the budgeted 4 year average plant flow (340.4 MGD actual vs 306.7 MGD expected) as precipitation was 30.4% higher than target this quarter (11.7 inches actual vs. 8.97 inches expected). Plant flows had been well below target following a lengthy period of severe drought during the first several months of FY25, resulting in below normal plant flows for every period in FY25 until March. **Total Plant Flow for FY25 was 9.8% below target as precipitation was 7.6% below target.**



The DiGas System and STGs availability both exceeded the 95% availability target in the 4th Quarter, while the Hydro Turbines remained unavailable for the entire 4th quarter as both turbines are undergoing wicket gate rehabilitation and other repairs. Wind Turbine availability was 88.8% this quarter as Turbine #2 had issues with the traverse anti-rotation equipment from March 18 through April 4 and turbulent winds blowing through the digesters on several days caused the turbine to trip. Wind Turbine #1 is awaiting re-installation and is not included in the FY25 tracking of turbine availability. **Overall for FY25, Hydro Turbine availability was only 14.6%, while Wind Turbine #2 availability was 81.7% and availability for the other self-generating equipment exceeded the 95% availability target.**



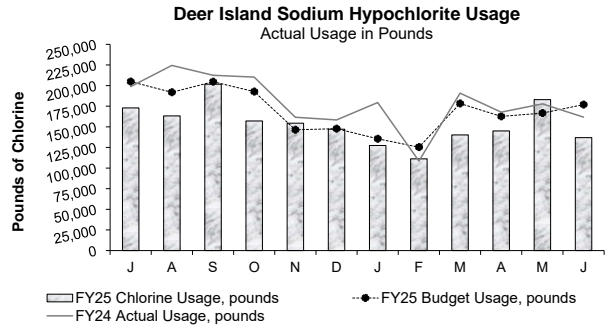
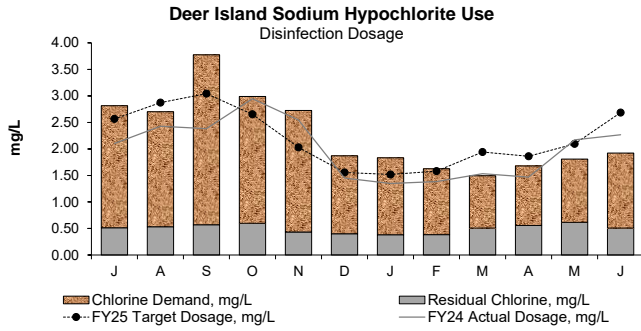
Under the current energy supply contract, a block portion of DI's energy is a fixed rate and the variable load above the block is purchased in real time. The Total Energy Unit Prices for January through May are estimated pending receipt of the Direct Energy invoices, and the Eversource invoice for June has not yet been received. Overall, the average unit prices are estimated to be 2.5% lower than the budgetary estimate through May. The Total Energy Unit Price includes a fixed block price, spot energy price, transmission & distribution charges, and ancillary charges.



Year-to-date Total Cost of Electricity is estimated to be \$249,705 (2.0%) higher than budgeted through May. The Total Cost of Electricity depicted for January through May are estimated pending receipt of the Direct Energy invoices, and the Eversource invoice for June has not yet been received. The Total Cost of Electricity is estimated to be slightly higher than budgeted even though the estimated Total Energy Unit Price is 2.5% lower than target as the Total Volume of Electricity Purchased was 4.7% above target.

Deer Island Operations

4th Quarter - FY25



The disinfection dosing rate in the 4th Quarter was 19% below budgetary estimates and the sodium hypochlorite usage in pounds of chlorine was 8.2% lower than target as plant flow was 11.0% higher-than-expected. Hypochlorite dosing is lower-than-expected due to a more dilute wastewater, a result of higher plant flows, which exerts a lower chlorine demand. DITP maintained an average disinfection chlorine residual of 0.56 with an average dosing rate of 1.80 mg/L as chlorine demand was 1.24 mg/L. In March, the disinfection basin effluent total chlorine residual target for dry weather flows was increased from 0.30 mg/L to greater than or equal to 0.50 mg/L, and to even higher levels during wet weather flow conditions, in preparation for potential new NPDES seasonal permit limits for indicator bacteria. The purpose for the higher chlorine residual target (and higher sodium hypochlorite dosing) is to continue developing operating strategies for the potential seasonal Enterococcus bacteria limit in the proposed permit, an effort that was also undertaken in 2023 and 2024. **Overall for FY25, the disinfection dosing rate of sodium hypochlorite was within 3.0% of the budgetary estimate.**

The overall disinfection dosing rate (target and actual) is dependent on plant flow, target effluent total chlorine residual levels, effluent quality and NPDES permit levels for fecal coliform (or the proposed seasonal Enterococcus bacteria).

Secondary Blending Events

Month	Count of Blending Events	Count of Blending Events Due to Rain	Count of Blending Events Due to Non-Rain-Related Events	Secondary, as a Percent of Total Plant Flow	Total Hours Blended During Month
July	0	0	0	100.0%	0.00
August	0	0	0	100.0%	0.00
September	0	0	0	100.0%	0.00
October	0	0	0	100.0%	0.00
November	0	0	0	100.0%	0.00
December	2	2	0	98.4%	14.00
January	0	0	0	100.0%	0.00
February	2	2	0	99.9%	4.55
March	4	4	0	99.8%	10.82
April	0	0	0	100.0%	0.00
May	2	2	0	97.9%	28.58
June	1	1	0	99.8%	3.10
Total	11	11	0	99.6%	61.05

99.2% of all flows were treated at full secondary during the 4th Quarter as there were three (3) separate secondary blending events in May and June, all due to high plant flows from heavy precipitation. These blending events resulted in 31.69 hours of blending and a total of 264.88 MGal of primary-only treated effluent blended with secondary effluent. The Maximum Secondary Capacity during the entire quarter was 700 MGD.

Overall in FY25, 99.6% of all flows received full secondary treatment, as there were 11 secondary blending events totaling 61.05 hours of blending and a total of 447.04 MGal of primary-only treated effluent blended with secondary effluent. All secondary blending events were due to high plant flows resulting from heavy precipitation, sometimes in combination with snow melt. The Maximum Secondary Capacity during the entire FY25 was 700 MGD and secondary permit limits were met at all times throughout FY25.

Deer Island Operations & Maintenance Report

Environmental/Pumping:

The plant achieved an instantaneous peak flow rate of 1,239.8 MGD during the very early morning of May 23. This peak flow occurred during a storm event that brought 3.55 inches of total precipitation to the metropolitan Boston area. The Total Plant Flow was 11.0% above the 4 year average plant flow target for the quarter as precipitation was 30.4% higher than target this quarter (11.70 inches actual vs. 8.97 inches expected).

Primary and Secondary Treatments:

The contractor completed the first several phases of the Clarifier Rehabilitation Project (Contract #7395) with the rehabilitation of the Primary Batteries A, B, C and D Influent and Effluent Channels, completing all scheduled work in these channels. The rehabilitation work under this contract includes putting primary influent gates in place, installing new aeration header systems, completing the installation of lower aeration systems, Linabond repair work in the clarifiers, installing drains between Batteries A and B, replacing effluent gates, completing hatch and grating modifications, and expansion joint repairs, in addition to other work. As of the end of June, the contractor is working in Primary Battery A, clarifiers A1, A2, A3, and A4. The contractor is also replacing the secondary scum influent gates and other equipment in the secondary clarifiers. The plan is to target the rehabilitation of no more than three (3) secondary clarifiers at a time and the contractor is working in the Secondary A2, B1, and B2 clarifiers as of the end of June, having completed work in Secondary A3, B3, and B4 clarifiers. There are 18 secondary clarifiers in each battery, totaling 54 clarifiers. Deer Island plans to maintain a secondary process limit of 700 MGD, which is the capacity of 50 clarifiers in operation.

Secondary Treatment:

Annual turnaround maintenance on Train #2 in the Cryogenic Oxygen Facility took place in May. The two (2) week turnaround maintenance is performed on roughly half of the components and systems in the Cryogenic Oxygen Facility. During this turnaround maintenance, the service contractor calibrated all the instrumentation on Cold Box unit #2, as well as a number of other components within the oxygen plant. Train #1 with Cold Box unit #1 was being brought online starting on May 4 to allow Cold Box #2 to be taken out of operation for periods of time during this cycle to allow for the scheduled maintenance. The same turnaround maintenance will be completed on Train #1 in the fall.

Disinfection/Dechlorination:

MWRA uses sodium hypochlorite to destroy pathogens in plant effluent after primary and secondary treatment. Indicator bacteria such as Fecal Coliforms, E. coli, and Enterococcus are used to measure the presence of potential pathogens. To provide a proper pathogen kill, sodium hypochlorite, a disinfectant, is added to meet a chlorine demand then regulated by maintaining a chlorine residual. In March, the disinfection basin effluent total residual chlorine target for dry weather was increased from 0.30 mg/L to greater than or equal to 0.50 mg/L and to even higher levels during wet weather flow conditions. The purpose for adjusting to the higher chlorine residual targets (by increasing the sodium hypochlorite dosing) is to continue developing operating strategies for the future more stringent seasonal NPDES permit limits for indicator bacteria prior to the limits coming into effect, an effort that was also undertaken in 2023 and 2024. This effort will remain in place through October 31. Higher usage of both sodium hypochlorite and sodium bisulfite, used for removing the residual chlorine before discharging the effluent, is anticipated in order to comply with the more stringent Enterococcus bacteria limits in the proposed new NPDES permit.

Deer Island Operations

4th Quarter - FY25

Deer Island Operations & Maintenance Report (continued)

Odor Control:

The North Pumping Odor Control (NPOC) Facility, which is responsible for treating the process airflows from the North Main Pump Station and the Winthrop Terminal Headworks Facility, was taken offline on April 28 for a total shutdown of 2 hours and 20 minutes to allow staff to replace airflow Fan #2. The NPOC Facility was taken offline intermittently on May 6 for a total combined shutdown of 1 hour and 8 minutes to allow staff and the fan vendor to perform testing and troubleshooting of the newly installed fan.

The NPOC Facility was again taken offline on May 14 for a shutdown of 6 hours and 48 minutes to allow staff to perform an inspection of the heater for the carbon adsorbers and to perform preventative maintenance cleaning on this heater. Airflow through the heater and through the carbon adsorbers significantly improved as a result of this heater cleaning. Process air was contained within the building during all these shutdowns and there were no resident odor complaints received as a result of these airflow shutdowns.

Carbon adsorber (CAD) units #3 and #5 in the Residuals Odor Control (ROC) Facility, unit #3 in the West Odor Control (WOC) Facility, and units #1 and #2 in the NPOC Facility were emptied and refilled with new regenerated activated carbon media this month as part of routine maintenance to replace spent activated carbon.

Energy and Thermal Power Plant:

Overall, total power generated on-site accounted for 22.7% of Deer Island's total power use in the 4th Quarter. Renewable power generated on-site (by Solar, Wind, STGs, and Hydro Turbines) accounted for 21.3% of Deer Island's total electrical power use for the quarter.

Annual scheduled maintenance on CTG-2B was conducted by staff and the service contractor during the week of May 5. The scope of this work consisted of routine maintenance and calibrations. During the work, CTG-1A was available on standby to act as DITP's emergency backup power. The single CTG is fully capable of providing sufficient power to maintain all of DITP's systems up to a plant flow capacity of 850 MGD. The scheduled maintenance work for CTG-2B was completed on May 7 and the unit was returned to standby status. This CTG was successfully test operated without issue on May 8 to confirm the unit's reliability following completion of this annual maintenance.

Boiler 201 in the Thermal Power Plant (TPP) was taken offline in the late evening of May 19 to allow the steam system to cool sufficiently overnight before the contractor and DITP Maintenance staff could proceed with the annual dump condenser cleaning on May 20, prior to placing the steam system in summer (vacuum) operating mode. Boiler 201 was returned to operation later in the evening, following the dump condenser work, to restore steam production and steam turbine power generation. The TPP began operating the steam system in summer mode starting on June 5 to maximize the energy generation from the steam turbines during the seasonally lower plant heat demand period.

DITP took delivery of 480,000 gallons of #2 fuel oil, a total of 48 oil tanker trucks, without incident from May 5 through May 14. This fuel oil is used for CTG operation, for boiler startup operations, and for supplemental fuel for boiler operation during periods of low or unstable digester gas production.

This summer, DITP is enrolled in an Eversource Connected Solutions Curtailment (Demand Response) program to reduce a portion of DITP's load from the regional electrical grid during peak energy usage periods. In this program only green energy can be used to offset a committed energy demand or the load shed can be achieved by curtailing existing energy demand sources. DITP is enrolled in this program by curtailing the cryogenic oxygen generation process. To be successful, the oxygen generation process would be taken offline for the few hours of an event to defer 1.5 MW of power demand. From a treatment perspective, staff would use stored liquid oxygen that was previously produced and stored in the Liquid Oxygen (LOX) tank to feed the secondary activated sludge without impact to the process during this short interruption, then reactivate the cryogenic compressors after the event has ended to restore normal operation. DITP participated in this program during the summer of 2023 and 2024 and earned over \$46,000 and \$69,000, respectively, by participating. The cryogenic oxygen generation process was taken offline for three (3) hours from 5 p.m. to 8 p.m. on June 24 for an Eversource Demand Response called event.

CTG-1A was operated for approximately 1.7 hours on June 9 for an ISO-New England (ISO-NE) Demand Response program summer audit. The performance on this audit determines DITP's demand response program payment for the next six (6) months. On June 24, DITP participated in the first ISO-NE Demand Response called event of the season and operated CTG-1A for approximately 6.2 hours. The CTGs were operated on June 23 and on June 24 (same day as the ISO-NE Demand Response event) for the purpose of peak shaving to reduce the amount of energy purchased during peak electrical demand periods, by removing DITP's demand on the electrical grid, thereby lowering the capacity charges on next year's utility bills.

Clinton Operations & Maintenance Report

Dewatering Building

The M&O and Facilities Specialist pressure washed the belt and replaced wash box seals on the #2 Belt Filter Press. The scum line pipe, which was cracked, was blanked off to the well, to allow Gravity Thickener #2 to remain in operation. Operations staff removed a blockage from the Gravity Thickener #1 beach plate. The Facility Specialist repaired the stairs for the Maintenance shop.

Chemical Building

The M&O and Facility Specialist jet cleaned the A and B soda ash lines and installed a new a coupling on the soda ash mixer. Staff also cleaned the soda ash trough and the mixing tank. The M&O repaired a leaking pipe on the #2 hypochlorite tank and replaced the hypochlorite tank mixer with a straight piece of pipe. Deer Island's plumber completed the re-piping of the sodium bisulfite system. A contractor replaced the faulty oxygen sensor in the chemical gas detection system.

Aeration Basins

The M&O pressure washed the intermediate #1 pump and Deer Island welders repaired the cracks on the same screw pump. The Operations staff cleaned the pH and dissolved oxygen probes.

Phosphorus Building

The M&O and the Area Supervisor broom cleaned the entire outfall channel. A contractor calibrated the pH meters and repaired the Model 5500 phosphorus analyzer. Operations and Maintenance staff cleaned the trough and acid washed the #1, #2, and #3 disc filters. Operations staff cleaned and replaced the reagents in both CL17 chlorine analyzers.

Headwork's Building

The M&O and Facilities Specialist cleaned and greased both the upper and lower pin racks. The M&O replaced the squeegee on the grit rake. Operations staff switched to the #2 grit chamber. The electrical contractor checked the #4 submersible Influent pump due to a leakage alarm. A sensor was bypassed to enable the pump to remain in operation. This pump was then replaced shortly afterwards. A contractor installed a spray bar on the #2 grit classifier. They also replaced a hot water tank, a T&P valve, and removed the Head Works Boiler. Deer Island's PICS Technician and the Area Supervisor installed a new hydro ranger transmitter & receiver on the Lancaster influent channel.

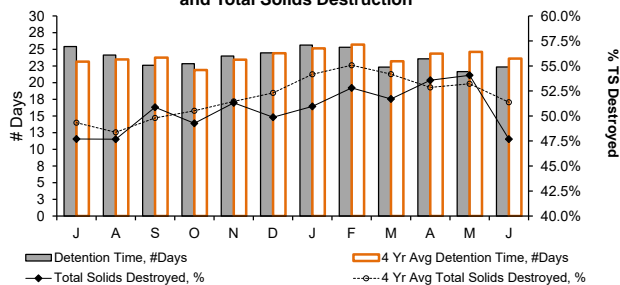
Digester Building

Maintenance staff checked the equipment for proper operation and greased the Floating Cover Digester's Ovivo mixer. A contractor replaced a valve on the #1 sludge boiler and also installed a new exhaust fan in the lower digester.

Deer Island Operations and Residuals

4th Quarter - FY25

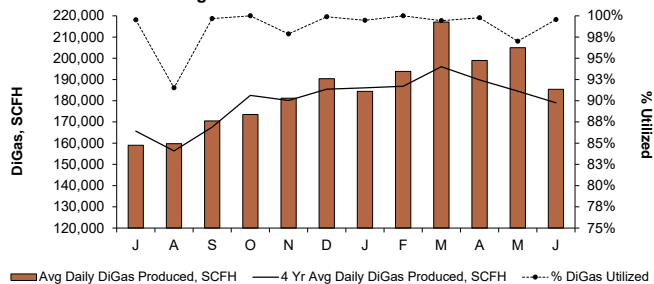
Sludge Detention Time in Digesters and Total Solids Destruction



Total solids (TS) destruction following anaerobic sludge digestion averaged 51.8% during the 4th Quarter, 1.3% below the 4 year average. Sludge detention time in the digesters was 22.5 days, with an average of 7.9 digesters in service, 6.9% below the 4 year average of 24.2 days detention time. **Overall for FY25, TS destruction averaged 50.6%, 2.4% lower than the 51.9% target.**

Total solids (TS) destruction is dependent on sludge detention time which is determined by primary and secondary solids production, plant flow, and the number of active digesters in operation. Solids destruction is also significantly impacted by changes in the number of digesters and the resulting shifting around of sludge.

Digester Gas Production and % Utilized

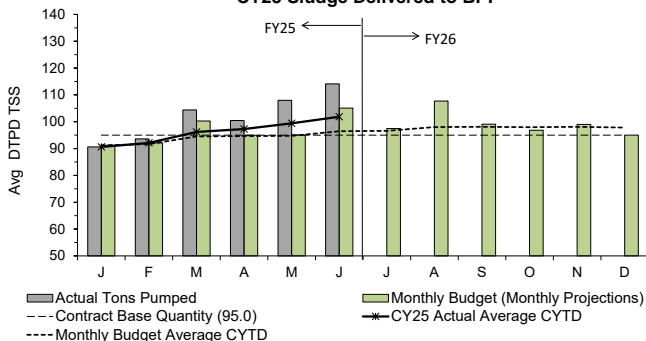


The Avg Daily DiGas Production in the 4th Quarter was 6.5% above target with the 4 Year Avg Daily DiGas Production driven by a 13.5% higher-than-expected primary sludge production this quarter. 98.8% of the Digas produced this quarter was utilized at the Thermal Power Plant. **Overall for FY25, DiGas Production was 2.7% above target and 98.6% of the DiGas produced was utilized at the TPP.**

Residuals Pellet Plant

New England Fertilizer Company (NEFCO), a wholly-owned, indirect subsidiary of Synagro Technologies, Inc., operates the MWRA Biosolids Processing Facility (BPF) in Quincy under contract. MWRA pays a fixed monthly amount for the calendar year to process up to 95.0 DTPD/TSS as an annual average (for the new contract period of January 1, 2024 through December 31, 2034). The monthly invoice is based on 95.0 DTPD/TSS (Dry Tons Per Day/Total Suspended Solids) times 365 days divided by 12 months. At the end of the year, the actual totals are calculated and additional payments are made on any quantity above the base amount. On average, MWRA processes more than 95.0 DTPD/TSS each year (FY25's budget is 99.9 DTPD/TSS and the FY26 budget is 101.4 DTPD/TSS).

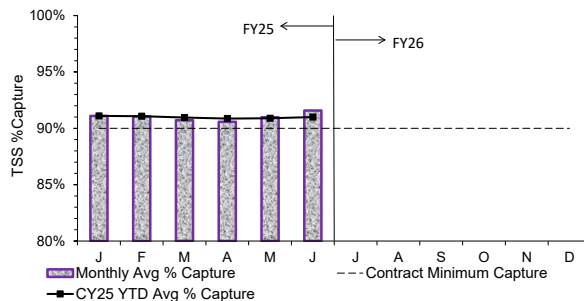
CY25 Sludge Delivered to BPF



The average quantity of sludge pumped to the Biosolids Processing Facility (BPF) in the 4th Quarter was 107.5 TSS Dry Tons Per Day (DTPD), 9.3% above target with the FY25 budget of 98.4 TSS DTPD for the same period. The higher amount of sludge sent to the BPF this quarter can be partially attributed to 8.3% higher overall sludge production at DITP.

The CY25 average quantity of sludge pumped through June was 101.9 TSS DTPD, 5.6% above target compared to the CY25 average budget of 96.5 TSS DTPD for the same period.

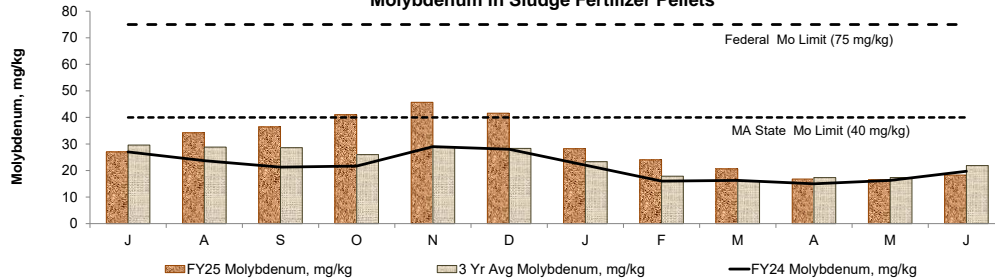
CY25 Monthly Average % Capture of Processed Sludge



The contract requires NEFCO to capture at least 90.0% of the solids delivered to the Biosolids Processing Facility. The average capture for the 4th Quarter was 91.05%.

The CY25 average capture rate of solids through June was 91.00%.

Molybdenum in Sludge Fertilizer Pellets



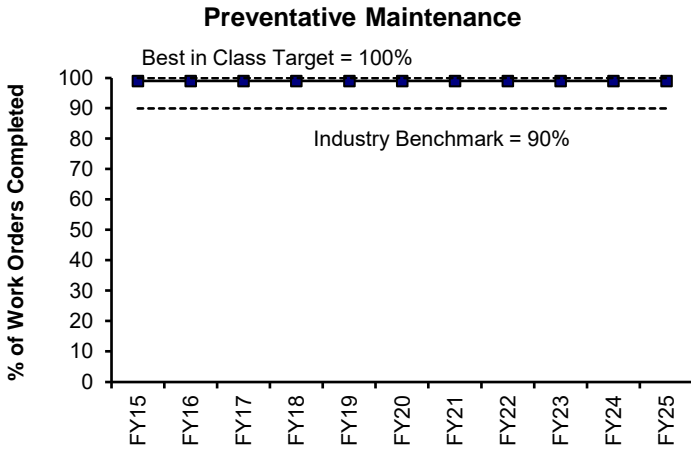
Copper, lead, and molybdenum (Mo) are metals of concern for MWRA as their concentrations in its biosolids have, at times, exceeded regulatory standards for unrestricted use as fertilizer. Molybdenum-based cooling tower water is a significant source of Mo in the sludge fertilizer pellets. The Federal standard for Mo is 75 mg/kg. The Massachusetts Type 1 biosolids standard for molybdenum was changed from 25 mg/kg to 40 mg/kg in 2016, allowing MWRA to sell its pellets in-state for land application whereas the previous limits forced several months' worth of pellets to be shipped out of state.

The levels were below the DEP Type 1 limit for copper and lead during the 4th Quarter. For Mo, the preliminary level in the MWRA sludge fertilizer pellets for the 4th Quarter averaged 17.2 mg/kg, 9% below the 3 year average, 57% below the MA State Limit, and 77% below the Federal Limit. The 18.3 mg/kg average Mo for June is a preliminary figure pending final approval of reportable Mo results from the laboratory. **Overall for FY25, the Mo level in the pellets averaged 29.2 mg/kg, 23% above the 3 year average, 27% below the MA State Limit, and 61% below the Federal Limit.**

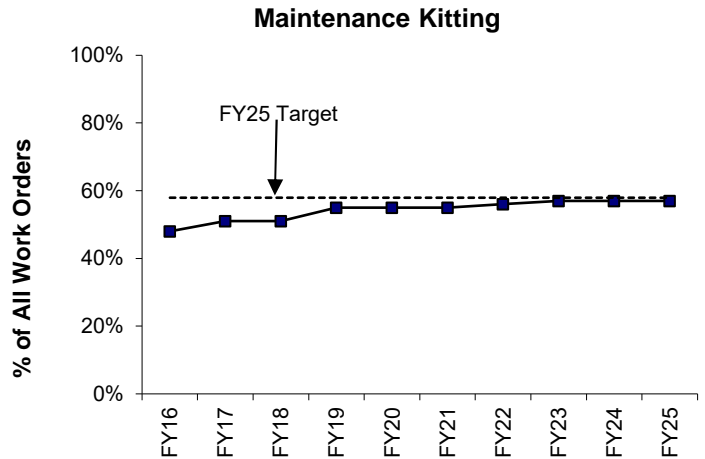
Deer Island Yearly Maintenance Metrics

FY25

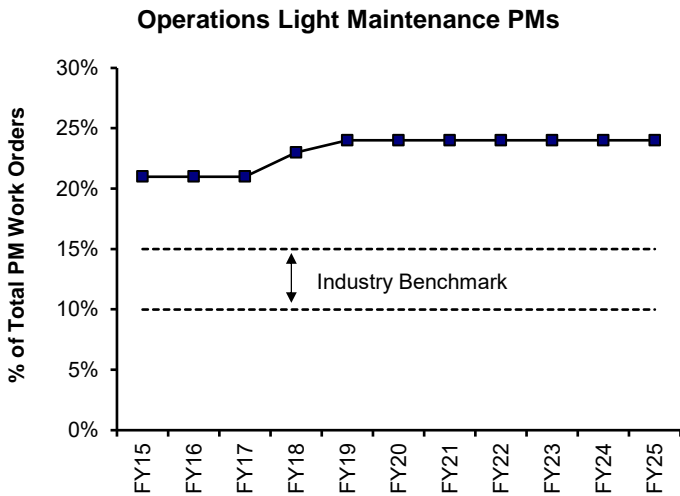
Proactive and Productivity Measures



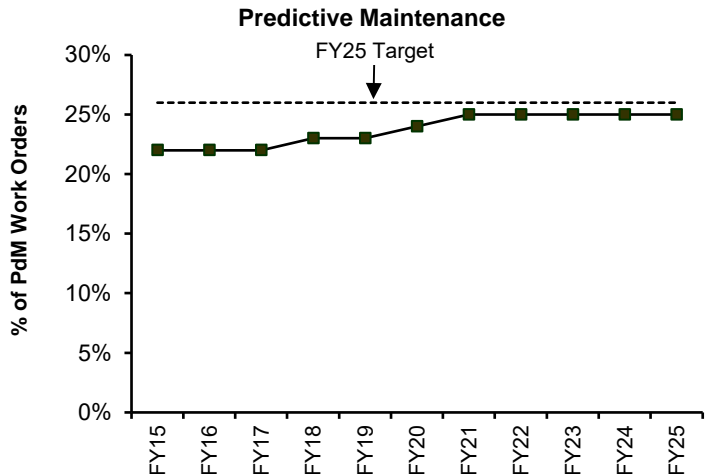
The industry benchmark is 90% for Preventative Maintenance (PM) completion. Upon reaching the 90% goal in FY05, the target goal was increased to the "Best in Class" Target of 100% PM completion. Reliability-Centered Maintenance (RCM) and PM optimization efforts have continued. PM completion rate was 99% in FY25.



Preventive Maintenance (PM) inventory items were loaded into Maximo to assign spare parts for equipment to PM work orders. DITP reached the PM kitting goal of 100%. In FY12 a new graph was developed to track kitting of all maintenance work orders in an effort to increase wrench time. Staff continues to fine-tune the process to "kit" all maintenance work orders. Kitting is considered a best practice by maintenance and reliability professionals. It entails staging parts necessary to complete maintenance work. Kitting allows maintenance staff to spend more time "turning the wrench" and less time waiting for parts at the stockroom window. Kitting for FY25 was 57%, slightly under DITP new goal of 58%.



The percentage of preventive maintenance work orders completed by Operations staff (non maintenance staff) increased from less than 1% in January 2002 to the current level of 24% in FY25. DITP reached the industry benchmark range of 15% and has exceeded the goal through FY25.

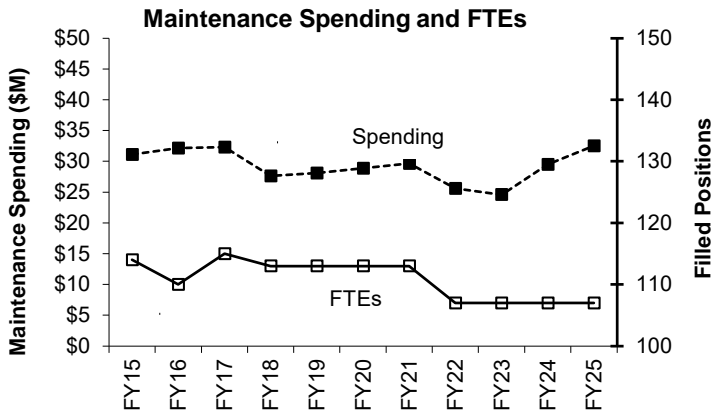


Predictive maintenance has steadily increased from 2% in FY03 to 25% in FY25, DITP was slightly below our new goal of 26%. This percentage in predictive maintenance was achieved through the expanded use of lubrication, vibration, thermography, and acoustic ultrasonic testing techniques. The Condition Monitoring Group continually reviews and investigates new opportunities and initiatives to expand condition monitoring testing and analysis.

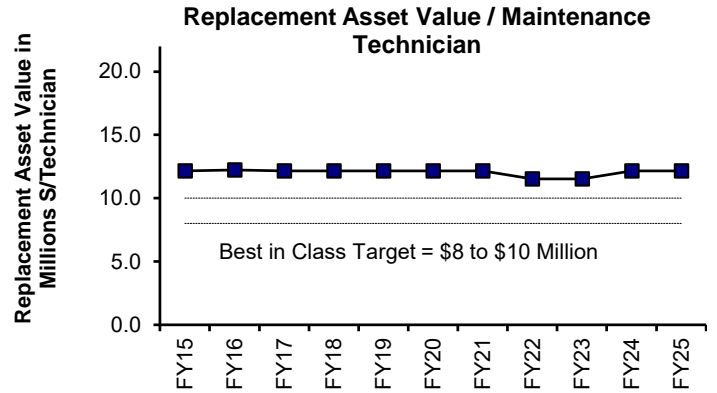
Deer Island Yearly Maintenance Metrics

FY25

Overall Maintenance Program Measures

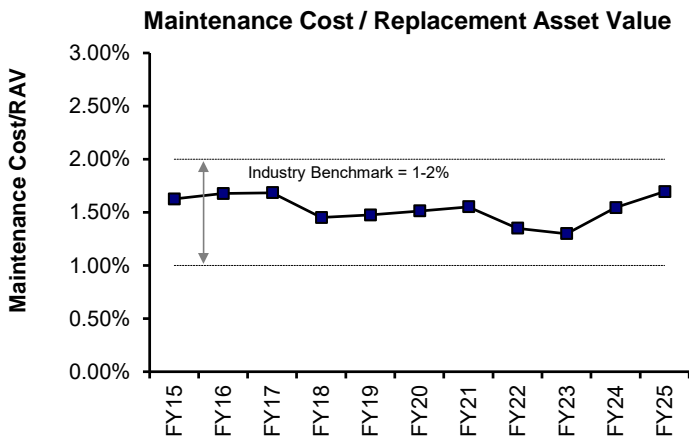


DITP's Maintenance staff is currently at 107 FTE's. Maintenance staff levels ended at 107 due to retirements and hiring challenges for trades personnel. Maintenance has worked to meet our goals through implementation of numerous maintenance efficiencies including: Operations performing light maintenance, cross-functional training and flexibility, and Reliability-Centered Maintenance. This year's overall Maintenance spending has increased.

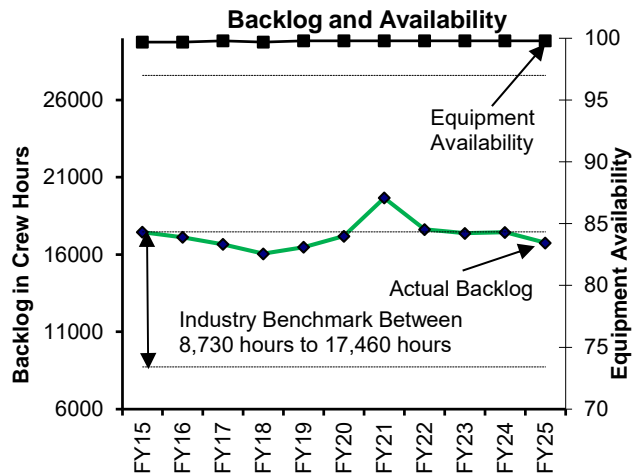


DITP adopted a "best in class" target of \$8-\$10 Million/Technician for maintenance staffing. DITP remains above this Best in Class. However, as the plant ages and additional equipment replacements are expected, DITP management will reassess staffing as needed.

The Maintenance Spending graph shows actual annual maintenance spending and CIP asset replacements (equipment costs only). Maintenance staff continues to evaluate plant assets and requirements for replacement of obsolete equipment to ensure the plant operates at maximum efficiency. In FY25, overall spending increased from FY24 due to the CIP Clarifier Rehab Project Spending. Maintenance staff replaced electrical conduits in the Primary Clarifier area. Plumbers removed and installed plug valves and piping in association for the Mod-1 start-up. Power and Pump staff replaced one odor control fan in the North Main Pump Station. Instrument staff replaced speed controllers for the Polymer Pump system in Centrifuge Facility. HVAC staff changed out one R-410a 10-ton chiller and for the Primary Operations Control Room and ten valves on the Central Plant Heating System (H1S/H1S).



The industry benchmark for annual maintenance spending is between 1% to 2% of replacement asset value, currently DITP is at 1.70%. The plant's replacement asset value is calculated at approximately \$2.6 billion dollars. DITP's current maintenance spending is the industry benchmark. Overall maintenance spending has increased from last year. DITP Maintenance CEB spending is \$28.95 million. CIP spending was \$3.7 million (equipment costs only). CIP/CEB Spending totaled \$32.52 million in FY25.



Industry benchmark for Equipment Availability is 97%. Deer Island has exceeded this benchmark over for the last ten years. In FY25 the availability was 99%. The high percentage in Equipment Availability during FY25 is due to redundancy of equipment and effective/efficient maintenance practices.

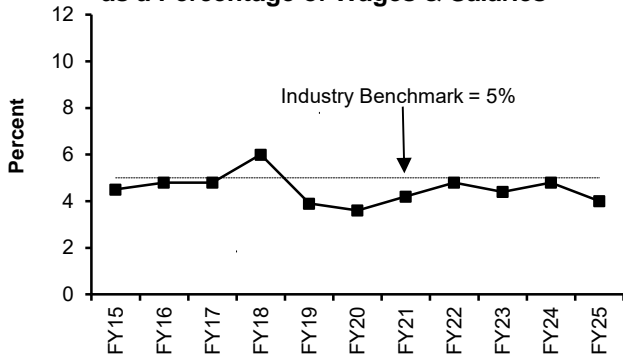
Industry Benchmark for Backlog is between 8,730 to 17,460 hours for maintenance based on current staffing, the total average backlog for FY25 was 16,754 hours, which is within the industry benchmark. DITP Maintenance has made significant progress to be within the Industry Benchmark.

Deer Island Yearly Maintenance Metrics

FY25

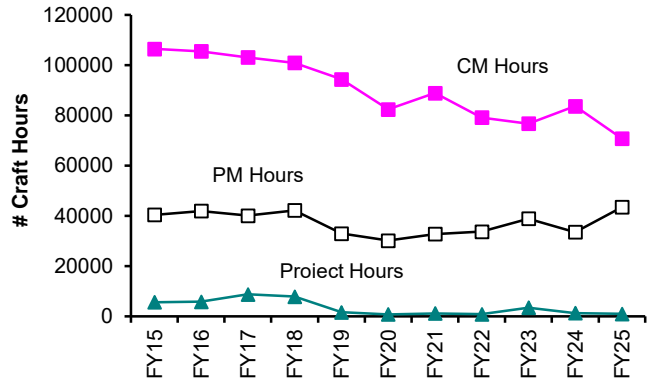
Overall Maintenance Program Measures (cont.)

Overtime (excluding Storm Coverage) as a Percentage of Wages & Salaries



Management continues its effort to keep overtime below the industry benchmark. DITP maintenance overtime was 4.0% for FY25. Management has taken steps to reduce overtime spending by limiting overtime to repair critical equipment and systems only. DITP has been under the Industry Benchmark every year except FY17, due to the increase in overtime for the Eversource Cable Outage.

Craft Hours



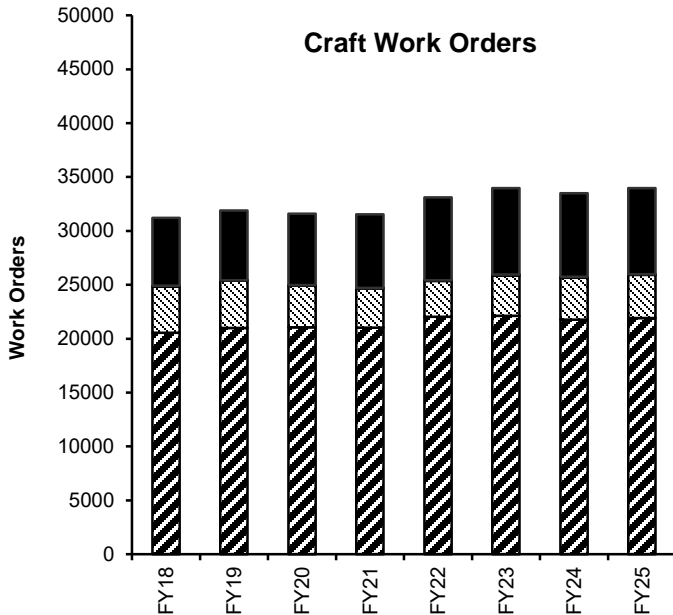
This year's decreased in Corrective Maintenance (CM) hours was due to staff prioritizing and working preventative maintenance.

This year's slight increase in Preventive Maintenance (PM) was due to adjusting PM frequencies to meet plant needs. Staff continued to work on optimization of the Preventive Maintenance (PM) program.

Maintenance did complete some significant maintenance work in FY25: Staff replaced ten valves on the Central Plant Heating System (H1S/H1R). The original valves were installed under the Boston Harbor Project and were failing and no longer provided a leak-free seal. Residuals staff removed and replaced four digester mixers. The mixers were recommended for refurbishment based upon impeller and bearing wear, which was identified by vibration analyses. Mixers are critical to plant performance. It provides the driving force for mixing the digester content and ensuring a uniform temperature within the sludge mass.

Mechanical staff changed out numerous in-line grinders due to the additional clogging due to wipes in the system. Power and Pump staff replaced one Odor Control Fan in North Main Pump Station. The fan was installed under the Boston Harbor Project and was showing trends to failure.

Craft Work Orders



- Predictive Maintenance
- Project
- Preventive Maintenance
- Emergency Maintenance
- ▨ Corrective Maintenance

During FY25, the overall number of work orders slightly increased from the previous year. The Work Coordination department is continuously modifying PM, PdM, and CM Job Plans to ensure maintenance is being performed efficiently and effectively, while ensuring reliability and availability of DITP's Assets.

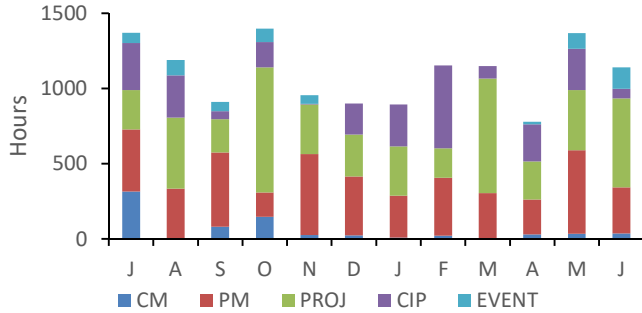
Water Distribution System Valves

4th Quarter - FY25

Background

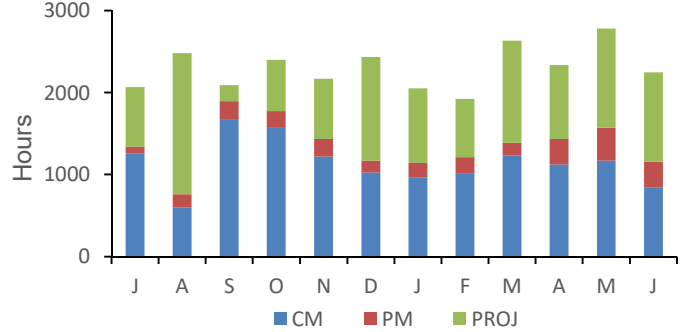
Valves are exercised, rehabilitated, or replaced in order to improve their operating condition. This work occurs year round. Valve replacements occur in roadway locations during the normal construction season, and in off-road locations during the winter season. Valve exercising can occur year round but is often displaced during the construction season. This is due to the fact that a large number of construction contracts involving rehabilitation, replacement, or new installation of water lines, requires valve staff to operate valves and assist with disinfection, dechlorination, pressure-testing, and final acceptance. Valve exercising can also be impacted due to limited redundancy in the water system; valve exercising cannot be performed in areas where there is only one source of water to the community meters or flow disruptions will occur.

Water Valve Labor Hours



During 4th Quarter of FY25 there was a total of 3,285 hours worked. Percentage breakdown; Corrective Maintenance 3%, Preventative Maintenance 33%, Project 38%, Capital Improvement Project 18%, Event - Wtr Fountain 8%

Water Pipeline Labor Hours



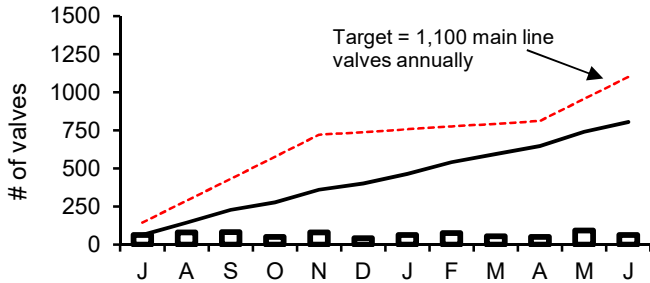
During 4th Quarter of FY25 there was a total of 7,366 hours worked. Percentage breakdown; Corrective Maintenance 43%, Preventative Maintenance 14%, Project 43%

Type of Valve	Inventory #	Operable Percentage	
		FY25 to Date	FY25 Targets
Main Line Valves	2,260	97.5%	95%
Blow-Off Valves	1,778	98.8%	95%
Air Release Valves	1,547	96.7%	95%
Control Valves	49	100.0%	95%

Key to Symbols:

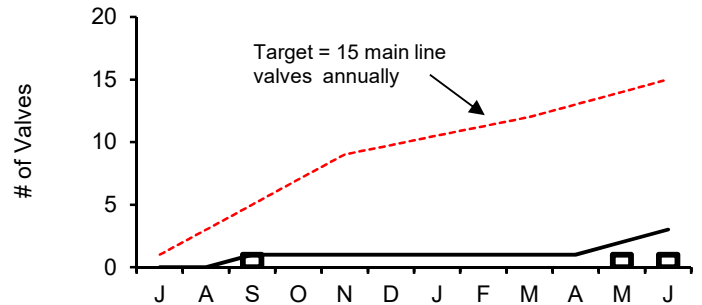
- FY25 Monthly Total
- FY25 Cumulative Total
- FY25 Target

Main Line Valves Exercised



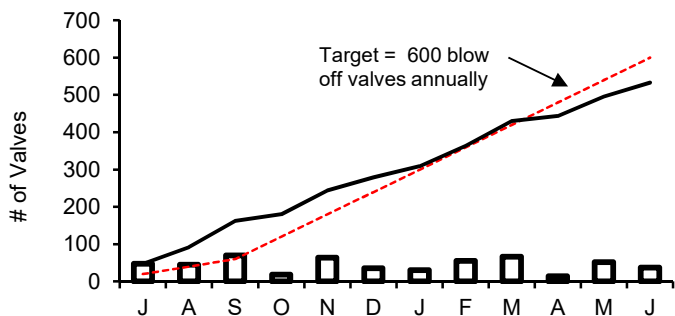
During 4th Quarter of FY25, 209 main line valves were exercised. The total exercised for the fiscal year to date is 805.

Main Line Valves Replaced



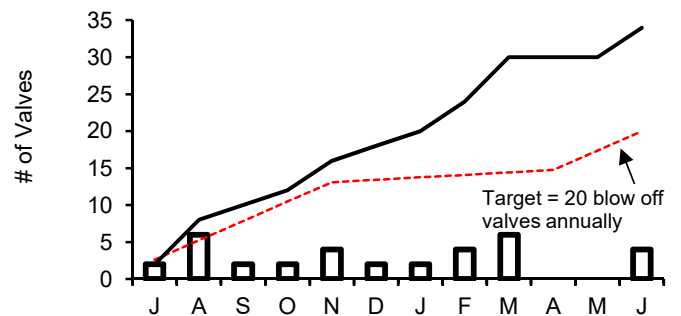
During 4th Quarter of FY25, there was 2 main line valves replaced. The total replaced for the fiscal year to date is 1.

Blow-Off Valves Exercised



During 4th Quarter of FY25, 103 blow off valves were exercised. The total exercised for the fiscal year to date is 533.

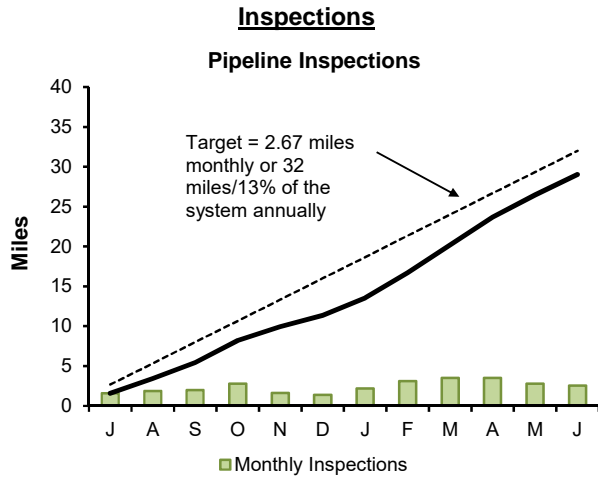
Blow-Off Valves Replaced



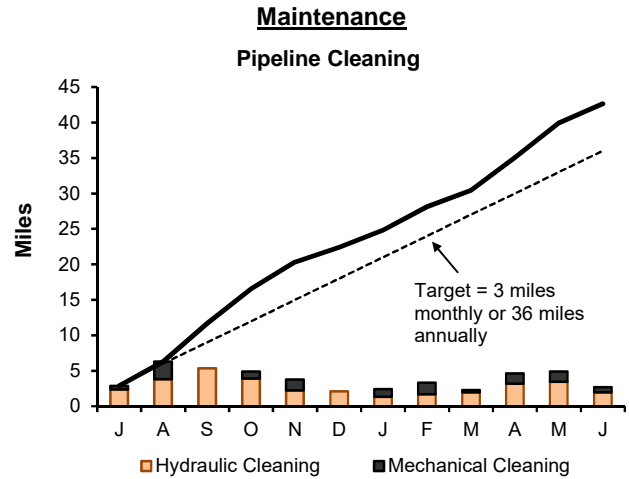
During 4th Quarter of FY25, there were 4 blow off valves replaced. The total replaced for the fiscal year to date is 34.

Wastewater Pipeline and Structure Inspections and Maintenance

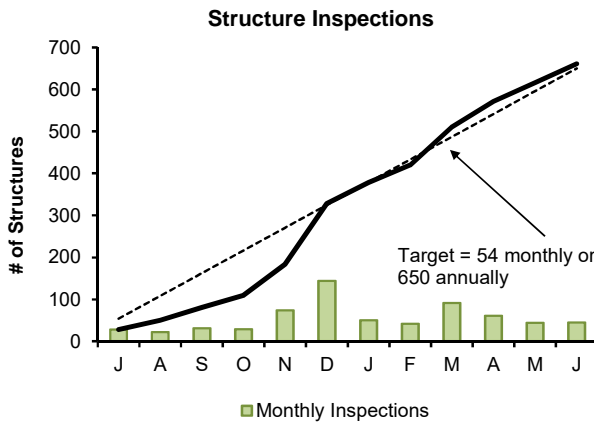
June 2025 - FY25



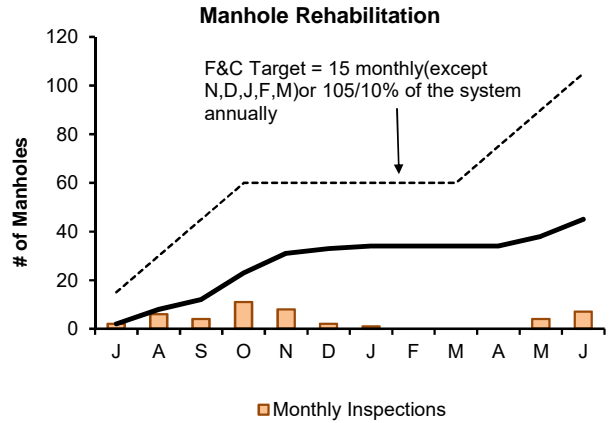
Staff internally inspected 2.56 miles of MWRA sewer pipe during this month. The year to date total is 29.03 miles. No Community Assistance was provided.



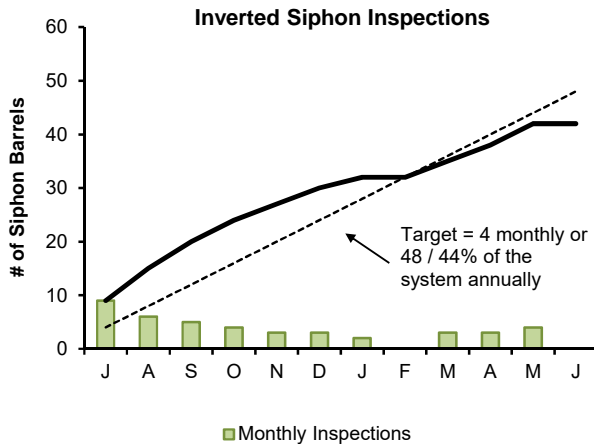
Staff cleaned 2.67 miles of MWRA sewer pipe, and removed 4.50 yards of grit. The year to date total is 42.63 miles of pipe cleaned. No Community Assistance was provided this month.



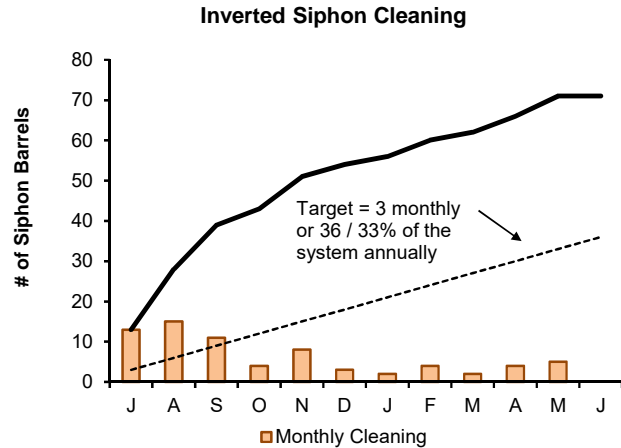
Staff inspected the 12 CSO structures and performed other additional 45 manhole/structure inspections during this month. The year to date total is 661 inspections.



Staff replaced 7 frames and covers this month. The year to date total is 45.



Staff inspected 0 siphon barrels this month. The year total is 42 siphon barrels inspected.

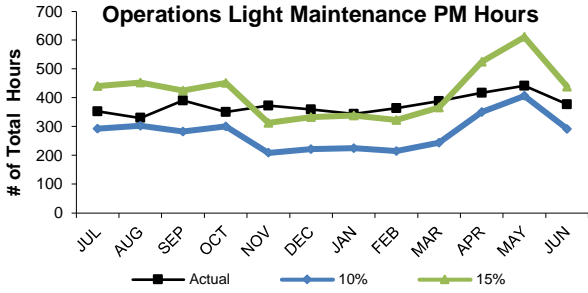


Staff cleaned 0 siphon barrels this month. The year total is 71 barrels cleaned.

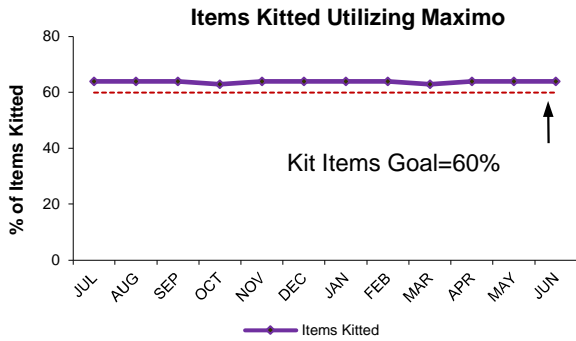
Field Operations' Metropolitan Equipment & Facility Maintenance

4th Quarter - FY25

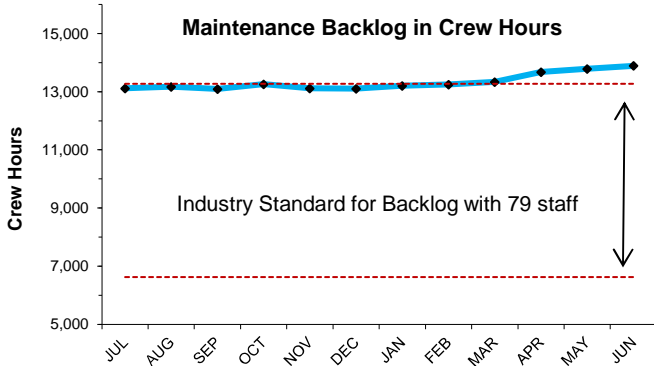
Several maintenance and productivity initiatives are in progress. The goal for the Overall PM completion and the Operator PM completion is 100%. The Operator PM and kitting initiatives frees up maintenance staff to perform corrective maintenance and project work, thus reducing maintenance spending. Backlog and overtime metrics monitor the success of these maintenance initiatives.



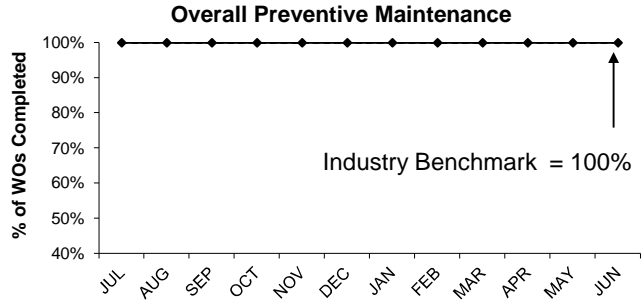
Operations staff averaged 412 hours per month of preventive maintenance during the 4th Quarter of FY25, an average of 12% of the total PM hours for the 4th Quarter, which is within the industry benchmark of 10% to 15%.



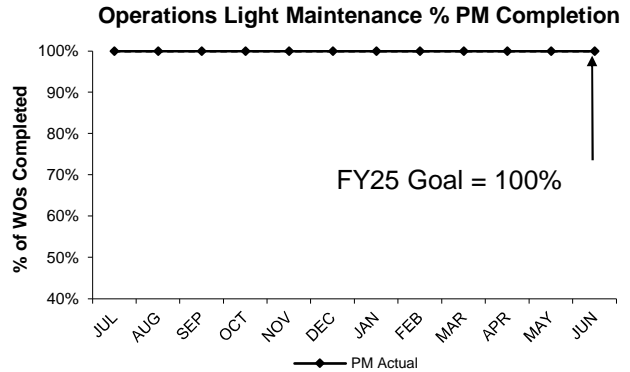
Operations' FY25 maintenance kitting goal has been set at 60% of all work orders to be kitted. Kitting is the staging of parts or material necessary to complete maintenance work. In the 4th Quarter of FY25, 64% of all applicable work orders were kitted. This resulted in more wrench time and increased productivity.



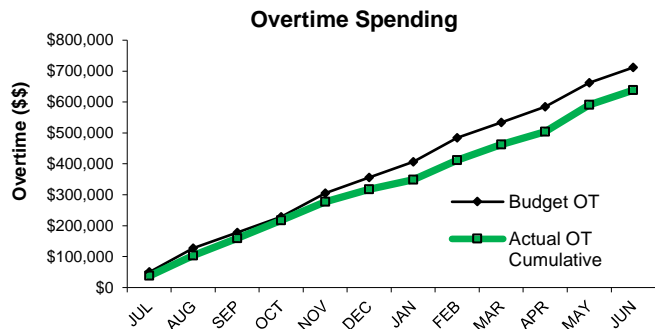
The 4th Quarter of FY25 backlog average is 13,790 hours. Which is above the industry benchmark of 6,636 to 13,275 hours. The current backlog is due to vacancies and several large maintenance projects.



The Field Operations Department (FOD) preventive maintenance goal for FY25 is 100% of all PM work orders. Staff completed 100% of all PM work orders in the 4th Quarter of FY25.



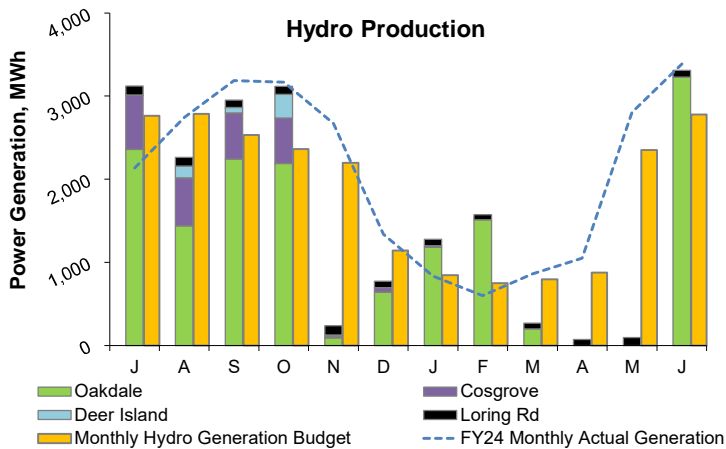
Wastewater Operations complete light maintenance PM's which frees up maintenance staff to perform corrective maintenance. Operations' FY25 PM goal is completion of 100% of all PM work orders assigned. Operations completed 100% of PM work orders in the 4th Quarter of FY25.



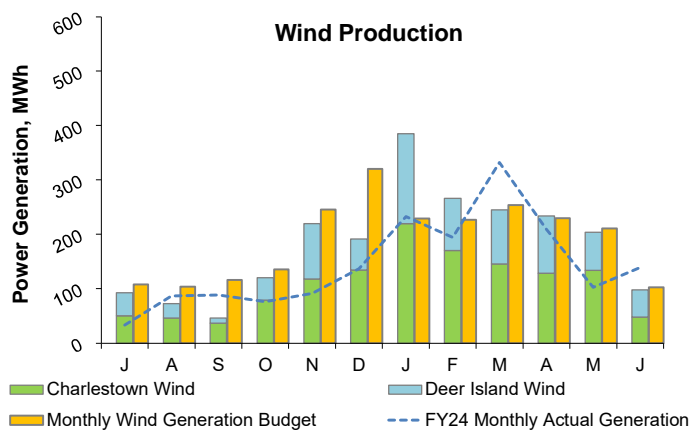
Maintenance overtime was \$580 under budget on average, per month, for the 4th Quarter of FY25. Overtime is used for critical maintenance repairs and wet weather events. The overtime budget through the 4th Quarter of FY25 is \$712,460. Overtime spending was \$638,815 which is \$73,645 under budget for the fiscal year.

Renewable Electricity Generation: Savings and Revenue

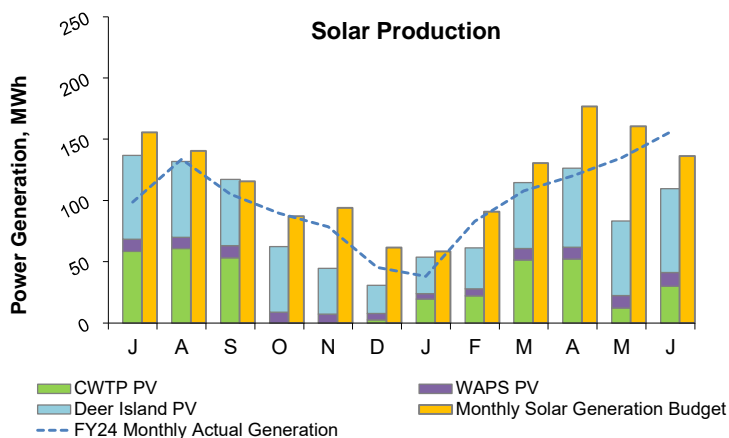
4th Quarter - FY25



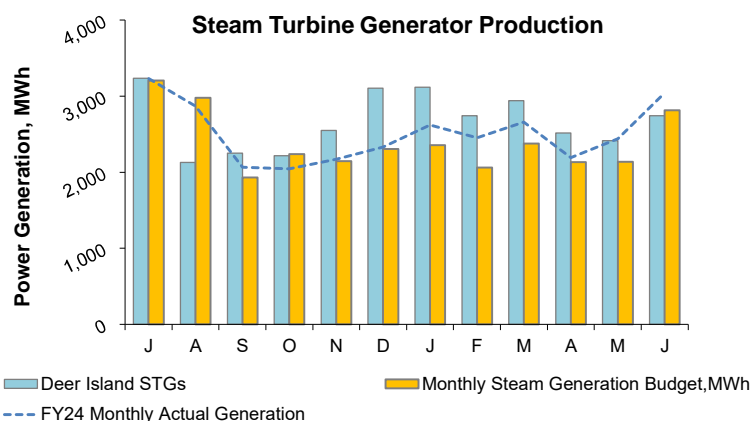
In Quarter 4, renewable energy produced from hydroelectric turbines totaled 3,575 MWh, 40% below budget. Deer Island hydroturbines were unavailable for the entire 4th quarter as both undergo wicket gate rehabilitation and other repairs. Cosgrove was offline due to rehab work at the Wachusett Dam Lower Gatehouse.



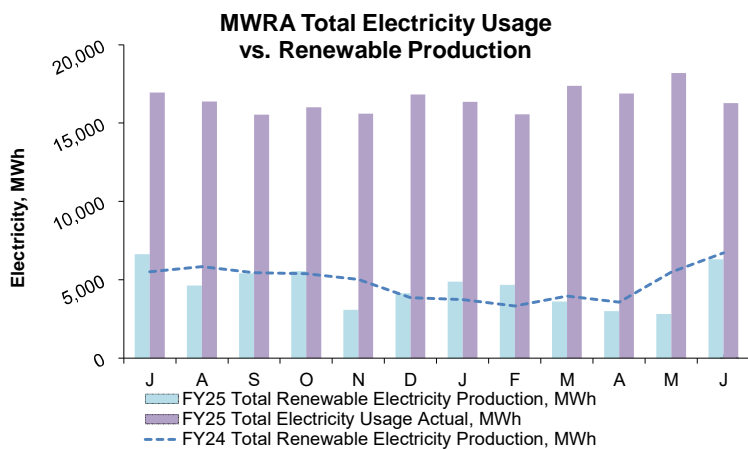
In Quarter 4, wind turbine production totaled 535 MWh, 1% below budget. Deer Island Turbine #1 has been out of service since April 2022 and is scheduled for replacement by 2027.



In Quarter 4, energy production from all solar PV systems totaled 319 MWh; 43% below budget¹. The Deer Island Residuals Odor Control roof mounted array has been offline since September 2022 due to a failed inverter. The system will remain offline pending full replacement. Ongoing inverter issues at the CWTP have limited production.

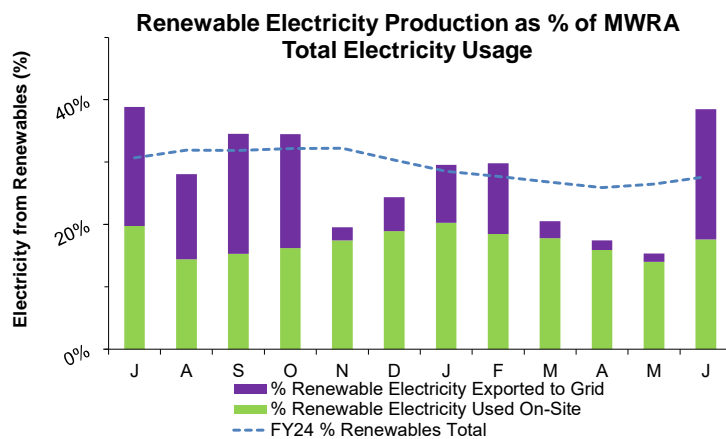


In Quarter 4, the renewable energy produced from Deer Island's steam turbine generators totaled 7,672 MWh; 8% above budget¹.



In Quarter 4, total renewable electricity production was 12,102 MWh, 14% below budget. The MWRA total electricity usage is the sum of all electricity purchased for Deer Island and FOD plus electricity produced and used on-site at these facilities. Approximately 99% of FOD electrical accounts are accounted for by actual billing statements; minor accounts that are not tracked on a monthly basis such as meters and cathodic protection systems are estimated based on this year's budget.

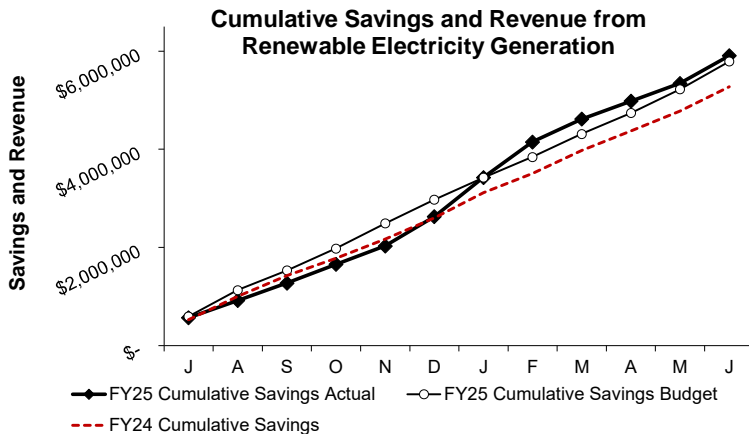
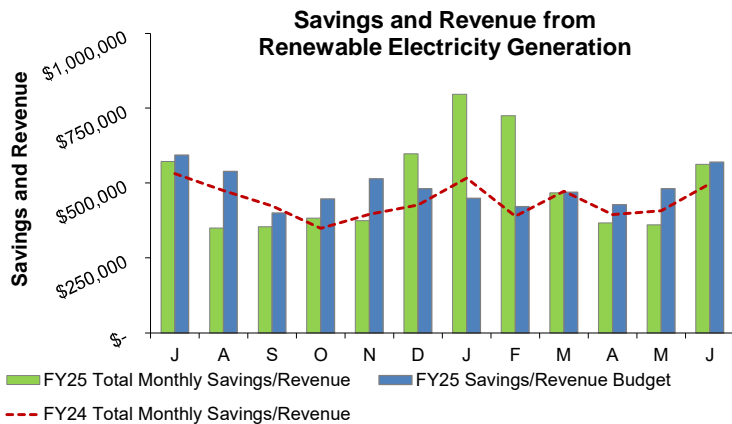
All renewable electricity generated on DI is used on-site (this accounts for more than 50% of MWRA renewable generation). Almost all renewable electricity generated off-DI is exported to the grid.



Notes: 1. Budget values are based on historical averages for each facility and include operational impacts due to maintenance work.

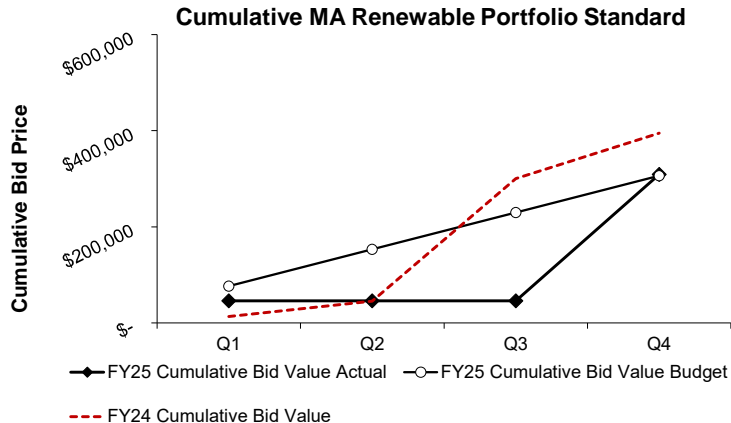
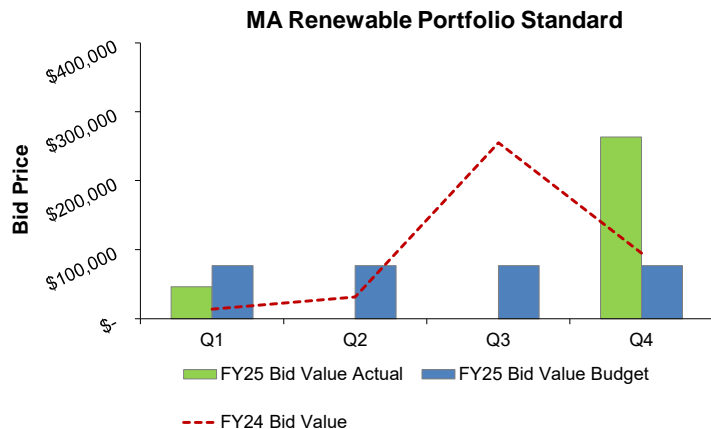
Renewable Electricity Generation: Savings and Revenue

4th Quarter - FY25



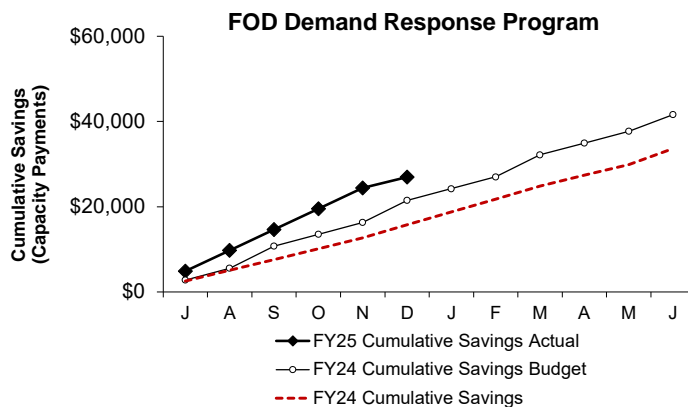
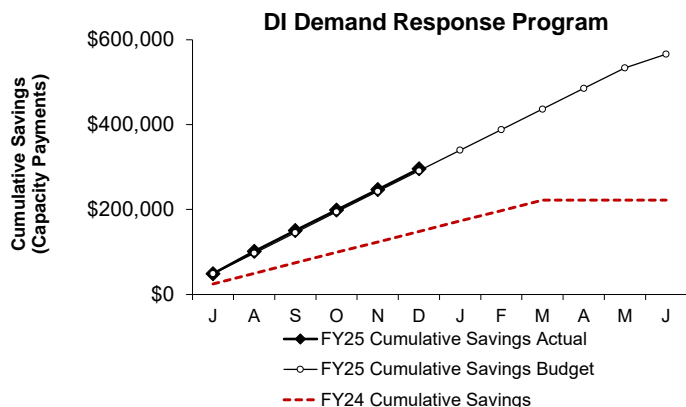
Savings and revenue from renewable sources is estimated at \$1,289,323 in Quarter 4, 13% below budget. Cumulative savings and revenue for the FY has climbed to 2% above budget. However, total savings and revenue depends heavily on electricity pricing at Deer Island, which is estimated from December through June. Savings are over estimated for January and February due to supplementary fuel oil use in the Deer Island boilers increasing STG output to above normal levels.

Savings and revenue¹ from all renewable energy sources include wind turbines, hydroelectric generators, solar panels, and steam turbines (DI). This includes savings and revenue due to electricity generation (does not include avoided fuel costs and RPS REC). The use of DITP digester gas as a fuel source provides the benefit of both electricity generation from the steam turbine generators, and provides thermal value for heating the plant, equivalent to approximately 5 million gallons of fuel oil per year (not included in charts above).



Bids were awarded during the 4th Quarter² of FY25 from MWRA's renewable energy assets; No Class I Renewable Energy Certificates (RECs) were sold. 13,488 Class II RECs were sold from previous quarters and sold for a value of \$269,387, which was 244% above budget for the Quarter.³ REC values reflect the bid value on the date that bids are accepted. Cumulative bid values reflects the total value of bids received to date.

*MWRA's SRECs have transitioned to the Class 1 REC category starting in FY23.

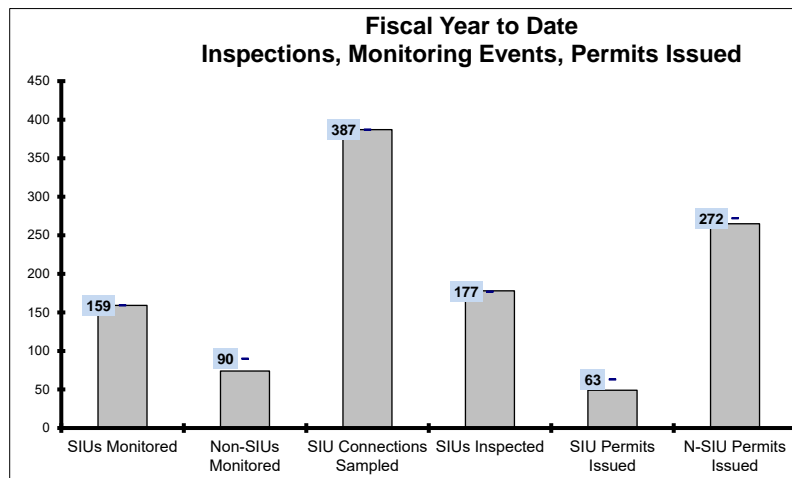


Currently Deer Island, Loring Rd, Brusch Hydro, and JCWTP participate in the ISO-New England Demand Response Programs. By agreeing to reduce demand and operate the facility generators to help reduce the ISO New England grid demand during periods of high energy demand, MWRA receives monthly Capacity Payments from ISO-NE. When MWRA operates the generators during an ISO-NE called event, MWRA also receives energy payments from ISO-NE. Payments total \$295,710 through December at Deer Island, and \$26,978 through December 2024 for Loring Rd, Brusch Hydro, and JCWTP.

- Notes:
1. Savings and Revenue: Savings refers to any/all renewable energy produced that is used on-site therefore saving the cost of purchasing that electricity, and revenue refers to any value of renewable energy produced that is sold to the grid.
 2. Only the actual energy prices are being reported. Therefore, some of the data lags up to 3 months due to timing of invoice receipt.
 3. Budget values are based on historical averages for each facility and include operational impacts due to maintenance work.

Toxic Reduction and Control

4th Quarter - FY25



EPA Required SIU Monitoring Events for FY25: 159
YTD : **159**

Required Non-SIU Monitoring Events for FY25: 90
YTD : **74**

SIU Connections to be Sampled For FY25: 387
YTD: **387**

EPA Required SIU Inspections for FY25: 177
YTD: **178**

SIU Permits due to Expire In FY25: 63
YTD: **49**

Non-SIU Permits due to Expire in FY25: 272
YTD: **265**

Significant Industrial Users (SIUs) are MWRA's highest priority industries due to their flow, type of industry, and/or their potential to violate limits. SIUs are defined by EPA and require a greater amount of oversight. EPA requires that all SIUs *with flow* be monitored at least once during the fiscal year.

The "SIU Monitored" data above, reflects the number of industries monitored; however, many of these industries have more than one sampling point and the "SIU Connections Sampled" data reflect samples taken from multiple sampling locations at these industries.

EPA requires MWRA to issue or renew 90 percent of SIU permits within 120 days of receipt of the application or the permit expiration date - whichever is later. EPA also requires the remaining 10 percent of SIU permits to be issued within 180 days.

	Number of Days to Issue a Permit						Permits Issued	
	0 to 120		121 to 180		181 or more		SIU	Non-SIU
	SIU	Non-SIU	SIU	Non-SIU	SIU	Non-SIU		
Jul	4	20	0	0	0	11	4	31
Aug	2	14	0	0	0	3	2	17
Sep	1	14	0	1	0	4	1	19
Oct	3	16	0	1	0	0	3	17
Nov	3	15	0	1	0	5	3	21
Dec	2	19	0	0	0	9	2	28
Jan	6	11	0	0	0	1	6	12
Feb	5	15	1	2	0	5	6	22
Mar	4	22	0	0	0	1	4	23
Apr	3	23	0	2	0	2	3	27
May	5	20	0	3	1	11	6	34
Jun	6	11	2	1	1	5	9	17
% YTD	90%	75%	6%	4%	4%	21%	49	268

TRAC's annual monitoring and inspection goals are set at the beginning of each fiscal year but they can fluctuate due to the actual number of SIUs.

In addition to the Annual SIU inspections required under TRAC's EPA approved Industrial Pretreatment Program, other inspections are usually undertaken, including for enforcement, permit renewal, follow up, temporary construction dewatering sites, group/combined permit audits, spot, sampling locations, visit only and out of business facility.

Monitoring of SIUs and Non-SIUs is dynamic for several reasons, including: newly permitted facilities; sample site changes requiring a permit change; changes in operations necessitating a change in SIU designation; non-discharging industries; a partial sample event is counted as an event even though not enough sample was taken due to the discharge rate at the time; and sometimes increased/decreased inspections lead to permit category changes requiring additional monitoring events

This is the fourth quarter of the MWRA fiscal year, FY25.

In this quarter, 96 permits issued. There were 18 SIUs, of which 14 were issued on time. There were 78 non-SIUs of which 54 were issued on time, with 18 late beyond 180 days.

All but 4 of the SIU permits were issued within the 120-day timeframe. The 4 SIUs issued after 120 days were due to outstanding permit fees holding up the issuance of the permits.

In FY25, there have been 34 completely new permits issued: 3-LFLP, 10-02 N-SIUs, 15-Dental, 4-DEW, 1 One-Time, 1-G2

For the Clinton Sewer Service area, there was 0 SIU permits issued during the 4th Q FY25.

TRAC completed 5 first time SIU monitoring events and 35 first time NSIU monitoring events.

Permit Categories, as defined in CMR 10.101(2):

SIU- Significant Industrial User

DEW - Category 12 Temporary Construction Site Dewatering Permit

LFLP - Category 10 Non-Significant Industrial User with Low Flow and Low Pollutant

02 N-SIU - Category 2 Non-Significant Industrial User

Dental - Category D1 Dental Group Permit

G2 - Category G2 Group Permit for Food Processing

One-Time - One Time Discharge Permit

Field Operations Highlights

4th Quarter – FY25

Metro Water Operations and Maintenance

- Valve Program: Supported in-house work including isolations on: Section 97A (4 Blow Off Replacements), Shaft 9 B Line (Blow off Replacement), Shaft 7C (Main Line Valve Replacement), Shaft 9 A Line (Leak Repair), Section 45 (Leak Repair), CIP Contractors were supported by isolation and dewatering of portions of Section 29 and 89 (Contract 7117), Section 101 (7457), Section 23, 24 & 47 (6392), Section 25 (6956) and W14 & W16 (7563).
- Water Pipeline Program: Staff completed Blow-Off replacements in East Boston (Section 97A – 4 valves), Somerville (Shaft 9 B Line) and Main Line Valve Replacements in Mattapan (Shaft 7C). Leak repairs on Section 45 (16-inch main) in Arlington, and Shaft 9 A Line (48-inch main) in Medford.

SCADA

Water System Work

- Continued technical support for JCWTP PLC replacement project; Continued support for the Wachusett Lower Gate House Project and Steel Tank Project; Installed new Verizon circuits at Bifurcation and Section 57; configured new firewalls for western and metro remote sites.

Wastewater System Work

- Continued work on Braintree/Weymouth Pump Station Improvements Project; continued testing the network monitoring system; continued configuration of SCADA historian; supported Ward/Columbus design development; supported scope development of BOSO19 and Framingham PS SCADA upgrades.

Environmental Quality-Water

- Algae: In April, DCR continued sampling of Quabbin and Wachusett reservoirs, while MWRA algae sampling resumed in May. On June 13, elevated levels of Chryso-sphaerella algae were observed by DCR in Quabbin reservoir and profiling buoy data showed increases in chlorophyll-a levels at both Wachusett and Quabbin reservoirs. Staff

commenced weekly cyanobacteria inspections at active and standby reservoirs.

- Regulatory Sampling: On April 7-10, sampling staff collected Q2 samples for EPA's Unregulated Contaminant Monitoring Rule 5. On June 9-17, sampling for optimal water quality parameters was performed for pH and alkalinity measurements in community distribution system sites. Weekly samples for the Wachusett Aqueduct Pump Station Geothermal NPDES permit were collected in April, May and June.
- Non-Regulatory: MWRA is collecting water quality samples at locations near residences that have results over the lead action level. Staff collected samples from one location in Malden in April and the sample met both pH and alkalinity targets. On June 23, MWRA and DCR staff performed sampling for the UMass Amherst project, investigating impacts of organic matter in MWRA's water supply. Samples collected from Wachusett tributaries, Carroll treatment plant taps and Oakdale.
- Community Support: On April 10, staff provided assistance with collecting a water quality-complaint sample in Southborough. On May 23, staff conducted coliform and chlorine residual training for three communities (Malden, Bedford, and Peabody).
- Internal Support: On April 10, sampling staff performed a comparison study on various lots of chlorine residual Chemkeys. One lot used by Carroll treatment plant staff was found to be low and was returned to Hach for reimbursement. On May 1, staff assisted Operations with sampling at a newly constructed well at Shaft 8 Lonergan Intake. Resampling is required for some parameters. On June 27 staff conducted pipeline clearance sampling at several sites in Waltham. CWTP lead pipe-rig study sample collection events occurred on April 17, May 29 and June 26 and samples were transferred to the Dept. of Laboratory Services lab for testing.
- Contaminant Monitoring System (CMS): On April 24 and 30, staff responded to a CMS alarm on the Bellevue and Delauri CMS caused by faulty spectro:lyzers that were subsequently replaced at each site. In April, staff met with the

Field Operations Highlights

4th Quarter – FY25

CMS equipment vendor to discuss resolution of spectro:lyser issues occurring at some CMS sites. On May 5, the first dive inspection of the Route 12 intake structure was performed. On May 4, staff responded to a CMS alarm at CWTP Finished water tap caused by air in the feed panel. On May 9 through 15, staff responded to several CMS alarms at the Route 12 shed caused by elevated UV254 and DOC in the raw water from rain events. On June 24, staff responded to a CMS alarm at Bellevue tank caused by biofilm clogging the panel screen during tank cycling operations.

- Wachusett & Quabbin Buoys: On May 27, staff met with MIS to discuss the transfer of fixed depth buoy data from the cloud platform to MWRA's buoy server. On April 23, three Wachusett water quality-profiling buoys were deployed on the Wachusett reservoir and on May 1, the Quabbin buoy was deployed at Quabbin. In May, bid specifications for the repair of the Quabbin buoy mooring line and anchor were posted. On May 12, staff launched the new QA boat into the Wachusett reservoir. Staff received training from Deer Island's Boat Captain on navigating the boat in Wachusett reservoir on May 29.
- Data Management Group (<http://wqdmgdev.mwra.net/>): Total coliform Rule (TCR) data for Chicopee were updated in dmj databases. Staff also fulfilled three data requests for April and two large data requests in May. Staff updated and reconfigured DMG homepage with new tools –CMS daily tracker, to assist water quality managers with reviewing daily field grab data from CMS sites. Reporting and programming staff worked together to get DEP reports issued on time due to issues with Aquarius software. Programming staff wrote UV-IT calculation algorithms for compliance reporting as backup for Aquarius.
- Environmental / Chemical Contract Management: Staff completed annual purity sampling for drinking water bulk chemicals. Staff submitted the city of Marlborough permit renewal for fuel oil storage at CWTP. In May, staff posted the city of Marlborough permit renewal for fuel oil storage at CWTP. Annual underground storage tank Stage 1 testing

occurred at the Lonergan Lower Garage facility with no issues. Staff performed a 3-year preventative maintenance on the Oakdale oil waster separator with vendor.

Environmental Quality-Wastewater

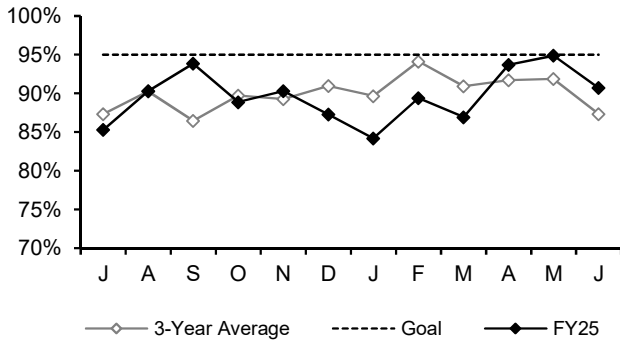
- Ambient Monitoring: Mass Bay surveys occurred in April, May, and June. Following elevated paralytic shellfish poisoning (PSP) observations reported by Division of Marine Fisheries on May 28, initiated Alexandrium rapid response surveys on June 3. Results showed Alexandrium counts exceeding 100 cells per liter, resulting in a Contingency Plan exceedance. The exceedance was reported to the regulatory agencies as required by the NPDES permit. MWRA will continue enhanced weekly monitoring until concentrations fall below the threshold.
- Permitting and Compliance Reporting: In the 4th Quarter, there were 16 notification/web postings about CSOs and blending. Posted 18 compliance documents to MWRA's website. Staff met with Deer Island to discuss adding sampling for Enterococcus to optimize disinfection strategies during high flow.
- Coordination with other MWRA Departments: Assisted Engineering & Construction by participating in community CSO coordination meetings and review of reports. Worked with Deer Island Process Control to analyze Deer Island effluent nitrogen data in response to the 2024 total nitrogen Contingency Plan exceedance. Continued to coordinate with Law on comments on draft permits and regulations.
- Cooperation with other agencies: ENQUAL staff participated with other stakeholders on CSO engagement and public notification efforts. Staff assisted the MassBays National Estuary Program in planning and executing a symposium on Mass Bay/Gulf of Maine environmental monitoring. Staff, in conjunction with Law, presented to the Wastewater Advisory Committee on both the 2023 draft Deer Island NPDES permit and the San Francisco vs. EPA Supreme Court decision. Staff also attended a meeting with EPA and DEP on the siting of the potential new Combined Heat and Power plant at Deer Island.

Laboratory Services

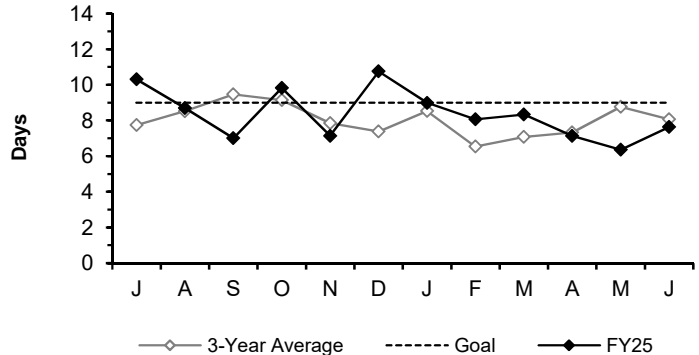
4th Quarter - FY25

Laboratory Services supports the laboratory sampling, testing, and consulting needs of various client groups primarily in the Operations Division. This includes drinking water transmission and treatment, wastewater collection and treatment, wastewater residuals management, industrial-pretreatment monitoring, and environmental quality.

Percent On-Time Results



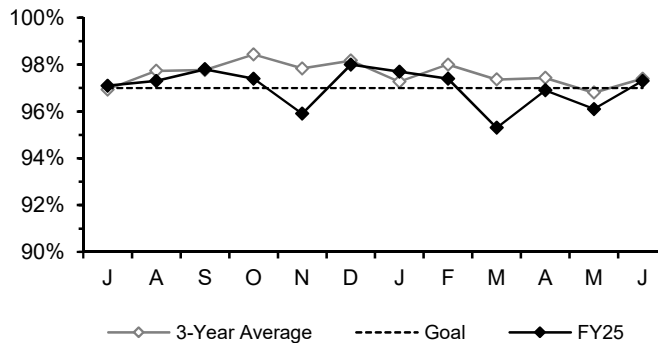
Turnaround Time



The Percent On-Time measurement assesses performance against internal client due dates. These due dates are shorter than the compliance reporting requirements to allow for internal review of the data.

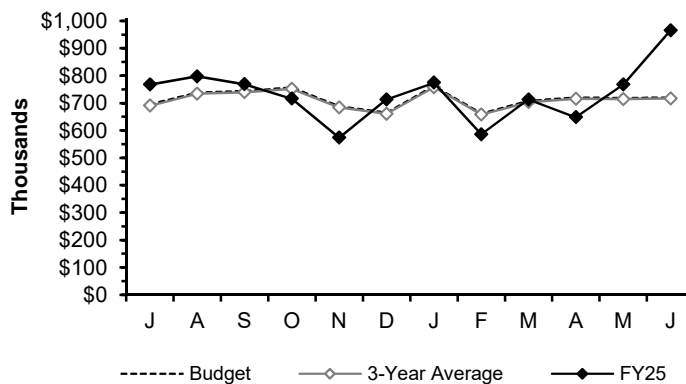
Turnaround Time measures the average time from sample receipt to sample completion.

Percent QC Within Specifications



Percent QC Within Specifications measures the fraction of Quality Control tests that met required limits during the month.

Value of Services Rendered



Value of Services Rendered models the true cost of the lab work performed, including fringe benefits that are not a part of the Laboratory Services budget.

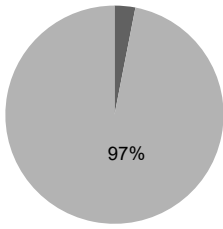
School Lead Program: During the 3rd quarter of FY25, MWRA’s lab completed 995 tests from 38 schools and childcare facilities in 16 communities. Since 2016, MWRA’s Laboratory has conducted over 46,700 tests from 701 schools and daycares in 49 communities. We have also completed 1106 home lead tests under the DPH sampling program and 2357 lead tests in response to resident requests since 2017.

CONSTRUCTION PROGRAMS

Engineering & Construction Projects In Construction

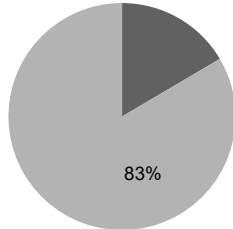
4th Quarter – FY25

Cost



■ Amount Remaining
■ Billed to Date

Time



■ Time Remaining
■ Time Expended

Carroll Water Treatment Plant SCADA Improvements

Project Summary: The current SCADA control equipment has reached the end of its useful life, and future vendor support for the installed PLC base is no longer guaranteed. This contract includes the supply and installation of replacement instrumentation panels, PLC's, UPS backup power, fiber-optic communication network, wiring between the existing panels, and new equipment and refurbishment of the operator control room. In addition, a new server room equipped with HVAC and fire suppression is being constructed to house redundant computer hardware supporting active and backup SCADA systems.

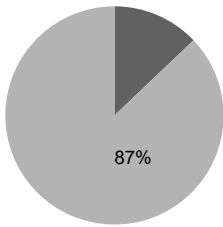
Contract Amount: \$13,808,614.75

Contract Duration: 1,675 Days

Notice to Proceed: 1-Sep-21

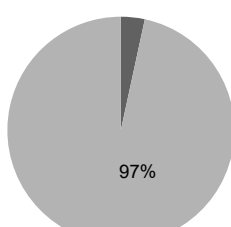
Contract Completion: 3-Apr-26

Cost



■ Amount Remaining
■ Billed to Date

Time



■ Time Remaining
■ Time Expended

Section 89 Replacement Pipeline

Project Summary: This project will include replacement of a 10,500-foot portion of PCCP with class IV reinforcing wire, line valves and appurtenances, and abandonment of the 118-year old, 24-inch diameter cast iron Section 29 pipeline.

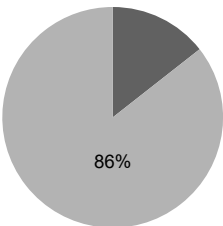
Contract Amount: \$36,573,441.60

Contract Duration: 1,475 Days

Notice to Proceed: 5-Aug-21

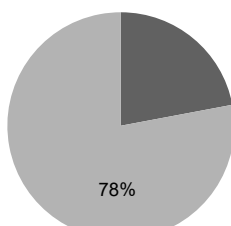
Contract Completion: 19-Aug-25

Cost



■ Amount Remaining
■ Billed to Date

Time



■ Time Remaining
■ Time Expended

Intermediate High Pipeline Improvements CP2

Project Summary: This contract includes replacement and hydraulic pipe size increase from 16 to 20 inches of 5,900 linear feet for Section 25 and the cleaning and lining rehabilitation of 3,300 linear feet of Section 24 along with replacement of revenue Meters 2 and 40 (both serving Watertown). The majority of this work is located in Watertown with minor work in Newton at the crossing of the Charles River. This project also reroutes Section 25 from Common Street in Watertown, to Bellevue Road, Russell Avenue and extending along Mount Auburn Street per the request of the City of Watertown following road reconstruction work in Common Street.

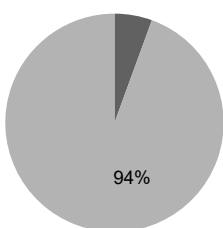
Contract Amount: \$21,946,845.02

Contract Duration: 912 Days

Notice to Proceed: 20-Jul-23

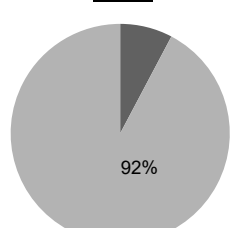
Contract Completion: 17-Jan-26

Cost



■ Amount Remaining
■ Billed to Date

Time



■ Time Remaining
■ Time Expended

Construction of Water Mains – Section 101

Project Summary: This construction contract consists of a new 36-inch diameter water main and appurtenances extending from MWRA's Meter 182 at the Waltham/Lexington town line down Lexington Street to Totten Pond Road, where it will connect to Waltham's water system. This new water main will provide sufficient capacity to maintain water service to Waltham during the anticipated shutdown of MWRA's WASM 3 pipeline and the Lexington Street Pumping Station for future rehabilitation.

Contract Amount: \$36,717,495.15

Contract Duration: 1175 Days

Notice to Proceed: 12-Jul-22

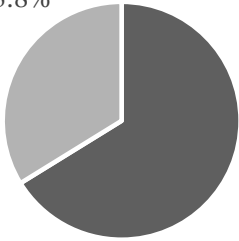
Contract Completion: 29-Sep-25

Deer Island Wastewater Treatment Plant Projects In Construction

4th Quarter – FY25

Cost

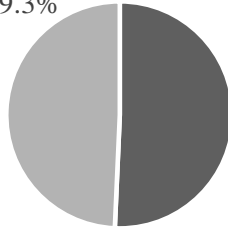
33.8%



- Amount Remaining
- Billed to Date

Time

49.3%



- Time Remaining
- Time Expended

7395 - Clarifier Rehabilitation Phase 2

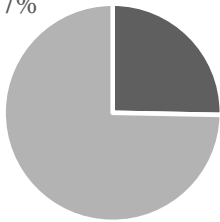
Project Summary: This project involves the replacement of the original remaining scum and sludge equipment, as follows: over 400 Primary Clarifier influent, effluent, and dewatering gates; 384 primary effluent cross channel gate actuators; approximately 450 secondary scum influent gates and actuators; wear strip rails, 768 head shaft and idler sprockets; over 3000 linear feet of influent channel aerations piping systems; 360 head shafts collector drives and chains; return sludge line vent piping; approximately 400 concrete and aluminum hatches and associated electrical and control systems.

Contract Amount: \$289,595,007.00 **Contract Duration:** 1710 Days

Notice to Proceed: 10-Mar-23 **Contract Completion:** 14-Nov-27

Cost

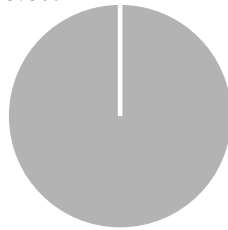
74.7%



- Amount Remaining
- Billed to Date

Time

100.0%



- Time Remaining
- Time Expended

7734 - Deer Island Treatment Plant Roofing

Replacement at Various Buildings

Project Summary: This project includes the removal and replacement of 86,500 square feet of roofing on the following buildings: Cryogenic Compressor; Gravity Thickener Complex; Thermal/Power Plant; Main Switchgear; and Digester Complex Modules 1, 2 and 3. Buildings to be reroofed in the Digester Complex include: Module 1- Digester Equipment Complex Roof, Elevator/Stair Lobby Roof and Elevator Penthouse Roof; Module 2 - Digester Equipment Complex Roof; and Module 3- Digester Equipment Complex Roof and Elevator Penthouse Roof.

Contract Amount: \$8,919,746.15 **Contract Duration:** 540 Days

Notice to Proceed: 28-Dec-2023 **Contract Completion:** 20-Jun-2025

CSO Control Program

4th Quarter – FY25

Overview

In compliance with milestones in the Federal District Court Order, all 35 projects in the CSO Long-Term Control Plan (LTCP) were complete as of December 2015. Subsequently, MWRA completed a multi-year CSO post-construction monitoring program and performance assessment, filing the Final CSO Post Construction Monitoring Program and Performance Assessment Report with the Court and submitted copies to EPA and DEP in December 2021. April 2024 Annual report shows an 88% reduction in CSO in a typical year, from 3.3 billion gallons to 397 million gallons, with 78 of 86 outfalls meet or materially meet the LTCP goals for CSO activation frequency and volume. MWRA and its member CSO communities are moving forward with plans to bring 6 CSOs in line with the LTCP goals. With respect to the remaining CSO outfalls, MWRA and its CSO Consultant (AECOM) continue to investigate alternative to move closer to LTCP goals.

MWRA CSO Performance Assessment

- In November 2017, MWRA signed a contract for CSO Post-Construction Monitoring and Performance Assessment with AECOM Technical Services, Inc. The contract includes CSO inspections, overflow metering, hydraulic modeling, system performance assessments and water quality impact assessments, culminating in the submission of a report to EPA and MassDEP in December 2021 verifying whether the LTCP goals are attained.
- AECOM continues to support efforts to advance projects identified not to meet performance goals the CSOs and evaluate alternatives for these challenging sites.
- MWRA submitted a Supplement to the Post-Construction Monitoring and Performance Assessment report in December 2024, completing its court ordered obligation.

Court Ordered Levels of CSO Control

In this quarter MWRA held its last scheduled meetings with CLF and the DEP/EPA . The last meeting completing our obligation was jointly held with CLF and DEP/EPA on 12/13/2024.

Ongoing Projects as of July 1, 2025

- *East Boston CSO Control*: BWSC completed Phase 3 of East Boston CSO Control in spring 2024. Phase 4 includes five sewer separation contracts, finishing by 2030. The first contract will be advertised in spring 2025, with work starting in July.
- *South Boston*: Contract 1 completed September 2023, Contract 2 projected to be completed by 4/6/2026, Contract 3 is ongoing and Contract 4 still in design.
- *Somerville Marginal New Pipe Connection* - the Somerville Marginal New Pipe Connection, stemming from a variance optimization study, will add a controlled pipe from the CSO influent conduit to the interceptor. The \$4.4M project, under Contract 7985 with RJV, aims to reduce CSO activation and volume. NTP was issued on 10/26/24, with mobilization set for April 2025 and completion by December 2025.

- *Roxbury Sewer Separation- Phase 3 work complete paving remains to be completed spring 2024.*
- *Fort Point Channel and Mystic Confluence* – The FAA/MOU was amended on 12/13/23 to add BOS013, then revised on 1/29/24 to increase funding to \$11.9M due to higher-than-expected construction costs. All work has been completed working with BWSC to close out the contract before December 31, 2025.
- *CAM005 weir will be raised and lengthened to reduce CSO activation and frequency. A Draft Preliminary Design workshop was held on 12/19/24 with Cambridge DPW and Mount Auburn Hospital. The task order to modify the RE-051 weir wall is at the 100% design. Advertise 8/7/2025; NTP 10/6/2025*

CSO variances

MassDEP has issued multi-year CSO variances allowing MWRA, Cambridge, and Somerville to continue limited CSO discharges to Alewife Brook, the Upper Mystic River, and the Charles River lower basin. The 2024 variances require Updated LTCPs, addressing CSO control levels, cost evaluations, performance improvements, public participation, and affordability.

- Plan Timeline: Draft Updated LTCP due December 2025, Final Plan due December 2027.
- Approval & Schedule: MassDEP and EPA conditionally approved MWRA's Scope of Work on 5/11/2022. A schedule extension was submitted on 9/22/22, and in May 2023, EPA/MassDEP confirmed adherence to the revised schedule.
- Meetings & Public Engagement: Monthly meetings track progress, with the last held on 4/9/2025 and the next on 5/14/2025. A public meeting on Alternatives Development and Financial Capability Analysis was held on 1/22/2025. Next public meeting scheduled for September 2025.
- Completed & Upcoming Studies:
 - o Alewife PS Optimization (submitted 4/27/2021)
 - o Somerville Marginal CSO Reduction Study (submitted 12/27/2021)
 - o Alewife Brook & Charles River System Optimization (submitted 12/28/2022)
 - o MWRA CSO Variances Optimization Measures Report (submitted 1/31/2023)
 - o Odor control feasibility study complete and submitted 6/2/2025
 - o Real-time notification study (due 8/31/2025)
 - o Floatables control study (due 10/1/2025)

CIP Expenditures

4th Quarter – FY25

FY25 Capital Improvement Program Expenditure Variances through June by Program - (\$ in thousands)				
Program	FY25 Budget Through June	FY25 Actual Through June	Variance Amount	Variance Percent
Wastewater	\$176,722	\$102,115	(\$74,608)	-42%
Waterworks	\$145,813	\$96,620	(\$49,192)	-33%
Business and Operations Support	\$24,813	\$8,388	(\$16,425)	-66%
Total	\$347,348	\$207,123	(\$140,225)	-40%

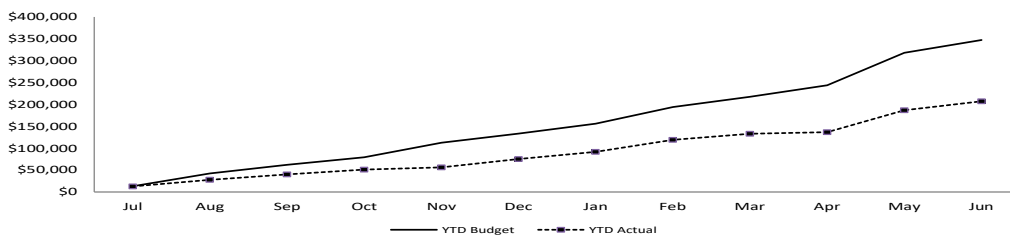
Wastewater:

- Spending was less than planned in Wastewater primarily due to less than anticipated distributions for the I/I Local Financial Assistance program, schedule changes for the Siphon Structure Rehab, Caruso, DeLauri & Framingham Fuel Tank Replacements, Ward St. & Columbus Park Headworks Design/CA, Interceptor Renewal 7 REI, DITP Fire Alarm System Replacement, and Screw Pump Replacement Phase 2 Construction, later than anticipated awards for the Clinton Digester Cover Replacement and Hayes Pump Station Rehab contracts, lower than projected task order work for DITP As-Needed Design contracts, competing project priorities for South System Pump Station VFD Replacement Design/ESDC/REI, Notice-to-Proceed issued later than anticipated for Somerville Marginal New Pipe Connections, and contractor was delayed in submitting dive and safety plan for West Roxbury Tunnel Inspection.
- This less than planned spending was partially offset by greater than planned contractor progress and additional equipment delivery sooner than anticipated for Deer Island Treatment Plant Clarifier Rehabilitation Phase 2 Construction, work planned in FY24 that was completed in FY25 for Braintree-Weymouth Improvements Design/CS and Construction, and greater than planned consultant progress for Digester & Storage Tank Rehabilitation Design/ESDC.

Water:

- Spending was less than planned in Waterworks primarily due to less than anticipated requests for community loans for the Local Water Pipeline Financial Assistance Program, contract awards later than anticipated for the Walnut Hill Steel Water Tank Painting and Improvements, Section 75A and 47 Extension CP-1, Section 56 Replacement/Saugus River, and Metropolitan Water Tunnel Program Final Design/ESDC, less than anticipated contractor progress for Section 89/29 Replacement, lower than projected spending for Metropolitan Water Tunnel Program Support Services, updated schedules for the Quabbin Maintenance Garage/Wash Bay/Storage Building – Construction, Northern Intermediate High Storage Design CA/RI, and Beacon St. Line - Design/ESDC, less than anticipated contractor progress for Section 89/29 Replacement, lower than projected spending for Metropolitan Water Tunnel Program Support Services, lower than projected task order work for CWTP Technical Assistance, less than planned consultant work for the WASM 3 MEPA/Design/CA/RI contract, longer lead-time on some larger items and a change in design for the multi-orifice valve for the Wachusett Lower Gatehouse Pipe Replacement project, and less than planned land purchases for Watershed Land Acquisition.
- This less than planned spending was partially offset by contractor progress for Waltham Section 101 Pipeline Construction and CP-2 Shaft 5, payment to Eversource for the infrastructure to supply electricity to a shaft site under the Metropolitan Water Tunnel Program Administration, Legal & Public Outreach contract, FY24 planned work performed in FY25 for Northern Extra High CP-1 Improvements, and easements paid for Section 56.

Budget vs. Actual CIP Expenditures (\$ in thousands)
Total FY25 CIP Budget of \$347,348



Construction Fund Management

All payments to support the capital program are made from the Construction Fund. Sources of fund in-flows include bond proceeds, commercial paper, SRF reimbursements, loan repayments by municipalities, and current revenue. Accurate estimates of cash withdrawals and grant payments (both of which are derived from CIP spending projections) facilitate planning for future borrowings and maintaining an appropriate construction fund balance.

Cash Balance as of 5/31/25	\$151 million
Unused capacity under the debt cap:	\$2.5 billion
Estimated date for exhausting construction fund without new borrowing:	August 2025
Estimated date for debt cap increase to support new borrowing:	Not anticipated at this time
Commercial paper/Revolving loan outstanding:	\$ 139.5 million
Commercial paper capacity / Revolving Loan	\$ 58 million
Budgeted FY25 Cash Flow Expectancy*:	\$245 million

DRINKING WATER QUALITY AND SUPPLY

Source Water – Microbial Results and UV Absorbance

4th Quarter – FY25

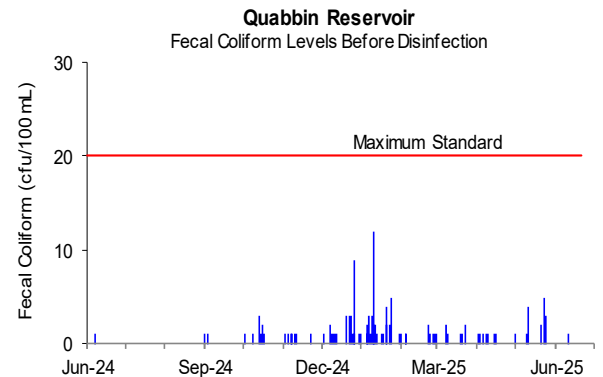
Source Water – Microbial Results

Total coliform bacteria are monitored in both source and treated water to provide an indication of overall bacteriological activity. Most coliforms are harmless. However, fecal coliforms, a subclass of the coliform group, are identified by their growth at temperatures comparable to those in the intestinal tract of mammals. They act as indicators of possible fecal contamination. The Surface Water Treatment Rule for unfiltered water supplies allows for no more than 10% of source water samples prior to disinfection over any six-month period to have more than 20 fecal coliforms per 100mL.

Sample Site: Quabbin Reservoir

Quabbin Reservoir water is sampled at the William A. Brutsch Water Treatment Facility raw water tap before being treated and entering the CVA system.

All samples collected during the quarter were below 20 cfu/100mL. **For the current six-month period, 0.0% of the samples have exceeded a count of 20 cfu/100mL.**

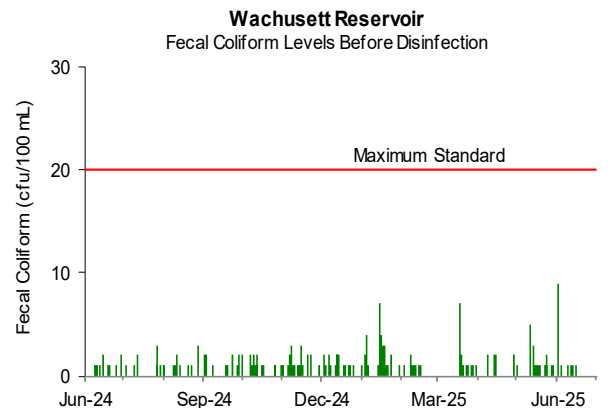


Sample Site: Wachusett Reservoir

Wachusett Reservoir water is sampled at the CWTP raw water tap in Marlborough before being treated and entering the MetroWest/Metropolitan Boston systems.

In the wintertime when smaller water bodies near Wachusett Reservoir freeze up, many waterfowl will roost in the main body of the reservoir - which freezes later. This increased bird activity tends to increase fecal coliform counts. DCR has an active bird harassment program to move the birds away from the intake area.

All samples collected during the quarter were below 20 cfu/100mL. **For the current six-month period, 0.0% of the samples exceeded a count of 20 cfu/100mL.**

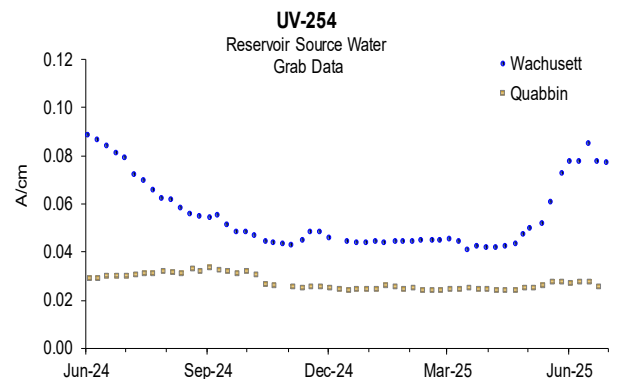


Source Water – UV Absorbance

UV Absorbance at 254nm wavelength (UV-254), is a measure of the amount and reactivity of natural organic material in source water. Higher UV-254 levels cause increased ozone and chlorine demand resulting in the need for higher ozone and chlorine doses, and can increase the level of disinfection by-products. UV-254 is impacted by tributary flows, water age, sunlight and other factors.

Quabbin Reservoir UV-254 levels averaged 0.026 A/cm for the quarter.

Wachusett Reservoir UV-254 levels averaged 0.062 A/cm for the quarter.



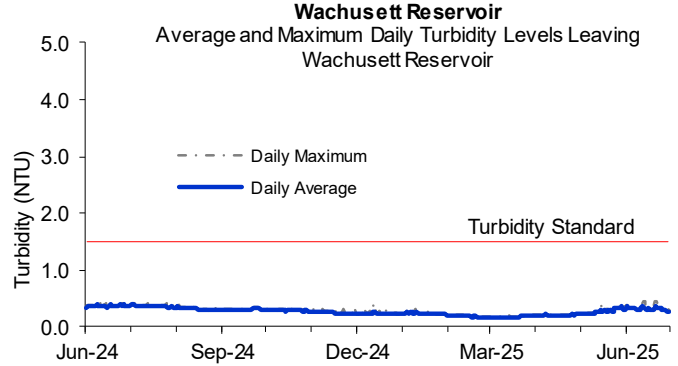
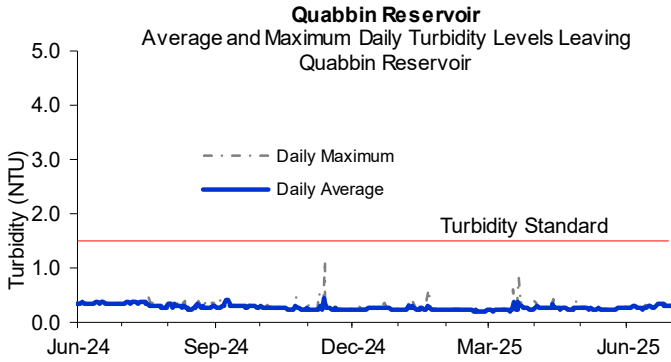
Source Water – Turbidity

4th Quarter – FY25

Turbidity is a measure of suspended and colloidal particles including clay, silt, organic and inorganic matter, algae and microorganisms. The effects of turbidity depend on the nature of the matter that causes the turbidity. High levels of particulate matter may have a higher disinfectant demand or may protect bacteria from disinfection effects, thereby interfering with the disinfectant residual throughout the distribution system.

There are two standards for turbidity: all water must be below five NTU (Nephelometric Turbidity Units), and water only can be above one NTU if it does not interfere with effective disinfection.

Turbidity of Quabbin Reservoir water is monitored continuously at the Brutsch Water Treatment Facility (BWTF) before UV and chlorine disinfection. Turbidity of Wachusett Reservoir is monitored continuously at the Carroll Water Treatment Plant (CWTP) before ozonation and UV disinfection. Maximum turbidity results at Quabbin and Wachusett were within DEP standards for the quarter.

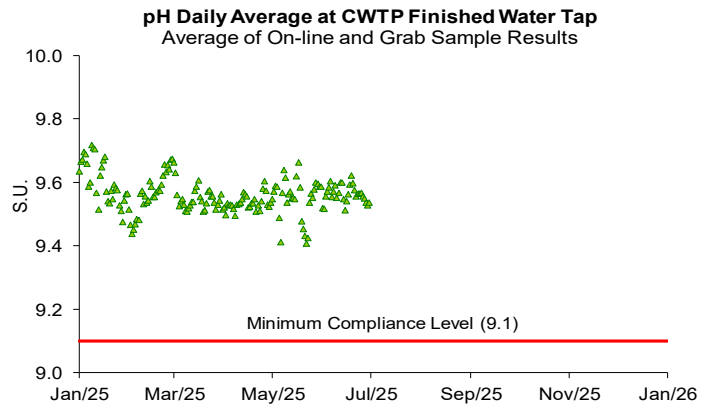
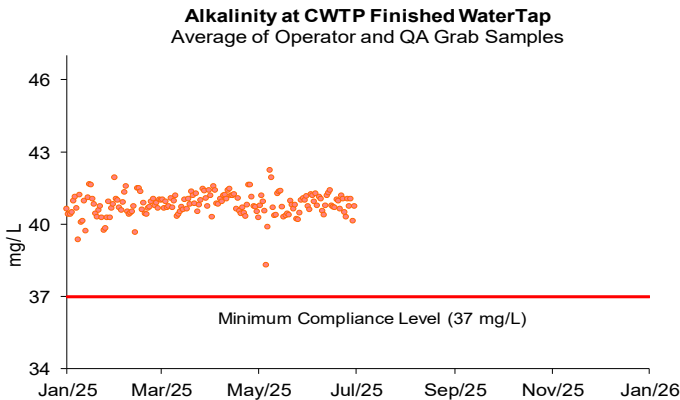


Treated Water – pH and Alkalinity Compliance

MWRA adjusts the alkalinity and pH of Wachusett water at CWTP to reduce its corrosivity, which minimizes the leaching of lead and copper from service lines and home plumbing systems into the water. MWRA tests finished water pH and alkalinity daily at the CWTP's Fin B sampling tap. MWRA's target for distribution system pH is 9.3; the target for alkalinity is 40 mg/l. Per DEP requirements, CWTP finished water samples have a minimum compliance level of 9.1 for pH and 37 mg/L for alkalinity. Samples from 27 distribution system locations have a minimum compliance level of 9.0 for pH and 37 mg/L for alkalinity. Results must not be below these levels for more than nine days in a six month period. Distribution system samples are collected in March, June, September, and December.

Each CVA community provides its own corrosion control treatment. See the CVA report: <https://www.mwra.com/node/6548>.

Quarterly distribution system samples were collected over a course of two weeks in June. Distribution system sample pH ranged from 9.4 to 9.6 and alkalinity ranged from 41 to 44 mg/L. No sample results were below DEP limits for this quarter.



Treated Water – Disinfection Effectiveness

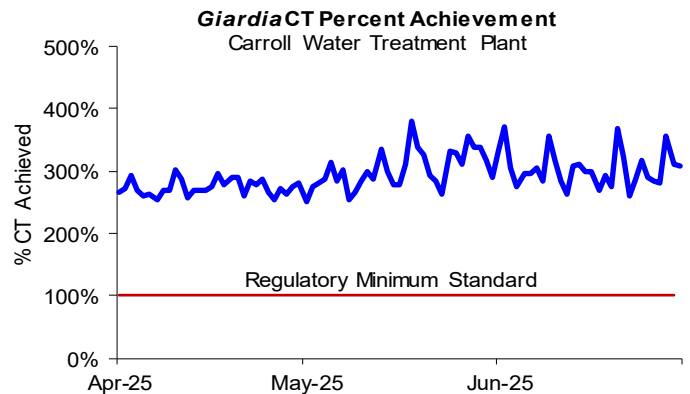
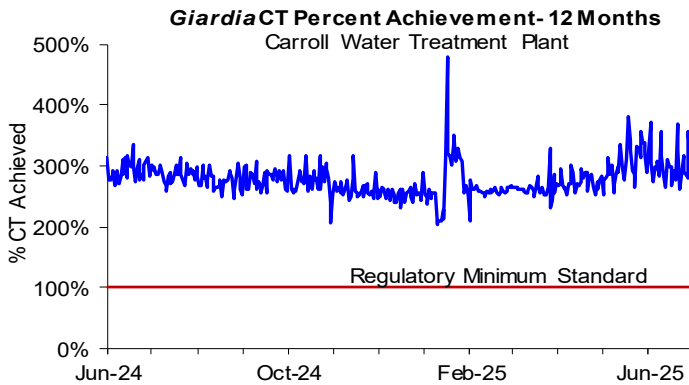
4th Quarter – FY25

At the Carroll Water Treatment Plant (CWTP), MWRA meets the required 99.9% (3-log) inactivation of *Giardia* using ozone (reported as CT: concentration of disinfectant x contact time) and the required 99% (2-log) inactivation of *Cryptosporidium* using UV (reported as IT: intensity of UV x time). MWRA calculates inactivation rates hourly and reports *Giardia* inactivation at maximum flow and *Cryptosporidium* inactivation at minimum UV dose. MWRA must meet 100% of required CT and IT.

CT achievement for *Giardia* assures CT achievement for viruses, which have a lower CT requirement. For *Cryptosporidium*, there is also an “off-spec” requirement. Off-spec water is water that has not reached the full required UV dose or if the UV reactor is operated outside its validated ranges. No more than 5% off-spec water is allowed in a month.

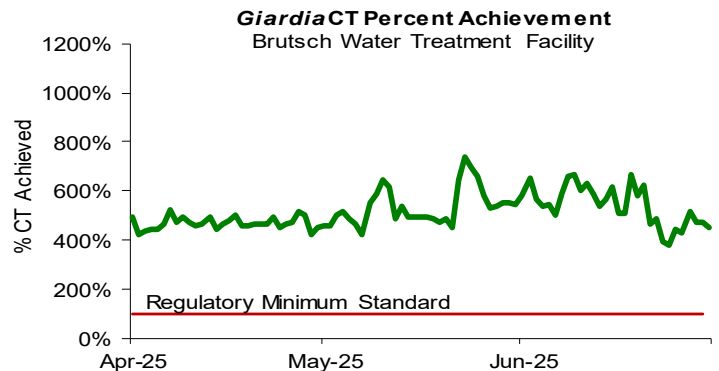
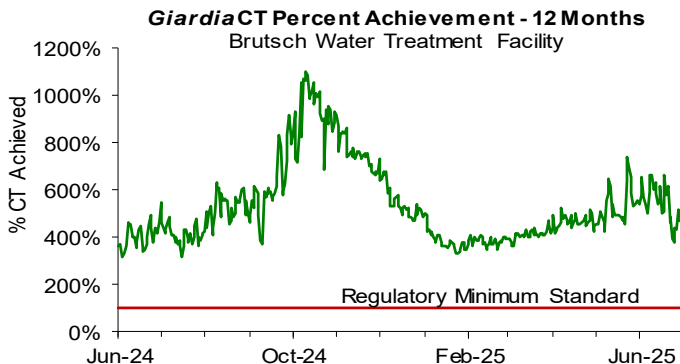
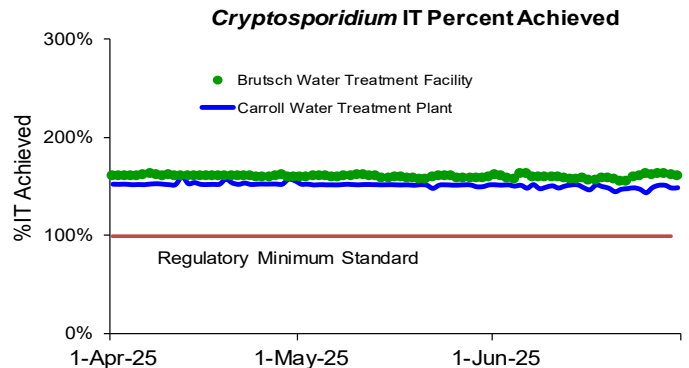
Wachusett Reservoir – MetroWest/Metro Boston Supply:

- The chlorine dose at the CWTP varied between 2.80 and 4.35 mg/L for the quarter.
- Ozone dose at the CWTP varied between 1.1 to 3.2 mg/L for the quarter.
- Giardia* CT was maintained above 100% at all times the plant was providing water into the distribution system this quarter, as well as every day for the last fiscal year.
- Cryptosporidium* IT was maintained above 100% for the quarter. Off-spec water was less than 5%.
- The CWTP SCADA Improvements project is progressing with the cutover of process equipment and data collection for the Train B ozone contactors. This can be seen in January 2025. The project is expected to continue into the spring of 2026.



Quabbin Reservoir (CVA Supply) at: Brutsch Water Treatment Facility

- The chlorine dose at BWTF is adjusted in order to achieve MWRA's seasonal target of 0.75 - 0.85 mg/L (November 1 – May 31) and 0.85 - 1.05 mg/L (June 1 – October 31) at Ludlow Monitoring Station.
- The chlorine dose at BWTF varied between 1.35 to 1.72 mg/L for the quarter.
- Giardia* CT was maintained above 100% at all times the plant was providing water into the distribution system for the quarter.
- Cryptosporidium* IT was maintained above 100% for the quarter. Off-spec water was less than 5%.

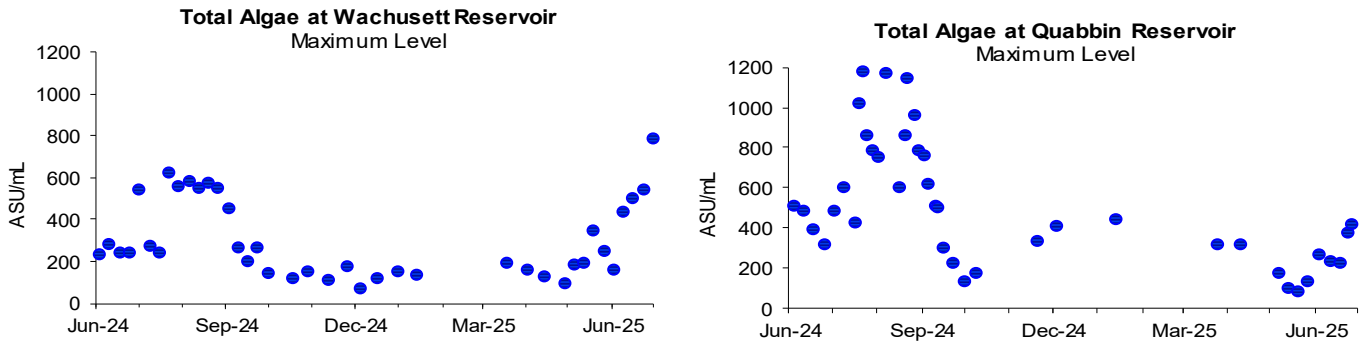


Source Water - Algae 4th Quarter – FY25

Algae levels in the Wachusett and Quabbin Reservoir are monitored by DCR and MWRA. These results, along with taste and odor complaints, are used to make decisions on source water treatment for algae control.

Taste and odor complaints at the tap may be due to algae, which originate in source reservoirs, typically in trace amounts. Occasionally, a particular species grows rapidly, increasing its concentration in water. When *Synura*, *Anabaena*, or other nuisance algae bloom, MWRA may treat the reservoirs with copper sulfate, an algaecide. During the winter and spring, diatom numbers may increase. While not a taste and odor concern, consumers that use filters may notice a more frequent need to change their filters.

In the 4th quarter, there were no complaints which may be related to algae reported from the local water departments.



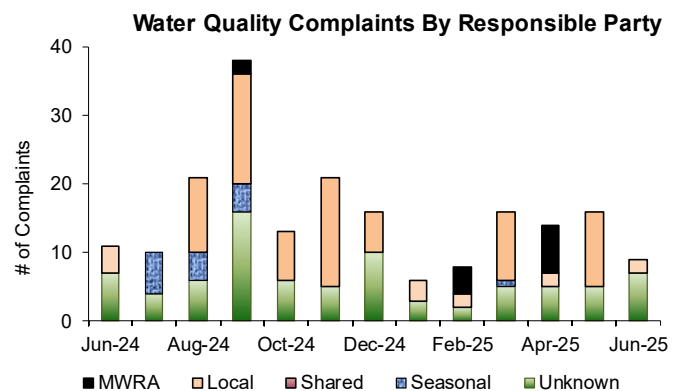
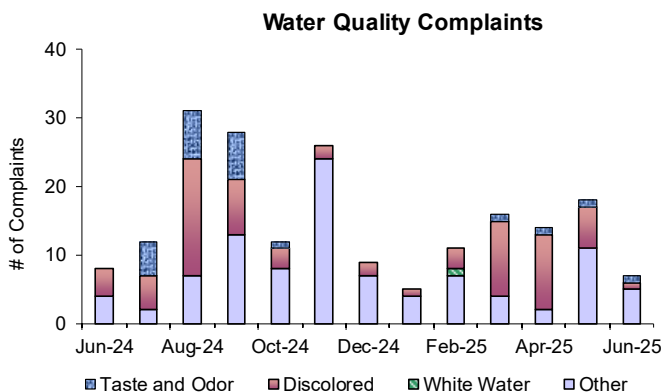
Drinking Water Quality Customer Complaints: Taste, Odor, or Appearance

MWRA collects information on water quality complaints that typically fall into four categories: 1) discoloration due to MWRA or local pipeline work; 2) taste and odor due to algae blooms in reservoirs or chlorine in the water; 3) white water caused by changes in pressure or temperature that traps air bubbles in the water; or 4) "other" complaints is a broad category and can include conditions such as low pressure, no water, water main or service line disruptions without discoloration, clogged filters, or other issues.

MWRA routinely contacts communities to classify and tabulate water complaints from customers. This count, reflecting only telephone calls to towns, probably captures only a fraction of the total number of customer complaints. Field Operations staff have improved data collection and reporting by keeping track of more kinds of complaints, tracking complaints to street addresses and circulating results internally on a daily basis.

Communities reported 39 complaints during the quarter compared to 48 complaints from 4th Quarter of FY24. Of these complaints, 18 were for "discolored water", 3 was for "taste and odor", and 18 were for "other". Of these complaints, 15 were local community issues, 7 were an MWRA issue, and 17 were unknown in origin.

- April: 6 discolored water complaints in Stoneham were reported when to a water main break occurred due to a MWRA main reactivation. Local DPW and MWRA staff repaired the water main. Another discolored water complaint was reported when MWRA reconfigured the system for the NIH zones. Somerville reported a low-pressure complaint due to valve exercising in the area.
- May: Lynnfield WD and Somerville reported discolored water complaints due to local water main breaks. Marlborough reported a discolored water complaint which was due to hydrant flushing. Somerville and Marblehead reported low pressure and no water complaints which were found to be internal to the buildings. Arlington and Somerville reported no water complaints due to local water main breaks.
- June: Five communities reported odor, clogged filter, particles or low-pressure complaints which are being followed up by the local DPW and MWRA staff.



Bacteria & Chlorine Residual Results for Communities in MWRA Testing Program

4th Quarter – FY25

While all communities collect bacteria samples and chlorine residual data for the Total Coliform Rule (TCR), data from the 44 systems that use MWRA’s Laboratory are reported below.

The MWRA TCR program has 144 sampling locations. These locations include sites along MWRA’s transmission system, water storage tanks and pumping stations, as well as a subset of the community TCR locations.

Samples are tested for total coliform and *Escherichia coli* (*E.coli*). *E.coli* is a specific coliform species whose presence likely indicates potential contamination of fecal origin.

If *E.coli* are detected in a drinking water sample, this is considered evidence of a potential public health concern. Public notification is required if repeat tests confirm the presence of *E.coli* or total coliform.

Total coliform provide a general indication of the sanitary condition of a water supply. If total coliform are detected in more than 5% of samples in a month (or if more than one sample is positive when less than 40 samples are collected), the water system is required to investigate the possible source/cause with a Level 1 or 2 Assessment, and fix any identified problems.

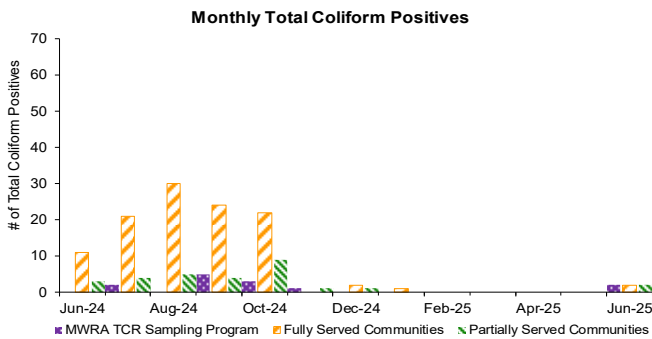
A disinfectant residual is intended to maintain the sanitary integrity of the water; MWRA considers a residual of 0.2 mg/L a minimum target level at all points in the distribution system.

Highlights

In the fourth quarter, four of the 6,443 fully and partially served samples (0.06%) tested positive for total coliform. Two of the 1854 Shared Community/MWRA samples (0.11%) tested positive for total coliform. None of the 404 CVA/MWRA community samples tested positive for total coliform. Bedford was required to perform a Level 2 Assessment in June. No samples confirmed for *E.coli*. 0.1% of the Fully Served community quarterly samples had chlorine residuals lower than 0.2 mg/L.

NOTES:

- a) MWRA total coliform and chlorine residual results include data from community locations. In most cases these community results are indicative of MWRA water as it enters the community system; however, some are strongly influenced by local pipe conditions. Residuals in the MWRA system are typically between 1.0 and 2.8 mg/L.
- b) The number of samples collected depends on the population served and the number of repeat samples required.
- c) These communities are partially supplied, and may mix their chlorinated supply with MWRA chloraminated supply.
- d) Part of the Chicopee Valley Aqueduct System. Free chlorine system.



		Total Coliform		E.coli Positive	# Assessment Required	
		# Samples (b)	# (%) Positive			
MWRA	a	MWRA Locations	396	1 (0.3%)	0	
		Shared Community/MWRA sites	1458	1 (0.1%)	0	
		Total: MWRA	1854	2 (0.11%)	0	No
Fully Served		ARLINGTON	169	0 (0%)	0	
		BELMONT	104	0 (0%)	0	
		BOSTON	779	0 (0%)	0	
		BROOKLINE	237	0 (0%)	0	
		CHELSEA	169	0 (0%)	0	
		DEER ISLAND	52	0 (0%)	0	
		EVERETT	169	0 (0%)	0	
		FRAMINGHAM	276	1 (0.4%)	0	No
		LEXINGTON	146	0 (0%)	0	
		LYNNFIELD	18	0 (0%)	0	
		MALDEN	234	0 (0%)	0	
		MARBLEHEAD	72	0 (0%)	0	
		MARLBOROUGH	153	0 (0%)	0	
		MEDFORD	216	0 (0%)	0	
		MELROSE	117	0 (0%)	0	
		MILTON	102	0 (0%)	0	
		NAHANT	30	0 (0%)	0	
		NEWTON	279	0 (0%)	0	
		NORTHBOROUGH	48	0 (0%)	0	
		NORWOOD	99	0 (0%)	0	
		QUINCY	306	0 (0%)	0	
		READING	143	0 (0%)	0	
		REVERE	234	0 (0%)	0	
		SAUGUS	104	0 (0%)	0	
		SOMERVILLE	252	0 (0%)	0	
		SOUTHBOROUGH	30	0 (0%)	0	
		STONEHAM	91	0 (0%)	0	
		SWAMPSCOTT	57	0 (0%)	0	
		WALTHAM	218	0 (0%)	0	
		WATERTOWN	143	0 (0%)	0	
		WESTON	45	0 (0%)	0	
		WINTHROP	69	1 (1.4%)	0	No
	Total: Fully Served	5161	2 (0.04%)			
Partially Served		BEDFORD	60	2 (3.3%)	0	Yes
		BURLINGTON	139	0 (0%)	0	
		CANTON	90	0 (0%)	0	
		HANSCOM AFB	32	0 (0%)	0	
		NEEDHAM	123	0 (0%)	0	
		PEABODY	219	0 (0%)	0	
		WAKEFIELD	138	0 (0%)	0	
		WELLESLEY	105	0 (0%)	0	
		WILMINGTON	87	0 (0%)	0	
		WINCHESTER	94	0 (0%)	0	
		WOBURN	195	0 (0%)	0	
		Total: Partially Served	1282	2 (0.16%)		
	Total: Fully and Partially Served	6443	4 (0.06%)			
CVA		MWRA CVA Locations	104	0 (0%)	0	
		CHICOPEE	195	0 (0%)	0	
		SOUTH HADLEY FD1	60	0 (0%)	0	
		WILBRAHAM	45	0 (0%)	0	
		Total: CVA	404	0 (0%)		

Chlorine Residuals in Fully Served Communities

	2024							2025					
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
% <0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% <0.2	0.2	0.4	0.2	0.2	0.4	0.7	0.4	0.2	0.0	0.0	0.1	0.2	0.0
% <0.5	1.2	1.8	2.0	1.5	2.0	2.5	2.2	1.5	0.8	0.7	0.6	0.5	0.4
% <1.0	5.2	5.8	7.3	5.6	7.6	7.3	5.2	2.7	1.8	1.5	1.3	1.7	3.0
% ≥1.0	94.5	93.5	91.8	93.9	92.0	92.7	94.8	97.3	98.2	98.5	98.7	98.3	97.0

Treated Water Quality: Disinfection By-Product (DBP) Levels in Communities

4th Quarter – FY25

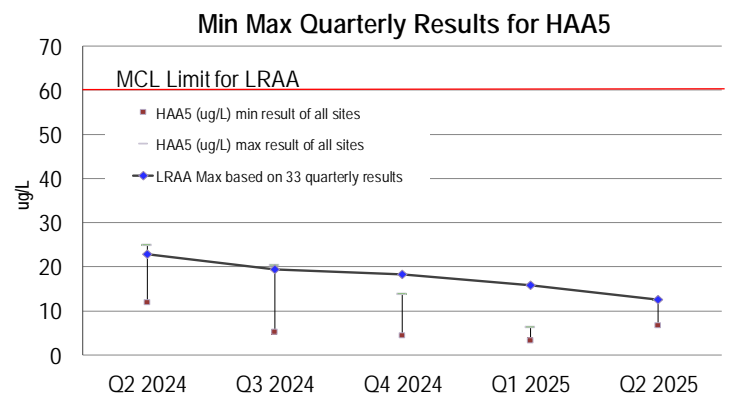
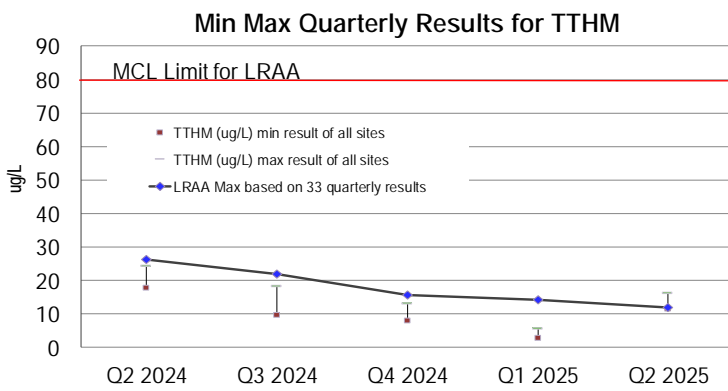
Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s) are by-products of disinfection treatment with chlorine. They are of concern due to their potential adverse health effects at high levels. EPA’s locational running annual average (LRAA) standard, using the most recent four quarterly results, is 80 µg/L for TTHMs and 60 µg/L for HAA5s. The locational running annual average at each individual sampling location must be below the standard.

Bromate is tested monthly as required for water systems, like CWTP, that treat with ozone. EPA’s RAA Maximum Contaminant Level (MCL) standard for bromate is 10 µg/L. The current RAA for Bromate at the CWTP finished water tap is 0.0 µg/L.

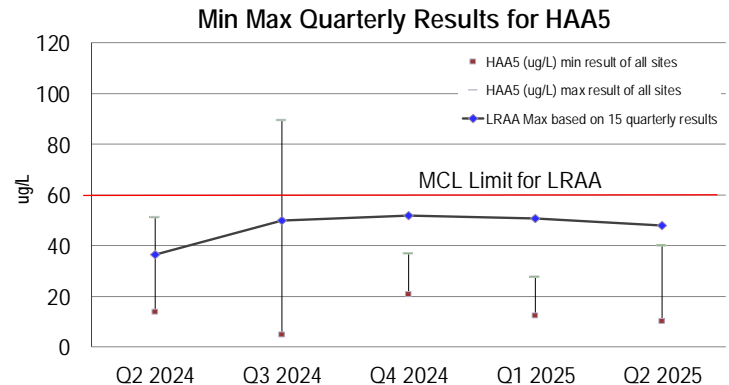
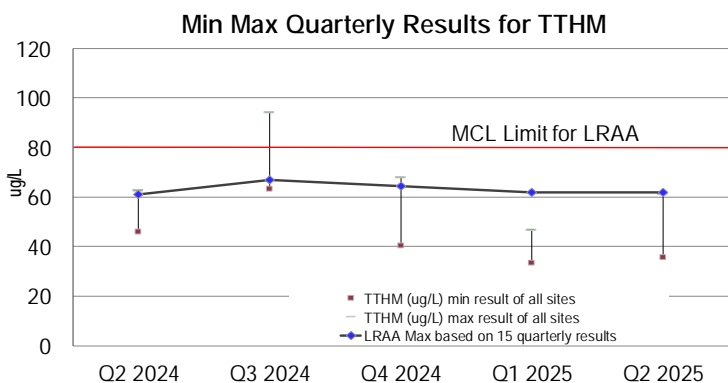
MWRA’s TTHM and HAA5 sampling program includes sampling at 33 MetroWest and Metro Boston communities sites. Partially served and CVA communities are responsible for their own compliance monitoring and are regulated individually.

The LRAA for TTHMs and HAA5s for MWRA’s Compliance Program (represented as the line in the top two graphs below) remains below current standards. The Max LRAA in the quarter for TTHMs = 11.9 µg/L; HAA5s = 12.5 µg/L. No LRAA exceedances or violations occurred this quarter for MetroBoston and for any of the CVA communities.

MetroBoston Disinfection By-Products



CVA Disinfection By-Products (Combined Results Chicopee, Wilbraham, & South Hadley FD1)



Water Supply and Source Water Management

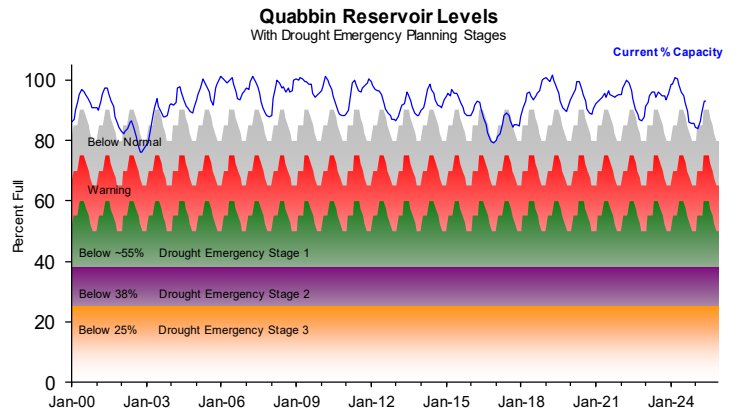
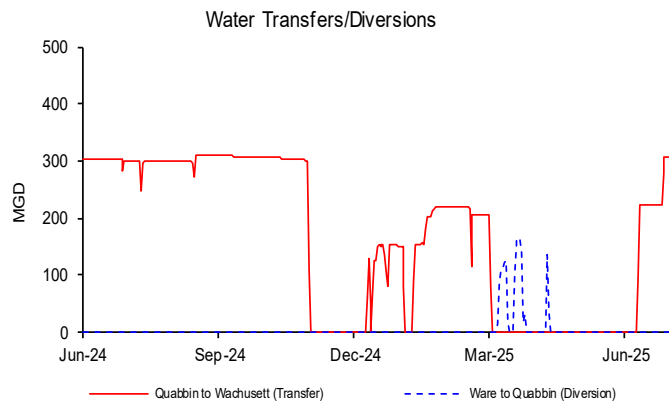
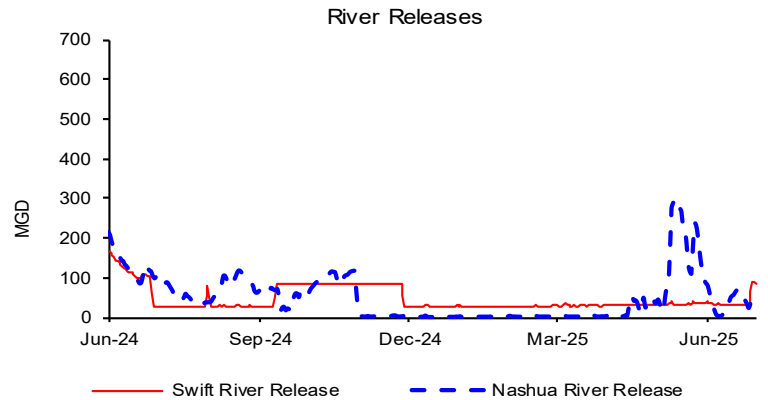
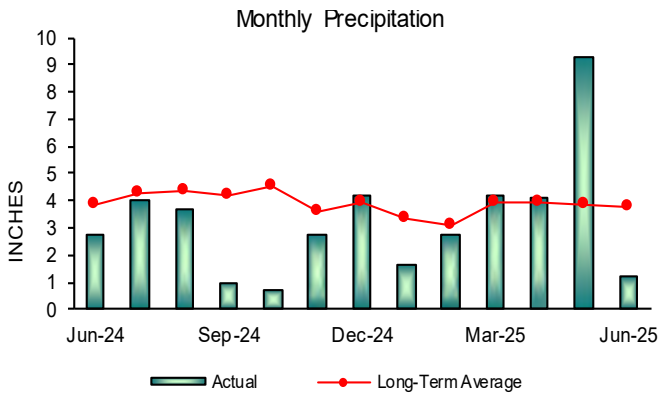
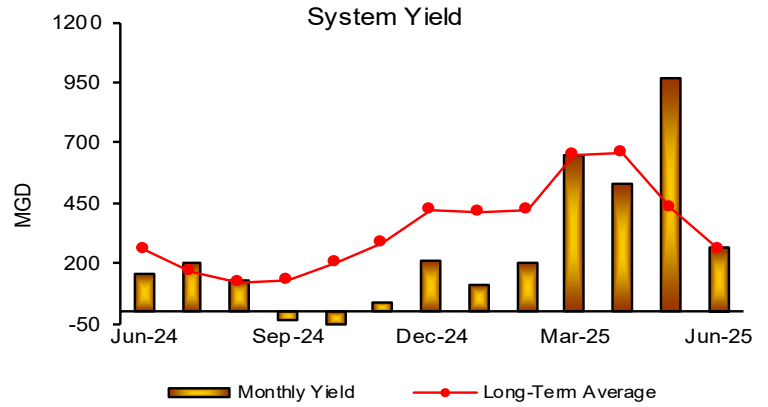
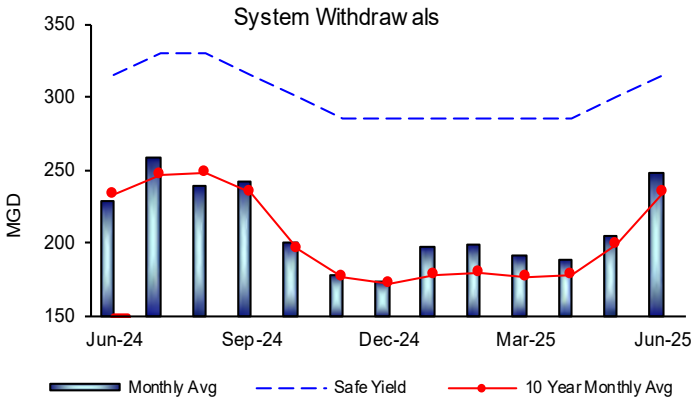
4th Quarter – FY25

Background

A reliable supply of water in MWRA's reservoirs depends on adequate precipitation during the year and seasonal hydrologic inputs from watersheds that surround the reservoirs. Demand for water typically increases with higher summer temperatures and then decreases as temperatures decline. Quabbin Reservoir was designed to effectively supply water to the service areas under a range of climatic conditions and has the ability to endure a range of fluctuations. Wachusett Reservoir serves as a terminal reservoir to meet the daily demands of the Greater Boston area. A key component to this reservoir's operation is the seasonal transfer of Quabbin Reservoir water to enhance water quality during high demand periods. On an annual basis, Quabbin Reservoir accounts for nearly 50% of the water supplied to Greater Boston. The water quality of both reservoirs (as well as the Ware River, which is also part of the System Safe Yield) depend upon implementation of DCR's DEP-approved Watershed Protection Plans. System Yield is defined as the water produced by its sources, and is reported as the net change in water available for water supply and operating requirements.

Outcome

The volume of the Quabbin Reservoir was at 93.0% as of June 30, 2025; a 9.3 % increase for the quarter, which represents a gain of more than 38.4 billion gallons of storage and an increase in elevation of 5.12'. System withdrawal was below its long term quarterly average. Precipitation and Yield were above their long term quarterly averages. Quabbin is in normal operating range for this time of year.



WASTEWATER QUALITY

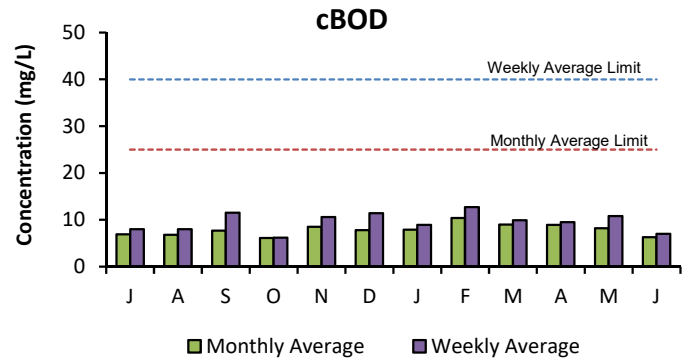
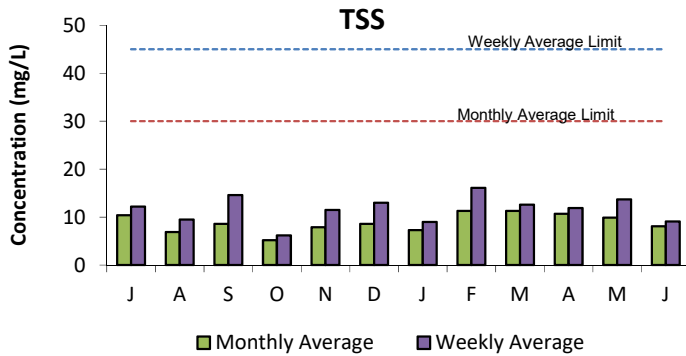
NPDES Permit Compliance: Deer Island Treatment Plant

4th Quarter - FY25

NPDES Permit Limits

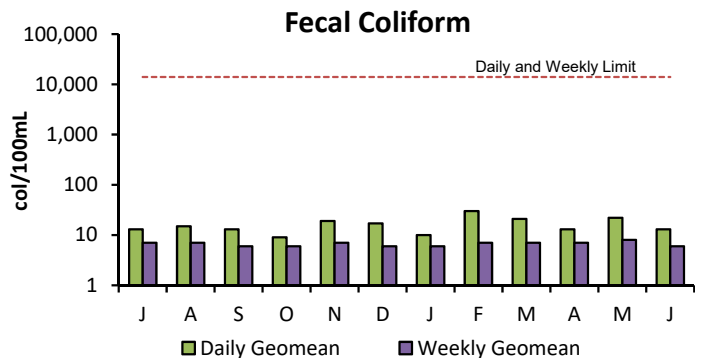
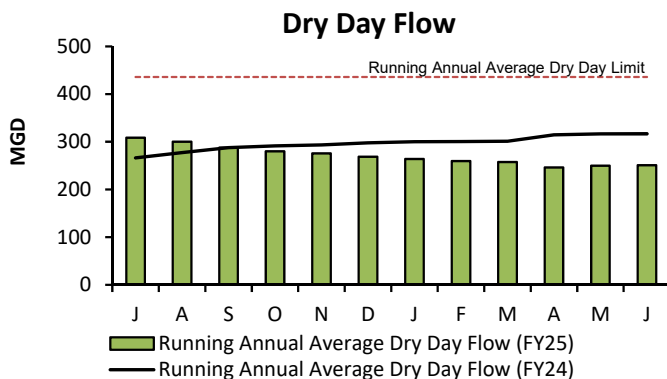
Effluent Characteristics	Units	Limits	April	May	June	4th Quarter Violations	FY25 YTD Violations
Dry Day Flow (365 Day Average):	MGD	436	246.0	249.9	250.9	0	0
cBOD: Monthly Average	mg/L	25	8.9	8.2	6.3	0	0
Weekly Average	mg/L	40	9.5	10.8	7.0	0	0
TSS: Monthly Average	mg/L	30	10.7	9.9	8.1	0	0
Weekly Average	mg/L	45	11.9	13.7	9.1	0	0
TCR: Monthly Average	ug/L	456	0.0	20.0	0.0	0	0
Daily Maximum	ug/L	631	0.0	0.7	0.0	0	0
Fecal Coliform: Daily Geometric Mean	col/100mL	14000	13	22	13	0	0
Weekly Geometric Mean	col/100mL	14000	7	8	6	0	0
% of Samples >14000	%	10	0	0	0	0	0
Consecutive Samples >14000	#	3	0	0	0	0	0
pH:	SU	6.0-9.0	6.5-6.8	6.4-6.8	6.45-6.9	0	0
PCB, Aroclors: Monthly Average	ug/L	0.000045	UNDETECTED			0	0
Acute Toxicity: Inland Silverside	%	≥50	96.1	76.9	42.6	1	1
Mysid Shrimp	%	≥50	>100	>100	>100	0	0
Chronic Toxicity: Inland Silverside	%	≥1.5	-	100	50	0	0
Sea Urchin	%	≥1.5	>100	66	52	0	0

Due to a control failure at the contract lab, the April 2025 chronic inland silverside (*Menidia beryllina*) test was determined to be invalid and therefore was terminated. The June 2025, acute toxicity test for inland silverside resulted in an LC50 of 42.6% and was below the effluent limit of ≥50%. A review of operational conditions and wastewater chemistry did not reveal a direct cause. The chronic test of the same species did not result in toxicity. Massachusetts Bay appears to be unimpacted.



Total Suspended Solids (TSS) in the effluent is a measure of the amount of solids that remain suspended after treatment. All TSS measurements for the 4th Quarter were within permit limits.

Carbonaceous Biochemical Oxygen Demand (cBOD) is a measure of the amount of dissolved oxygen required for the decomposition of organic materials in the environment. All cBOD measurements for the 4th Quarter were within permit limits.



Running Annual Average Dry Day Flow is the average of all dry weather influent flows over the previous 365 days. The Dry Day Flow for the 4th Quarter was well below the permit limit of 436 MGD.

Fecal Coliform is an indicator for the possible presence of pathogens. The levels of these bacteria after disinfection show how effectively the plant is inactivating many forms of disease-causing microorganisms. In the 4th Quarter, all permit conditions for fecal coliform were met.

NPDES Permit Compliance: Clinton Wastewater Treatment Plant

4th Quarter - FY25

Effluent Characteristics		Units	Permit Limits	April	May	June	4th Quarter Violations	FY25 YTD Violations
Dissolved Oxygen	Daily Minimum	mg/L	6	9.1	8.6	8.1	0	0
	Monthly Average Load	lb/d	500	<39	<59	<31	0	0
BOD	Weekly Average Load	lb/d	500	<49	<73	<35	0	0
	Monthly Average	mg/L	20	<1.7	<1.8	<1.6	0	0
	Weekly Average	mg/L	20	<1.9	<2.1	<1.8	0	0
	Monthly Average Minimum	%	85	98.9	98.5	99.1	0	0
pH	Monthly Minimum	S.U.	6.5	6.75	7.15	7.18	0	0
	Monthly Maximum	S.U.	8.3	7.80	7.55	7.68	0	1
TSS	Monthly Average Load	lb/d	500	64.0	103.0	76.0	0	0
	Weekly Average Load	lb/d	500	77.0	130.0	97.0	0	0
	Monthly Average	mg/L	20	2.9	3.2	3.9	0	0
	Weekly Average	mg/L	20	3.2	3.7	4.6	0	0
TSS % removal	Monthly Average Minimum	%	85	98.4	98.2	98.6	0	0
Total Ammonia Nitrogen June 1st - October 31st	Monthly Average	mg/L	2	0.03	0.02	0.02	0	0
	Daily Maximum	mg/L	3	0.06	0.04	0.04	0	0
Total Phosphorus April 1st - October 31st	Monthly Average	lb/d	3.8	1.0	1.1	1.1	0	0
	Monthly Average	mg/L	0.15	0.04	0.04	0.06	0	0
Copper	Monthly Average	ug/L	11.6	8.15	7.61	9.86	0	1
	Daily Maximum	ug/L	14	8.70	9.10	11.30	0	1
Flow	12-month Rolling Average	MGD	3.01	2.14	2.22	2.19	0	4
	Monthly Average	ug/L	20	0.13	<20	0.13	0	0
TCR	Daily Maximum	ug/L	30.4	4.0	<20	4.0	0	0
	Monthly Geometric Mean	cfu/100mL	126	5.0	5.0	5.0	0	0
E. Coli	Daily Maximum	cfu/100mL	409	21.0	7.0	7.0	0	0
	Monthly Average Minimum	%	100	>100	N/A	>100	0	0
Chronic Toxicity ¹	Monthly Average Minimum	%	62.5	100	N/A	100	0	0

There have been seven permit violations in FY25 at the Clinton Treatment Plant.

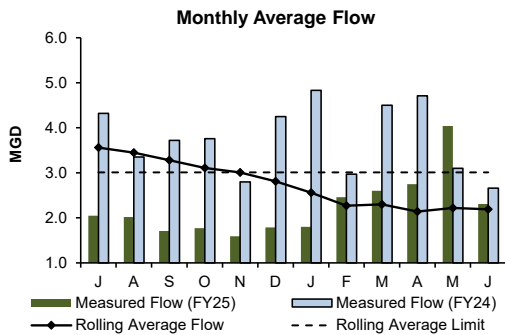
1st Quarter: There were four permit violations in the first quarter, three for 12 month rolling-average flow and one for pH.

2nd Quarter: There were three permit violations in the second quarter, one for 12 month rolling-average flow; one each for copper monthly average and daily maximum.

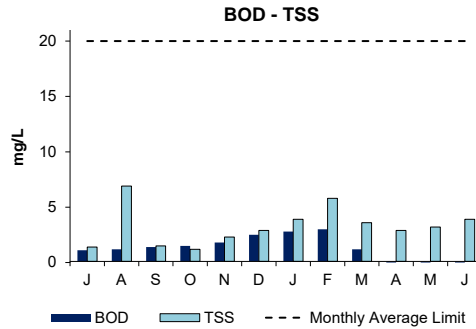
3rd Quarter: There were no permit violations in the third quarter.

4th Quarter: There were no permit violations in the fourth quarter.

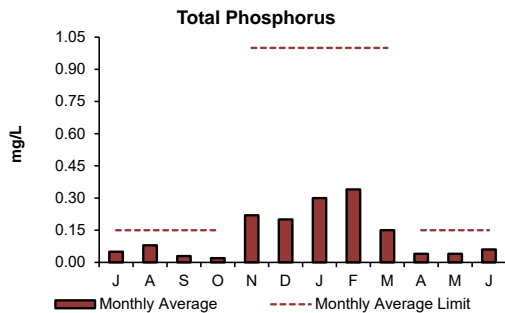
¹ Toxicity testing at the Clinton Treatment Plant is conducted on a quarterly basis.



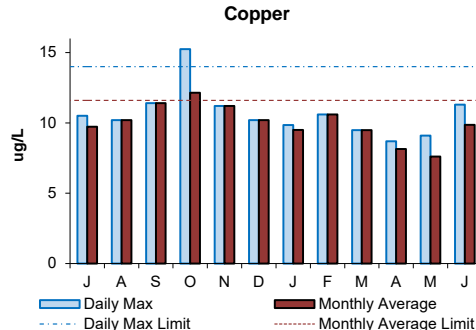
The graph depicts the rolling annual average monthly flow, measured in million gallons per day, exiting the plant. The 12-month rolling average flows during the 4th Quarter were above the permit limit.



Monthly average concentrations of BOD and TSS were below permit limits in the 4th Quarter. The permit monthly limit for both parameters is 20 mg/L.



Total phosphorus limits are most stringent during the growing season from April to October. The 4th Quarter's monthly average concentrations for total phosphorus were below permit limits.

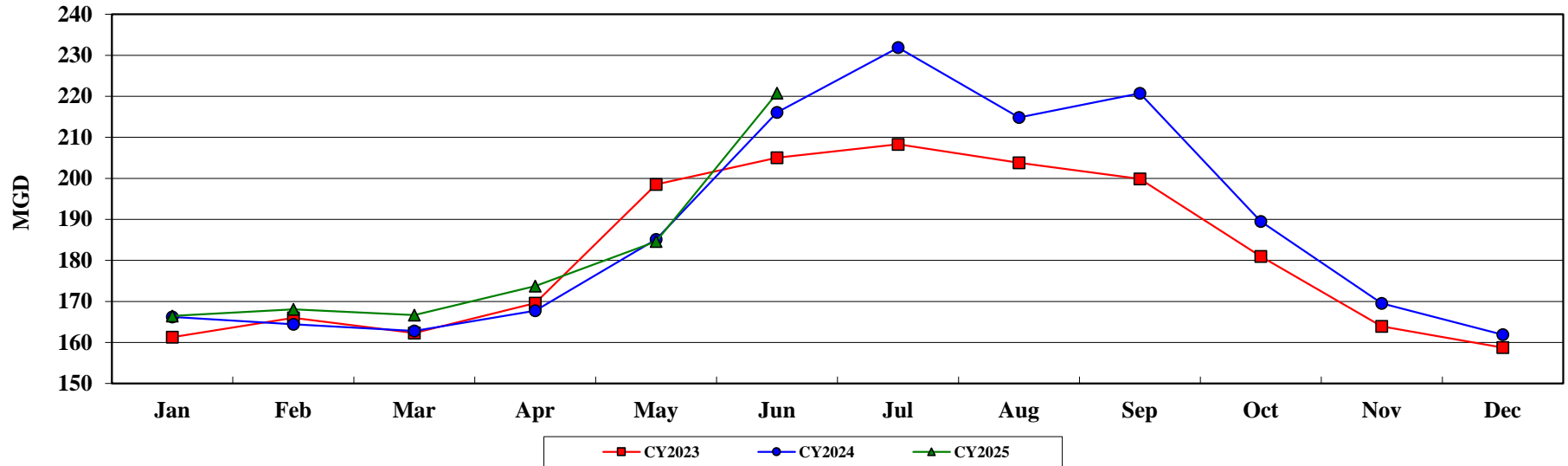


Daily maximum and monthly average concentrations of copper were below permit limits in the 4th Quarter. Permit daily and monthly limits are 14.0 ug/L and 11.6 ug/L respectively.

COMMUNITY FLOWS AND PROGRAMS

Customer Water Use 4th Quarter - FY25

MWRA Water Supplied: All Revenue Customers



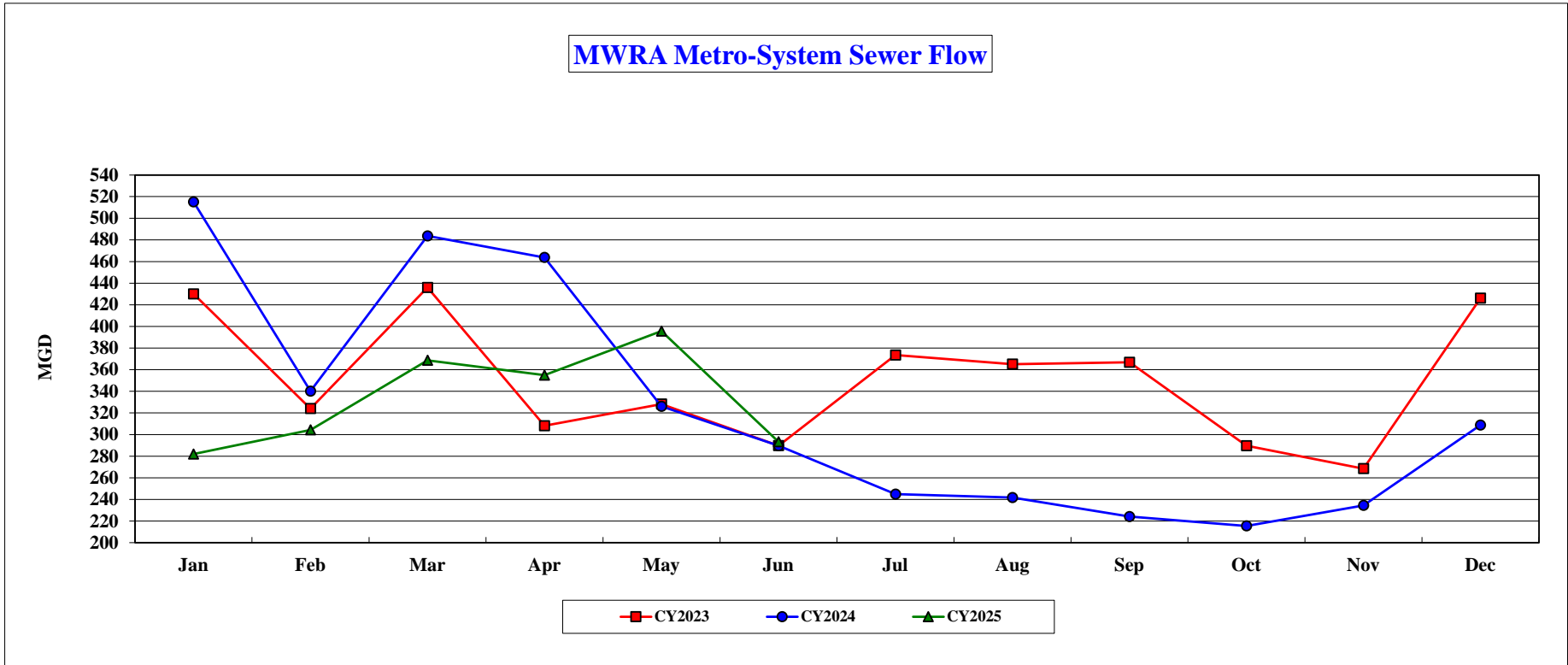
Water Use (million gallons per day)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Average	Annual Average
CY2023	161.272	165.989	162.292	169.594	198.499	205.042	208.304	203.762	199.844	180.948	163.937	158.736	177.186	181.612
CY2024	166.216	164.428	162.771	167.755	185.117	216.090	231.863	214.851	220.742	189.490	169.526	161.886	177.038	187.622
CY2025	166.464	168.077	166.664	173.719	184.616	220.793							180.064	1,051.340

The June 2025 Community Water Use Report was recently distributed to communities and customers served by the MWRA's Metropolitan and Chicopee Valley waterworks systems. Each community's annual water use relative to the system as a whole is the primary factor in allocating the annual water rate revenue requirement to MWRA water communities. Calendar year 2025 water use will be used to allocate the FY2027 water utility rate revenue requirement.

MWRA customers used an average of 192.9 mgd in the 4th quarter (Apr-Jun 2025) of FY2025. This is an increase of 3.3 mgd or 1.8% compared to the 4th quarter of FY2024.

Community Sewer Flow YTD - FY25



Sewer Flow (million gallons per day)														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Average	Annual Average
CY2023	430.060	323.980	435.990	308.110	328.160	289.710	373.540	365.130	366.840	289.680	268.470	426.070	353.738	351.159
CY2024	515.140	340.120	483.590	463.770	326.090	289.640	244.870	241.730	224.160	215.540	234.450	308.770	404.040	324.130
CY2025	281.960	304.280	368.660	354.940	395.670	293.320							333.716	308.491

The 2025 6-Month Community Sewer Flow Report was recently distributed to the 43 communities served by the MWRA's Metropolitan sewer system. Each community's share of sewer flow relative to the system as a whole is used to allocate the annual sewer rate revenue requirement to MWRA sewer communities. The average of calendar year 2023-2025 sewer flow will be used to allocate the FY2027 sewer utility rate revenue requirement.

MWRA customer sewer flow averaged 333.7 mgd in the first six months of CY2025. This is a decrease of 70.3 mgd or 17.4% compared to the first six months of CY2024.

How CY2023-25 Community Wastewater Flows Could Effect FY2027 Sewer Assessments ^{1,2,3}

The flow components of FY2027 sewer assessments will be calculated using a 3-year average of CY2023 to CY2025 wastewater flows compared to FY2026 assessments that will use a 3-year average of CY2022 to CY2024 wastewater flows.

But as MWRA's sewer assessments are a ZERO-SUM calculation, a community's assessment is strongly influenced by the RELATIVE change in CY2023 to CY2025 flow share compared to CY2022 to CY2024 flow share, compared to all other communities in the system.

The chart below illustrates the change in the TOTAL BASE assessment due to FLOW SHARE CHANGES. ⁴



¹ MWRA uses a 3-year flow average to calculate sewer assessments. Three-year averaging smoothes the impact of year-to-year changes in community flow share, but does not eliminate the long-term impact of changes in each community's relative contribution to the total flow.
² Based on actual flows through June 2025.
³ Flow data is preliminary and subject to change pending additional MWRA and community review.
⁴ Represents ONLY the impact on the total BASE assessment resulting from the changes in average and maximum wastewater FLOW SHARES.

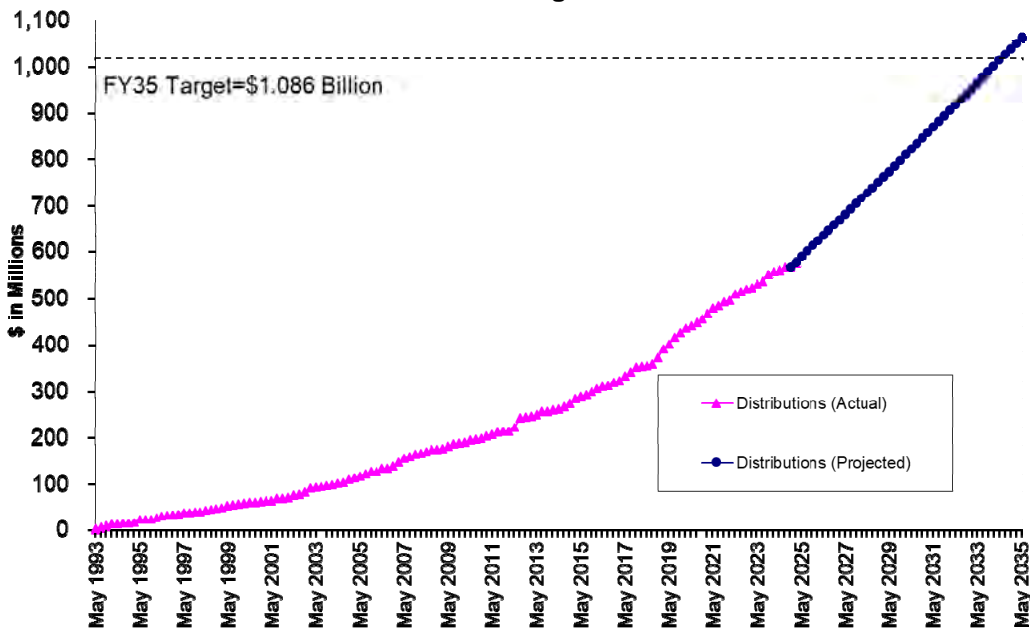
Community Support Programs

4th Quarter – FY25

Infiltration/Inflow Local Financial Assistance Program

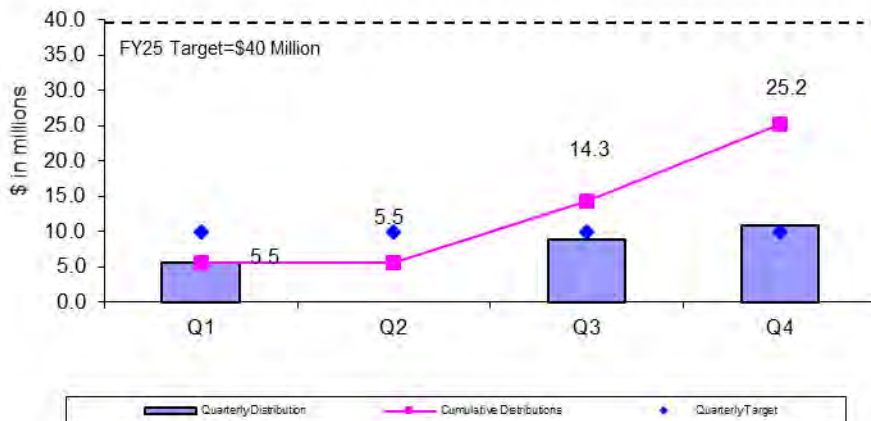
MWRA's Infiltration/Inflow (I/I) Local Financial Assistance Program provides \$1085.75 million in grants and interest-free loans (average of about \$22 million per year from FY93 through FY35) to member sewer communities to perform I/I reduction and sewer system rehabilitation projects within their locally-owned collection systems. Eligible project costs include: sewer rehabilitation construction, pipeline replacement, removal of public and private inflow sources, I/I reduction planning, engineering design, engineering services during construction, etc. I/I Local Financial Assistance Program funds are allocated to member sewer communities based on their percent share of MWRA's wholesale sewer charge. Phase 1-8 funds (total \$300.75 million) were distributed as 45% grants and 55% loans with interest-free loans repaid to MWRA over a five-year period. Phase 9 through 12 funds (total \$360 million) are distributed as 75% grants and 25% loans with interest-free loans repaid to MWRA over a ten-year period. Phase 13 funds of \$100 million are distributed as ten-year interest-free loan-only funds. Phase 14 funds (total \$100 million) are distributed as 75% grants and 25% loans with interest-free loans repaid to MWRA over a ten-year period. Phase 15 provides an additional \$100 million in ten-year interest-free loan-only funds. Phase 16 funds (total \$125 million) are programmed in the budget beginning in FY26 and will be distributed as 75% grants and 25% loans with interest-free loans repaid to MWRA over a ten-year period.

I/I Local Financial Assistance Program Distribution FY93-FY35



During the 4th Quarter of FY25, \$10.9 million in I/I Local Financial Assistance Program distributions were made to fund projects in Boston, Malden, Norwood, Revere, and Woburn. Total grant/loan distribution to date for FY25 is \$25.2 million. From FY93 through the 4th Quarter of FY25, all 43 member sewer communities have participated in the program and \$585 million has been distributed to fund 702 local I/I reduction and sewer system rehabilitation projects. Distribution of the remaining funds has been approved through FY35 and community loan repayments will be made through FY45. All scheduled community loan repayments have been made.

FY25 Quarterly Distributions of Sewer Grant/Loans



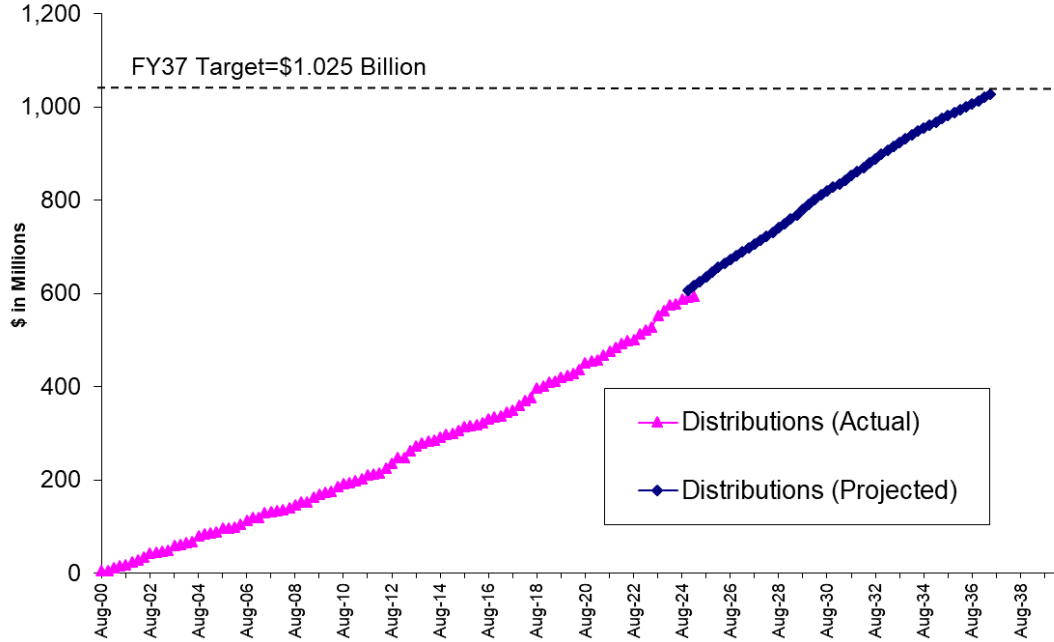
Community Support Programs

4th Quarter – FY25

Local Water System Assistance Program

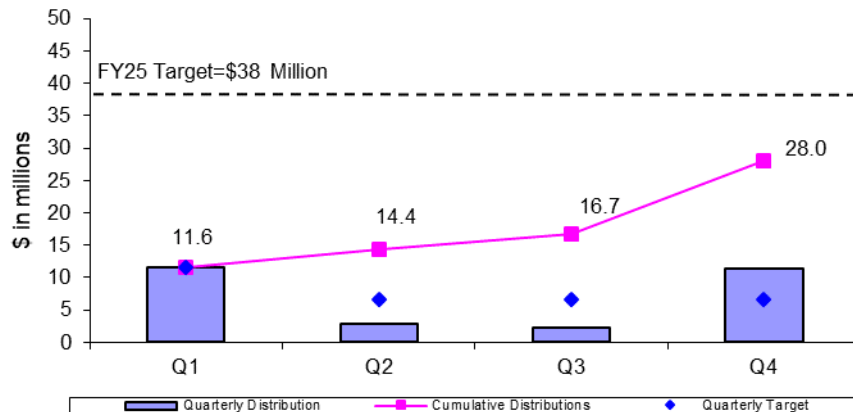
MWRA's Local Water System Assistance Programs (LWSAP) provides \$1.025 billion in interest-free loans (an average of about \$24 million per year from FY01 through FY35) to member water communities to perform water main rehabilitation projects within their locally-owned water distribution systems. There have been four (3) funding phases: Phase 1 at \$222 Million, Phase 2 at \$210 Million, and Phase 3 at \$293 Million. Eligible project costs include: water main cleaning/lining, replacement of unlined water mains, lead service replacements, valve, hydrant, water meter, tank work, engineering design, engineering services during construction, etc. MWRA partially-supplied communities receive pro-rated funding allocations based on their percentage use of MWRA water. Interest-free loans are repaid to MWRA over a ten-year period beginning one year after distribution of the funds. The Phase 1 water loan program concluded in FY13 with \$222 million in loan distributions. The Phase 2 - LWSAP continues distributions through FY25. The Phase 3 LWSAP is authorized for distributions from FY18 through FY30. And the Phase 4 – LWSAP is authorized for distributions from FY25 through FY35.

Local Water System Assistance Program Distribution FY01-FY35



During the 4th Quarter of FY25, \$11.3 million in interest-free loans was distributed to fund local water projects Malden, Melrose, Somerville, Southborough, Wellesley, Weston, Wilbraham and Winchester. Total loan distribution to date for FY25 is \$28.0 million. From FY01 through the 4th Quarter of FY25, \$604 million has been distributed to fund 540 local water system rehabilitation projects in 45 MWRA member water communities. Distribution of the remaining funds has been approved through FY35 and community loan repayments will be made through FY45. All scheduled community loan repayments have been made.

FY25 Quarterly Distributions of Water Loans



Community Support Programs

4th Quarter – FY25

Lead Service Line Replacement Loan Program

By its vote on March 16, 2016, the Board approved an enhancement to the Local Water System Assistance Program to provide up to \$100 million in 10-year zero-interest loans to communities solely for efforts to fully replace lead service lines. On June 26, 2024, the Board approved an additional \$100 million, and authorized the inclusion a 25% grant for communities who commit to fully fund the replacement of the portion of lead service lines located on private property.

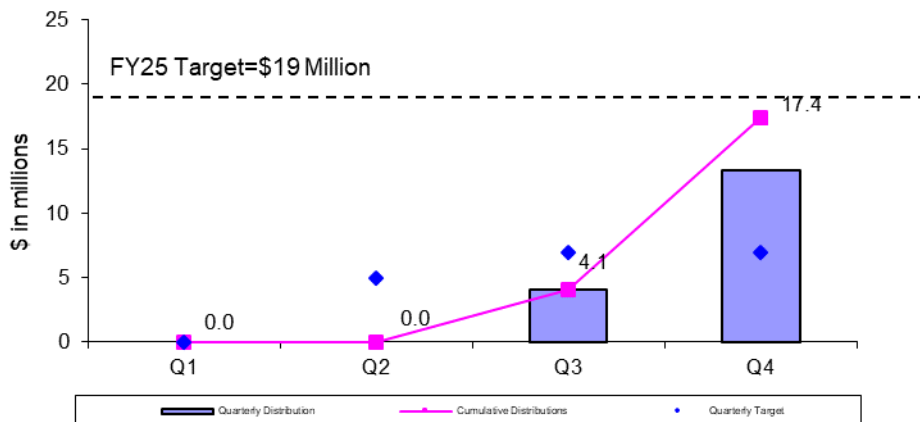
The Lead Service Line Replacement Loan Program is also referenced as the Lead Replacement Program or LRP. Each community can develop its own program, tailored to their local circumstances. MWRA’s goal in providing financial assistance to member communities is to help communities remove lead from their water systems. MWRA’s goal is for all lead service lines to be removed by 2032, meeting the requirements of the Lead and Copper Rule Improvements.

Distributed Lead Funds

Boston	\$3.5M
Brookline	\$2.0M
Chelsea	\$2.6M
Everett	\$7.0M
Lexington	\$3.9M
Malden	\$0.8M
Marblehead	\$0.3M
Marlborough	\$5.8M
Medford	\$8.0M
Melrose	\$1.0M
Needham	\$1.0M
Newton	\$4.0M
Quincy	\$3.0M
Reading	\$1.5M
Revere	\$3.3M
Somerville	\$2.5M
Watertown	\$1.8M
Weston	\$0.2M
Winchester	\$3.4M
Winthrop	\$5.6M
Total	\$61.2M

During the 4th Quarter of FY25, \$13.3 million in Lead Replacement Program grants and loans were distributed to fund local water projects in Everett, Malden, Marblehead, Marlborough, Medford, Revere and Winchester. Total loan distribution to date for FY25 is \$17.4 million. From FY17 through the 4th Quarter of FY25, \$61.2 million has been distributed to fund 60 lead replacement projects in 20 MWRA member water communities. Distribution of the remaining funds has been approved through FY33 and community loan repayments will be made through FY43. All scheduled community loan repayments have been made.

FY25 Quarterly Distributions of Lead Service Line Replacement Loans

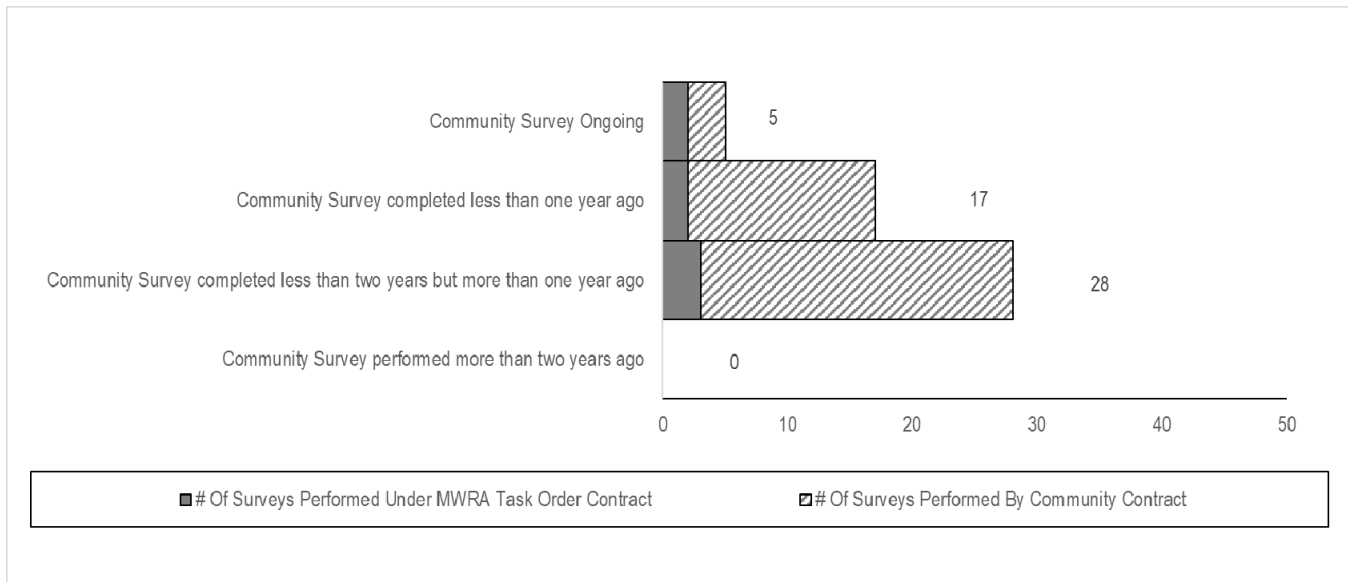


Community Support Programs

4th Quarter – FY25

Community Water System Leak Detection

To ensure member water communities identify and repair leaks in locally-owned distribution systems, MWRA developed leak detection regulations that went into effect in July 1991. Communities purchasing water from MWRA are required to complete a leak detection survey of their entire distribution system at least once every two years. Communities can accomplish the survey using their own contractors or municipal crews, or alternatively, using MWRA’s task order leak detection contract. MWRA’s task order contract provides leak detection services at a reasonable cost that has been competitively procured (3-year, low-bid contract) taking advantage of the large volume of work anticipated throughout the regional system. Leak detection services performed under the task order contract are paid for by MWRA and the costs are billed to the community the following year. During the 4th Quarter of FY25, all member water communities were in compliance with MWRA’s Leak Detection Regulation.



Community Water Conservation Outreach

MWRA’s Community Water Conservation Program helps to maintain average water demand below the regional water system’s safe yield of 300 mgd. Current 5-year average water demand is less than 200 mgd. The local Water Conservation Program includes distribution of water conservation education brochures (indoor - outdoor bill-stuffers) and low-flow water fixtures and related materials (shower heads, faucet aerators, and toilet leak detection dye tabs), all at no cost to member communities or individual customers. The Program’s annual budget is \$25,000 for printing and purchase of materials. Annual distribution targets and totals are provided in the table below. Distributions of water conservation materials are made based on requests from member communities and individual customers.

	Annual Target	Q1	Q2	Q3	Q4	Annual Total
Educational Brochures	100,000	16,504	6,456	267	424	<u>23,651</u>
Low-Flow Fixtures (showerheads and faucet aerators)	10,000	1,352	700	616	1,958	<u>4,626</u>
Toilet Leak Detection Dye Tablets	-----	2,517	524	665	7,107	<u>10,813</u>

BUSINESS SERVICES

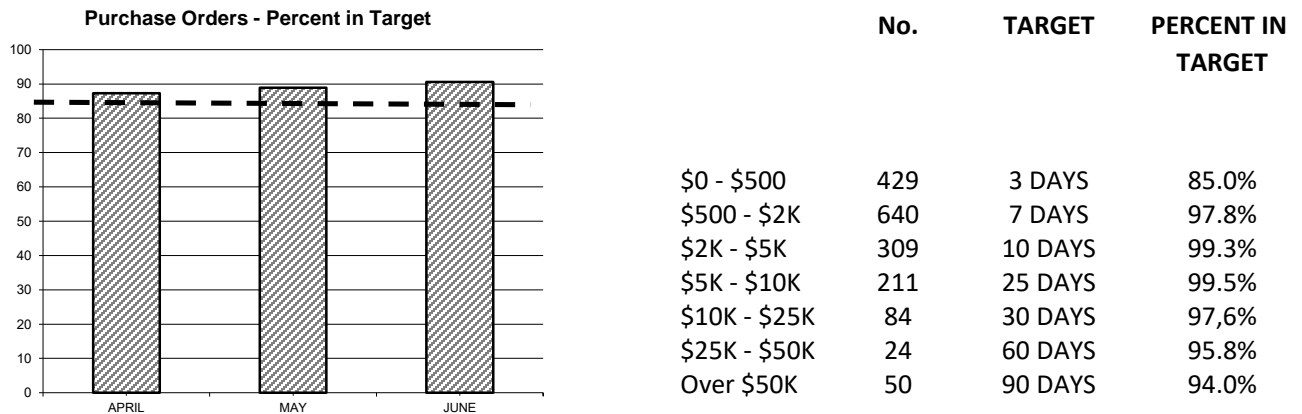
Procurement: Purchasing and Contracts

4th Quarter - FY25

Background: Goal is to process 85% of Purchase Orders and 80% of Contracts within Target timeframes.

Highlights: Processed 95% of purchase orders within target; Average Processing Time was 4.88 days vs. 4.61 days in Qtr 4 of FY24. Processed 50% (5 of 10) of contracts within target timeframes; Average Processing Time was 165 days vs. 100 days in Qtr 4 of FY24.

Purchasing



The Purchasing Unit processed 1,747 purchase orders, 66 less than the 1,813 processed in Qtr 4 of FY24 for a total value of \$21,401,487 versus a dollar value of \$15,432,700 in Qtr 4 of FY24 .

The purchase order processing target was met for all categories.

Contracts, Change Orders and Amendments

Procurement executed ten contracts with a value of \$59,915,935 and nine amendments with a value of \$1,780,298. Five contracts were not executed within the target timeframes. One contract was not executed within the target timeframe due to delays associated with the Proprietary Request Form approval in addition to delays receiving bonds and insurance from the contractor. Another contract was delayed as the FRR Board does not meet on a regular basis, resulting in delays in processing and awarding the contract to the recommended proposer. A third contract was delayed due to significant time needed to review the recommended proposer to ensure that proposed costs would be acceptable to move forward with awarding the contract. A fourth contract was delayed due to the procurement process including an undefined period to monitor the electricity market over time. During the initial qualifying stage, MWRA negotiated certain terms at the request of the respondents resulting in a 3-month delay. Additionally, pricing from qualified suppliers was monitored for three weeks until the market was favorable, then we received formal bids. The final contract was delayed as the MWRA wanted the new contract awarded well in advance of the expiration of the existing contract.

Staff reviewed 15 proposed change orders and 9 draft change orders.

Twenty three change orders were executed during the period. The dollar value of all non-credit change orders during Q4 FY25 was \$2,081,531 and the value of credit change orders was (\$474,362).

Note: A credit change order is a change order that results in a decrease in contract value.

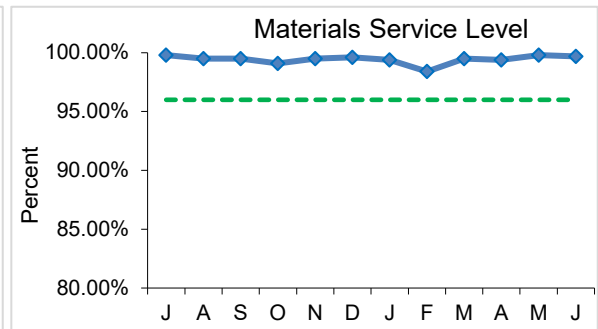
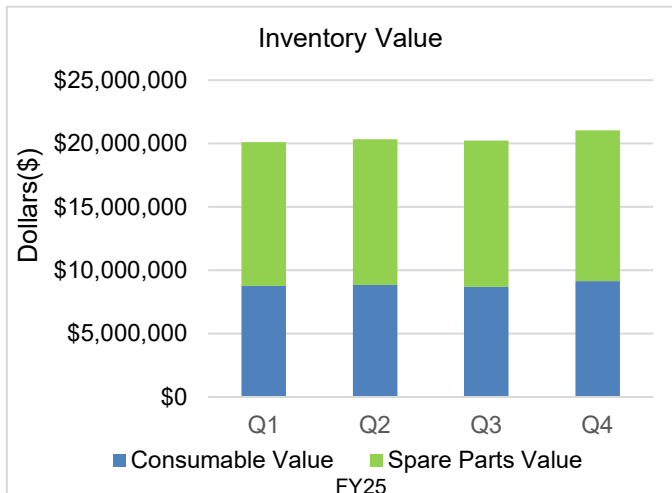
Materials Management

4th Quarter - FY25

The Materials Management department manages the three regional warehouses (Chelsea, Deer Island and Southboro). This includes the replenishment and receipt of both consumable and spare parts items to meet the needs of the MWRA. Additionally, MWRA tools and equipment are safeguarded through the Property Pass unit within the Materials Management department.

Inventory goals focus on:

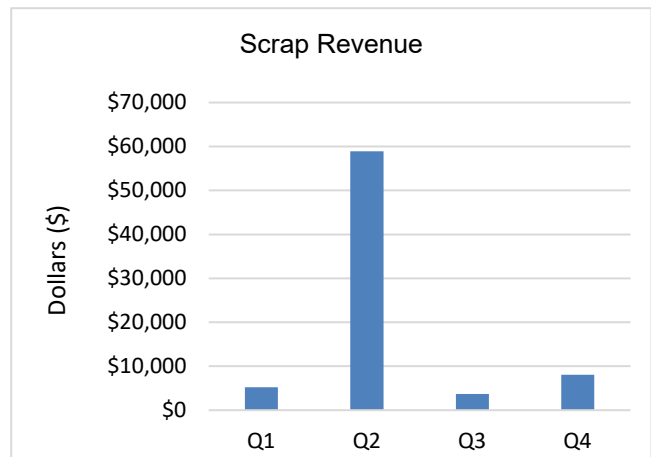
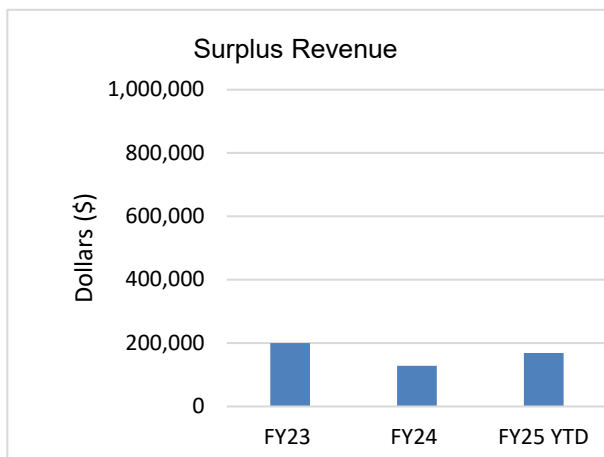
- Maintaining optimum levels of consumables inventory (office supplies, electrical, safety, etc.) and spare parts inventory (critical items such as actuators, motors, muffin monsters, etc.) necessary to support MWRA Operations and Maintenance. Typically spare parts carry longer lead times.
- Adding new items to inventory to meet changing business needs.
- Reviewing consumables and spare parts for obsolescence.
- Managing and controlling valuable equipment and tools via the Property Pass Program.



The service level is the percentage of stock requests filled. The goal is to maintain a service level of 96%. Staff issued 8,209 (99.7%) of the 8,179 items requested in Q4 from the inventory locations for a total dollar value of \$1,731,148.

Property Pass Program:

- Conducts audits of tools and equipment to ensure the safeguarding of MWRA assets.
- Manages the disposition and sale of surplus tools and equipment through GovDeals, an online auction site.
- Manages the surplusing of scrap metals and materials generating revenue to the MWRA staff.



MIS Program

4th Quarter – FY25

Project Updates

Infrastructure & Security

SD-WAN: Additional subnet added to secondary circuit to complete implementation. Anticipated completion in July.

CUCM VOIP Upgrade: Application upgrade to version 15 completed successfully in April. Host upgrade was postponed due to changes in licensing. The system will be migrated to new hardware infrastructure as a part of the Virtual Host Hardware Refresh project.

Server/Database Version Upgrades: Staff continue to meet monthly to review and identify migration paths of infrastructure to maintain support.

Live Stream Webcam: New cameras installed in Cosgrove, Deer Island and Quabbin and implemented on mwra.com.

O365 Migration: M365 Pilot successfully launched with no major issues. Operating system upgrades being deployed by location. Chelsea and Deer Island PCs significantly complete. Starting upgrades for laptop users and PCs at remote sites. Office upgrades being pushed after Windows11 upgrade. Mailbox migrations are planned for August.

AutoCAD Desktop Virtualization: All users have been transitioned to the virtual environment and physical desktops reclaimed.

Deer Island Phone System Migration to VOIP: Ethernet cabling upgrades for Admin/Lab 3&4, Residuals, Cryogenics, Centrifuge, Guard House, and Vehicle Maintenance have been completed and phones have been migrated to VOIP. The ethernet cabling upgrade for the remaining auxiliary buildings is underway. Staff anticipate phones in these areas will be migrated to VOIP in August

Deer Island Edge Switch Hardware Refresh: Edge switches located in the Vehicle Maintenance, Cryogenics, Centrifuge, Guard House, Thermal Power Plant, North Main Pump Station, Primary Operations, Secondary Operations and Residuals are end of life. MIS staff are working with DITP Engineering on the scope of work to replace the fiber cabling between these building and the Admin/Lab building.

Cybersecurity: Completed pen test of wireless network in May. A pilot implementation of network access controls was completed June and staff are preparing for implementation at all locations. The scope for monitoring east/west network traffic is being developed.

VMHosts Hardware Refresh: All the physical servers supporting the virtualized environments need a hardware refresh. The hardware and software have been received and build and configuration to begin in July.

Library, Record Center, & Training

MIS Training: In Q4, 23 online IT lessons were taken (63 YTD), by 30 employees (83 YTD).

Library: Completed 147 research requests and provided access to 9 articles, 11 new books/reports, and 4 new standards (outside subscriptions). The MWRA Library Portal supported 305 user searches (a return to FY2024 numbers) on topics including the Alewife Brook, Jamaica Pond waterworks, PFAS, and Framingham Reservoir No. 1 statutory release requirements.

Record Center (RC): Added 34 new boxes and handled 179 total boxes. The RC disposed of 100 boxes from Walpole RC with permission from the RCB. The RC scrubbed in the ECM database 710 items related to boxes and drawings to help maintain accurate data. The RC performed database / physical box searches for various departments. Research included: Engineering documents, staff summaries, personnel files, Law requests, Invoices, various construction contracts and permitting.

Applications

ECM/Electronic Document Management: Staff Summary, Contract Requisition, and Policy workflows are live in the production environment. Staff Summary and Contract Requestion processes within ECM are being rolled out strategically, agency wide. Internal Audit is uploading existing Policies into the system with an anticipated audit review of select policies scheduled for July 1 and all policies by the end of FY 26.

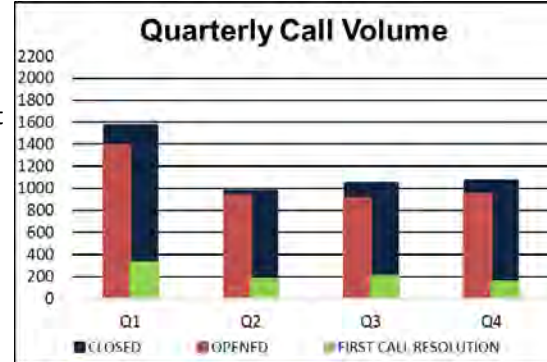
Infor Upgrade/Migration: MIS staff continue development on assigned ERP tasks, with RICE components nearly complete. APIs for Maximo Asset Management integration have been developed and entered testing. Security access now tailored to departmental needs. Cloud data replication for on-premise custom apps finalized. Interfaces for MHC, TRAC, and banking successfully tested. Birst reporting training completed; Oracle EPM Budgeting cloud integration planning underway. Warehouse labeling configured and tested. Systems Integration Testing (SIT) Completed. User Acceptance Testing (UAT) Scheduled for July–October.

Maximo/Lawson Interface: MIS staff completed the design and development of APIs for CloudSuite–Maximo integration. 19 Maximo APIs released and available for testing. CloudSuite APIs and workflows underway to interface with Maximo. System Integration Testing (SIT) scheduled for July–August.

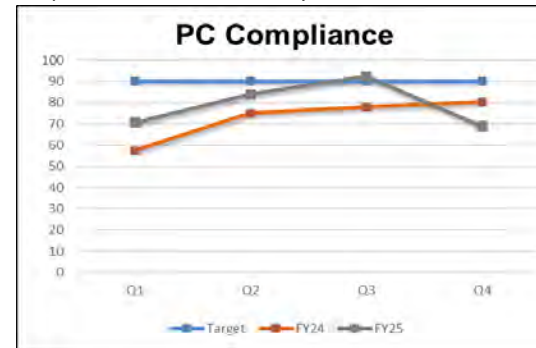
PI ProcessBook Upgrade (dataParc): dataParc selected to replace ProcessBook; implementation ongoing through June. Display groupings for DITP, Chelsea, and Transport being designed. Display migration status: Transport complete, DITP in progress, FOD up next. Secondary/tertiary links being fixed; manual review of converted displays underway. PARCmodel installed; PARCview client rollout to end users planned. Nexus web server configured—pending external access to internal shares. Next steps: Testing, training, and full implementation.

Numbers & Statistics

Summary of calls managed by the Helpline.



Percentage of user endpoints in compliance with system updates. These numbers reflect accessibility to these systems. The inclusion of Windows11 for compliance was added in May.



Legal Matters
4th Quarter – FY25

PROJECT ASSISTANCE

Real Estate, Contract, Energy, Environmental, and Other Support:

- **8(m) Permits and License Agreements:** Reviewed seventy-one (71) 8(m) permits, including any related MEPA Section 61 Findings. Reviewed five (5) direct connect permits (one new connection and four abandonments/disconnections) related to a development in Melrose. Revised Direct Connect Permit terms and conditions.
- **Real Property:** Finalized license for two temporary property interests needed for Contract 7454 - Section 56 Water Pipeline Replacement Project. Finalized real property and law draft schedule for the acquisition of temporary easements needed for Contract 7216, Interceptor Renewal No. 7 Malden-Melrose (Sections 41/42/49/54/65), drafted related notices of offer (including acceptances of offer and grants of easements), and drafted and mailed project update letters to the 16 private property owners. Reviewed property interests for 1625 VFW Parkway site for MWRA Contract 6224/6225 - Siphon and Junction Structure Rehabilitation Project, drafted related notices of offer (including acceptances of offer and grants of easements), and reviewed 8(m) permit and site plan for construction of carwash at 1625 VFW Parkway in preparation for site visit. Reviewed various property interests for Metropolitan Water Tunnel Program (MWTP), updated acreage, revised property maps and summaries and reviewed various properties to support MWTP boring work and proposed shaft sites and pipeline construction. Reviewed plan and drafted offer letter, grant of easement, and acceptance of offer for easement needed at 396-400 Lexington Street in Waltham, MA for MWRA Contract No. 7457 – Section 101 Pipeline Extension Waltham. Reviewed Rutland Holden Sewer property interests and background. Reviewed Wachusett Watershed WPR Acquisition W-001262 (Bigelow) and reviewed and finalized Wachusett Watershed Fee Acquisition W-001261(Borelli).
- **Environmental:** Assisted with presentation to Wastewater Advisory Committee regarding U.S. Supreme Court decision *City & Cnty. of San Francisco, California v. EPA*, 2025. Assisted ENQUAL with preparation of comments regarding draft NPDES permits for South Essex and Fall River facilities, EPA’s PFAS Sludge Risk Assessment, and EPA’s draft National Recommended Ambient Water Quality Criteria for PFAS. Assisted with the preparation of the 2024 CSO Annual Report. Assisted TRAC with ongoing review of special conditions template for abandonment of existing connections to the MWRA sewerage system. Finalized a Third Amendment to the Financial Assistance Agreement between MWRA and BWSC regarding the implementation of certain CSO control projects.
- **Energy:** Assisted Tunnel Redundancy Program regarding final payment to Eversource Electric Company for power line extension(s) electric distribution service at tunnel boring machine locations/projects. Assisted Internal Audit with review of *Petition of Harbor Electric Energy Company for approval by the Department of Public Utilities of its Capacity and Support Charge True-Up Adjustment for 2024*, Docket No. 25-67. Reviewed filing regarding Harbor Electric Energy Company Capacity and Support Charge True-up Adjustment for 2024 (D.P.U. 25-67).
- **Miscellaneous:** Reviewed open meeting law requirements for hybrid meetings and the practices of various agencies. Drafted case brief for *Students for Fair Admissions, Inc. v. President and Fellows of Harvard College*, 600 U.S. 181 (2023) and summarized cases following the decision. Reviewed

presentation materials for acquisition of property interests in furtherance of MWTP, and coordinated communications. Outlined disposition and acquisition processes for anticipated MWTP property interests. Begin preparation for title exam services procurement to support E&C and MWTP in the acquisition of property interests for future construction projects. Reviewed documents for submission to Records Conservation Board for disposition.

- **Public Records Requests:** During the 4th Quarter FY 2025, MWRA received and responded to one hundred seventy seven (177) public records requests.

LITIGATION/CLAIMS

New Lawsuits:

- There are no new lawsuits in 4th Quarter FY 2025.

New Claims:

- There is one new claim.

Robinson, Angel and Jones, Dana; MVA Property damage claim

On April 4, 2025, MAPFRE issued a letter denying liability for a motor vehicle accident that occurred on October 7, 2024, involving its insureds, Angel Robinson and Dana Jones, and an MWRA vehicle, near Forest Hill Station. MWRA seeks recovery for property damage in the total amount of \$10,430.90.

Significant Developments:

- In the Matters of Massachusetts Water Resources Authority Challenge to Certain Conditions in Alewife Brook/Upper Mystic River Basin and Lower Charles River/Charles River Basin Variances, OADR Nos. 2024-029 and 2024-030: The Authority filed its Memorandum of Law and its Response to MassDEP's Reply on the Order to Show Cause.
- Walsh Construction Company II, LLC (f/k/a Perry Fiberglass Products, Inc.). v. MWRA, Suffolk Superior Court C. A. No. 2484CV2841-E. On May 21, 2025, the Court allowed MWRA's Motion to Dismiss subcontractor Perry Fiberglass Products, Inc.'s complaint against MWRA for breach of contract, holding that as a subcontractor, Perry could not bring a breach of contract claim directly against MWRA. On June 18, 2025 the complaint was amended naming Walsh Construction Company II, LLC as the plaintiff and alleging that Walsh has authorized Perry to bring the suit in Walsh's name pursuant to the subcontract between Walsh and Perry.

Closed Cases:

- Four cases closed in 4th Quarter FY 2025.

Eldridge, Jon, et al. v City of Framingham, et al.; Middlesex Superior Court C.A. No. 2281CV03049. On May 5, 2023, the Court allowed MWRA's Motion to Dismiss. Claims remained pending against the City of Framingham. On March 13, 2025, the Court allowed the Defendant City of Framingham's Motion for Summary Judgment, dismissing the Plaintiff's remaining claims.

IPC Lydon, LLC v. MWRA; Suffolk Superior Court C.A. No. 2484CV0294. This action involved claims for extra time and compensation for work performed by the Plaintiff, IPC Lydon, LLC at the Massachusetts Water Resources Authority's Clinton Wastewater Treatment Plant. The parties have settled this matter and on May 22, 2025, IPC Lydon filed a Notice of Voluntary Dismissal with the court.

In re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation, USDC (E.D. N.Y.), MDL 1720 (MKB). MWRA received notice of a class action settlement with Visa, Mastercard and their issuing banks. Plaintiffs alleged that defendants wrongfully inflated Interchange Fees from January 1, 2004 through January 25, 2019. Finance submitted a claim for approximately \$3,000. This matter is complete and administratively closed in Law Division.

Charleston Water System v. Costco Wholesale Corp., et al. USDC (S.Carolina) Case No. 2:21-cv-00042. Law Division received Notice of Class Action Settlement on January 2, 2024. On November 21, 2023, the federal district court in Charleston, South Carolina, issued an Order granting preliminary approval to proposed Class Action Settlements between Plaintiff Charleston Water System and Defendants, Costco Wholesale Corporation, CVS Health Corporation, The Procter & Gamble Company, Target Corporation, Walgreen Co. and Walmart Inc. (“the Wipes Defendants”) addressing flushable and non-flushable wipe products sold and/or manufactured by the Wipes Defendants. The settlements commit the defendants to meet an international flushability standard supported by the wastewater industry, with two years of confirmatory testing and non-flushable wipes labeling enhancements. This matter is complete and administratively closed in Law Division.

Closed Claims:

- There are no closed claims in 4th Quarter FY 2025.

Subpoenas:

- During the 4th Quarter FY 2025, one subpoena was re-opened from the previous month. Two subpoenas are pending.

SUMMARY OF PENDING LITIGATION MATTERS

TYPE OF CASE/MATTER	As of June 2025
Construction/Contract/Bid Protest	3
Tort/Labor/Employment	0
Environmental/Regulatory/Other	4
Eminent Domain/Real Estate	0
TOTAL	7
Other Litigation matters (restraining orders, etc.) - Class Action suits	2
TOTAL – all pending lawsuits	9
Claims not in suit	1

Bankruptcy	4
Wage Garnishment	1
TRAC/Adjudicatory Appeals	1
Subpoenas	2
TOTAL – ALL LITIGATION MATTERS	18

TRAC/MISC. ADMIN. APPEALS

Appeals Pending:

- There is one pending TRAC appeal in 4th Quarter FY 2025:
Tri-Town Regional Water District; MWRA Docket No. 23-03
- One TRAC appeal settled in 4th Quarter FY 2025:
1058 Beacon Street, Newton, MA; MWRA Docket No. 22-01

LABOR AND EMPLOYMENT

New Matters

- A union filed a request for arbitration, appealing the denial of a grievance alleging that the MWRA suspended an employee in violation of the collective bargaining agreement.
- An employee filed a charge of discrimination at the MCAD on the basis of age, gender, race and color.

Significant Developments

- None to report.

Matters Concluded

- An arbitrator issued an award in favor of the MWRA, denying a Union's grievance contending that an employee worked out of title without appropriate compensation.
- The MCAD affirmed its prior finding of lack of probable cause and dismissal of an employee's charge of discrimination based upon sex, gender identity and retaliation, in favor of the MWRA.

INTERNAL AUDIT AND CONTRACT AUDIT ACTIVITIES

4th Quarter - FY25

Purpose

Internal Audit evaluates the effectiveness of internal controls and procedures and monitors the quality, efficiency and integrity of the Authority's operating and capital programs. Through our audits and reviews, we assess whether internal controls are functioning as intended and that only reasonable, allowable and allocable costs are paid to consultants, contractors and vendors.

Cost Savings	FY25 YTD
Consultants	\$170,113
Contractors and Vendors	\$1,318,143
Internal Audits	\$249,550
Total	\$1,737,806



Highlights

During the 4th quarter FY25, IA prepared an analysis of NEFCo's Claim Statement for Product Marketing Cost Impact of High Molybdenum. As a result of the increased Molybdenum, NEFCo claimed that it incurred additional distribution costs and provided supporting documentation. IA examined the supporting documentation and concluded that the claimed costs were accurate, complete and sufficiently supported. IA did not review whether NEFCo is entitled to payment of the claimed costs under the contract, but rather whether the costs were in fact incurred. Whether the costs are compensable under the contract is under review by Law & Procurement. A review of MIS Software Management controls and procedures is progressing.

In addition, IA completed a true-up of 2024 operating expenses for the HEEC cable and completed 3 labor burden reviews. There are 6 incurred cost audits, 4 labor burden reviews and 3 consultant preliminary reviews in process. IA also issued 62 cost rate letters to consultants following a review of their consultant disclosure statements.

A review of Needham Core Shed lease for 2024 is in process and being finalized.

Internal Audit also supported updates related to 1 existing policy.

Status of Recommendations

During FY25, 10 recommendations were closed.

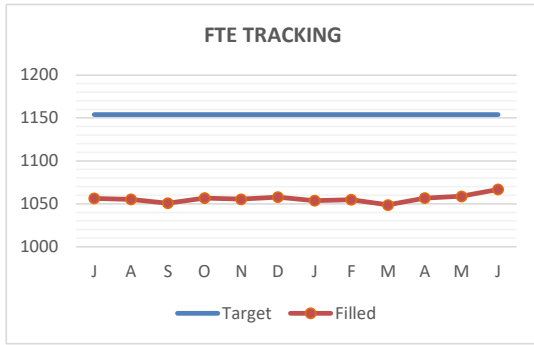
IA follows-up on open recommendations on a continuous basis. All open recommendations have target dates for implementation and are generally targeted to be closed within 12 months of the audit report issue date.

Report Title (issue date)	Audit Recommendations		
	Open	Closed	Total
Accounts Payable Process (3/14/2024)	1	5	6
MWRA Payroll (3/19/2024)	0	3	3
MIS Asset Management (6/28/2024)	1	6	7
Infiltration/Inflow Program Review (3/13/2025)	0	1	1
Total Recommendations	2	15	17

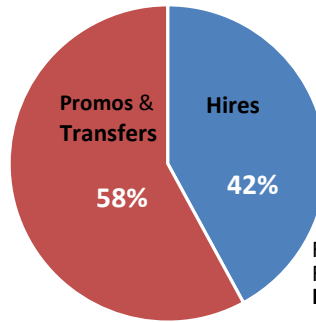
OTHER MANAGEMENT

Workforce Management

4th Quarter - FY25



Position Filled by Hires/Promos & Transfer for YTD

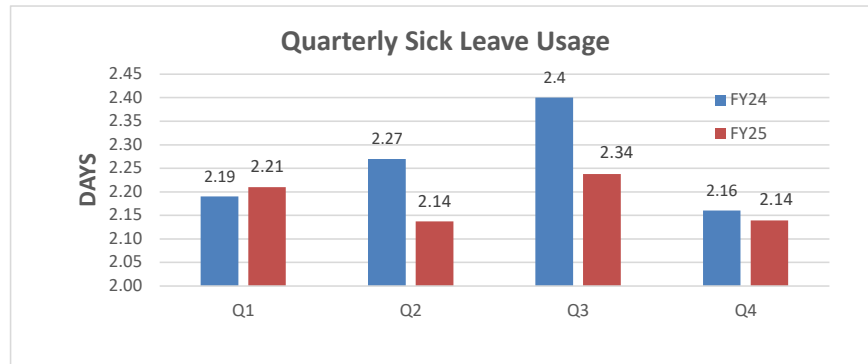


	Pr/Trns	Hires	Total
FY23	133 (59%)	91(41%)	224
FY24	117 (56%)	93 (44%)	210
FY25	124 (58%)	90(42%)	214

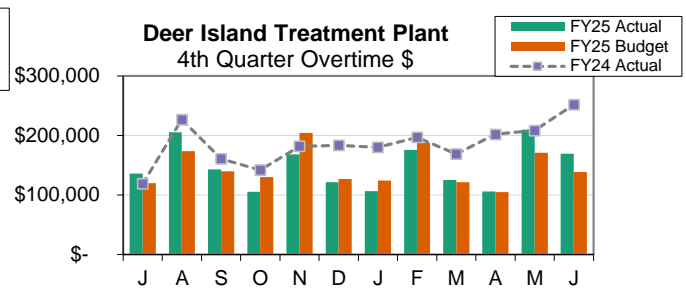
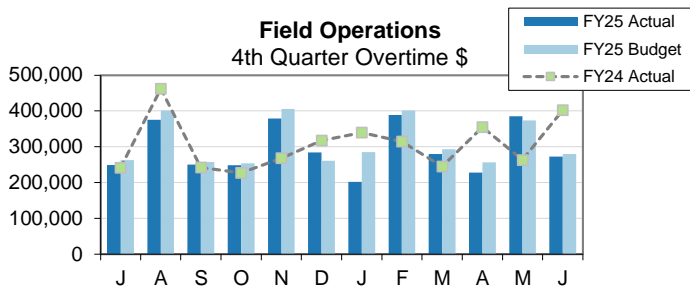
FY25 Budget for FTE's = 1154
 FTE's as of June = 1066.7
 Tunnel Redundancy as of June 2025 = 8

POSITION CHANGE by FY

FY	HIRES	PROMOS	TRANSFER	RETIRE	RESIGN	DISMISS	DECEASED
FY21	64	66	15	58	15	2	2
FY22	65	108	30	82	45	2	3
FY23	91	118	15	46	31	5	5
FY24	93	97	20	48	30	5	4
FY25*	90	107	17	54	25	5	3



Average quarterly sick leave for the 4th Quarter of FY25 has decreased compared to the 4th Quarter of FY24 (2.14 from 2.16)



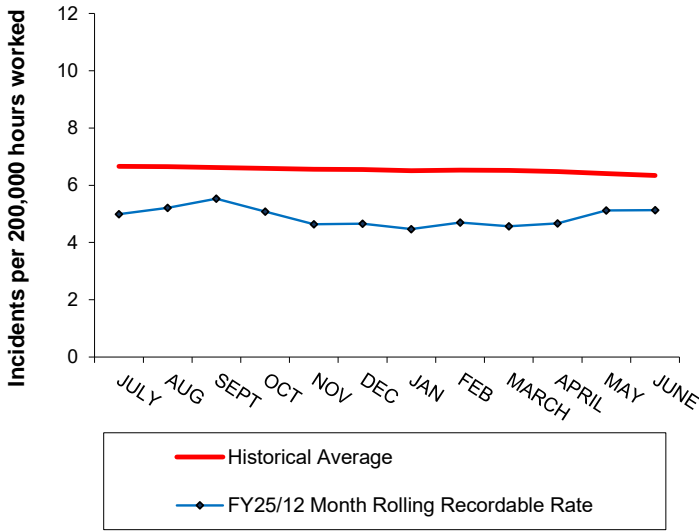
Total Overtime for Field Operations for Fourth Quarter (Q4) (FY25) was \$885k, which is \$24k or 3% under budget. Fewer than anticipated emergency events contributed to lower spending in Q4. Rain events totaled \$43k, or 33% of Emergency for FOD in Q4. Total Planned Scheduled Maintenance was \$97k, which was comprised of Regular Training of \$16k; Planned Off-Hours OT of \$152k. Operator Coverage OT for Q4 was \$219k, due to vacancies; Maintenance Work Completion OT was \$27k for (Q4) for FY25.

Total overtime for Deer Island for the fourth quarter (Q4) (FY25) was \$486k, which is \$71k or 17.1% over budget - due to \$51k Planned/Unplanned, \$27k Storm Coverage. offset a little by (\$7.2k) Shift Coverage - driven by (\$21k) Thermal & \$13k Wastewater Ops.

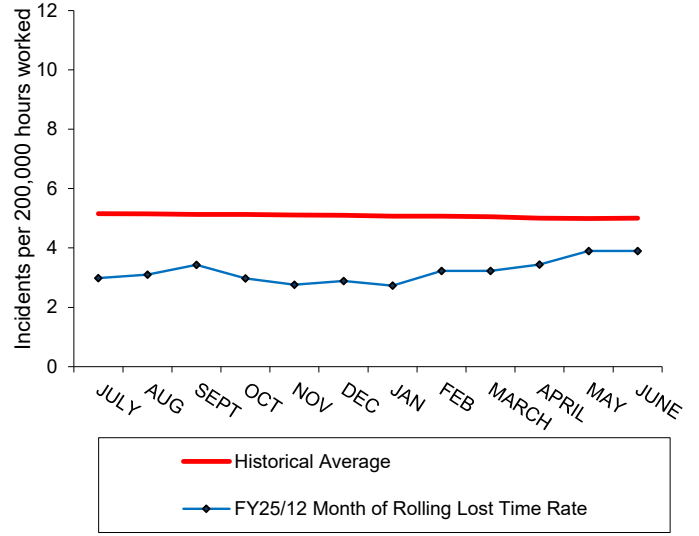
Workplace Safety

4th Quarter - FY25

Recordable Injury & Illness Rates



Lost Time Injury & Illness Rates

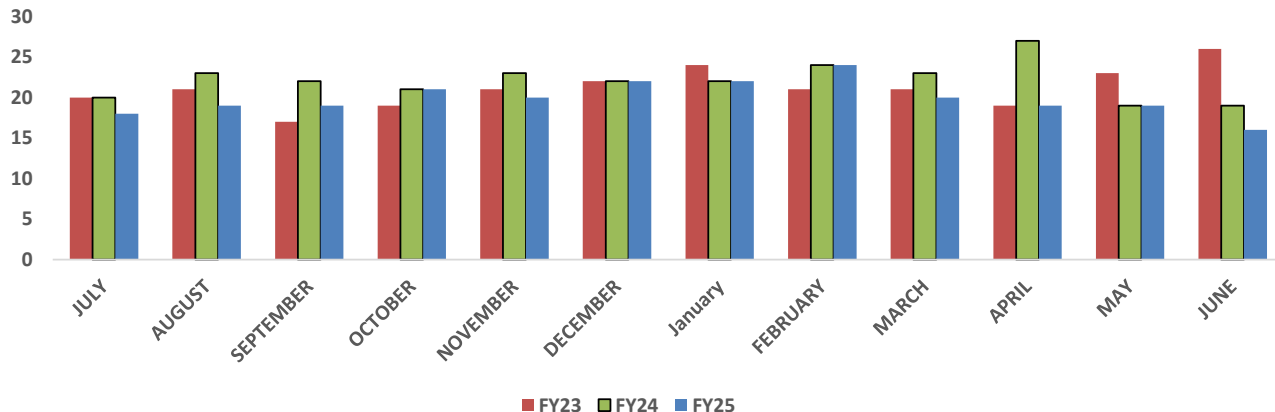


- 1 "Recordable" incidents are all work-related injuries and illnesses which result in death, loss of consciousness, restriction of work or motion, transfer to another job, or require medical treatment beyond first aid. Each month this rate is calculated using the previous 12 months of injury data.
- 2 "Lost-time" incidents, a subset of the recordable incidents, are only those incidents resulting in any days away from work, days of restricted work activity or both - beyond the first day of injury or onset of illness. Each month this rate is calculated using the previous 12 months of injury data.
- 3 The "Historical Average" is computed using the actual MWRA monthly incident rates for FY04 through FY24

WORKERS COMPENSATION HIGHLIGHTS

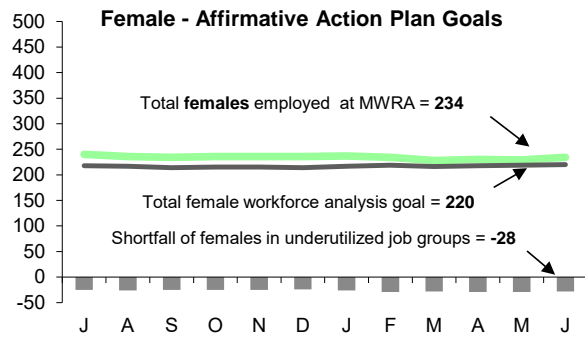
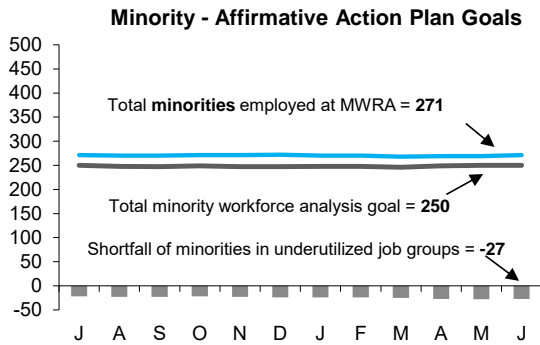
4th Quarter Info as of 6.30.25			
	New	Closed	Open Claims
Lost Time	1	6	14
Medical Only	4	7	116
Report Only	6	6	
QYTD		FYTD	
Regular Duty Returns	6		15
Light Duty Returns	0		1
Indemnity payments as of June 2025 included in open claims listed			16

INDEMINITY CLAIMS



MWRA Job Group Representation

4th Quarter - FY25



Highlights:

At the end of Q4 FY25, 5 job groups or a total of 27 positions are underutilized by minorities as compared to 5 job groups for a total of 23 positions at the end of Q4 FY24; for females 7 job groups or a total of 28 positions are underutilized by females as compared to 7 job groups or a total of 23 positions at the end of Q4 FY24. During Q4, 8 minorities and 9 females were hired. During this same period

Underutilized Job Groups - Workforce Representation

Job Group	Employees as of 6/30/2025	Minorities as of 6/30/2025	Achievement Level	Minority Over or Underutilized	Females As of 6/30/2025	Achievement Level	Female Over or Underutilized
Administrator A	24	4	1	3	10	1	9
Administrator B	27	5	5	0	8	7	1
Clerical A	20	10	4	6	15	15	0
Clerical B	20	4	4	0	3	5	-2
Engineer A	80	17	21	-4	18	21	-3
Engineer B	52	16	14	2	16	10	6
Craft A	128	15	26	-11	0	7	-7
Craft B	113	24	23	1	0	6	-6
Laborer	59	14	15	-1	3	2	1
Management A	86	18	20	-2	32	22	10
Management B	39	12	6	6	6	7	-1
Operator A	53	3	12	-9	2	5	-3
Operator B	73	25	13	12	5	5	0
Professional A	29	8	8	0	14	13	1
Professional B	175	56	55	1	76	67	9
Para Professional	44	18	9	9	19	14	5
Technical A	52	20	13	7	6	12	-6
Technical B	5	2	1	1	1	1	0
Total	1079	271	250	48/-27	234	220	42/-28

AACU Candidate Referrals for Underutilized Positions

Job Group	Job Title	# of Vacancies	Requisition Internal/ External	Promotions/ Transfers	AACU Referral External	Position Status = New Hire/Promotion
Engineer A	Project Engineer	2	Int./Ext.	1	0	NH= BM PROMO = AM
Engineer A	Program Manager	2	Ext.	0	0	NH = AM, WF
Engineer A	Project Manager	1	Int./Ext.	0	0	NH = WF
Engineer A	Sr Geotech Engineer	1	Ext.	0	0	NH = WM
Craft A	Instrumentation Specialist	2	Int./Ext.	2	0	PROMO= 2WM
Craft A	Unit Supervisor	2	Int.	2	0	PROMO= 2WM
Craft A	HVAC Specialist	1	Int./Ext.	1	0	PROMO = WM
Craft A	Trades Foreman	1	Int.	1	0	PROMO = WM
Craft A	M & O Specialist - Wastewater	1	Int./Ext.	1	0	PROMO = WM
Craft A	Automotive Fleet Technician	1	Int.	1	0	PROMO = WM
Craft B	Second Class Engineer	1	Ext.	0	0	NH = WM
Craft B	Third Class Engineer	1	Ext.	0	0	NH = WM
Craft B	Electrician	2	Ext.	0	0	NH = 2WM
Craft B	Metal Fabricator/Welder	1	Int./Ext.	1	0	PROMO = WM
Craft B	Automotive Repairman Assist	1	Int.	1	0	PROMO = WM
Laborers	OMC Laborer	4	Ext.	0	0	NH = 3WM, BM
Laborers	Building/Grounds Worker	1	Ext.	0	0	NH= WM
Management A	Manager, Training and Development	1	Ext.	0	0	NH= WM
Management A	Mgr, Workplace Investigations	1	Ext.	0	0	NH= WF
Management A	Manager, Talent Acquisition	1	Int./Ext.	0	0	NH= WM
Management A	Program Manager	1	Int./Ext.	1	0	PROMO = AF
Operator A	Area Superv I (WW Transport)	3	Int.	3	0	PROMO = 3WM
Operator A	Supervisor, Inspection	1	Int./Ext.	1	0	PROMO = WM
Technical A	WSS General Foreman	1	Int.	1	0	PROMO = WM
Technical A	CADD Manager	54	Int./Ext.	1	0	PROMO= WM

Minority/Women-Owned Business Enterprise (MBE/WBE) Expenditures

4th Quarter – FY25

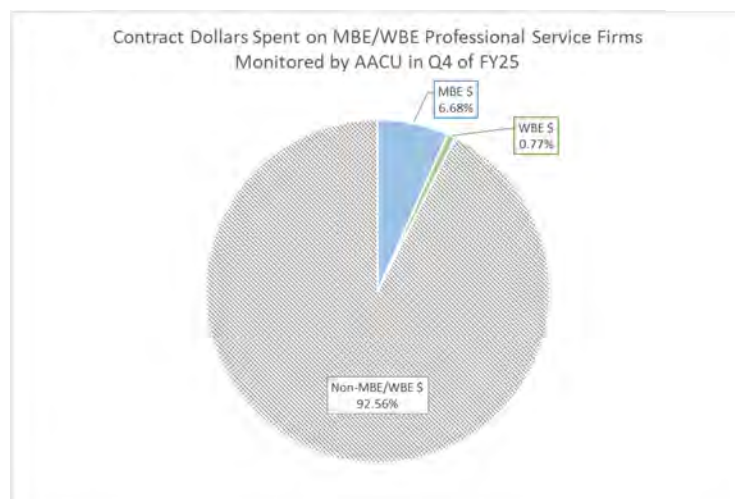
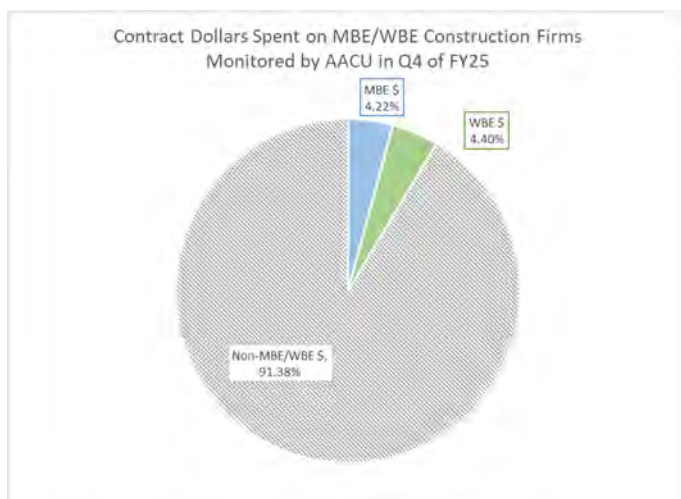
MWRA’s goals for construction and professional services expenditures for Minority-Owned Business Enterprises (MBE) and Women-Owned Business Enterprises (WBE) is based upon an Availability Study completed in 2002.* The goals are as follows:

Construction: 7.24% MBE / 3.6% WBE

Professional Services: 7.18% MBE / 5.77% WBE

Participation goals are only placed on contracts when there is a reasonable expectation of participation from available MBE and WBE firms, whether as prime contractors or as subcontractors, to perform the contracted work.

*MWRA is in the process of competitively procuring an expert firm to perform a new availability analysis during Calendar Year 2025.



In accordance with the Affirmative Action Plan (AAP) for calendar year 2025, MWRA is reporting expenditures for Qtr 4 of FY25 in the format consistent with the approved AAP. MWRA is monitoring 14 construction contracts and 28 professional services contracts. In this quarter, MWRA has spent approximately 4.22% (approximately \$1.5 million) of all construction payments to MBE firms, and 4.40% (approximately \$1.6 million) on WBE firms. In Qtr 4 of FY25, the MWRA has spent approximately 6.68% (approximately \$720K) of all professional services payments to MBE firms, and 0.77% (approximately \$82K) on WBE firms. In Qtr 4 of FY25, MWRA has spent approximately \$34,314 dollars with MBE or WBE vendors for goods and services.

Calendar Year (2025) to Date					
	Total Payments	MBE Payments (\$)	MBE % of Payments	WBE Payments (\$)	WBE % of Payments
Construction	\$70,103,416	\$3,708,576	5.29%	\$2,641,385	3.77%
Professional Services	\$21,728,277	\$2,359,852	10.86%	\$293,406	1.35%
Grand Totals	\$91,831,693	\$6,068,428	6.61%	\$2,934,791	3.20%

MWRA FY25 CEB Expenses

4th Quarter – FY25

As of June 2025, total expenses are \$880.1 million, \$20.5 million or 2.3% lower than budget, and total revenue is \$903.3 million, \$2.7 million or 0.3% over the estimate, for a net variance of \$23.2 million.

Expenses –

Direct Expenses are \$300.5 million, \$20.5 million or 6.5% under budget.

- **Wages & Salaries** were \$15.0 million under budget or 11.2%. Regular pay is \$16.1 million under budget, largely due to lower head count. YTD through June, the average Full Time Equivalent (FTE) positions was 1,065 or 103 below the 1,168 FTE's budgeted.
- **Professional Services** expense was \$2.8 million under budget or 25.1% primarily due to later than anticipated services for Other Professional Services of \$1.2 million and less than anticipated spending for Computer System Consultant and Engineering of \$572k and \$479k, respectively.
- **Other Services** expense was \$1.8 million under budget or 5.3% primarily due to lower Sludge Pelletization and lower Grit and Screenings expense of \$1.2 million and \$419k, respectively, both primarily due to lower quantities.
- **Fringe Benefits** expenses are \$1.2 million under budget or 4.3%, primarily due to lower spending for Health Insurance of \$1.1 million, reflecting the lower than budgeted head count. As of June FTEs were 103 below budget.
- **Chemicals** expenses were lower than budget by \$921k or 4.7% due primarily to lower Sodium Hypochlorite of \$859k was driven by DITP of \$759k due to below average plant flows. Lower Liquid Oxygen of \$302k due to lower dosing at Carroll Water Treatment Plant. This is partially offset by higher Hydrogen Peroxide of \$796k to reduce elevated H2S levels for odor pretreatment and corrosion control. DITP flows were 8.0% less than planned and the CWTP flows are 0.4% greater than planned through June.
- **Ongoing Maintenance** expense was \$506k over budget or 1.1% due to higher than anticipated project spending as Plant & Machinery Services was \$2.1 million over budget primarily due to greater than anticipated work for Deer Island Treatment Plant annual boiler maintenance and earlier than anticipated hydro wicket gate replacement work for the Deer Island Treatment Plant (DITP) Thermal Plant, Hydro Power and Wind Turbine maintenance contract, and also Deer Island Treatment Plant centrifuge maintenance. This overspending was partially offset by underspending of \$1.4 million for Special Equipment Services.

Indirect Expenses were \$72.3 million, \$3.2 million or 4.2% below budget driven by lower than budgeted Watershed Reimbursement of \$3.5 million.

Capital Finance Expenses totaled \$507.3 million, \$3.2 million over budget or 0.6%. Higher Senior Debt of \$14.6 million, as a result of defeasance expenditures of \$25.7 million. This was partially offset by lower Local Water Pipeline CP of \$3.7 million due to lower anticipated interest rates, lower than anticipated variable interest expense of \$4.3 million due to favorable rates, and lower SRF of \$3.4 million due to ARPA grants replacing borrowing and timing of repayments.

Revenue and Income –

Total Revenue and Income is \$903.3 million, \$2.7 million or 0.3% over the estimate. The favorable variance was driven by Investment Income of \$30.0 million, \$1.6 million over the estimate due to higher than assumed average balances in addition Other Revenue of \$828k that were over estimates.

	Jun 2025 Year-to-Date			
	Period 12 YTD Budget	Period 12 YTD Actual	Period 12 YTD Variance	%
EXPENSES				
WAGES AND SALARIES	\$ 133,658,955	\$ 118,626,118	\$ (15,032,837)	-11.2%
OVERTIME	6,133,078	5,739,519	(393,559)	-6.4%
FRINGE BENEFITS	27,834,124	26,631,794	(1,202,330)	-4.3%
WORKERS' COMPENSATION	2,073,434	2,364,511	291,077	14.0%
CHEMICALS	19,706,033	18,785,059	(920,974)	-4.7%
ENERGY AND UTILITIES	32,048,176	32,403,493	355,317	1.1%
MAINTENANCE	46,653,201	47,159,548	506,347	1.1%
TRAINING AND MEETINGS	568,346	351,912	(216,434)	-38.1%
PROFESSIONAL SERVICES	11,121,730	8,331,169	(2,790,561)	-25.1%
OTHER MATERIALS	7,270,879	7,986,802	715,923	9.8%
OTHER SERVICES	33,945,804	32,158,913	(1,786,891)	-5.3%
TOTAL DIRECT EXPENSES	\$ 321,013,760	\$ 300,538,838	\$ (20,474,922)	-6.4%
INSURANCE	\$ 4,471,045	\$ 4,763,831	\$ 292,786	6.5%
WATERSHED/PILOT	32,507,642	28,964,186	(3,543,456)	-10.9%
HEEC PAYMENT	8,185,722	8,259,571	73,849	0.9%
MITIGATION	1,823,564	1,823,564	-	0.0%
ADDITIONS TO RESERVES	1,906,278	1,906,278	-	0.0%
RETIREMENT FUND	21,264,519	21,264,519	-	0.0%
POST EMPLOYEE BENEFITS	5,280,806	5,280,806	-	0.0%
TOTAL INDIRECT EXPENSES	\$ 75,439,576	\$ 72,262,753	\$ (3,176,823)	-4.2%
STATE REVOLVING FUND	\$ 85,449,151	\$ 82,017,582	\$ (3,431,569)	-4.0%
SENIOR DEBT	315,206,721	329,820,727	14,614,006	4.6%
DEBT SERVICE ASSISTANCE	-	-	-	---
CURRENT REVENUE/CAPITAL	20,200,000	20,200,000	-	0.0%
SUBORDINATE MWRA DEBT	64,768,074	64,768,074	-	0.0%
LOCAL WATER PIPELINE CP	9,827,661	6,096,116	(3,731,545)	-38.0%
CAPITAL LEASE	3,217,060	3,217,060	-	0.0%
VARIABLE DEBT	-	(4,300,604)	(4,300,604)	---
DEFEASANCE ACCOUNT	-	-	-	---
DEBT PREPAYMENT	5,500,000	5,500,000	-	0.0%
TOTAL CAPITAL FINANCE EXPENSE	\$ 504,168,667	\$ 507,318,956	\$ 3,150,289	0.6%
TOTAL EXPENSES	\$ 900,622,003	\$ 880,120,547	\$ (20,501,456)	-2.3%
REVENUE & INCOME				
RATE REVENUE	\$ 855,488,000	\$ 855,488,000	\$ -	0.0%
OTHER USER CHARGES	10,668,572	10,910,076	241,504	2.3%
OTHER REVENUE	6,066,670	6,894,502	827,832	13.6%
RATE STABILIZATION	-	-	-	---
INVESTMENT INCOME	28,398,761	30,025,555	1,626,794	5.7%
TOTAL REVENUE & INCOME	\$ 900,622,003	\$ 903,318,133	\$ 2,696,130	0.3%

Cost of Debt 4th Quarter – FY25

MWRA borrowing costs are a function of the fixed and variable tax exempt interest rate environment, the level of MWRA's variable interest rate exposure and the perceived creditworthiness of MWRA. Each of these factors has contributed to decreased MWRA borrowing costs since 1990.

Average Cost of MWRA Debt FYTD

Fixed Debt (\$2.73 billion)	3.25%
Variable Debt (\$334.8 million)	3.41%
SRF Debt (\$749.36 million)	1.82%
Weighted Average Debt Cost (\$3.82 billion)	2.98%

Most Recent Senior Fixed Debt Issue April 2024

2024 Series B and C (\$445.5 million)	3.68%
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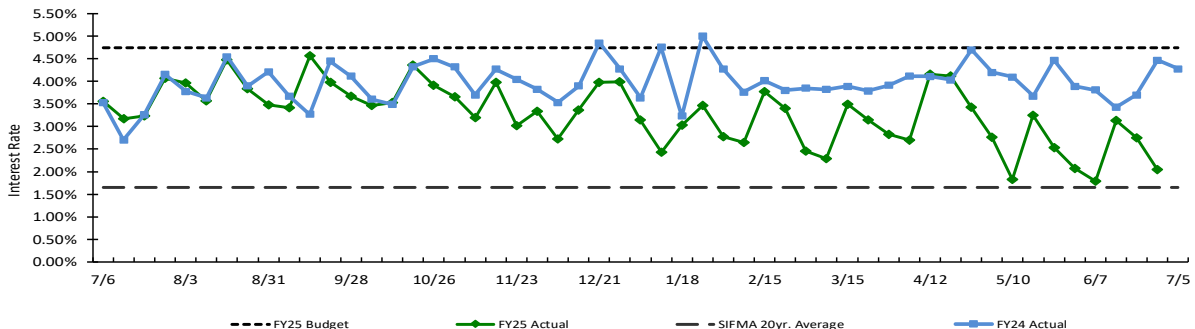


Bond Deal	1998AB	2000A	2000D	2002B	2002J	2003D	2004A	2004B	2005A	2006AB	2007AB	2009AB	2010AB	2011B
Rate	5.04%	6.11%	5.03%	5.23%	4.71%	4.64%	5.05%	4.17%	4.22%	4.61%	4.34%	4.32%	4.14%	4.45%
Avg Life	24.4 yrs	26.3 yrs	9.8 yrs	19.9 yrs	19.6 yrs	18.4 yrs	19.6 yrs	13.5 yrs	18.4 yrs	25.9 yrs	24.4 yrs	15.4 yrs	16.4 yrs	18.8 yrs

Bond Deal	2011C	2012AB	2013A	2014D-F	2016BC	2016D	2017BC	2018BC	2019BC	2019EFG	2020B	2021BC	2023BC	2024BC
Rate	3.95%	3.93%	2.45%	3.41%	3.12%	2.99%	2.98%	3.56%	2.82%	2.66%	2.33%	2.56%	3.35%	3.68%
Avg Life	16.5 yrs	17.9 yrs	9.9 yrs	15.1 yrs	17.4 yrs	18.8 yrs	11.2 yrs	11.7 yrs	11.9 yrs	9.73 yrs	15.6 yrs	12.2 yrs	10.45 yrs	11.77 yrs

Weekly Average Variable Interest Rates vs. Budget

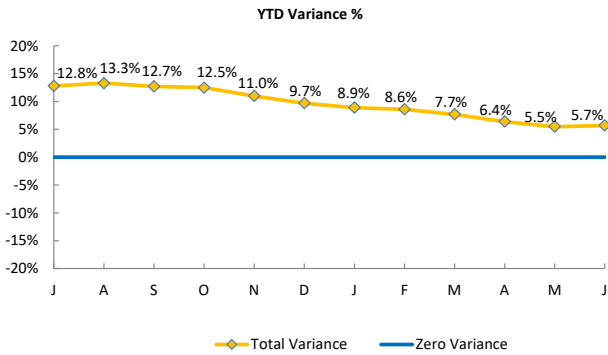
MWRA currently has eight variable rate debt issues with \$334.8 million outstanding, excluding commercial paper. Variable rate debt has been less expensive than fixed rate debt in recent years as short-term rates have remained lower than long-term rates on MWRA debt issues. In June, the Securities Industry and Financial Markets Association rate ranged from a high of 3.28% to a low of 1.68% for the month. MWRA's issuance of variable rate debt, although consistently less expensive in recent years, results in exposure to additional interest rate rise as compared to fixed rate debt.



Investment Income

4th Quarter – FY25

➤ YTD variance is 5.7%, \$1.6 million, over budget due to higher than budgeted average balances.



	YTD BUDGET VARIANCE			
	(\$'000)			
	BALANCES IMPACT	RATES IMPACT	TOTAL	%
Renewal & Replacement Reserves	\$7	-\$66	-\$59	-11.8%
Insurance Reserves	\$0	\$41	\$41	24.9%
Operating Reserves	-\$7	-\$575	-\$582	-22.3%
Construction	\$869	\$806	\$1,675	40.3%
Debt Service	\$192	-\$494	-\$302	-3.0%
Debt Service Reserves	\$44	-\$159	-\$115	-5.7%
Operating	\$287	\$10	\$297	7.7%
Revenue	\$605	\$66	\$672	14.0%
Redemption	\$0	\$0	\$0	0.1%
Total Variance	\$1,997	-\$370	\$1,627	5.7%

YTD Average Balances Budgeted vs. Actual

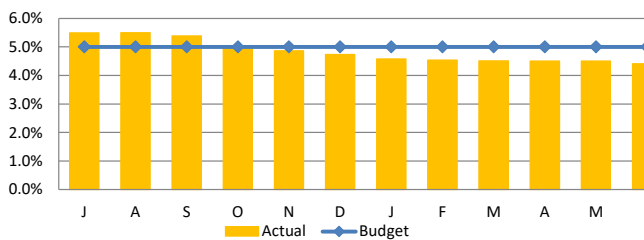


YTD Average Interest Rate Budgeted vs. Actual

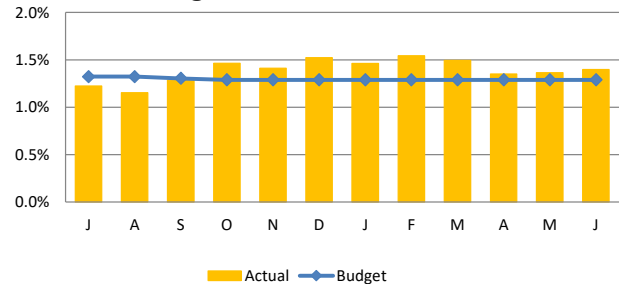


Monthly

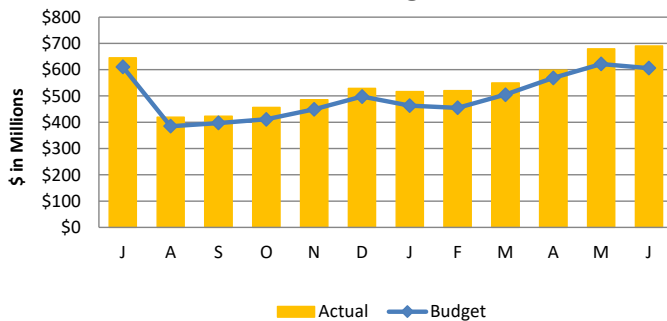
Short -Term Interest Rates



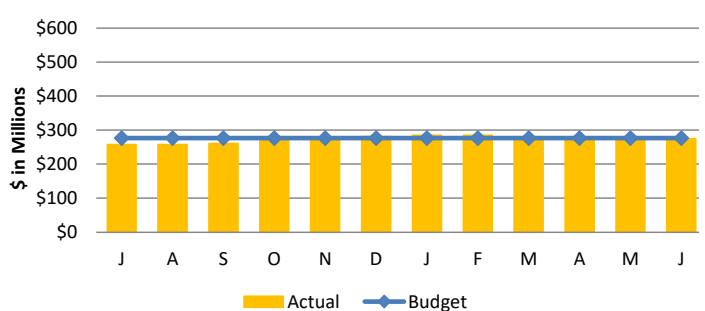
Long -Term Interest Rates



Short-Term Average Balances



Long-Term Average Balances



STAFF SUMMARY

TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: FY25 Year-End Financial Update and Summary




COMMITTEE: Administration, Finance & Audit

INFORMATION

VOTE

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



Thomas J. Durkin
Director, Finance

RECOMMENDATION:

For information only. This staff summary provides the financial results and variance highlights for Fiscal Year 2025.

DISCUSSION:

FY25 expenses were 2.3% under budget or \$20.5 million. In addition, revenue was 0.3% ahead of plan or \$2.7 million, resulting in a total budget variance of \$23.2 million. The variance was due to lower direct expenses of \$20.5 million, indirect expenses of \$3.2 million, and higher debt service costs of \$3.2 million, as well as higher revenue of \$2.7 million.

The largest variances in comparison with the budget are highlighted below:

Direct expenses were \$20.5 million below budget, driven by lower spending for Wages & Salaries, Professional Services, Other Services, Fringe Benefits, Chemicals, Overtime, and Training & Meetings, partially offset by higher spending on Other Materials, Maintenance, Utilities, and Worker's Compensation.

Indirect expenses were \$3.2 million below budget due to lower spending on Watershed Reimbursement of \$3.5 million associated with lower costs for wages & salaries, fringe benefits and maintenance, as well as PILOT. This underspending is partially offset by higher insurance payments/claims of \$0.3 million.

Capital Finance costs were \$3.2 million greater than budget due to higher senior debt of \$14.6 million as a result of defeasance expenditures of \$25.7 million. This was partially offset by lower than anticipated variable interest expense of \$4.3 million due to favorable rates, lower Local Water Pipeline CP of \$3.7 million due to lower than anticipated interest rates, and lower SRF spending of \$3.4 million due to ARPA grants replacing borrowing and timing of principal repayments.

Revenue was \$2.7 million greater than budget, driven by Investment Income of \$1.6 million greater than the estimate based on higher average balances. Other Revenue of \$0.8 million, and Other User Charges of \$0.2 million.

Of the \$23.2 million year-end favorable variance, \$1.3 million will be reserved for emergency repairs to the Quabbin Admin Building roof. This \$1.3 million will be combined with the \$1.8 million reserved from the FY24 year-end favorable variance, as the cost estimate for this project has increased to \$3.1 million. Staff are reviewing options for the utilization of the remaining FY25 favorable budget variance to reduce debt service in future years. Staff anticipate presenting a recommendation to the Board at the October meeting.

FY25 Current Expense Budget

The CEB expense variances for FY25 by major budget category were:

- Lower Direct Expenses of \$20.5 million or 6.4% under budget. Spending was lower for Wages & Salaries, Professional Services, Other Services, Fringe Benefits, Chemicals, Overtime, and Training & Meetings. Spending was higher than budget for Other Materials, Maintenance, Utilities, and Workers’ Compensation.
- Lower Indirect Expenses of \$3.2 million or 4.2% under budget due primarily to lower Watershed reimbursements.
- Higher Debt Service expenses of \$3.2 million was a result of higher Senior Debt, as a result of defeasance expenditures, partially offset by lower than anticipated variable interest expense due to favorable rates, lower Local Water Pipeline CP due to lower than anticipated interest rates, and lower SRF spending of due to ARPA grants replacing borrowing and timing of principal repayments.
- Revenue was \$2.7 million or 0.3% over the estimate driven by Investment Income of \$1.6 million due to higher than budgeted average balances, Other Revenue of \$0.8 million, and Other User Charges of \$0.2 million.

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

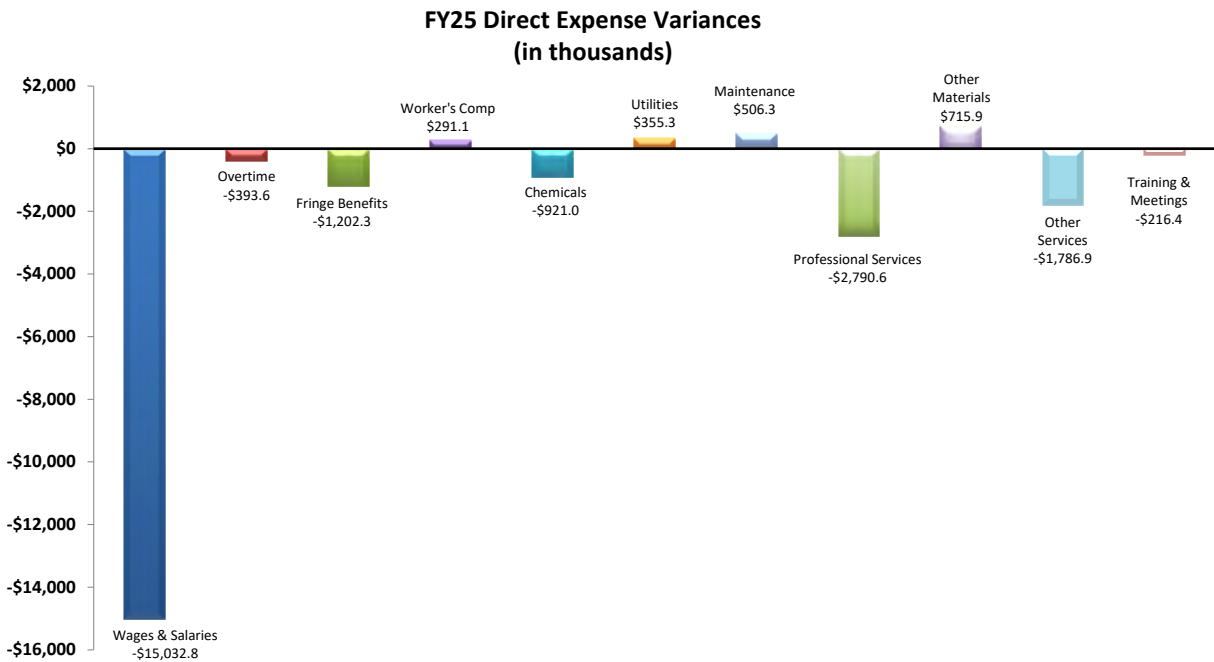
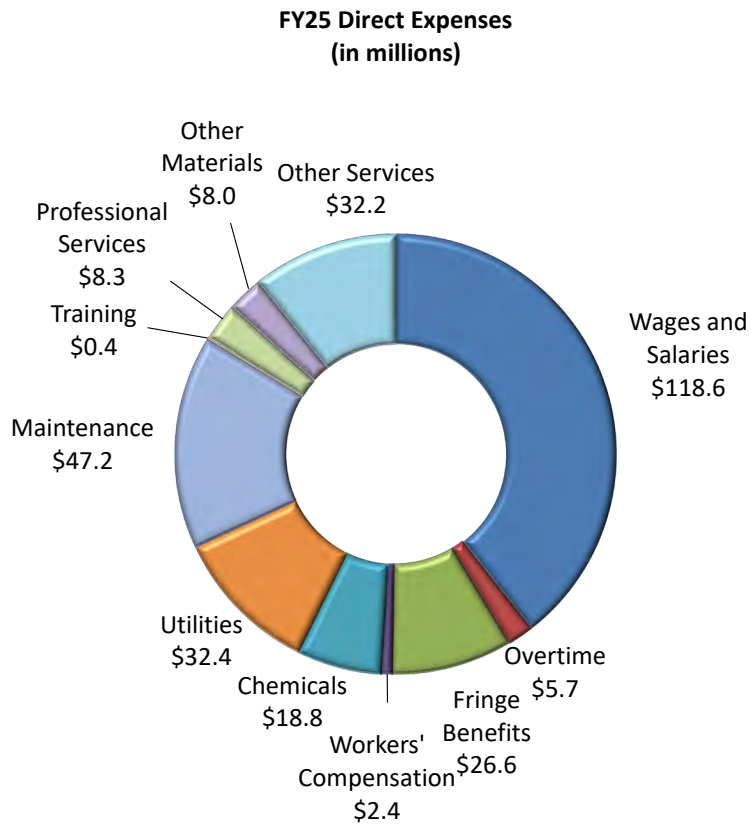
	FY25 Budget	FY25 Actual	\$ Variance	% Variance
Direct Expenses	\$321.0	\$300.5	-\$20.5	-6.4%
Indirect Expenses	\$75.4	\$72.3	-\$3.2	-4.2%
Capital Financing	\$504.2	\$507.3	\$3.2	0.6%
Total	\$900.6	\$880.1	-\$20.5	-2.3%

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.

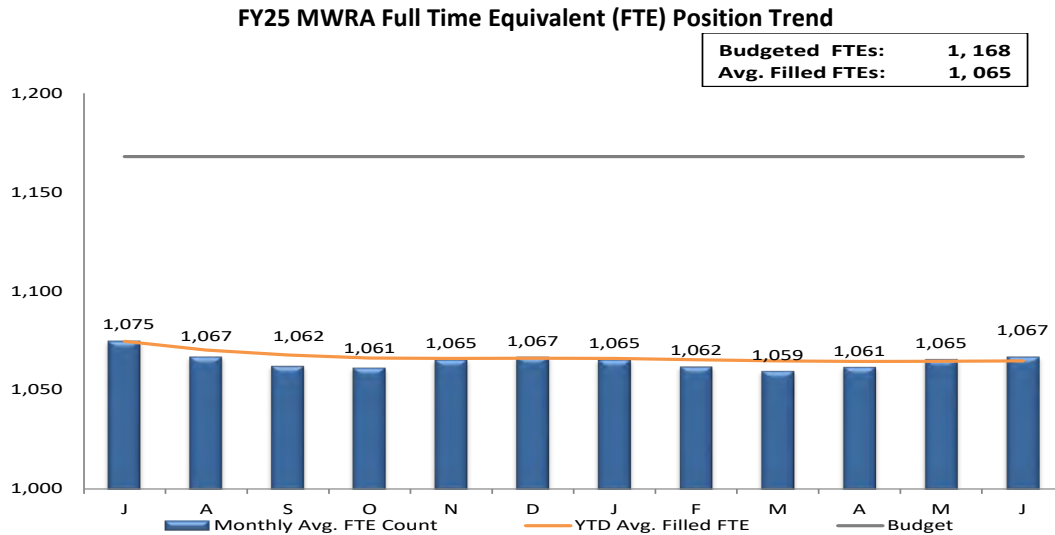
Direct Expenses

FY25 direct expenses totaled \$300.5 million, which was \$20.5 million or 6.4% less than budgeted.



Wages and Salaries

Wages and Salaries were under budget by \$15.0 million or 11.2%. In FY25, there were 103 fewer average FTEs (1,065 versus 1,168 budget) or 8.8% and lower average salaries for new hires versus retirees. The timing of backfilling vacant positions also contributed to Regular Pay being under budget.



Professional Services

Professional Services were lower than budget by \$2.8 million or 25.1% driven by lower Other Services of \$1.2 million due to later than anticipated services which includes the Disparity Study, Computer Systems Consultant of \$572,000, Engineering of \$479,000, Security of \$244,000, and Audit of \$211,000, all due to less than anticipated spending.

Other Services

Other Services were lower than budget by \$1.8 million or 5.3% driven by Sludge Pelletization of \$1.2 million primarily due to the potential PFAS regulation changes requiring landfilling that were budgeted for, but unspent in FY25 and Grit & Screenings Removal of \$419,000 due to lower quantities.

Fringe Benefits

Fringe Benefits spending was lower than budget by \$1.2 million or 4.3%. This is primarily driven by lower than budgeted Health Insurance costs of \$1.1 million, 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.

Chemicals

Chemicals were lower than budget by \$921,000 or 4.7%. Lower Sodium Hypochlorite of \$859,000 was driven by DITP of \$759,000 due to below average plant flows and Field Operations of \$96,000 due to lower than anticipated wet weather events. Lower Liquid Oxygen of \$302,000 was due to lower dosing at Carroll Water Treatment Plant. Lower Sodium Bisulfite of \$231,000 was primarily driven by lower volume at DITP of \$139,000 due to lower quantities to dechlorinate the effluent, and Wastewater Operations of \$78,000 due to lower volume as a result of less than anticipated CSO activations. Lower Carbon Dioxide of \$161,000 was due to lower dose required to meet target residual levels in finished water and less than anticipated contract price. Lower Activated Carbon of \$101,000 was due to fewer carbon change outs this fiscal year. This is partially offset by higher Hydrogen Peroxide of \$799,000 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, and higher Ferric Chloride of \$184,000 to keep the orthophosphate levels within the target levels. DITP flows are 9.9% less than planned and the CWTP flows are 0.4% greater than planned in FY25. 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.

Other Materials

Other Materials spending was higher than budget by \$716,000 or 9.8% driven by Computer Hardware of \$890,000 due to additional purchases for server and VM hardware refresh, Lab & Testing Supplies of \$457,000, Vehicle Purchases of \$310,000, and Health/Safety of \$174,000 due to more purchases than originally planned. These were partially offset by Other Materials of \$685,000 due to later than anticipated Phase 3 Boston/Chelsea office fit-out and less than anticipated purchase of gravel at the Clinton Wastewater Treatment Plant, and Vehicle Expense of \$261,000 due to less than anticipated spending including lower fuel prices.

Maintenance

Maintenance was greater than budget by \$506,000 or 1.1%. Maintenance Materials were greater than budget by \$598,000 driven by Warehouse Inventory of \$990,000 due to the need for spare parts and the purchase of materials early due to long lead times, higher Plant & Machinery Materials of \$398,000 for additional purchases including valve plugs, pump assemblies, butterfly valves and ROC fan at DITP, and Electrical Materials of \$372,000 due to greater than anticipated purchases through June including DITP LED lighting projects. These were partially offset by lower Special Equipment Materials of \$557,000 due to the timing of purchasing hatch covers at Loring Road Covered Storage, and HVAC Materials of \$354,000 due to less than anticipated purchases through June including a scope change for the Chelsea HVAC project. Maintenance Services were less than budget by \$92,000 driven by Special Equipment Services of \$1.4 million due to less than anticipated spending through June including various Process Instrumentation and Control System (PICS) work at DITP, and Building and Grounds Services of \$978,000 due to less than anticipated services through June including the Shaft 8 Retaining Wall repair, and lower spending for Computer Software/Licenses of \$356,000 was primarily due to license renewals that were originally anticipated to be paid in FY25 that will be paid in FY26. This underspending was partially offset by higher Plant & Machinery Services of \$2.1 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, and DITP centrifuge maintenance, partially offset by timing of solar repair at the John Carroll Water Treatment Plant (JCWTP), duct cleaning at pump stations, diesel exhaust silencers, and Nut Island Headworks fire pump replacement. Higher spending for HVAC Services of \$374,000 and Electrical Services of \$355,000 due to greater than anticipated electrical and HVAC spending in FY25.

Overtime

Overtime expenses were lower than budget by \$394,000 or 6.4%. Lower than budgeted spending for the Field Operations Department (FOD) of \$189,000 due to less emergency overtime as a result of less rain events and planned overtime due to vacancies. Lower spending in TRAC of \$89,000, Engineering & Construction of \$62,000, and Occupational Health & Safety of \$40,000, all due to less than anticipated needs through June. FY25 rainfall was a major contributor for the less than anticipated overtime.

Utilities

Utilities were higher than budget by \$355,000 or 1.1%. Higher than budgeted spending for Water of \$401,000 was primarily due to greater than projected water usage at DITP as a result of the DITP Primary and Secondary Clarifier Rehabilitation project, Electricity of \$385,000 driven by Deer Island Treatment Plant (DITP) of \$350,000 which was primarily due to Direct Energy for higher pricing and quantity as well as recent real time pricing. Field Operations was under budget by \$54,000 due to lower demand as a result of fewer wet weather events, resulting in less pumping. Higher than budgeted spending for Natural Gas of \$235,000 was primarily due to higher pricing. This was partially offset by lower than budgeted spending for Diesel Fuel by \$686,000 driven by Field Operations of \$367,000 due to lower price and less than anticipated deliveries, and Deer Island of \$319,000 due to favorable pricing.

Worker's Compensation

Worker's Compensation expenses were greater than budget by \$291,000 or 14.0%. The variance is due to higher than budgeted expenses for Medical Payments of \$205,000, Compensation Payments of \$46,000, and Administrative Expenses of \$40,000. Due to uncertainties of when spending will happen, the budget was spread evenly throughout the year.

Training & Meetings

Training & Meetings were lower than budget by \$216,000 or 38.1% primarily due to less than anticipated spending on meetings and conferences.

Indirect Expenses

Indirect Expenses totaled \$72.3 million, which is \$3.2 million or 4.2% lower than budget. The variance is driven by lower Watershed Reimbursements and PILOT payment, partially offset by higher spending on Insurance.

Based on FY25 operating activity only, the Watershed Division is \$3.0 million or 12.6% under budget. Lower spending on Wages & Salaries, Fringe Benefits, and Maintenance drove the variance. When factoring in the FY24 balance forward of \$156,000 which was paid during Q1 of FY25, Watershed Reimbursement is \$3.1 million or 13.3% below budget in FY25. In addition, PILOT was paid in the amount of \$8.5 million, which is \$414,000 or 4.6% under budget.

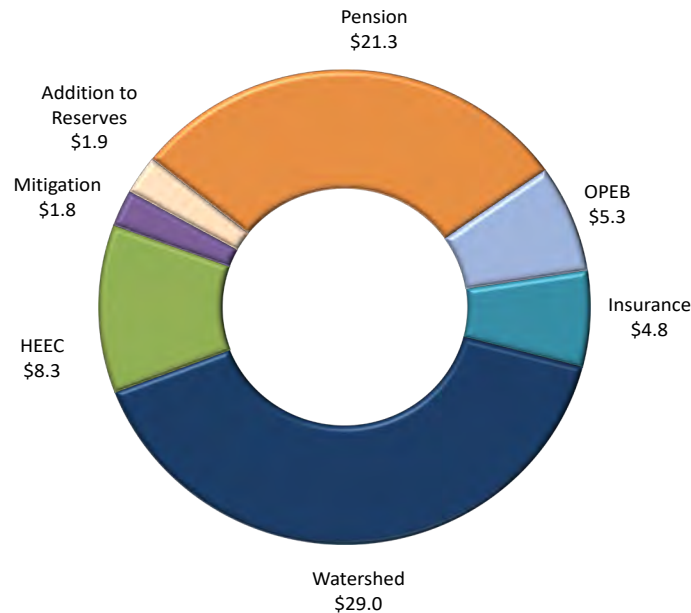
FY25 Watershed Protection Variance

\$ in millions	FY25 Budget	FY25 Actual	FY25 \$ Variance	FY25 % Variance
Operating Expenses	24.7	22.1	-2.6	-10.5%
Operating Revenues - Offset	1.1	1.5	0.4	35.5%
FY25 Operating Totals	23.6	20.6	-3.0	-12.6%
DCR Balance Forward (FY24 year-end accrual true-up)	0.0	-0.2	-0.2	
FY25 Adjusted Operating Totals	23.6	20.5	-3.1	-13.3%
PILOT	8.9	8.5	-0.4	-4.6%
Total Watershed Reimbursement	32.5	29.0	-3.5	-10.9%

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 trued-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 June was 150.0 (147.0 on a year-to-date basis) vs. a budget of 151.

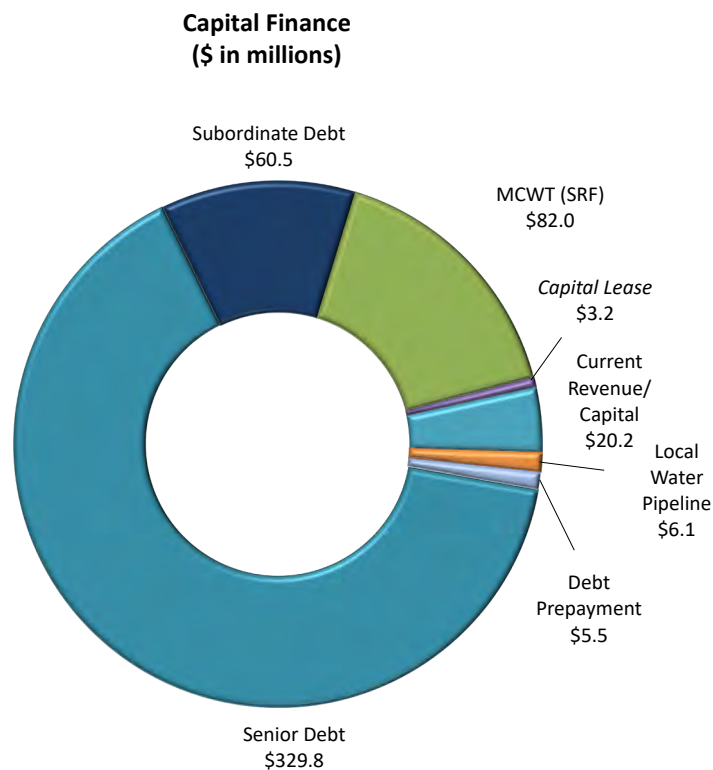
**FY25 Indirect Expenses
(in millions)**



Capital Financing

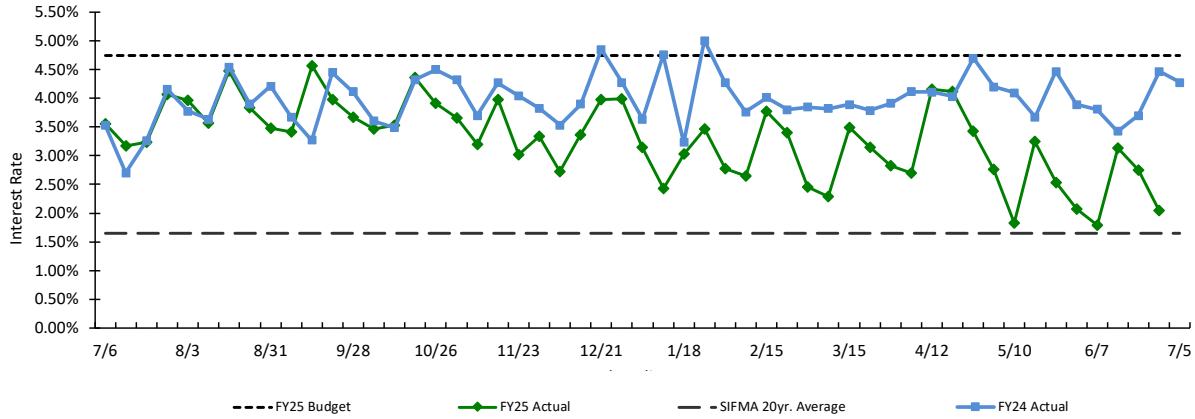
Capital Financing expenses include the principal and interest payments for fixed senior debt, the variable subordinate debt, the Massachusetts Clean Water Trust (SRF) obligation, the costs for the local water pipeline projects, current revenue for capital, Optional Debt Prepayment, and the Chelsea Facility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

Capital Finance totaled \$507.3 million and was \$3.2 million over budget driven by higher senior debt of \$14.6 million as a result of defeasance expenditures of \$25.7 million. This was partially offset by lower than anticipated variable interest expense of \$4.3 million due to favorable rates, lower Local Water Pipeline CP of \$3.7 million due to lower than anticipated interest rates, and lower SRF spending of \$3.4 million due to ARPA grants replacing borrowing and timing of principal repayments.



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

**Weekly Average Interest Rate on MWRA Variable Rate Debt
(Includes liquidity support and remarketing fees)**



Revenue & Income

Revenues of \$903.3 million were \$2.7 million or 0.3% greater than the estimate driven by Investment Income which was \$1.6 million or 5.7% greater than planned due to higher than assumed average balances. Also, Other Revenue of \$0.8 million and Other User Charges of \$0.2 million both contributed to this variance.

ATTACHMENTS:

- Attachment 1 – FY25 Variance Summary
- Attachment 2 – Current Expense Variance Explanations
- Attachment 3 – FY25 Actual vs. FY25 Projection

ATTACHMENT 1
FY25 Actuals vs. FY25 Budget

	June 2025				
	FY25 Budget	FY25 Actual	FY25 Variance	%	FY25 Approved
<u>EXPENSES</u>					
WAGES AND SALARIES	\$ 133,658,955	\$ 118,626,118	\$ (15,032,837)	-11.2%	\$ 133,658,955
OVERTIME	6,133,078	5,739,519	(393,559)	-6.4%	6,133,078
FRINGE BENEFITS	27,834,124	26,631,794	(1,202,330)	-4.3%	27,834,124
WORKERS' COMPENSATION	2,073,434	2,364,511	291,077	14.0%	2,073,434
CHEMICALS	19,706,033	18,785,059	(920,974)	-4.7%	19,706,033
ENERGY AND UTILITIES	32,048,176	32,403,493	355,317	1.1%	32,048,176
MAINTENANCE	46,653,201	47,159,548	506,347	1.1%	46,653,201
TRAINING AND MEETINGS	568,346	351,912	(216,434)	-38.1%	568,346
PROFESSIONAL SERVICES	11,121,730	8,331,169	(2,790,561)	-25.1%	11,121,730
OTHER MATERIALS	7,270,879	7,986,802	715,923	9.8%	7,270,879
OTHER SERVICES	33,945,804	32,158,913	(1,786,891)	-5.3%	33,945,804
TOTAL DIRECT EXPENSES	\$ 321,013,760	\$ 300,538,838	\$ (20,474,922)	-6.4%	\$ 321,013,760
<u>INDIRECT EXPENSES</u>					
INSURANCE	\$ 4,471,045	\$ 4,763,831	\$ 292,786	6.5%	\$ 4,471,045
WATERSHED/PILOT	32,507,642	28,964,186	(3,543,456)	-10.9%	32,507,642
HEEC PAYMENT	8,185,722	8,259,571	73,849	0.9%	8,185,722
MITIGATION	1,823,564	1,823,564	-	0.0%	1,823,564
ADDITIONS TO RESERVES	1,906,278	1,906,278	-	0.0%	1,906,278
RETIREMENT FUND	21,264,519	21,264,519	-	0.0%	21,264,519
POST EMPLOYEE BENEFITS	5,280,806	5,280,806	-	0.0%	5,280,806
TOTAL INDIRECT EXPENSES	\$ 75,439,576	\$ 72,262,753	\$ (3,176,823)	-4.2%	\$ 75,439,576
<u>CAPITAL FINANCE EXPENSES</u>					
STATE REVOLVING FUND	\$ 85,449,151	\$ 82,017,582	\$ (3,431,569)	-4.0%	\$ 85,449,151
SENIOR DEBT	315,206,721	329,820,727	14,614,006	4.6%	315,206,721
DEBT SERVICE ASSISTANCE	-	-	-	---	-
CURRENT REVENUE/CAPITAL	20,200,000	20,200,000	-	0.0%	20,200,000
SUBORDINATE MWRA DEBT	64,768,074	64,768,074	-	0.0%	64,768,074
LOCAL WATER PIPELINE CP	9,827,661	6,096,116	(3,731,545)	-38.0%	9,827,661
CAPITAL LEASE	3,217,060	3,217,060	-	0.0%	3,217,060
VARIABLE DEBT	-	(4,300,604)	(4,300,604)	---	-
DEFEASANCE ACCOUNT	-	-	-	---	-
DEBT PREPAYMENT	5,500,000	5,500,000	-	0.0%	5,500,000
TOTAL CAPITAL FINANCE EXPENSE	\$ 504,168,667	\$ 507,318,956	\$ 3,150,289	0.6%	\$ 504,168,667
TOTAL EXPENSES	\$ 900,622,003	\$ 880,120,547	\$ (20,501,456)	-2.3%	\$ 900,622,003
<u>REVENUE & INCOME</u>					
RATE REVENUE	\$ 855,488,000	\$ 855,488,000	\$ -	0.0%	\$ 855,488,000
OTHER USER CHARGES	10,668,572	10,910,076	241,504	2.3%	10,668,572
OTHER REVENUE	6,066,670	6,894,502	827,832	13.6%	6,066,670
RATE STABILIZATION	-	-	-	---	-
INVESTMENT INCOME	28,398,761	30,025,555	1,626,794	5.7%	28,398,761
TOTAL REVENUE & INCOME	\$ 900,622,003	\$ 903,318,133	\$ 2,696,130	0.3%	\$ 900,622,003

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY25 Budget	FY25 Actuals	FY25 Actual vs. FY25 Budget		Explanations
			\$	%	
Direct Expenses					
Wages & Salaries	133,658,955	118,626,118	(15,032,837)	-11.2%	Wages and Salaries were lower than budget by \$15.0 million or 11.2%. In FY25, there were 103 fewer average FTEs (1,065 versus 1,168 budget), lower average new hire salaries versus retirees, the timing of backfilling vacant positions.
Overtime	6,133,078	5,739,519	(393,559)	-6.4%	Overtime expenses were lower than budget by \$394,000 or 6.4%. Lower than budgeted spending for the Field Operations Department (FOD) of \$189,000 due to less emergency overtime due to less rain events and planned overtime due to vacancies. Lower spending in TRAC of \$89,000, Engineering & Construction of \$62,000, and Occupational Health & Safety of \$40,000, all due to less than anticipated needs. FY25 rainfall was a major contributor for the less than anticipated overtime.
Fringe Benefits	27,834,124	26,631,794	(1,202,330)	-4.3%	Fringe Benefits spending was lower than budget by \$1.2 million or 4.3%. This is primarily driven by lower Health Insurance costs of \$1.1 million, 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	2,073,434	2,364,511	291,077	14.0%	Worker's Compensation expenses were greater than budget by \$291,000 or 14.0%. The variance is due to higher than budgeted expenses for Medical Payments of \$205,000, Compensation Payments of \$46,000, and Administrative Expenses of \$40,000. Due to uncertainties of when spending will happen, the budget was spread evenly throughout the year.
Chemicals	19,706,033	18,785,059	(920,974)	-4.7%	Chemicals were lower than budget by \$921,000 or 4.7%. Lower Sodium Hypochlorite of \$859,000 was driven by DITP of \$759,000 due to below average plant flows and Field Operations of \$96,000 due to lower than anticipated wet weather events. Lower Liquid Oxygen of \$302,000 due to lower dosing at Carroll Water Treatment Plant. Lower Sodium Bisulfite of \$231,000 was primarily driven by lower volume at DITP of \$139,000 due to lower quantities to dechlorinate the effluent, and Wastewater Operations of \$78,000 due to lower volume as a result of less than anticipated CSO activations. Lower Carbon Dioxide of \$161,000 due to lower dose required to meet target residual levels in finished water and less than anticipated contract price. Lower Activated Carbon of \$101,000 due to fewer carbon change outs this fiscal year. This is partially offset by higher Hydrogen Peroxide of \$799,000 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, and higher Ferric Chloride of \$184,000 to keep the orthophosphate levels within the target levels. DITP flows are 9.9% less than planned and the CWTP flows are 0.4% greater than planned in FY25. 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.

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Total MWRA	FY25 Budget	FY25 Actuals	FY25 Actual vs. FY25 Budget		Explanations
			\$	%	
Utilities	32,048,176	32,403,493	355,317	1.1%	Utilities were higher than budget by \$355,000 or 1.1%. Higher than budgeted spending for Water of \$401,000 primarily due to greater than projected water usage at DITP as a result of the DITP Primary and Secondary Clarifier Rehabilitation project, Electricity of \$385,000 driven by Deer Island Treatment Plant (DITP) of \$350,000 which was primarily due to Direct Energy for higher pricing and quantity as well as recent real time pricing. Field Operations was under budget by \$54,000 due to lower demand as a result of fewer wet weather events, resulting in less pumping. Higher than budgeted spending for Natural Gas of \$235,000 primarily due to higher pricing. This was partially offset by lower than budgeted spending for Diesel Fuel by \$686,000 driven by Field Operations of \$367,000 due to lower price and less than anticipated deliveries, and Deer Island of \$319,000 due to favorable pricing.
Maintenance	46,653,201	47,159,548	506,347	1.1%	Maintenance was greater than budget by \$506,000 million or 1.1%. Maintenance Materials were greater than budget by \$598,000 driven by Warehouse Inventory of \$990,000 due to the need for spare parts and purchase of materials early due to long lead times, higher Plant & Machinery Materials of \$398,000 for additional purchases including valve plugs, pump assemblies, butterfly valves and ROC fan at DITP, and Electrical Materials of \$372,000 due to greater than anticipated purchases including DITP LED lighting projects. These were partially offset by lower Special Equipment Materials of \$557,000 due to the timing of purchasing hatch covers at Loring Road Covered Storage, and HVAC Materials of \$354,000 due to less than anticipated purchases including a scope change for the Chelsea HVAC project. <i>Maintenance Services</i> were less than budget by \$92,000 driven by Special Equipment Services of \$1.4 million due to less than anticipated spending including various Process Instrumentation and Control System (PICS) work at DITP, and Building and Grounds Services of \$978,000 due to less than anticipated services including the Shaft 8 Retaining Wall repair, and lowerspending for Computer Software/Licenses of \$356,000 was primarily due to license renewals that were originally anticipated to be paid in FY25 that will be paid in FY26. This underspending was partially offset by higher Plant & Machinery Services of \$2.1 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, and DITP centrifuge maintenance, partially offset by timing of solar repair at the John Carroll Water Treatment Plant (JCWTP), duct cleaning at pump stations, diesel exhaust silencers, and Nut Island Headworks fire pump replacement. Higher spending for Electrical Services of \$355,000 and HVAC Services of \$374,000 due to greater than anticipated electrical and HVAC work spending in FY25.

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Current Expense Variance Explanations

Total MWRA	FY25 Budget	FY25 Actuals	FY25 Actual vs. FY25 Budget		Explanations
			\$	%	
Training & Meetings	568,346	351,912	(216,434)	-38.1%	Training & Meetings were lower than budget by \$216,000 or 38.1% primarily due to less than anticipated spending on meetings and conferences driven by MIS (\$162,000), Deer Island Treatment Plant (\$15,000), Procurement (\$15,000), Occupational Health & Safety (\$14,000), and Engineering & Construction of (\$14,000), partially offset by higher spending in FOD Admin of \$38,000 and Operations Administration of \$21,000.
Professional Services	11,121,730	8,331,169	(2,790,561)	-25.1%	Professional Services were lower than budget by \$2.8 million or 25.1% driven by lower Other Services of \$1.2 million due to later than anticipated services which includes the Disparity Study, Computer Systems Consultant of \$572,000, Engineering of \$479,000, and Audit of \$211,000, all due to less than anticipated spending.
Other Materials	7,270,879	7,986,802	715,923	9.8%	Other Materials spending was higher than budget by \$716,000 or 9.8% driven by Computer Hardware of \$890,000 due to additional purchases for server and VM hardware refresh, Lab & Testing Supplies of \$447,000 and Health/Safety Materials of \$149,000 due to greater than anticipated purchases, Vehicle Purchases of \$310,000 and Health/Safety of \$174,000 due to more purchases than originally planned. These were partially offset by Other Materials of \$685,000 due to later than anticipated Phase 3 Boston/Chelsea office fit-out and less than anticipated purchase of gravel at the Clinton Wastewater Treatment Plant, and Vehicle Expense of \$261,000 due to less than anticipated spending driven by lower fuel prices.
Other Services	33,945,804	32,158,913	(1,786,891)	-5.3%	Other Services were lower than budget by \$1.8 million or 5.3% driven by Sludge Pelletization of \$1.2 million due to the potential PFAS regulation changes requiring landfilling that were budgeted for, but unspent in FY25 and Grit & Screenings Removal of \$419,000 due to lower quantities, and lower than anticipated Telecommunications of \$151,000.
Total Direct Expenses	321,013,760	300,538,838	(20,474,922)	-6.4%	
Indirect Expenses					
Insurance	4,471,045	4,763,831	292,786	6.5%	Higher payments/claims of \$164,000 and premiums of \$129,000 than budgeted.
Watershed/PILOT	32,507,642	28,964,186	(3,543,456)	-10.9%	Lower Watershed Reimbursement of \$3.5 million driven by lower spending on Wages & Salaries, Fringe Benefits, and Maintenance. Also, the PILOT payment was \$0.4 million less than budget.
HEEC Payment	8,185,722	8,259,571	73,849	0.9%	HEEC Revenue Requirement of \$58,000 and O&M Charge of \$16,000.
Mitigation	1,823,564	1,823,562	(2)	0.0%	
Addition to Reserves	1,906,278	1,906,278	-	0.0%	

ATTACHMENT 2
Current Expense Variance Explanations

Total MWRA	FY25 Budget	FY25 Actuals	FY25 Actual vs. FY25 Budget		Explanations
			\$	%	
Pension Expense	21,264,519	21,264,519	-	0.0%	
Post Employee Benefits	5,280,806	5,280,806	-	0.0%	
Total Indirect Expenses	75,439,576	72,262,753	(3,176,823)	-4.2%	
Debt Service					
Debt Service	504,168,667	507,318,956	3,150,289	0.6%	Capital Financing was \$3.2 million over budget driven by higher senior debt of \$14.6 million as a result of defeasance expenditures of \$25.7 million. This was partially offset by lower than anticipated variable interest expense of \$4.3 million due to favorable rates, lower Local Water Pipeline CP of \$3.7 million due to lower than anticipated interest rates, and lower SRF spending of \$3.4 million due to ARPA grants replacing borrowing and timing of repayments.
Debt Service Assistance	-	-	-		
Total Debt Service Expenses	504,168,667	507,318,956	3,150,289	0.6%	
Total Expenses					
Total Expenses	900,622,003	880,120,547	(20,501,455)	-2.3%	
Revenue & Income					
Rate Revenue	855,488,000	855,488,000	-	0.0%	
Other User Charges	10,668,572	10,910,076	241,504	2.3%	Primarily higher than estimated DI water.
Other Revenue	6,066,670	6,894,502	827,832	13.6%	Other Revenue was \$827,000 or 13.6% greater than budget due to Energy Revenue of \$308,000, Energy Rebates of \$250,000, Miscellaneous Revenue of \$227,000, Emergency Water Supply of \$101,000 for the Town of Wayland, Permit Fees of \$95,000, partially offset by Profit & Loss on Disposal of Equipment of \$188,000.
Rate Stabilization	-	-	-		
Investment Income	28,398,761	30,025,555	1,626,794	5.7%	Investment Income is over budget due to higher than assumed average balances.
Total Revenue	900,622,003	903,318,133	2,696,130	0.3%	
Net Revenue in Excess of Expenses	-	23,197,586	23,197,585		

Attachment 3
FY25 Actual vs. FY25 Projection

TOTAL MWRA	FY25 Projection	FY25 Actual	Change FY25 Actual vs FY25 Projection	
			\$	%
EXPENSES				
WAGES AND SALARIES	\$ 115,620,736	\$ 118,626,118	\$ 3,005,382	2.6%
OVERTIME	5,779,767	5,739,519	(40,248)	-0.7%
FRINGE BENEFITS	26,215,824	26,631,794	415,970	1.6%
WORKERS' COMPENSATION	2,544,104	2,364,511	(179,593)	-7.1%
CHEMICALS	19,474,912	18,785,059	(689,853)	-3.5%
ENERGY AND UTILITIES	31,142,942	32,403,493	1,260,551	4.0%
MAINTENANCE	44,437,472	47,159,548	2,722,076	6.1%
TRAINING AND MEETINGS	421,713	351,912	(69,801)	-16.6%
PROFESSIONAL SERVICES	9,364,497	8,331,169	(1,033,328)	-11.0%
OTHER MATERIALS	7,387,450	7,986,802	599,352	8.1%
OTHER SERVICES	31,304,362	32,158,913	854,551	2.7%
TOTAL DIRECT EXPENSES	\$ 293,693,778	\$ 300,538,838	\$ 6,845,060	2.3%
INSURANCE	\$ 4,602,141	\$ 4,763,831	\$ 161,690	3.5%
WATERSHED/PILOT	29,755,671	28,964,186	(791,485)	-2.7%
HEEC PAYMENT	8,259,572	8,259,571	(1)	0.0%
MITIGATION	1,823,563	1,823,562	-	0.0%
ADDITIONS TO RESERVES	1,906,278	1,906,278	-	0.0%
RETIREMENT FUND	21,264,519	21,264,519	-	0.0%
POSTEMPLOYMENT BENEFITS	5,280,806	5,280,806	-	0.0%
TOTAL INDIRECT EXPENSES	\$ 72,892,550	\$ 72,262,753	\$ (629,796)	-0.9%
STATE REVOLVING FUND	\$ 82,017,580	\$ 82,017,582	\$ 2	0.0%
SENIOR DEBT	306,878,174	329,820,727	22,942,553	7.5%
SUBORDINATE DEBT	60,696,949	60,467,470	(229,479)	-0.4%
LOCAL WATER PIPELINE CP	7,347,129	6,096,116	(1,251,013)	-17.0%
CURRENT REVENUE/CAPITAL	20,200,000	20,200,000	-	0.0%
CAPITAL LEASE	3,217,060	3,217,060	-	0.0%
DEBT PREPAYMENT	5,500,000	5,500,000	-	0.0%
DEBT SERVICE ASSISTANCE	-	-	-	-
TOTAL DEBT SERVICE	\$ 485,856,892	\$ 507,318,956	\$ 21,462,063	4.4%
TOTAL EXPENSES	\$ 852,443,219	\$ 880,120,547	\$ 27,677,328	3.2%
REVENUE & INCOME				
RATE REVENUE	\$ 855,488,000	\$ 855,488,000	\$ -	0.00%
OTHER USER CHARGES	10,753,761	10,910,076	156,315	1.5%
OTHER REVENUE	6,292,411	6,894,503	602,092	9.6%
RATE STABILIZATION	-	-	-	0.0%
INVESTMENT INCOME	29,892,694	30,025,555	132,860	0.4%
TOTAL REVENUE & INCOME	\$ 902,426,866	\$ 903,318,133	\$ 891,267	0.1%

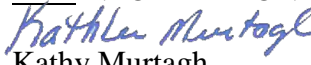
VARIANCE: **\$ (23,197,587)** **\$ 26,786,061** **3.0%**

STAFF SUMMARY




TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Fiscal Year 2025 Year-End Capital Improvement Program Spending Report

COMMITTEE: Administration, Finance & Audit

 VOTE
X INFORMATION

Kathy Murtagh
Chief Operating Officer

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


Thomas J. Durkin
Director, Finance

At the end of each fiscal year, staff present the Board with a recap of the Capital Improvement Program. FY25 was the second year of MWRA’s five-year spending cap for FY24-28 established at \$1.4 billion. The FY25 capital plan was \$347.3 million. The FY25 capital spending totaled \$207.1 million, \$140.2 million or 40.4% lower than planned. After accounting for programs which are not directly under MWRA’s control, capital spending totaled \$177.0 million, \$72.7 million or 29.1% under planned spending.

In FY25, the Authority reached substantial completion of several projects including the Braintree-Weymouth Improvements Construction, Deer Island Treatment Plant Roofing replacements, Sudbury Reservoir Dam Spillway and Gatehouse Vent Repair, Carroll Water Treatment Plant Parapet Wall Repair, Columbus Park Headworks Air Handling Equipment, MAXIMO Interface Enhancements, and Walnut Hill Bridge Truss Construction.

The Authority made significant progress on several major projects including the Deer Island Treatment and Primary & Secondary Clarifier Rehabilitation, Carroll Water Treatment Plant SCADA Upgrade Construction, Northern Intermediate High (NIH) Section 89/29 Replacement, New Connecting Mains Sections 24 & 25 Construction CP-2, and Wachusett Lower Gatehouse Pipe & Boiler Replacement.

In FY25, MWRA managed 84 design and construction contracts and awarded 22 contracts valued at \$231.9 million.

RECOMMENDATION:

For information only. The Fiscal Year 2025 Year-End Capital Program Spending Report highlights MWRA’s major capital program accomplishments during FY25 and provides explanations for spending variances.

Please see Attachment A for the full Report.

DISCUSSION:

Projects that were completed or reached substantial completion in FY25 included:

- Braintree-Weymouth Improvements Construction – \$14.4 million
- Deer Island Treatment Plant Roofing Replacements – \$8.9 million
- Braintree-Weymouth Improvements Design – \$2.3 million
- Sudbury Reservoir Dam Spillway & Gatehouse Vent Repair – \$2.2 million
- Carroll Water Treatment Plant Parapet Wall Repair – \$1.4 million
- MAXIMO Interface Enhancements – \$1.2 million
- Columbus Park Headworks Air Handling Equipment – \$1.1 million
- Braintree-Weymouth Improvements REI – \$0.9 million
- Near Field Communications – \$0.8 million
- Core Switches – \$0.5 million
- Oracle Database Appliance V.2 – \$0.5 million
- Walnut Street Bridge Truss-Construction – \$0.4 million
- Deer Island Misc. VFD Replacements – \$0.4 million
- CP-1 NEH Improvements REI – \$0.2 million

MWRA made significant progress on a number of water and wastewater projects, including:

- Carroll Water Treatment Plant SCADA Upgrade Construction – 97.3% complete
- Metro Water Tunnel Geotechnical Technical Support Services – 95.4% complete
- CP-2 Shaft 5 Improvements – 91.6% complete
- Wachusett Lower Gatehouse Pipe and Boiler Replacement – 88.5% complete
- New Connecting Mains Sections 24 & 25 Construction CP-2 – 85.9% complete
- Northern Intermediate High (NIH) Section 89/29 Replacement – 85.3% complete
- Quinapoxet Dam Removal – 77.6%
- Metro Water Tunnel Program Support Services – 46.5% complete
- Deer Island Clarifier Rehab Phase 2 Construction – 35.4% complete

MWRA pipelines rehabilitated or constructed in FY25 totaled 2.0 miles for water and wastewater projects.

Please see Attachment D for a detailed breakdown of the linear footage of pipeline rehabilitated or constructed by project for FY25.

There were 22 contracts awarded by MWRA for \$231.9 million in FY25. The major awards with the following Notice to Proceed and amount are listed below:

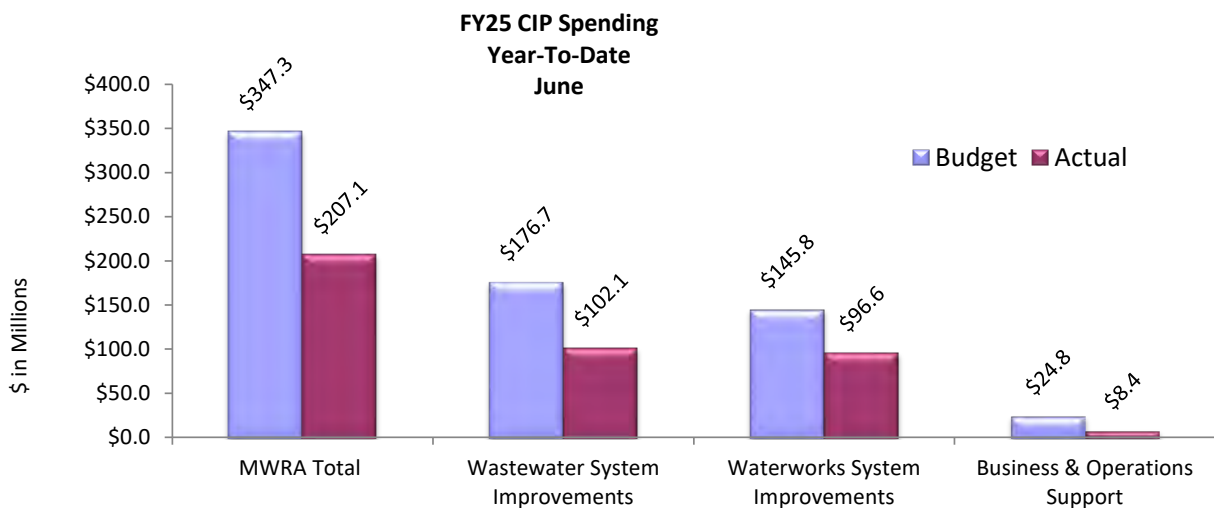
- Final Design/ESDC Tunnel Redundancy – Nov 2024 – \$93.6 million
- CP-2 NEH Improvement Sects 45 & 63 – April 2025 – \$26.8 million
- Hayes Pump Station Rehab Construction – November 2024 – \$25.6 million
- Combined Heat and Power Design/ESDC/REI – August 2024 – \$18.4 million

- Section 75A and 47 Extension – Construction CP-1 – February 2025 - \$22.6 million
- Section 56 Replacement – Construction – April 2025 – \$9.5 million
- Steel Tank/Improvement Construction Walnut Hill – April 2025 – \$8.8 million
- HVAC Design/ESDC – April 2025 – \$8.3 million
- Clinton Digester Cover Replacement – March 2025 – \$7.0 million
- Somerville Marginal New Pipeline October 2024 – \$4.4 million
- Cottage Farm PCB Abatement – Design/CA – October 2024 – \$3.8 million
- Section 75A and 47 REI CP-1 – January 2025 – \$1.8 million
- Hayes Pump Station Rehab REI – January 2025 – \$1.8 million
- West Roxbury Tunnel Inspection – July 2024 – \$1.7 million
- Hyperion v.2 – June 2024 – \$1.0 million
- CP-2 Tops of Shafts REI – August 2024 – \$0.9 million
- Oracle Database Appliance v.2 – July 2024 – \$0.5 million
- PI Vision Process Book Replacement – December 2024 – \$0.2 million
- Technical Assistance Appraisal Services – July 2025 – 2 contracts at \$0.2 million each
- Disaster Recovery – September 2024 – \$0.1 million
- MS Office Upgrade – June 2025 – \$0.03 million

Please see Attachment C for FY25 Planned versus Actual/Revised CIP Notices to Proceed for a complete list of contracts awarded.

For FY25, MWRA continued support for the community financial assistance programs includes overall net spending of \$27.9 million. Inflow and Infiltration (I/I) spending consisted of \$15.5 million in grants and \$9.6 million in loans offset by \$7.9 million in prior period loan repayments for net spending of \$17.2 million. The Local Water System Assistance Program spending was \$41.7 million in loans, including CVA communities, \$3.6 million in grants, offset by \$34.6 million in prior period loan repayments for net loans of \$10.7 million that includes net Lead Service Line Replacement loans of \$9.3 million.

Major Variances to FY25 Plan



For FY25, total Capital Improvement Program spending was projected at \$347.3 million. Total spending was \$207.1 million, which was \$140.2 million or 40.4% below plan. Underspending was reported in Wastewater of \$74.6 million, \$49.2 million in Waterworks Improvements, and \$16.4 million in Business and Operations Support.

After accounting for programs which are not directly under MWRA's control which include 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 \$177.0 million, \$72.7 million or 29.1% under planned spending.

The table below reports the FY25 spending and variances by major program:

\$ in Millions	Budget	Actuals	\$ Var.	% Var.
Wastewater System Improvements				
Interception & Pumping	24.0	12.6	(11.4)	-47.7%
Treatment	81.0	68.5	(12.5)	-15.4%
Residuals	0.4	0.2	(0.2)	0.0%
CSO	5.4	3.6	(1.8)	-33.2%
Other	65.9	17.2	(48.7)	-73.9%
Total Wastewater System Improvements	\$176.7	\$102.1	(\$74.6)	-42.2%
Waterworks System Improvements				
Drinking Water Quality Improvements	4.4	1.8	(2.6)	-58.9%
Transmission	58.7	56.7	(2.1)	-3.6%
Distribution & Pumping	34.0	23.6	(10.5)	-30.8%
Other	48.7	14.6	(34.1)	-70.0%
Total Waterworks System Improvements	\$145.8	\$96.6	(\$49.2)	-33.7%
Business & Operations Support	\$24.8	\$8.4	(\$16.4)	-66.2%
Total MWRA	\$347.3	\$207.1	(\$140.2)	-40.4%

The \$140.2 million variance is the net of \$149.3 million in less than planned spending on 35 projects offset by \$9.1 million in more than planned spending on 8 projects. The main reasons for the project spending variances in order of magnitude are:

Other Wastewater: Less than planned spending of \$48.7 million

- \$48.7 million for Community I/I due to less than anticipated requests for community grants and loans.

Other Waterworks: Less than planned spending of \$34.1 million

- \$18.8 million for Local Financial Assistance due to less than anticipated requests for community loans.
- \$8.8 million for Steel Tank Improvements - Design/CA, Construction and REI Phase 1, \$3.6 million for Steel Tank Improvements- Construction and REI Phase 2, \$1.8 million for Beacon St. Line Design/ESDC and \$1.0 million for Gillis, Brattle Court and Newton Pump Stations Roofs - Construction all due to schedule changes.

Business & Operations Support: Less than planned spending of \$16.4 million

- \$3.9 million for Cabling due to delays in development of the scope of work caused by challenges in locating available conduit paths on Deer Island.

- \$3.0 million for Deer Island Solar Canopy Project due to updated schedule.
- \$1.9 million for As-Needed Design Contracts due to lower than projected task order work.
- \$1.2 million for Security Equipment & Installation due to project delays including upgrades to communication circuits and Incident Management System.
- Lawson Upgrade of \$1.0 million, \$1.0 million for Disaster Recovery, \$0.8 million for Data Center Firewalls, Oracle Database Appliance v.2 of \$0.3 million, \$0.3 million for Instrumentation & Controls IT, and \$0.3 million for and Distributed Antenna System Upgrades due to schedule changes.
- \$0.3 million for MAXIMO Interface Enhancements due to less than anticipated completion of final work.

Wastewater Treatment: Less than planned spending of \$12.5 million

- \$5.2 million for Clinton Wastewater Treatment Plant Digester Cover Replacement due to contract awarded later than originally planned.
- \$2.3 million for DITP As-Needed Design due to lower than projected task order work.
- \$2.0 million for Fire Alarm System Replacement – Construction, \$2.0 million for Chemical Pipe Replacement – Construction, \$1.9 million for Screw Pump Replacement Phase 2 and \$1.2 million for Gas Protection System Replacement Phase 2 due to schedule changes.
- \$1.5 million for South System Pump Station VFD Replacement design/ESDC/REI due to work deferred for Clarifier Rehabilitation priority.
- This under planned spending was partially offset by greater than planned spending of \$4.8 million for Clarifier Rehabilitation Phase 2 Construction due to contractor progress and additional equipment delivery sooner than anticipated, and \$0.9 million for Digester & Storage Tank Rehabilitation Design/ESDC due to consultant progress greater than anticipated.

Interception & Pumping: Less than planned spending of \$11.4 million

- \$4.8 million for Siphon Structure Rehabilitation Construction, \$1.2 million for Caruso, DeLauri & Framingham Fuel Tank Replacements, and \$0.6 million for Ward St. & Columbus Park Headworks Design/CA due to schedule changes.
- \$2.7 million for Hayes Pump Station Rehab Construction due to award being slightly later than anticipated.
- \$0.7 million for West Roxbury Tunnel Inspection due to contractor delayed submitting dive and safety plan.
- Bell Isle Rehab Design/ESDC of \$0.5 million, and \$0.4 million for Cambridge Branch Sections 23,24,25,26 Design/CS due to contracts being repackaged and rescheduled.
- This underspending was partially offset by work planned in FY24 that was completed in FY25 of \$1.5 million for the Braintree-Weymouth Improvements Design/CS and Construction contracts.

Water Distribution and Pumping: Less than planned spending of \$10.5 million

- \$5.1 million for Section 75 and 47 Extension CP-1 Construction due to later than anticipated contract award.
- \$3.1 million for Section 89/29 Replacement Construction due to less than planned contractor progress.

- \$2.7 million for Section 56 Replacement/Saugus River Design/CA and Construction, and \$1.0 million for NIH Storage Design CA/RI due to updated schedules.
- This under planned spending was partially offset by \$1.7 million for the CP-1 NEH Improvements and \$0.4 million for New Connecting Mains CP3-Sections 23, 24 & 47 Rehabilitation due to work scheduled for FY24 including paving performed in FY25.

Drinking Water Quality Improvements: Less than planned spending of \$2.6 million

- \$2.1 million for the John Carroll Water Treatment Plant (JCWTP) Technical Assistance due to lower than projected task order work.

Waterworks Transmission: Less than planned spending of \$2.1 million

- \$2.8 million for Final Tunnel Design/ESDC due to contract awarded later than anticipated.
- \$2.4 million for Maintenance Garage/Wash Bay/Storage Building due to schedule change.
- \$2.0 million for Metro Water Tunnel Program Support due to less than anticipated services.
- \$1.7 million for WASM 3 MEPA/Design/CA/RI due to less than anticipated consultant work.
- \$1.1 million for Wachusett Lower Gatehouse Pipe & Boiler Replacement Construction and REI due to longer lead-time on some larger items and a change in design for the multi-orifice valve.
- \$0.6 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 \$4.9 million for the Waltham Water Pipeline and \$1.2 million for CP-2 Shaft 5 and by \$2.9 million for Metro Water Tunnel Program Administration, Legal & Public Outreach due to payment to Eversource for the infrastructure to supply electricity to a shaft site.

Combined Sewer Overflow: Less than planned spending of \$1.8 million

- \$1.9 million for Somerville Marginal New Pipe Connection due to Notice-to-Proceed issued later than anticipated.

Please see Attachment B for detailed FY25 CIP variance explanations of all FY25 for projects.

Construction Fund Balance

The construction fund balance was \$144.5 million as of the end of June. Commercial Paper/Revolving Loan available capacity was \$58.0 million.

FY26 Outlook

Looking ahead to FY26, the projected capital spending is \$380.8 million, of which \$175.1 million supports Wastewater System Improvements, \$173.9 million supports Waterworks System Improvements, and \$31.8 million is for Business and Operations Support. The projects with spending of \$10.0 million or greater in FY26 include Deer Island Clarifier Rehabilitation Phase 2 Construction (\$50.0 million), Metropolitan Tunnel Redundancy Final Design/Engineering Services During Construction (\$26.5 million), Hayes Pump Station Rehabilitation (\$12.4 million), Metropolitan Tunnel Redundancy Admin, Legal & Public

Outreach (\$12.0 million), New Connecting Mains Section 75 Extension Construction CP-1 (\$12.0 million), and Northern Extra High Service (NEH) – CP-2 NEH Improvements – Construction (\$10.0 million).

In FY26, 74 contracts or phases of projects with a total budget of \$981.6 million are expected to be awarded. Of the 74 planned contract awards for FY26, 31 are for Wastewater, 33 are for Waterworks, and 10 for Business and Operation Services with associated dollar awards of \$653.2 million, \$305.3 million, and \$23.1 million, respectively. Deer Island's Digester/Storage Tank Rehab Construction is the largest planned award at \$450.0 million with a targeted notice to proceed of June 2026.

Please see Attachment E for FY26 Planned Contract Awards.

ATTACHMENTS:

- A. Fiscal Year 2025 Year-End Capital Program Spending Report
- B. FY25 CIP Year-End Variance Report
- C. FY25 Planned versus Actual/Revised Contract Awards
- D. Linear Footage of Rehabilitated or New Pipelines in FY25
- E. FY26 Planned Capital Contract Awards

MASSACHUSETTS WATER RESOURCES AUTHORITY

Capital Program Spending Report

for

Fiscal Year 2025



September 17, 2025

Fiscal Year 2025 Year-End Capital Program Spending Report

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Introduction

Since its inception in 1986, MWRA has expended \$9.6 billion on capital initiatives. Of this spending 69% has supported improvements to Wastewater treatment, interception, pumping and combined sewer overflow (CSO) systems, 28% has supported Waterworks treatment, transmission, distribution and water protection improvements, and 2% has supported Business and Operations Support initiatives. Through FY25, nearly 66% of the capital spending has been for court mandated projects. The long-term strategy for capital work is identified in the Authority’s Master Plan which was first published in 2006, updated in 2013, 2019, and 2025 and serves as a road map for inclusion of projects in the Capital Improvement Program (CIP) in every budget cycle. An update to the Master Plan is currently under review. Going forward, MWRA expects to spend \$6.2 billion on system improvements between FY26-FY35 with main emphasis on Asset Protection and Water System Redundancy initiatives including the Metropolitan Water Tunnels Project.

MWRA Capital Spending FY1986 - FY2035 (in millions)				
Program	Expenditures FY86 - FY25		Planned Expenditures FY26 - FY35	
	Amount	% of Total	Amount	% of Total
Wastewater	\$6,566	69%	\$3,130	51%
Waterworks	\$2,787	28%	\$2,981	48%
Business & Operations Support	\$203	2%	\$72	1%
Total MWRA	\$9,556	100.0%	\$6,183	100.0%

**Totals may not add up due to rounding*

To date, MWRA has distributed \$324.2 million in grants and \$261.5 million in no-interest loans to fund 702 separate projects in 43 communities under the I/I Local Financial Assistance Program. Additionally, \$661.9 million in Local Water Pipeline Assistance Program loans has been distributed to member communities which includes \$57.5 million in lead service loans.

FY26 Spending

Total CIP spending in FY25 was \$207.1 million which was \$140.2 million or 40.4% less than the \$347.3 million planned.

Spending by program in FY25 was:

Program	FY25 Budget (in millions)	FY25 Actuals (in millions)	Variance	% Variance
Wastewater	\$176.7	\$102.1	(\$74.6)	-42.2%
Waterworks	\$145.8	\$96.6	(\$49.2)	-33.7%
Business & Operations Support	\$24.8	\$8.4	(\$16.4)	-66.2%
Total	\$347.3	\$207.1	(\$140.2)	-40.4%

FY25 included spending of \$30.1 million not directly under MWRA’s control, most notably the Inflow and Infiltration (I/I) program, the Local Water Pipeline programs, and CSO Community Managed projects. The community assistance programs are either loan or grant programs to support the MWRA’s member communities’ local water and sewer infrastructure. In FY25, MWRA expended \$51.3 million in water and I/I loans and \$19.2 million in grants offset by \$42.5 million in prior period loan repayments for net spending of \$27.9 million. An additional \$2.1 million was expended on the CSO Community Managed projects. After accounting for these programs which are not directly under MWRA’s control, the FY25 CIP underspending is \$72.7 million or 29.1%.

FY25 Capital Program Highlights

This section highlights the spending and key accomplishments by major program categories and projects.

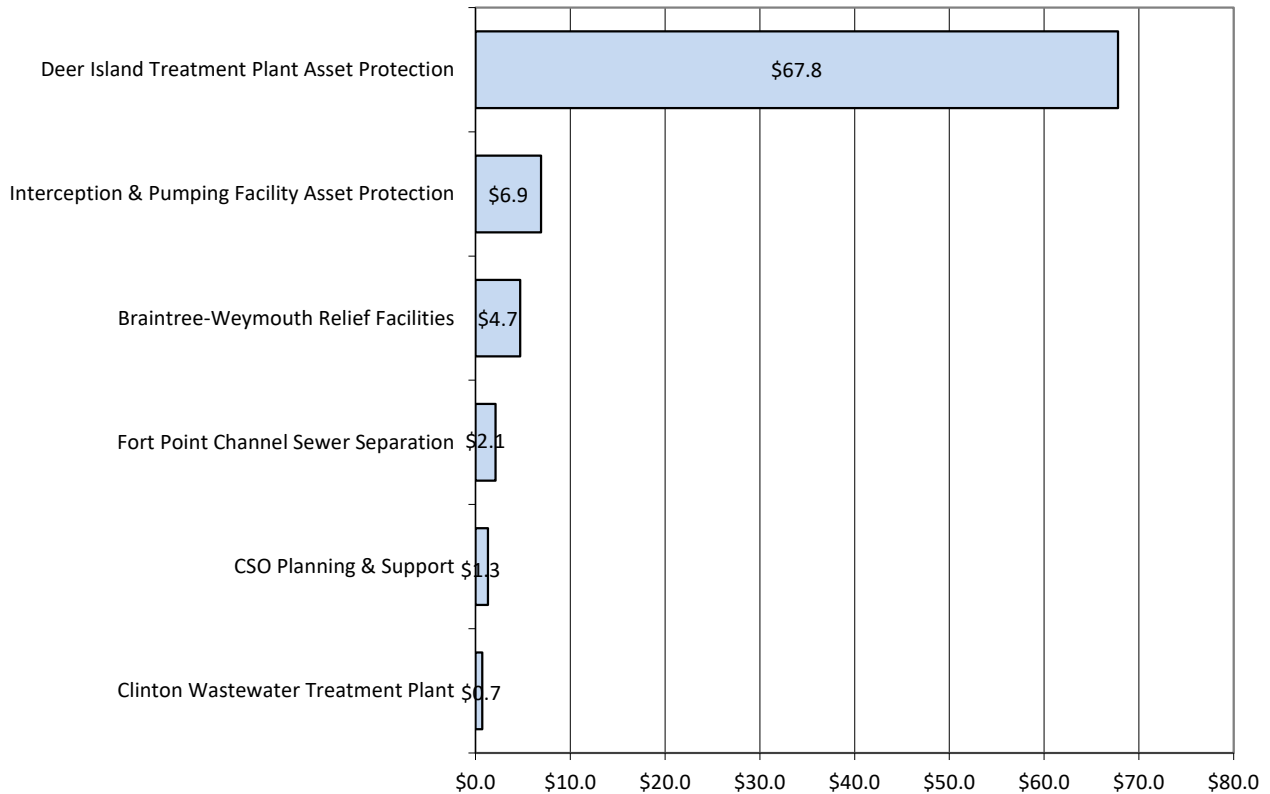
Wastewater System

During FY25, MWRA spent \$102.0 million on Wastewater system projects: \$12.5 million for Interception & Pumping projects, \$68.5 million for Treatment projects, \$3.5 million for CSO projects, and \$17.2 million for Other Wastewater projects.

Wastewater Interception & Pumping, Treatment, and CSO Projects

Total FY25 spending for Interception & Pumping was \$12.5 million, Treatment was \$68.5 million, Other Wastewater was \$17.2 million, and CSO was \$3.5 million. The largest spending occurred on the following:

Wastewater- Interception & Pumping, Treatment and CSO (in millions)



Key Accomplishments in Wastewater - Interception and Pumping:

- Braintree-Weymouth Improvements REI and Design
 - Completed in June 2025
- Braintree-Weymouth Improvements Construction
 - Completed in May 2025
- Nut Island Headworks Odor Control and HVAC Des/CA/REI
 - Completed in June 2025
- Tunnel Inspection
 - Contract awarded in July 2024

- Columbus Park Headworks Air Handling Equipment
 - Completed in February 2025
- Hayes Pump Station Rehab Construction
 - Contract awarded in October 2024
- Hayes Pump Station Rehab REI
 - Contract awarded in December 2024
- Cottage Farm PCB Abatement Design/CA
 - Contract awarded in July 2024

Key Accomplishments in Wastewater – Treatment:

- Clinton Wastewater Treatment Plant Digester Cover Replacement
 - Contract awarded in February 2025
- DITP HVAC Design/ESDC
 - Contract awarded in February 2025
- DITP CHP Design/ESDC/REI
 - Contract awarded in July 2024
- DITP Roofing Replacement
 - Completed in June 2025
- DITP Misc. VFD Replacements
 - Completed in June 2025

Wastewater System – Combined Sewer Overflow (CSO) Projects

Total FY25 spending for CSO projects was \$3.5 million which was primarily for the Fort Point Channel & Mystic work and CSO Planning & Support.

Key Accomplishments in CSO:

- Somerville Marginal New Pipe Connection
 - Contract awarded in September 2024

Wastewater - Other

This category includes spending only for the community managed Infiltration/Inflow (I/I) Local Financial Assistance Program.

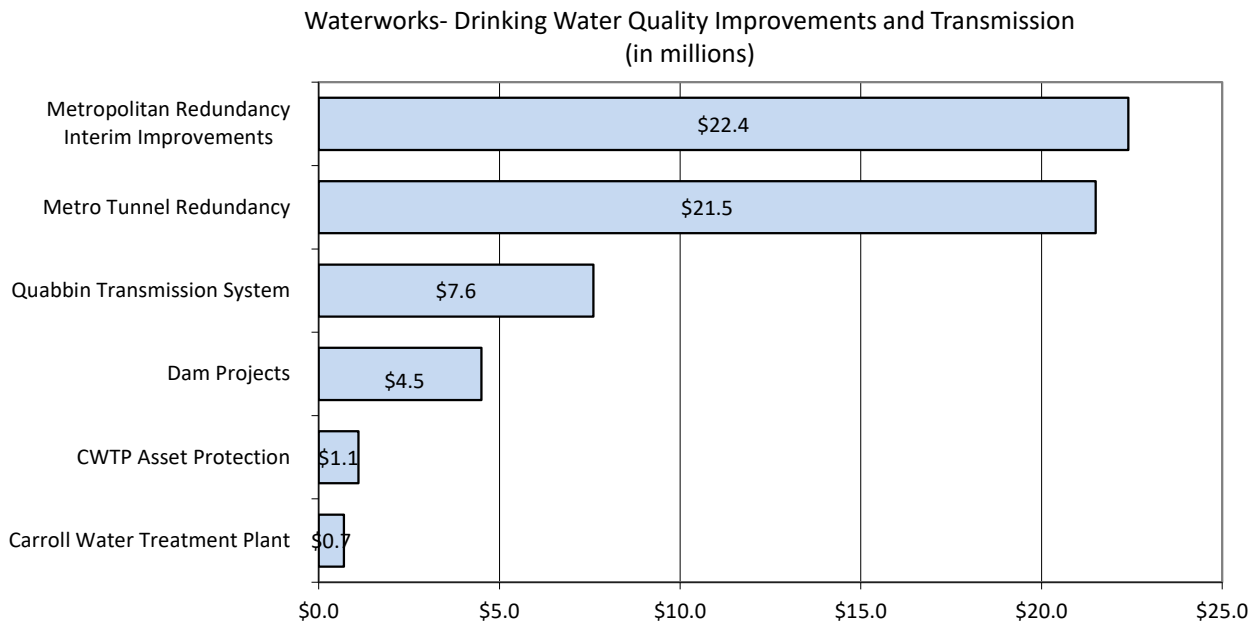
In FY25, MWRA distributed \$15.5 million in grants and \$9.6 million in no-interest loans which is offset by repayment of prior-period loans of \$7.9 million resulting in net spending of \$17.2 million.

Waterworks System

During FY25, the MWRA spent \$96.6 million on Waterworks system projects: \$1.7 million for Drinking Water Quality Improvement projects, \$56.6 million for Transmission projects, \$23.5 million for Distribution and Pumping projects, and \$14.6 million for Other Waterworks projects.

Waterworks System – Drinking Water Quality Improvements and Transmission

Total FY25 spending for Drinking Water Quality Improvements and Transmission projects was \$1.7 million and \$56.6, respectively. Projects with the largest spending are listed below:



Key Accomplishments in Drinking Water Quality Improvements:

- Carroll Water Treatment Plant Parapet Wall Repairs
 - Completed in November 2024

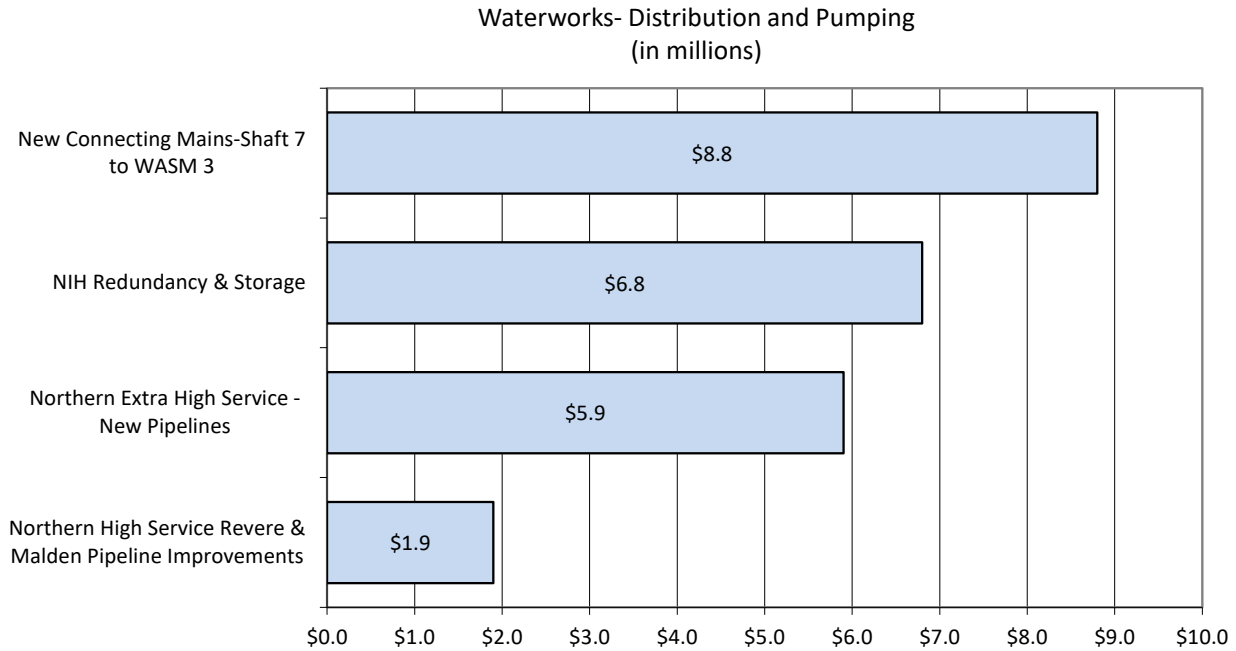
Key Accomplishments in Transmission:

- Sudbury Reservoir Dam Spillway & Gatehouse Vent Repair
 - Completed in February 2025

- Final Design/ESDC Tunnel Redundancy
 - Contract awarded in July 2024

Waterworks System - Distribution and Pumping

Total FY25 spending for Distribution and Pumping projects totaled \$23.5 million. Projects with the largest spending are listed below:



Key Accomplishments in Distribution and Pumping:

- CP-2 NEH Improvements
 - Contract awarded in February 2025
- Section 56 Replacement - Construction
 - Contract awarded in April 2025
- Section 75 Extension – REI and Construction CP-1
 - Contract awarded in December 2024
- CP-1 NEH Improvements REI
 - Completed in November 2024
- Walnut Street Bridge Truss-Construction
 - Completed in January 2025

Waterworks – Other

Total FY25 spending for Waterworks Other totaled \$14.6 million.

This category includes the community assistance program for the local water pipelines and other MWRA Waterworks projects.

In FY25, MWRA distributed \$41.7 million in Local Water Pipeline Assistance Program loans and 3.6 million in lead grants to member communities offset by repayment of prior-period loans of \$31.2 million which resulted in total net receipts of \$34.6 million.

Key Accomplishments in Waterworks – Other:

- Steel Tank Improvements Construction-Walnut Hill
 - Contract awarded in March 2025

Business & Operations Support

Total FY25 spending for Business and Operations Support totaled \$8.3 million.

Key Accomplishments in Business & Operations Support:

- MAXIMO Interface Enhancements
 - Completed in September 2024
- Core Switches
 - Completed in August 2024
- Near Field Communications
 - Completed in August 2023
- Oracle Database Appliance V.2
 - Awarded in July 2024
 - Completed in January 2025
- PI Vision Process Book Replacement
 - Awarded in October 2024
- Disaster Recovery
 - Awarded in September 2024

- MS Office Upgrades
 - Awarded in December 2024

Total New or Rehabilitated Pipeline

In addition to measuring spending on CIP projects, MWRA tracks the mileage of pipeline that is rehabilitated or added to its infrastructure. During FY25, the MWRA rehabilitated or constructed 2.0 miles of water and wastewater pipeline. These numbers do not include the rehabilitated or replaced pipelines of our member communities which are funded through our Inflow/Infiltration (I/I) and Water Loan programs as referenced above.

Refer to Attachment D for the specific linear footage of rehabilitated or new pipelines by project in FY25.

FY25 Spending Variances

Total FY25 capital spending was \$207.1 million which was \$140.2 million or 40.4% less than the \$347.3 million budget. The variance is primarily due to underspending for the Infiltration/Inflow Assistance Program, Local Water System Assistance Program, Waterworks Facility Asset Protection, Interception & Pumping Facility Asset Protection, Clinton Wastewater Treatment Plant, New Connecting Mains Shaft 7 to WASM 3, and Deer Island Treatment Plant Asset Protection.

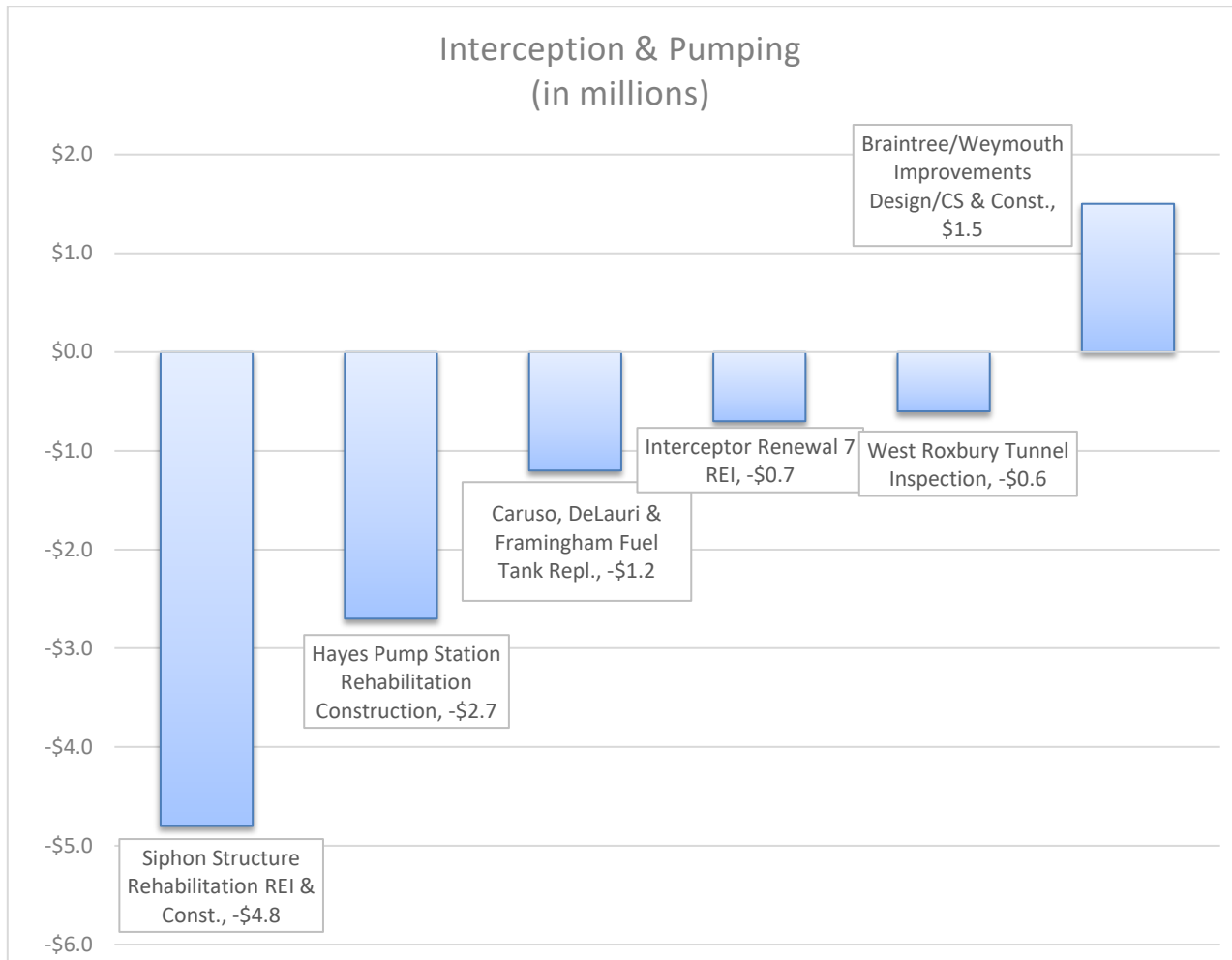
FY25 Spending Variances (\$ in Thousands)

Program	Budgeted Spending	Actual Spending	Variance to Budget		% Actual Spending to Total Spending
			\$	%	
Total Wastewater System	\$176,722	\$102,115	(\$74,608)	-42.2%	49%
Interception & Pumping	\$24,000	\$12,563	(\$11,437)	-47.7%	6%
Treatment	\$81,006	\$68,501	(\$12,505)	-15.4%	33%
Residuals	\$400	\$241	(\$159)	-39.7%	0%
Combined Sewer Overflow	\$5,391	\$3,599	(\$1,792)	-33.2%	2%
Other Wastewater Programs	\$65,925	\$17,211	(\$48,715)	-73.9%	8%
Total Waterworks System	\$145,813	\$96,620	(\$49,192)	-33.7%	47%
Drinking Water Quality Improvements	\$4,372	\$1,796	(\$2,576)	-58.9%	1%
Transmission	\$58,749	\$56,653	(\$2,095)	-3.6%	27%
Distribution and Pumping	\$34,035	\$23,563	(\$10,471)	-30.8%	11%
Other Waterworks Programs	\$48,657	\$14,607	(\$34,050)	-70.0%	7%
Business & Operations Support	\$24,813	\$8,388	(\$16,425)	-66.2%	4%
Total MWRA	\$347,348	\$207,124	(\$140,223)	-40.4%	100%

FY25 Variances for Major Projects

Please see Attachment B for the full FY25 CIP variance explanations by project.

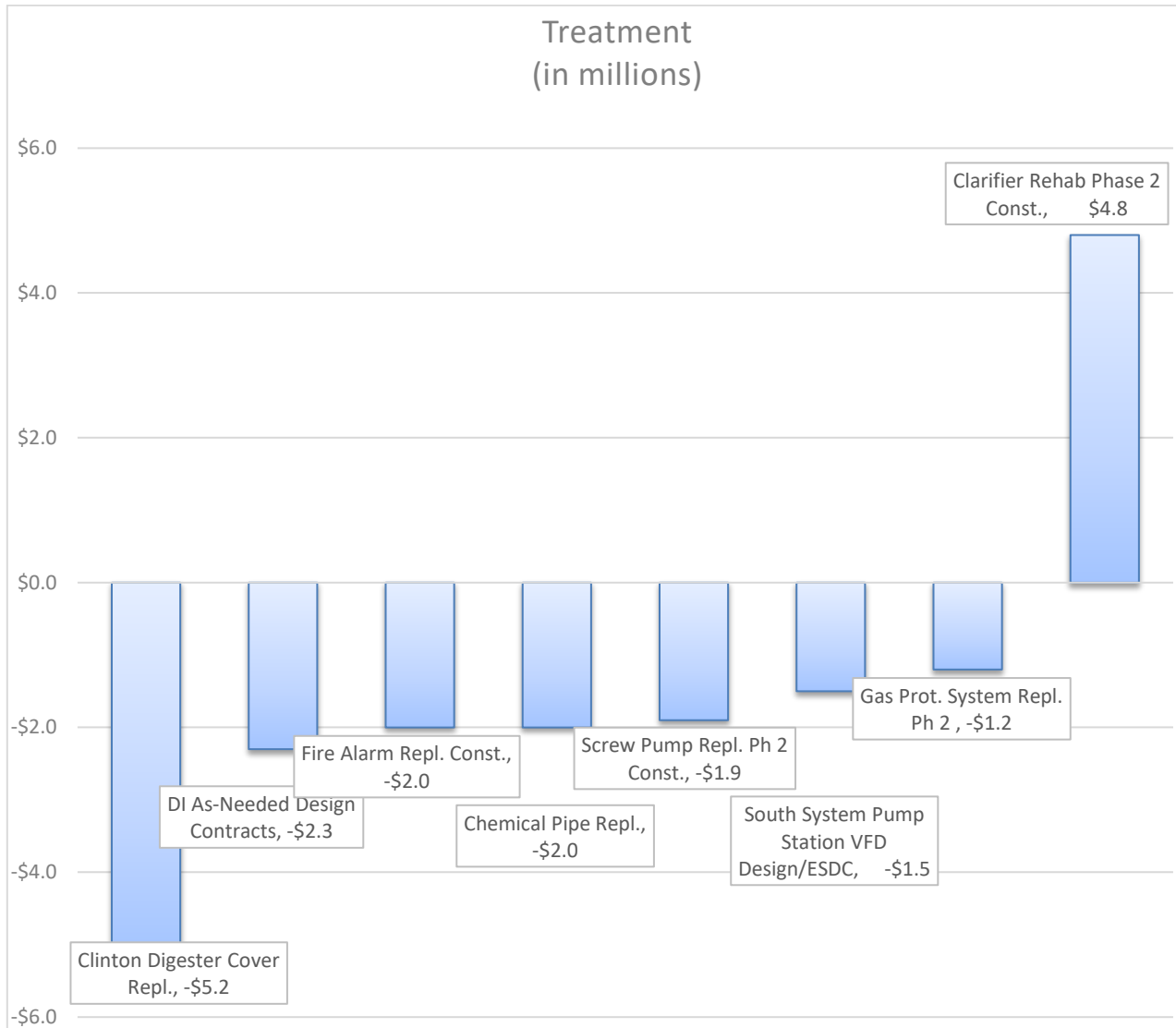
Wastewater - Interception & Pumping



- Total FY25 Planned Spending: \$24.0 million
- Total FY25 Expended: \$12.6 million
- \$11.4 million less than budgeted spending
 - Underspending on various projects, including
 - \$4.8 million for Siphon Structure Rehabilitation Construction, \$1.2 million for Caruso, DeLauri & Framingham Fuel Tank Replacements, and \$0.6 million for Ward St. & Columbus Park Headworks Design/CA due schedule changes.
 - \$2.7 million for Hayes Pump Station Rehab Construction due to award being slightly later than anticipated.
 - \$0.7 million for West Roxbury Tunnel Inspection due to contractor delayed submitting dive and safety plan.

- Bell Isle Rehab Design/ESDC of \$0.5 million, and \$0.4 million for Cambridge Branch Sections 23,24,25,26 Design/CS due to contracts being repackaged and rescheduled.
- This underspending was partially offset by work planned in FY24 that was completed in FY25 of \$1.5 million for the Braintree-Weymouth Improvements Design/CS and Construction contracts.

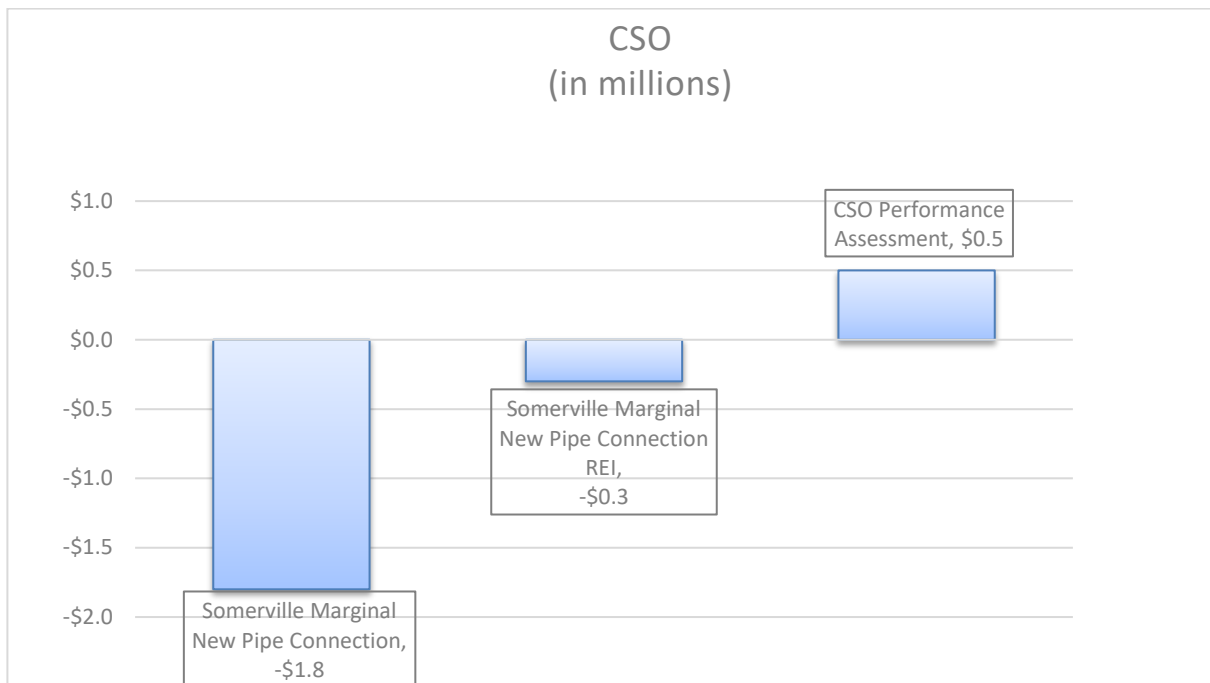
Wastewater – Treatment



- Total FY25 Planned Spending: \$81.0 million
- Total FY25 Expended: \$68.5 million
- \$12.5 million less than budgeted spending
 - Underspending on various projects, including

- \$5.2 million for Clinton Wastewater Treatment Plant Digester Cover Replacement due to contract awarded later than originally planned.
- \$2.3 million for DITP As-Needed Design due to lower than projected task order work.
- \$2.0 million for Fire Alarm System Replacement – Construction, \$2.0 million for Chemical Pipe Replacement – Construction, \$1.9 million for Screw Pump Replacement Phase 2 and \$1.2 million for Gas Protection System Replacement Phase 2 due to schedule changes.
- \$1.5 million for South System Pump Station VFD Replacement design/ESDC/REI due to work deferred for Clarifier Rehabilitation priority.
- This under planned spending was partially offset by greater than planned spending of \$4.8 million for Clarifier Rehabilitation Phase 2 Construction due to contractor progress and additional equipment delivery sooner than anticipated, and \$0.9 million for Digester & Storage Tank Rehabilitation Design/ESDC due to consultant progress greater than anticipated.

Wastewater - Combined Sewer Overflows (CSO's)

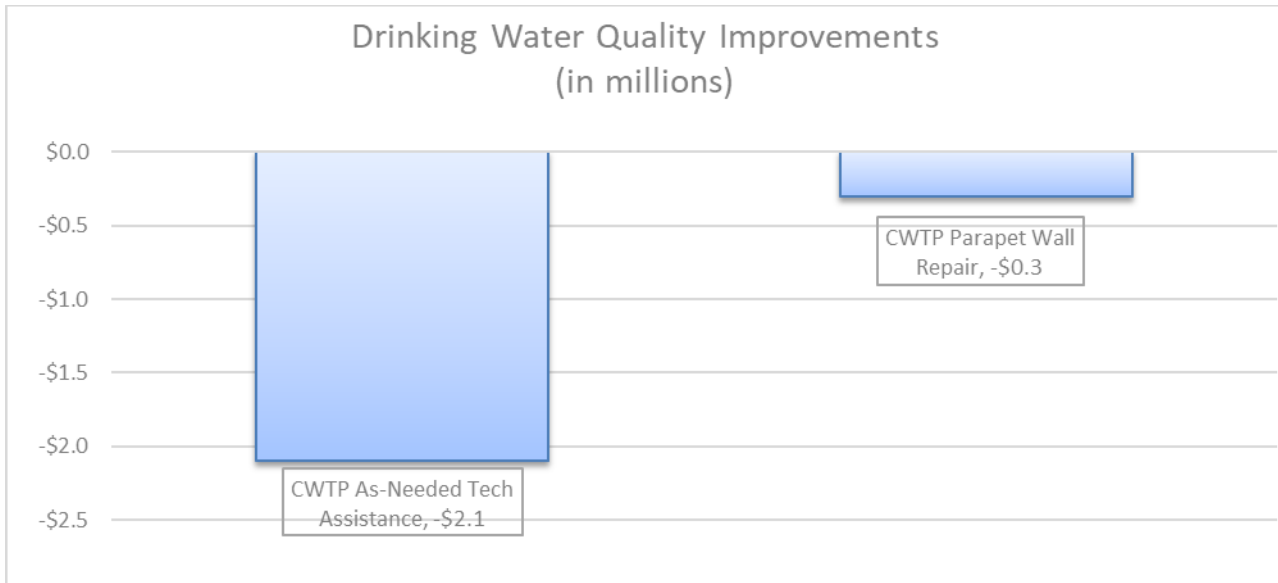


- Total FY25 Planned Spending: \$5.4 million
- Total FY25 Expended: \$3.6 million
- \$1.8 million less than budgeted spending
 - \$1.9 million for Somerville Marginal New Pipe Connection due to Notice-to-Proceed issued later than anticipated.

Wastewater - Other

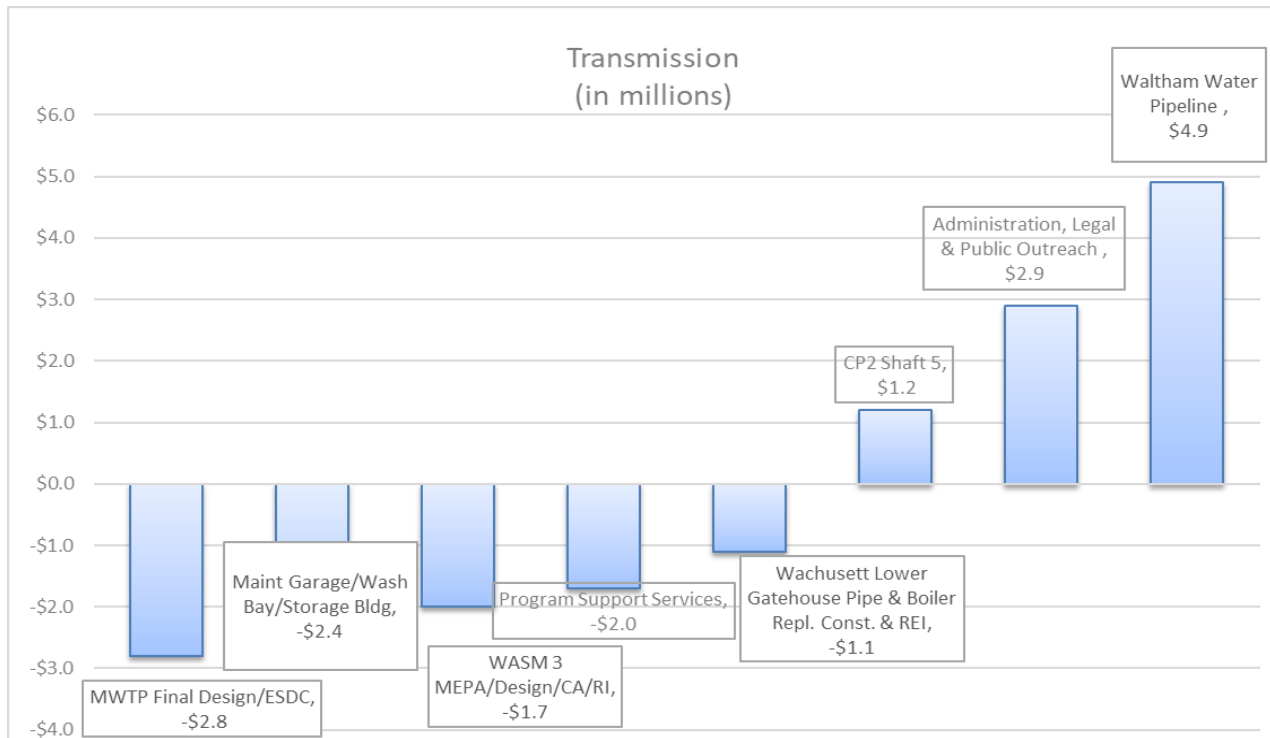
- \$48.7 million for Community I/I due to less than anticipated requests for community grants and loans.

Waterworks - Drinking Water Quality Improvements



- Total FY25 Planned Spending: \$4.4 million
- Total FY25 Expended: \$1.8 million
- \$2.6 million less than planned spending
 - \$2.1 million for the John Carroll Water Treatment Plant (JCWTP) Technical Assistance due to work being lower than projected task order.

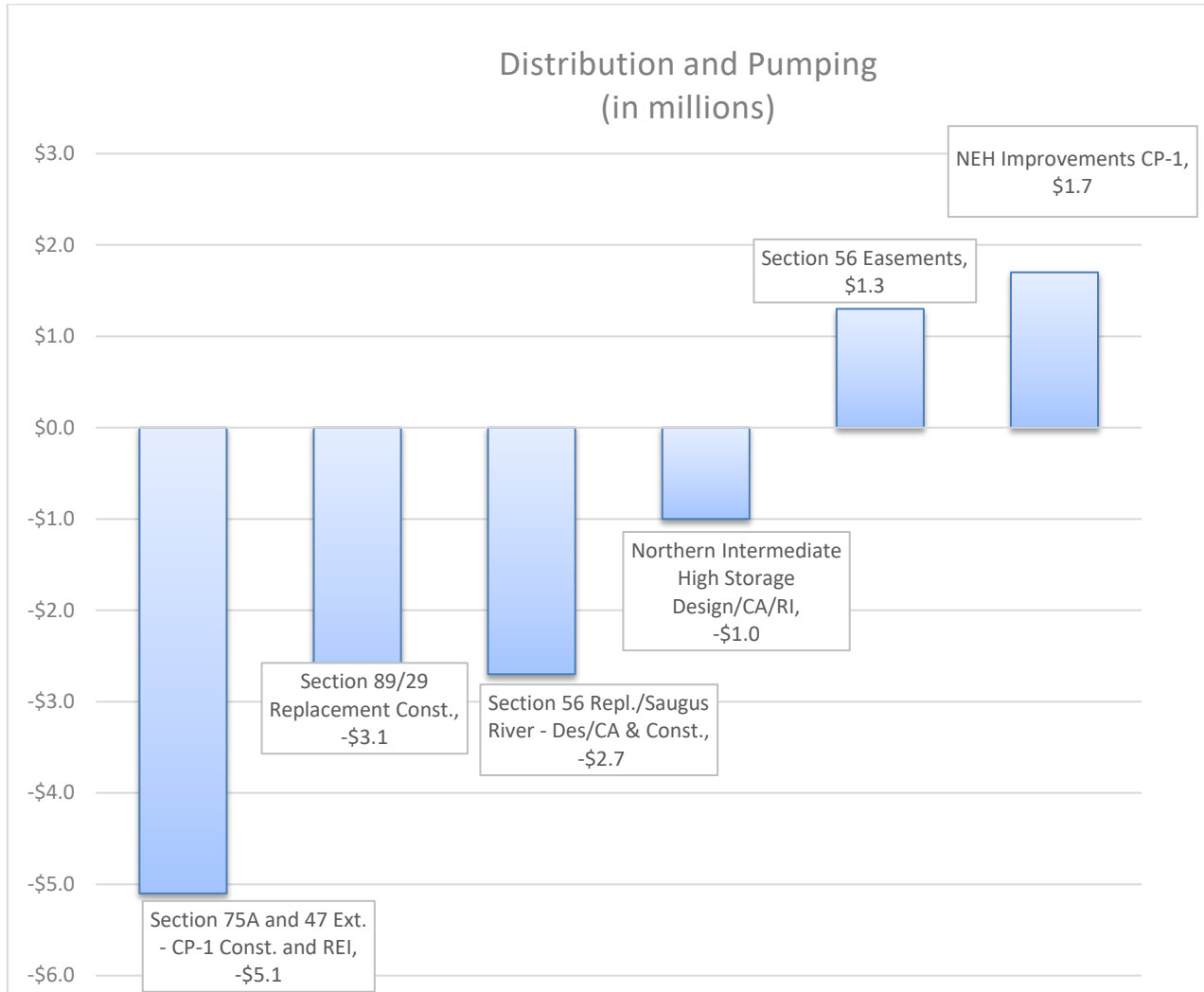
Waterworks – Transmission



- Total FY25 Planned Spending: \$58.7 million
- Total FY25 Expended: \$56.6 million
- \$2.1 million less than budgeted spending
 - Underspending on various projects, including
 - \$2.8 million for Final Tunnel Design/ESDC due to contract awarded later than anticipated.
 - \$2.4 million for Maintenance Garage/Wash Bay/Storage Building due to schedule change.
 - \$2.0 million for Metro Water Tunnel Program Support due to less than anticipated services.
 - \$1.7 million for WASM 3 MEPA/Design/CA/RI due to less than anticipated consultant work.
 - \$1.1 million for Wachusett Lower Gatehouse Pipe & Boiler Replacement Construction and REI due to longer lead-time on some larger items and a change in design for the multi-orifice valve.
 - \$0.6 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 \$4.9 million for the Waltham Water Pipeline and \$1.2 million for CP-2 Shaft 5 and by \$2.9 million for Metro Water Tunnel Program

Administration, Legal & Public Outreach due to payment to Eversource for the infrastructure to supply electricity to a shaft site.

Waterworks - Distribution and Pumping



- Total FY25 Planned Spending: \$34.0 million
- Total FY25 Expended: \$23.6 million
- \$10.5 million less than budgeted spending
 - Underspending on various projects, including
 - \$5.1 million for Section 75 and 47 Extension CP-1 Construction due to later than anticipated contract award.
 - \$3.1 million for Section 89/29 Replacement Construction due to less than planned contractor progress.

- \$2.7 million for Section 56 Replacement/Saugus River Design/CA and Construction, and \$1.0 million for NIH Storage Design CA/RI due to updated schedules.
- This under planned spending was partially offset by \$1.7 million for the CP-1 NEH Improvements and \$0.4 million for New Connecting Mains CP3-Sections 23, 24 & 47 Rehabilitation due to work scheduled for FY24 including paving performed in FY25.

Waterworks - Other

- Total FY25 Planned Spending: \$48.7 million
- Total FY25 Expended: \$14.6 million
- \$34.1 million less than budgeted spending
 - Underspending on various projects, including
 - \$18.8 million for Local Financial Assistance due to less than anticipated requests for community loans.
 - \$8.8 million for Steel Tank Improvements - Design/CA, Construction and REI Phase 1, \$3.6 million for Steel Tank Improvements- Construction and REI Phase 2, \$1.8 million for Beacon St. Line Design/ESDC and \$1.0 million for Gillis, Brattle Court and Newton Pump Stations Roofs - Construction all due to schedule changes.

Business & Operations Support

- Total FY25 Planned Spending: \$24.8 million
- Total FY25 Expended: \$8.4 million
- \$16.4 million less than budgeted spending
 - Underspending on various projects, including
 - \$3.9 million for Cabling due to delays in development of the scope of work caused by challenges in locating available conduit paths on Deer Island.
 - \$3.0 million for Deer Island Solar Canopy Project due to updated schedule.
 - \$1.9 million for As-Needed Design Contracts due to work lower than projected task order.
 - \$1.2 million for Security Equipment & Installation due to project delays including upgrades to communication circuits and Incident Management System.
 - Lawson Upgrade of \$1.0 million, \$1.0 million for Disaster Recovery, \$0.8 million for Data Center Firewalls, Oracle Database Appliance v.2 of \$0.3 million, \$0.3 million for Instrumentation & Controls IT, and \$0.3 million for Distributed Antenna System Upgrades due to schedule changes.
 - \$0.3 million for MAXIMO Interface Enhancements due to less than anticipated completion of final work.

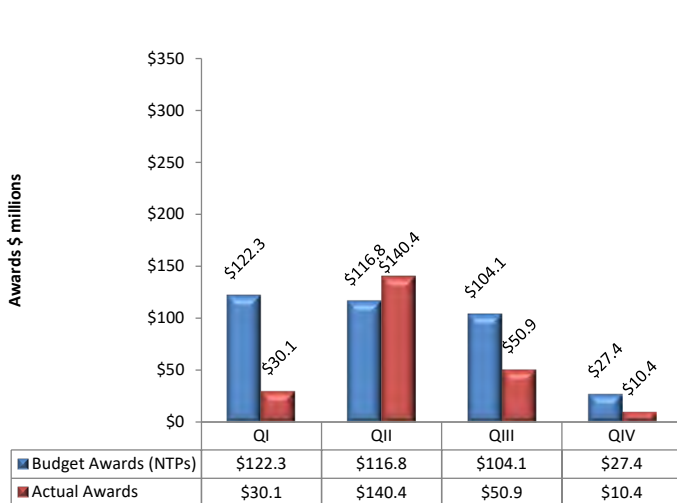
FY25 CIP Contract Awards

The FY25 CIP planned the award of 77 contracts with a value of \$371.0 million. During FY25, the MWRA awarded 22 contracts valued at \$231.9 million, representing 28.6% of contracts and 62.5% of contract funding. Of the 77 planned awards, 19 contracts were awarded (3 unplanned contracts were awarded), 39 are expected to be awarded in FY26, 12 have been rescheduled beyond FY26, and 7 are being done in-house, were deleted, renamed, or scope moved to another contract. Of the 39 contracts that shifted to FY26: 8 due to scope changes, 20 due to changes in priorities/scheduling, and 11 due to bidder issues/outside consultant/contractor delays/additional specification review.

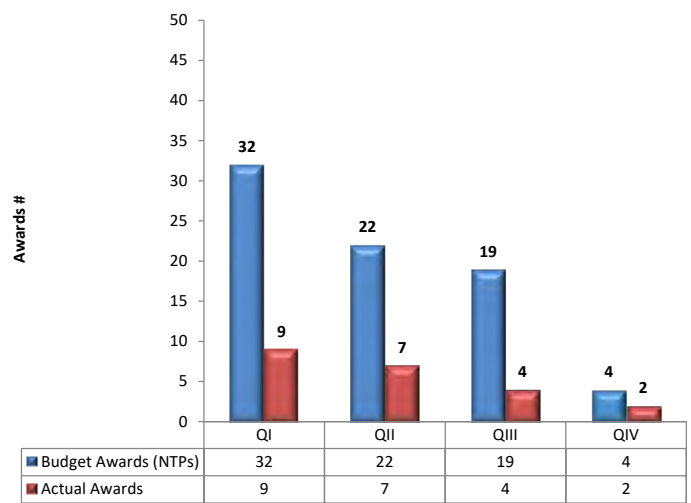
A comparison of the FY25 budgeted contracts and the FY25 actual contract awards are detailed below:

FY25 Contracts (\$s in Million)				
Programs	Planned Contract Awards		Actual Awards	
	#	\$	#	\$
Wastewater	33	\$228.2	8	\$70.8
Waterworks	28	\$121.5	7	\$158.7
Business Operations & Support	16	\$21.2	7	\$2.3
Total	77	\$371.0	22	\$231.9

FY25 Budget and Actual Awards (\$)



FY25 Budget and Actual Awards (#)



Please refer to Attachment C for a full listing of contracts planned to be awarded in FY24 and actual awards.

Change Orders Review

Management of change orders remains a top priority. Total change orders for MWRA-managed active capital projects were 3.1% of award value through June 2025. This percentage is within the target of 10% for change orders as a percentage of awards.

Master Plan and the FY25 CIP Process

To arrive at the FY25 Final CIP, the Authority identified the needs of the programs taking into account the recommendations of the Master Plan. The long-term strategy for capital work is identified in the Authority’s Master Plan which was published in 2006 and updated in 2013, 2019, and is expected to be updated *in* 2025. The Master Plan serves as a road map for inclusion of projects in the CIP in every budget cycle.

The updated Master Plans focused on capital needs over the next 40-years and are intended to be the principal framework for annual capital planning. The Plans focus on projects that require capital spending during the next two 5-year CIP cap cycles: FY24-28 and FY29-33. Potential capital needs during the next 10-year (FY34-43) and 20-year (FY44-63) planning periods will also be identified.

FY24-28 Spending Cap

FY24-28 Cap spending based on the FY26 Final Budget totals \$1.7 billion before the Spend Rate Adjustment of \$397.2 million nets FY24-28 forecast of \$1.35 billion, \$12.4 million under the FY24-28 Base-Line Cap. Net MWRA spending during the FY24-28 timeframe is planned to be \$1,351.8 million, with additional net spending of \$242.1 million for the community I/I (Infiltration and Inflow) loan and grant program and \$128.8 million for the community water pipeline loan program. Annual cash flows for the Cap period are shown below in millions:

	FY24	FY25	FY26	FY27	FY28	FY24-28	
FY26 Final CAP	Projected Expenditures excl. Metro Tunnel	\$199.2	\$268.9	\$334.4	\$436.7	\$561.7	\$1,800.9
	Metropolitan Tunnel	\$9.0	\$22.2	\$46.4	\$44.1	\$68.6	\$190.4
	I/I Program	(22.0)	(67.4)	(51.1)	(48.6)	(53.0)	(242.1)
	Water Loan Program	(26.2)	(34.0)	(32.8)	(18.9)	(16.9)	(128.8)
	MWRA Spending	\$160.1	\$189.7	\$296.9	\$413.3	\$560.4	\$1,620.4
	Contingency	0.0	0.0	19.5	27.9	40.5	88.0
	Inflation on Unawarded Construction	0.0	0.0	1.4	10.9	29.5	41.9
	Chicopee Valley Aqueduct Projects	0.0	0.0	0.0	(0.8)	(0.3)	(1.1)
	Projected Spending before Adjustment	\$160.1	\$189.7	\$317.8	\$451.3	\$630.1	\$1,749.1
	Spend Rate Adjustment (25%)*	0.0	(47.4)	(79.5)	(112.8)	(157.5)	(397.2)
FY26 Final FY24-28 Spending	\$160.1	\$142.3	\$238.4	\$338.5	\$472.6	\$1,351.8	

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

In addition to the Spend Rate Adjustment, the format of the Cap table is adjusted to account separately for MWRA and Metropolitan Tunnel spending, and excludes the local I/I grant and loan program and the local water pipeline loan spending which are both outside of MWRA’s control. The Cap also excludes Chicopee Valley Aqueduct system projects. 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.

FY26 Outlook Based on FY26 CIP

Looking ahead to FY26, the projected capital spending is \$380.8 million in spending for FY26, of which \$175.1 million supports Wastewater System Improvements, \$173.9 million supports Waterworks System Improvements, and \$31.8 million is for Business and Operations Support. The projects with spending of \$10.0 million or greater in FY26 include Deer Island Clarifier Rehabilitation Phase 2 Construction (\$50.0 million), Metropolitan Tunnel Redundancy Final Design/Engineering Services During Construction (\$26.5 million), Hayes Pump Station Rehabilitation (\$12.4 million), Metropolitan Tunnel Redundancy Admin, Legal & Public Outreach (\$12.0 million), New Connecting Mains Section 75 Extension Construction CP-1 (\$12.0 million), and Northern Extra High Service (NEH) – CP-2 NEH Improvements – Construction (\$10.0 million).

In FY26, 74 contracts or phases of projects with a total budget of \$981.6 million are expected to be awarded. Of the 74 planned contract awards for FY26, 31 are for Wastewater, 33 are for Waterworks, and 10 for Business and Operation Services with associated dollar awards of \$653.2 million, \$305.3 million, and \$23.1 million, respectively. Deer Island's Digester/Storage Tank Rehab Construction is the largest planned award at \$450.0 million with a targeted notice to proceed of June 2026.

Please see Attachment E for FY26 Planned Contract Awards.

ATTACHMENT B
FY25 CIP Variance Report (\$000s)

	FY25 Budget June	FY25 Actuals June	Actuals vs. Budget		Explanations
			\$	%	
Wastewater					
Interception & Pumping (I&P)	\$24,000	\$12,563	(\$11,437)	-47.7%	<u>Less than planned spending</u> Siphon Structure Rehabilitation Construction and REI: \$4.8M, Caruso, DeLauri & Framingham Fuel Tank Replacements: \$1.2M, Interceptor Renewal 7 REI: \$700k, and Ward St. & Columbus Park Headworks Design/CA: \$572k (schedule changes) Hayes Pump Station Rehab - Construction: \$2.7M (award slightly later than anticipated) West Roxbury Tunnel Inspection: \$672k (contractor was delayed in submitting dive and safety plan) Belle Isle Rehab Design/ESDC: \$500k, and Cambridge Branch Sections 23,24,25,26 Design/CS: \$425k (contracts being repackaged and rescheduled) <u>Greater than planned spending</u> Braintree-Weymouth Improvements Design/CS and Construction: \$1.5M (work planned in FY24 that was completed in FY25)
Treatment	\$81,006	\$68,501	(\$12,505)	-15.4%	<u>Less than planned spending</u> Clinton Wastewater Treatment Plant Digester Cover Replacement: \$5.2M: (contract awarded later than originally planned) DITP As-Needed Design: \$2.3M (lower than projected task order work) Fire Alarm System Replacement - Construction: \$2.0M, Chemical Pipe Replacement - Construction: \$2.0M, Screw Pump Replacement Phase 2 Construction: \$1.9M, Gas Protection System Replacement Phase 2: \$1.2M, and Odor Control Rehabilitation - Design/ESDC: \$784k (schedule changes) South System Pump Station VFD Replacement Design/ESDC/REI: \$1.5M (work deferred to Clarifier Rehabilitation priority) <u>Greater than planned spending</u> Clarifier Rehabilitation Phase 2 Construction: \$4.8M (contractor progress greater than planned and additional equipment received sooner than anticipated) Digester & Storage Tank Rehabilitation Design/ESDC: \$926k (consultant progress greater than anticipated)
Residuals	\$400	\$241	(\$159)	-39.7%	

ATTACHMENT B
FY25 CIP Variance Report (\$000s)

	FY25 Budget June	FY25 Actuals June	Actuals vs. Budget		Explanations
			\$	%	
CSO	\$5,391	\$3,599	(\$1,792)	-33.2%	<u>Less than planned spending</u> Somerville Marginal New Pipe Connection: \$1.9M (Notice-to-Proceed issued later than anticipated) <u>Greater than planned spending</u> CSO Performance Assessment: \$578k (consultant progress greater than originally planned)
Other Wastewater	\$65,925	\$17,211	(\$48,715)	-73.9%	<u>Less than planned spending</u> I/I Local Financial Assistance: \$48.7M (less than anticipated requests for community grants and loans)
Total Wastewater	\$176,722	\$102,115	(\$74,608)	-42.2%	
Waterworks					
Drinking Water Quality Improvements	\$4,372	\$1,796	(\$2,576)	-58.9%	<u>Less than planned spending</u> CWTP Technical Assistance: \$2.1M (lower than projected task order work)
Transmission	\$58,749	\$56,653	(\$2,095)	-3.6%	<u>Less than planned spending</u> Metropolitan Water Tunnel Program Final Design/ESDC: \$2.8M (contract award later than anticipated) Maintenance Garage/Wash Bay/Storage Building - Construction: \$2.4M (schedule change) Program Support Services: \$2.0M (less than anticipated services) WASM 3 - MEPA/Design/CA/RI: \$1.7M (less than planned consultant work) Wachusett Lower Gatehouse Pipe & Boiler Replacement Construction and REI: \$1.1M (longer lead time on some larger items and a change in design for the multi-orifice valve) Watershed Land Acquisition: \$575k (less than planned land purchases) <u>Greater than planned spending</u> Waltham Water Pipeline Construction: \$4.9M and CP2 Shaft 5: \$1.2M (greater than planned contractor progress) Metropolitan Water Tunnel Program Administration, Legal & Public Outreach: \$2.9M (payment to Eversource for the infrastructure to supply electricity to a shaft site)

ATTACHMENT B
FY25 CIP Variance Report (\$000s)

	FY25 Budget June	FY25 Actuals June	Actuals vs. Budget		Explanations
			\$	%	
Distribution & Pumping	\$34,035	\$23,563	(\$10,471)	-30.8%	<u>Less than planned spending</u> Section 75A and 47 Extension - CP-1 Construction and REI: \$5.1M (Construction award later than anticipated) Section 89/29 Replacement Construction: \$3.1M (less than planned contractor progress) Section 56 Replacement/Saugus River - Design/CA and Construction: \$2.7M, and NIH Storage Design CA/RI:\$1.0M (updated schedules) <u>Greater than planned spending</u> NEH Improvements CP-1: \$1.7M and New Connecting Mains CP3-Sections 23, 24 & 47 Rehabilitation: \$366k (work scheduled for FY24 including final paving performed in FY25) Section 56 Easements: \$1.3M (necessary easements paid for Section 56) Northern Extra High Service (NEH) - New Pipelines Legal: \$682k (greater than planned legal/easement expenses)
Other Waterworks	\$48,657	\$14,607	(\$34,050)	-70.0%	<u>Less than planned spending</u> Local Water Pipeline Financial Assistance Program: \$18.8M (less than anticipated requests for community loans) Steel Tank Improvements - Design/CA, Construction and REI Phase 1: \$8.8M and Phase 2 Construction and REI: \$3.6 million (construction schedule changes) Beacon St. Line - Design/ESDC: \$1.8M and Gillis, Brattle Court and Newton Pump Stations Roofs - Construction: \$1.0M (schedule changes)
Total Waterworks	\$145,813	\$96,620	(\$49,192)	-33.7%	

ATTACHMENT B
FY25 CIP Variance Report (\$000s)

	FY25 Budget June	FY25 Actuals June	Actuals vs. Budget		Explanations
			\$	%	
Business & Operations Support					
Total Business & Operations Support	\$24,813	\$8,388	(\$16,425)	-66.2%	<u>Less than planned spending</u> Cabling: \$3.9M (delays in development of the scope of work caused by challenges in locating available conduit paths on Deer Island) Deer Island Solar Canopy Project: \$3.0M (updated schedule) As-Needed Design Contracts: \$1.9M (lower than projected task order work) Security Equipment & Installation: \$1.2M (delays with projects including upgrades to communication circuits and Incident Management System) Lawson Upgrade: \$1.0M, Disaster Recovery: \$962k, Data Center Firewalls: \$800k, LIMS Upgrade v2: \$750k, Oracle Database Appliance v.2: \$313k, Instrumentation & Controls IT: \$310k, and Distributed Antenna System Upgrades: \$300k (schedule changes) MAXIMO Interface Enhancements: \$309k (less than anticipated completion of final work)
Total MWRA	\$347,348	\$207,123	(\$140,225)	-40.4%	

**ATTACHMENT C
FY25 CIP Planned Contract Awards**

Project	Contract No.	Subphase	FY25 Notice to Proceed	FY25 Budget (\$ in millions)	Award in millions (\$)	Vender	Schedule Change Reason Code *	Secondary Codes*
940 Applicat Improv Program	8088	PI Vision Process Book Replace	Jul-24	\$0.2	0.3	Capstone Technology	1	
940 Applicat Improv Program	8096	Hyperion v.2	Jul-24	\$0.3	0.9	SMART WORKS, Inc.	1	
942 Info Security Program ISP	7657	ITSM Access Management	Jul-24	\$0.3			3	6
946 IT Infrastructure Program	7664	Instrumentation & Controls IT	Jul-24	\$0.3			3	6
946 IT Infrastructure Program	8097	Oracle Database Appliance v.2	Jul-24	\$0.5	0.5	Mythics	1	
130 Siphon Structure Rehabilitation	6225	Construction	Jul-24	\$8.3			3	7
130 Siphon Structure Rehabilitation	7996	Siphon Structure Phase 1 REI	Jul-24	\$1.0			3	5
136 West Roxbury Tunnel	6898	Tunnel Inspection	Jul-24	\$1.2	1.7	Black Dog Divers, Inc.	1	
702 New Connect Mains-Shaft 7	7484	Section 75A and 47 Extension - Const CP-1	Jul-24	\$16.9	17.3	P. Gioioso & Sons, Inc.	1	
702 New Connect Mains-Shaft 7	8067	Sect 75A and 47 REI CP-1	Jul-24	\$2.0	1.8	CDM Smith, Inc.	1	
766 Waterworks Facility Asset	7729	Beacon St Line Des/ESDC	Jul-24	\$4.9			5	
630 Watershed Div Cap Impr	7569	QAB Concept Des Report	Jul-24	\$0.3			3	7
946 IT Infrastructure Program	8092	Distributed Antenna System Upg	Aug-24	\$0.3			3	6
946 IT Infrastructure Program	8098	Servers v.2	Aug-24	\$0.2			3	6
354 Hydraulic Relief Projects	7985	Somm Marginal New Pipe Connection	Aug-24	\$4.6	4.4	RJV Construction	1	
354 Hydraulic Relief Projects	8070	Som.-Marg.New Pipe Conn. REI	Aug-24	\$0.5			3	7
145 Facility Asset Protection	7392	Cottage Farm PCB Abatement - Design/CA	Aug-24	\$2.7	3.8	Weston & Sampson Engineers	1	
145 Facility Asset Protection	7989	Belle Isle Rehab Des/ESDC/REI (now North Collection Sewer System CP-2 REI)	Aug-24	\$2.5			7	
271 Residuals Asset Protection	7145	Residuals Facility Upgrades - Design	Aug-24	\$4.0			2	
206 DI Treatment PI Asset Prot	6730	CHP Des/ESDC/REI	Aug-24	\$16.5	18.4	Burns & McDonnell Engineering Company	1	
206 DI Treatment Plant Asset Protection	7110	HVAC Design/ESDC	Aug-24	\$4.5	8.3	Mott MacDonald, LLC	1	
210 Clinton Wastewater Treatment Plant	7648	Digester Cover Replacement	Aug-24	\$5.8	7.0	Walsh Construction Company, LLC	1	
766 Waterworks Facility Asset Protection	7711	Water Tank Masonry/Strct.Con Assessment/Eval	Aug-24	\$0.9			5	
628 Metro Redundancy Interim Impr.	7702	CP2 Tops of Shafts REI	Aug-24	\$0.7	0.9	Mott MacDonald, LLC	1	
145 Facility Asset Protection	7375	Hayes Pump Station Rehab Construction	Sep-24	\$22.7	25.6	Waterline Industries Corporation	1	
145 Facility Asset Protection	7668	Hayes Pump St Rehab REI	Sep-24	\$1.1	1.8	Hazen & Sawyer	1	
946 IT Infrastructure Program	7663	Disaster Recovery	Sep-24	\$1.0	0.1	ePlus Technology	1	
946 IT Infrastructure Program	8091	MS Office Upgrades	Sep-24	\$0.2	0.03	Dell Marketing LP	1	
145 Facility Asset Protection	7637	Fuel Oil Tank Repl Caruso, DeLauri, Framingham Constr	Sep-24	\$4.0			5	
145 Facility Asset Protection	7689	Somerville-Marginal CSO Facility Rehab Des/CA	Sep-24	\$3.0			3	5
206 DI Treatment Plant Asset Protection	7169	Gas Protect System Replac Ph 2	Sep-24	\$6.5			2	
210 Clinton Wastewater Treatment Plant	7591	Screw Pump Replac Ph 2 Const	Sep-24	\$4.5			3	7
940 Applicat Improvements Program	8095	LIMS Upgrade v.2	Oct-24	\$0.8			3	5
206 DI Treatment Plant Asset Protection	6728	Digester Gas Flare No 4-Des/ESDC	Oct-24	\$1.2			2	

**ATTACHMENT C
FY25 CIP Planned Contract Awards**

Project	Contract No.	Subphase	FY25 Notice to Proceed	FY25 Budget (\$ in millions)	Award (\$ in millions)	Vender	Schedule Change Reason Code *	Secondary Codes*
721 South Spine Distrib Mains	7120	Section 22 - Design/ESDC	Oct-24	\$3.1			5	
722 NIH Redundancy & Storage	7311	NIH Storage - Design/CA/RI	Oct-24	\$6.9			5	
555 CWTP Asset Protection	7595	CWTP Water Pump VFD Repl	Oct-24	\$0.2			6	
766 Waterworks Facility Asset Protection	7676	Steel Tanks Impr REI	Oct-24	\$1.1			3	6
766 Waterworks Facility Asset Protection	7727	Steel Tank Improv Constr Ph2	Oct-24	\$7.1			3	6
766 Waterworks Facility Asset Protection	7728	Steel Tank Improv REI Ph2	Oct-24	\$0.8			3	6
766 Waterworks Facility Asset Protection	7493	Steel Tank/Impr Constr Walnut Hill	Oct-24	\$9.8	8.7	Atlas Painting and Improvements, Inc.	1	
942 Info Security Program ISP	8090	Data Center Firewalls	Nov-24	\$0.8			3	7
145 Facility Asset Protection	7410	CB1 Sect 23, 24, 25, 26 Des/ESDC	Nov-24	\$2.0			2	
206 DI Treatment Plant Asset Protection	6852	Chemical Pipe Replacement - Construction	Nov-24	\$9.0			3	5
630 Watershed Division Capital Impr	7577	Maint Gar/Wash Bay/Stor Bldg Constr	Nov-24	\$5.4			3	6
933 Capital Maintenance Planning	8063	As-Needed Des Contract 23	Dec-24	\$2.5			3	6
935 Alternative Energy Initiatives	7270	DITP Solar Canopy	Dec-24	\$10.0			3	6
206 DI Treatment Plant Asset Protection	7088	Odor Control Rehab - Design/ESDC	Dec-24	\$14.0			3	5
206 DI Treatment Plant Asset Protection	7137	Centrifuge Replac Des/ESDC/REI	Dec-24	\$5.2			3	6
206 DI Treatment Plant Asset Protection	7397	Clarifier Rehab Phase 2 - REI	Dec-24	\$7.3			2	
693 NHS - Revere & Malden Pipe	7486	Section 56 Replacement- Construction	Dec-24	\$6.7	9.5	Bond Civil & Utility Construction, Inc.	1	
693 NHS - Revere & Malden Pipe	7681	Sect 56 Replace REI	Dec-24	\$0.6			3	7
708 Nor Ext High Serv New Pipeline	7725	CP-2 NEH Improvements Sects 45 & 63	Dec-24	\$21.0	26.8	RJV Construction Corp.	1	
708 Nor Ext High Serv New Pipeline	8004	REI CP-2	Dec-24	\$1.5			2	
935 Alternative Energy Initiatives	8149	Heat Pmps WLGH/N.Nep/Newt PS	Jan-25	\$1.1			3	7
933 Capital Maintenance Planning	8062	As-Needed Des Contract 22	Jan-25	\$2.5			3	6
940 Application Improvement Program	7666	PI (OSI)	Jan-25	\$0.3			3	6
142 Wastewater Meter Sys-Equip	6928	Comm. Unmetered Flows Eval.	Jan-25	\$2.7			6	
145 Facility Asset Protection	8106	Prison Point Repack Des/CA/RI	Jan-25	\$2.3			3	5
766 Waterworks Facility Asset Protection	7900	Roofs Gillis/Bratt/Newt REI	Jan-25	\$0.3			3	7
766 Waterworks Facility Asset Protection	7901	Roofs Gillis/Bratt/Newt Constr	Jan-25	\$1.5			3	7
604 MetroWest Tunnel	8080	Shaft L Interconnect Des/ESDC	Jan-25	\$1.1			3	6
630 Watershed Division Capital Impr.	8073	New Salem Building Design	Jan-25	\$2.1			6	
206 DI Treatment Plant Asset Protection	7051	Fire Alarm System Replacement - Construction	Mar-25	\$35.0			6	
206 DI Treatment Plant Asset Protection	7135	DI DiStor Membrane Replacements	Mar-25	\$8.0			3	7
206 DI Treatment Plant Asset Protection	7139	Cryo Plant Equipment Repl. Des-ESDC-REI	Mar-25	\$6.3			6	
206 DI Treatment Plant Asset Protection	7420	MCC & Switchgear Replace Const	Mar-25	\$23.5			3	7
206 DI Treatment Plant Asset Protection	7426	Fire System Replacement - REI	Mar-25	\$4.8			3	6

**ATTACHMENT C
FY25 CIP Planned Contract Awards**

Project	Contract No.	Subphase	FY25 Notice to Proceed	FY25 Budget (\$ in millions)	Award (\$ in millions)	Vender	Schedule Change Reason Code *	Secondary Codes*
712 Cathodic Protection Of Distr. Mains	6439	Cath Pro Shafts E,L,N&W Const	Mar-25	\$5.1			3	5
712 Cathodic Protection Of Distr. Mains	7610	Cath Pro Shafts E,L,N&W REI	Mar-25	\$1.0			2	
542 Carroll Water Treatment Plant	8130	Technical Assistance 15	Mar-25	\$2.5			3	6
542 Carroll Water Treatment Pl	8131	Technical Assistance 16	Mar-25	\$2.5			3	6
542 Carroll Water Treatment Plant	7790	CWTP UV Rooms Dehumidification	Mar-25	\$1.6			6	
145 Facility Asset Protection	7827	Hingham Pump Station Rehab Des/ESDC	Apr-25	\$2.9			3	6
145 Facility Asset Protection	7217	Inter Ren 7-Malden&Melrose-Const	May-25	\$9.4			3	6
145 Facility Asset Protection	7751	Intercept Renewal 7 REI	May-25	\$1.3			3	6
628 Metro Redundancy Interim Impr.	6543	WASM 3 Rehab CP-2	May-25	\$13.9			3	5

77 Total Planned Contracts Awards

\$371.0

18 Planned Awards Achieved

\$137.9

Unplanned Awards in FY25

625 Metro Water Tunnel Program	7556	Final Design/ESDC	Jun-24	\$117.8	93.6	WSP USA Inc.	1	
925 Technical Assistance	623TA	Technical Assistance Appraisal Services	Jul-24	\$0.2	0.2	Foster Appraisal Consulting Corp.	1	
925 Technical Assistance	624TA	Technical Assistance Appraisal Services	Jul-24	\$0.2	0.2	BBG Real Estate Services	1	

3 Unplanned Awards

\$94.0

22 Contract Awards

\$231.9

*** Reason Codes:**

1. NTP issued in FY25.
2. Project/Phase eliminated or being performed in-house; combined with another project, or phase completed but on hold.
3. NTP expected in FY26.
4. Schedule change due to permitting.
5. Scope changes.
6. Changes in priorities/scheduling.
7. Bidder issue/Outside Design Delay/Contractor issue/Additional specifications review.

ATTACHMENT D
Linear Footage of Rehabilitated or New Pipelines
FY25 (July 2024 - June 2025)

	<u>Contract #</u>	<u>Type</u>	<u>Linear Feet</u>
<u>WASTEWATER PROJECTS</u>			
Braintree-Weymouth Pump Station Improvements	7366	New	105
<u>WATERWORKS PROJECTS</u>			
Waltham Section 101 Extension Construction	7457	New	4,800
CP-2 Sections 24 & 25	6956	New	1,901
NIH Sections 89 & 29 Replacement	7117	New	2,640
CP-2 NEH Improvements	7725	New	842
Wachusett Lower Gatehouse Pipe & Boiler Replacement	7380	New	140
<u>TOTAL PIPELINE REHABILITATED OR CONSTRUCTED IN FY25</u>			
	<u>Linear Feet</u>		<u>Miles</u>
Wastewater Projects	105		0.0
Water Projects	<u>10,323</u>		<u>2.0</u>
Total	10,428		2.0

**Attachment E
FY26 Planned Contract Awards**

Project	Contract	Subphase	NTP	FY26 Budget (\$ in Millions)
935 Alternative Energy Initiatives	8147	Chelsea Admin Heat Pumps	Jul-25	\$3.0
942 Info Security Program ISP	7657	ITSM Access Management	Jul-25	\$0.2
946 IT Infrastructure Program	8093	Fiber Channel Switch Upgrades	Jul-25	\$0.3
206 DI Treatment Plant Asset Protection	8150	Cryo Facility Valve Repl.	Jul-25	\$11.9
693 NHS - Revere & Malden Pipeline	7681	Sect 56 Replace REI	Jul-25	\$1.1
766 Waterworks Facility Asset Protection	7385	Fells Loring RD Tanks Rehab Des/CA	Jul-25	\$1.0
766 Waterworks Facility Asset Protection	7676	Steel Tanks Impr REI	Jul-25	\$1.1
766 Waterworks Facility Asset Protection	8137	Pipe Bridge Insp./Struct. Anal.	Jul-25	\$0.9
604 MetroWest Tunnel	7283	Valve Chamber & Storage Tank Improve Design	Jul-25	\$0.6
630 Watershed Div Cap Improvements	7569	Quabbin Administration Building Concept Design Report	Jul-25	\$0.4
935 Alternative Energy Initiatives	8148	DITP Wind Turbine 1 Repl.	Aug-25	\$4.5
935 Alternative Energy Initiatives	8149	Heat Pumps Wachusett Lower Gatehouse/NewNep./Newt PS	Aug-25	\$3.0
942 Info Security Program ISP	8090	Data Center Firewalls	Aug-25	\$0.8
130 Siphon Structure Rehabilitation	6225	Construction	Aug-25	\$7.2
145 Facility Asset Protection	7513	N. Coll. Sewer Syst. Design/ESDC	Aug-25	\$6.2
145 Facility Asset Protection	8141	Cottage Farm/Prison Point Chemical Storage Tank	Aug-25	\$1.0
145 Facility Asset Protection	8142	Cottage Farm/Prison Point Chemical Storage Tank REI	Aug-25	\$0.1
145 Facility Asset Protection	8175	Heat Pumps various Wastewater Facilities	Aug-25	\$0.9
145 Facility Asset Protection	7689	Somerville-Marginal CSO Facility Rehab Design/CA	Sep-25	\$3.0
210 Clinton Wastewater Treatment Plant	7591	Screw Pump Replacement Ph 2 Construction	Sep-25	\$7.7
542 Carroll Water Treatment Plant	8130	Technical Assistance 15	Sep-25	\$2.0
542 Carroll Water Treatment Plant	8131	Technical Assistance 16	Sep-25	\$2.0
616 Quabbin Transmission Syst.	8159	Ware River Shft 8 Retaining Wall	Sep-25	\$1.0
616 Quabbin Transmission Syst.	8163	Ware River Shft 8 Retaining Wall REI	Sep-25	\$0.4
935 Alternative Energy Initiatives	7270	DI Solar Canopy Project	Oct-25	\$10.0
130 Siphon Structure Rehabilitation	7996	Siphon Structure Phase 1 REI	Oct-25	\$1.5
206 DI Treatment Plant Asset Protection	7088	Odor Control Rehab - Design/ESDC	Oct-25	\$14.0
206 DI Treatment Plant Asset Protection	7135	DI DiStor Membrane Replacements	Oct-25	\$9.5
693 NHS - Revere & Malden Pipeline	6335	CP-1 Section 68 Construction	Oct-25	\$18.0
712 Cathodic Protection Of Disribution Mains	6439	Cathodic Protection Shafts E,L,N&W Const	Oct-25	\$5.6
604 MetroWest Tunnel	8080	Shaft L Interconnect Design/ESDC	Oct-25	\$1.3
940 Applications Improvement Program	8089	Intranet	Nov-25	\$0.5
137 Wastewater Central Monitoring	8156	Microw. Redund. Syst Imp Study	Nov-25	\$0.5
206 DI Treatment Plant Asset Protection	6852	Chemical Pipe Replacement - Construction	Nov-25	\$9.0
933 Capital Maintenance Planning	8062	As-Needed Des Contract 22	Dec-25	\$2.5
933 Capital Maintenance Planning	8063	As-Needed Des Contract 23	Dec-25	\$2.5
145 Facility Asset Protection	7637	Caruso, Delauri & Framingham Fuel Tank Repl	Dec-25	\$2.5
145 Facility Asset Protection	8155	High Level Culv. Design/ESDC/REI	Dec-25	\$1.0
271 Residuals Asset Protection	7143	Various Equipment Replacement	Dec-25	\$20.0
271 Residuals Asset Protection	7175	Various Equipment Replacement Design	Dec-25	\$3.8
206 DI Treatment Plant Asset Protection	7137	Centrifuge Replacement Design/ESDC/REI	Dec-25	\$14.0

**Attachment E
FY26 Planned Contract Awards**

Project	Contract	Subphase	NTP	FY26 Budget (\$ in Millions)
693 NHS - Revere & Malden Pipeline	7682	Sect 14, 53 & 99 Const REI	Dec-25	\$3.6
630 Watershed Division Capital Improvements	7577	Maintenance Garage/Wash Bay/Storage Bldg Constr	Dec-25	\$6.3
946 IT Infrastructure Program	8092	Distributed Antenna System Upg	Jan-26	\$0.3
145 Facility Asset Protection	7827	Hingham Pump Station Rehab Des/ESDC	Jan-26	\$2.9
145 Facility Asset Protection	8106	Prison Point Repack Des/CA/RI	Jan-26	\$2.3
145 Facility Asset Protection	8176	Heat Pump Squantum PS	Jan-26	\$0.3
206 DI Treatment Plant Asset Protection	7426	Fire System Replacement Design,ESDC,REI	Jan-26	\$12.0
617 Sudbury/Weston Aqued. Repair	7700	Weston Aqueduct Gatehouse Rehab	Jan-26	\$1.3
625 Metro Water Tunnel Program	7356	Construction Management	Jan-26	\$151.1
625 Metro Water Tunnel Program	8086	Tunnel Construction CP3	Jan-26	\$10.4
625 Metro Water Tunnel Program	8153	Owners Representative Services	Jan-26	\$6.3
145 Facility Asset Protection	7389	Cottage Farm PCB Abatement Construct. 1	Feb-26	\$10.6
145 Facility Asset Protection	8151	Ward St Headworks Air Handler Replacement	Feb-26	\$2.0
616 Quabbin Transmission Syst.	8138	Loneragan Int.Bldg Walkway/Wall Impr.	Feb-26	\$2.0
616 Quabbin Transmission Syst.	8160	Loneragan Int.Bldg Walkway REI	Feb-26	\$2.0
145 Facility Asset Protection	7217	Inter Ren 7-Malden&Melrose-Construction	Mar-26	\$9.4
206 DI Treatment Plant Asset Protection	7420	Motor Control Center & Switchgear Replace Const	Mar-26	\$39.0
766 Waterworks Facility Asset Protection	7727	Steel Tank Improv Constr Ph2	Mar-26	\$11.2
766 Waterworks Facility Asset Protection	7728	Steel Tank Improv REI Ph2	Mar-26	\$0.8
145 Facility Asset Protection	7751	Intercept Renewal 7 REI	Apr-26	\$1.3
206 DI Treatment Plant Asset Protection	6724	Eastern Seawall Construction - 1	Apr-26	\$45.0
206 DI Treatment Plant Asset Protection	6725	Barge Berth Des/ESDC/REI	Apr-26	\$4.6
766 Waterworks Facility Asset Protection	8030	Cosgrove Tunnel Rehab Inspection	Apr-26	\$1.0
628 Metro Redundancy Interim Improvements	7600	Shaft 5 Building Impr. Constr.	Apr-26	\$3.5
628 Metro Redundancy Interim Improvements	7670	CP3 Shafts 7, 7B, 7C, 7D	Apr-26	\$8.6
628 Metro Redundancy Interim Improvements	7673	Shaft 5 Building Impr REI	Apr-26	\$0.8
628 Metro Redundancy Interim Improvements	6543	WASM 3 Rehab CP-2	Apr-26	\$24.7
766 Waterworks Facility Asset Protection	8183	Southborough Paving	May-26	\$1.0
616 Quabbin Transmission Syst.	7545	Oakdale Turbine Rehab Design	May-26	\$0.2
206 DI Treatment Plant Asset Protection	6240	Digester/Storage Tank Rehab Const	Jun-26	\$400.0
206 DI Treatment Plant Asset Protection	7094	HVAC Equip Replac REI	Jun-26	\$10.0
708 Northern Extra High Service New Pipeline	7910	CP-3 NEH Improvements	Jun-26	\$29.2
708 Northern Extra High Service New Pipeline	8005	REI CP-3	Jun-26	\$1.5

74 Planned Contracts

\$981.6

STAFF SUMMARY




TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Approval of the Ninety-First Supplemental Bond Resolution

COMMITTEE: Administration, Finance & Audit

VOTE
 INFORMATION

Matthew R. Horan, Deputy Director, Finance/Treasurer
Sean R. Cordy, Sr. Financial Analyst
 Preparer/Title



Thomas J. Durkin
 Director, Finance

RECOMMENDATION:

To adopt the Ninety-First Supplemental Resolution authorizing the issuance of up to \$63,000,000 of Massachusetts Water Resources Authority Subordinated General Revenue Bonds and the supporting issuance resolution.

DISCUSSION:

The Massachusetts Clean Water Trust (“Trust”) provides subsidized financing for water and wastewater capital projects to Massachusetts governmental entities. MWRA annually submits new projects to the Massachusetts Department of Environmental Protection to be considered for inclusion on the Clean and Drinking Water Intended Use Plans (IUP). New and previously approved carry-over projects that are included on an IUP are eligible to receive financing through the Trust. Historically, MWRA has drawn down its funding at the same time the Trust was closing its long-term bond transaction. Starting in 2020, MWRA began utilizing the Trust’s interim loans to complete several draws during the course of the year. Under this structure, MWRA will enter into interest free interim loans with Trust, which will be replaced with standard loans when the Trust completes its next public market borrowing.

Currently MWRA has approximately \$63 million in funding from the approved 2025 IUPs, \$50 million of which is related clean water (wastewater) and \$13 million for drinking water projects. The following table outlines the allocation of the funding between projects.

Project	Approved Funding
Deer Island Clarifier Rehabilitation	\$50,000,000
Total Clean Water	\$50,000,000
NIH Section 89	\$ 11,344,056
Sections 23,24,47 Water Mains Rehab	\$ 1,655,944
Total Drinking Water	\$ 13,000,000
Total Loans	\$ 63,000,000

Staff anticipate drawing down all of the drinking water loans upon closing of the transaction and will draw down the clean water funding as the work progresses on the clarifiers. This will allow MWRA to maximize its ability to borrow funds from the Trust through zero percent interest interim loans. The Trust will complete its long-term borrowing once sufficient funds have been drawn by MWRA and other communities.

From the 2025 IUPs, MWRA anticipates receiving up to \$63 million in new, low-interest loans from the Trust to fund several water and wastewater projects. The loans will have a 20-year maturity at a fixed interest rate of 2.15%, including the Trust administrative fee of 0.15%. The Trust also typically charges a loan origination fee of \$5.50 per \$1,000 to cover its costs of issuance.

In order to move ahead with the interim and permanent borrowing, the Trust requires that all borrowers sign loan commitment documents which indicate that they have the authorization to borrow these funds. Once the documents are completed, MWRA will begin drawing funds. While this new structure will allow MWRA to access the interest free funds sooner, it may make budgeting for the debt service costs associated with the permanent financing less certain. MWRA is required by its General Bond Resolution to make monthly principal and interest deposits to the debt service accounts for these bonds. Since MWRA is required to budget the funds for anticipated principal and interest payments, shifts in timing of the permanent financing will change when deposits are required and may reduce budgeted debt service expenses.

BUDGET/FISCAL IMPACT:

There are sufficient funds available in the FY26 CEB to pay the debt service costs associated with these borrowings.

STAFF SUMMARY



TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Remarketing Agent for the 2008 Series A-1 and 2025 C-F and Commercial Paper Dealer for the 2025 Notes
BofA Securities, Inc., Goldman Sachs & Co. LLC, Jefferies LLC, RBC Capital Markets, LLC and TD Securities (USA) LLC.
Contract F283

COMMITTEE: Administration, Finance & Audit

VOTE
 INFORMATION



Michele S. Gillen
Director, Administration

Matthew R. Horan, Deputy Director, Finance/Treasurer
Preparer/Title



Thomas J. Durkin
Director, Finance

RECOMMENDATION:

To authorize the Executive Director, pursuant to the Fifty-Fourth, Eighty-Ninth and Ninetieth Supplemental Resolutions, to approve the recommendation of the Selection Committee for BofA Securities, Inc., Goldman Sachs & Co. LLC, Jefferies LLC, and RBC Capital Markets, LLC., to provide remarketing services for the Multi-Modal Subordinated General Revenue Refunding Bonds, and for TD Securities (USA) LLC to provide commercial paper dealer services for the 2025 Notes, as detailed in this September 17, 2025 staff summary.

DISCUSSION:

Unlike fixed rate debt where the interest rate is set at the time the bonds are issued, variable rate debt has interest rates reset on a periodic basis taking advantage of the typically lower short-term rates. MWRA all-in average variable interest rate over the last 10 years is 1.94%, as compared to SRF bonds at 2.15% and fixed rate debt that is averaging 3.12%. On a daily or weekly basis, the Remarketing Agent is responsible for determining the appropriate interest rate at which bondholders will want to purchase MWRA's bonds. This interest rate considers market conditions, MWRA's credit quality and the security provided by the liquidity bank. The liquidity banks agree to purchase the bonds or notes if there is not an investor willing to purchase them. If the Remarketing Agent were to fail to find purchasers for the bonds they could either hold them in their inventory or place them with the liquidity banks at a higher interest rate prescribed in the liquidity agreements. The Commercial Paper Dealer acts in a similar manner to the Remarketing Agent setting a short-term interest rate that investors will accept to hold the commercial paper. Unlike the variable rate bonds where the interest rate is set on a daily or weekly basis, commercial

paper is typically sold with maturities ranging from 30 to 270 days depending on market conditions. The Remarketing Agents and Commercial Paper Dealer are compensated for these services, quarterly based on a fixed basis point fee times the principal outstanding on the bonds. The Remarketing Agent typically also receives a one-time new bond placement fee to cover the initial placement costs based on a fixed fee per \$1,000. The Commercial Paper Dealer does not typically receive the new bonds placement fee.

At the July 2025 meeting, the Board awarded liquidity agreements for four new series of variable rate refunding bonds and a new commercial paper series. The Remarketing Agents and Commercial Paper Dealer selected through this process will set interest rates on the new bonds or notes. In addition to the new bonds, MWRA is also replacing the Remarketing Agent on the 2008 Series A -1, which has experienced interest rates averaging 36 basis points higher than comparable series of bonds, since the current Remarketing Agent took over in March of 2024. Pursuant to the applicable Supplemental Resolutions, the Remarketing Agents and Commercial Paper Dealer are integral parts of the bond transaction and will continue to serve in that role, until the earlier of the maturity of the bonds, removal by MWRA or their seeking to resign from providing the services.

PROCUREMENT PROCESS:

The procurement process to select Remarketing Agents utilized a one-step Request for Qualification Statements and Proposals (RFQ/P), which was issued on August 18, 2025. The procurement was publically advertised in the Goods and Services Bulletin, Boston Herald, Banner Publications, El Mundo and via the MWRA Supplier Portal. Eleven firms, BofA Securities (B of A), Goldman Sachs & Co. LLC (Goldman), Jefferies LLC (Jefferies), J.P. Morgan Securities (J.P. Morgan), Loop Capital Markets LLC (Loop), Morgan Stanley & Co, LLC (Morgan Stanley), Ramirez and Co., Inc (Ramirez) , RBC Capital Markets (RBC), TD Securities (USA) LLC (TD Securities), U.S. Bancorp (U.S. Bancorp), and Wells Fargo Securities LLC (Wells Fargo) submitted proposals on September 2, 2025. As part of the procurement process, MWRA required that all proposers have at least seven years of experience, be members of the National Association of Securities Dealers, Inc. have a minimum capitalization of at least \$15 million and provide a minimum capacity to remarket at least one series of bonds.

The Selection Committee evaluated and ranked the proposals from the eleven firms based on the following criteria: Fees, Other Related Costs and Market Trading Performance (35 pts), Financial Strength and Credit Profile (25 pts), Remarketing Capacity, Past Experience and Key Personnel (25 pts), and Proposed Contract Modifications to Sample Agreement (15 pts). The proposals for Remarketing Agent were ranked as follows:

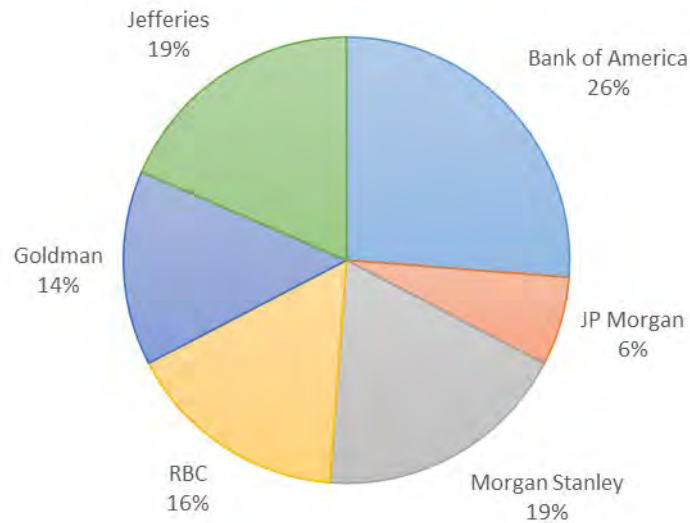
Rank	Firm	Daily Reset (bps)*	Weekly Reset (bps)*	Commercial Paper (bps)*	New Bond Placement Fee (\$/\$1000)
1	BofA Securities	6	4	5	\$ 1.00
2	TD Securities	6	5	5	\$ 1.00
3	RBC Capital Markets	7	5	6	\$ 0.75
4	Jefferies	6	4	7	\$ -
5	Goldman Sachs	7	5	5	\$ 1.00
6	Wells Fargo	8	5	5	\$ 1.00
7	Morgan Stanley	7.5	7.5	5	\$ 1.00
8	JP Morgan	9	7	7	\$ 1.00
9	Loop Capital	5	5	5	\$ 1.00
10	US Bancorp	8	8	5	\$ 1.50
11	Ramirez	N/A	N/A	5	\$ 1.00

* Per million dollars of bonds

All eleven proposals reviewed by the Selection Committee were from firms with significant experience in remarketing variable rate bonds and commercial paper. Staff are recommending awarding contracts to provide either Remarketing Agent or Commercial Paper Dealer services as outlined in the following table.

Series	Par Outstanding	Remarketing Agent	Remarketing Cycle
2008A-1	\$ 20,905,000	BofA Securities	Weekly
2025C	\$ 54,720,000	Jefferies	Weekly
2025D	\$ 41,723,000	Goldman Sachs	Weekly
2025E	\$ 39,195,000	BofA Securities	Weekly
2025F	\$ 47,700,000	RBC Capital Markets	Daily
2025Notes	\$ 150,000,000	TD Securities	CP

The selected firms all presented strong proposals with well demonstrated experience related to the remarketing of both variable rate bonds and commercial paper. All the firms had comparable fees for the remarketing of the bonds and commercial paper, as well as similar bond placement fees. The bond placement fee does not apply to the commercial paper for the firm selected to provide those services. Staff allocated the products based on the rankings of the firms, and also with MWRA's long standing goal of maintaining diversity among counterparties in the variable rate program. To that end, the bonds were allocated to limit any one firm from having a significant portion of the portfolio and to prevent the same firm from being both the Remarketing Agent/Commercial Paper Dealer on a series that they also provide the liquidity agreement. The following chart details the proposed allocation of remarketing agents in MWRA's long-term variable rate portfolio.



Wells Fargo, Morgan Stanley, JP Morgan and US Bancorp all have strong experience as Remarketing Agent/Commercial Paper Dealers, but their proposed costs were higher than the selected firms. While Loop Capital proposed a strong team with a long history with MWRA and competitive rates, the Selection Committee had some concerns over the size of their remarketing portfolio and overall financial capacity of the firm. While Ramirez has been a long-standing member of MWRA’s fixed rate debt underwriting team, it does not provide Remarketing Agent services and there were concerns about the limited size of their remarketing portfolio and the overall financial capacity of the firm.

Based on the cost, experience and qualifications of the firms, the Selection Committee recommends award of Remarketing Agreements to BofA Securities, Inc., Goldman Sachs & Co. LLC, Jefferies LLC, and RBC Capital Markets, LLC as detailed in the above table and to award a Commercial Paper Deal contract to TD Securities (USA) LLC.

BUDGET/FISCAL IMPACT:

There are sufficient funds in the FY26 CEB to pay for the costs associated with the Remarketing Agent and Commercial Paper Deal contracts.

MBE/WBE PARTICIPATION:

There were no MBE/WBE participation requirements established for this contract due to the limited opportunities for subcontracting.


STAFF SUMMARY



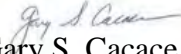
TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Assignment and Assumption of Contract EXE-047
Viscom Systems, Inc. to Sullivan & McLaughlin Companies, Inc.

COMMITTEE: Administration, Finance & Audit

 INFORMATION
 X VOTE



Kathryn T. Keating, Manager, Security Services
Manager, Security Services



Gary S. Cacace
Director of Security

On May 20, 2025, through an Asset Purchase Agreement, Sullivan & McLaughlin Companies, Inc., purchased the existing assets of Viscom Systems, Inc. This Staff Summary requests approval of the proposed assignment of Contract EXE-047 to Sullivan & McLaughlin.

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve the assignment and assumption of Contract EXE-047, Security Equipment Maintenance and Repair Services, from Viscom Systems, Inc. to Sullivan & McLaughlin Companies, Inc., and to further authorize the Executive Director, on behalf of the Authority, to execute an Assignment and Assumption Agreement to effectuate that assignment and assumption with no increase in contract price or contract term.

DISCUSSION:

On November 15, 2023, the Board voted to award Contract EXE-047, Security Equipment Maintenance and Repair services to Viscom Systems, Inc. in the amount of \$2,395,680.05 for a Contract term of 1,095 days from the Notice to Proceed. The Notice to Proceed was issued on December 13, 2023, and the Contract is scheduled to expire on December 27, 2026. There have been no amendments to date.

Contract EXE-047 is a three-year contract that provides scheduled preventative maintenance services as well as needed repair services for all components of MWRA’s extensive security system, non-emergency and emergency on-call maintenance and repair services with the exception of the overarching administration of MWRA’s security information technology network. Provisions for software integration at the application level are also included in the Contract. Staff developed an appropriate preventive maintenance schedule for each piece of equipment and

determine on a case-by-case basis when to call the Contractor to repair critical equipment outside of normal business hours.

On May 20, 2025, an Asset Purchase Agreement was executed by Viscom Systems, Inc. and Sullivan & McLaughlin Companies, Inc. MWRA Finance staff reviewed audited financial statements and insurance information provided by Sullivan & McLaughlin, and determined that the firm appears to have the financial capacity to perform the remainder of the Contract term to the same extent as Viscom Systems, Inc. Likewise, Risk Management staff reviewed certificates of insurance for Sullivan & McLaughlin, and determined that adequate insurance coverage is being provided to cover work required under the Contract. Moreover, there is a commitment from Sullivan & McLaughlin that the existing staff servicing the Contract will remain in place. For these reasons, staff recommend approval of the assignment and assumption of Contract EXE-047 to Sullivan & McLaughlin Companies, Inc. and execution of an Assignment and Assumption Agreement to effectuate that assignment/assumption with no increase in contract price or contract term.

BUDGET/FISCAL IMPACTS:

There are no budget or fiscal impacts to this contract as a result of this assignment.

MBE/WBE PARTICIPATION:

There are no MBE/WBE participation requirements for this contract.



MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island
33 Tafts Avenue
Boston, MA 02128

Frederick A. Laskey
Executive Director

Chair: P. Walsh
Vice-Chair: J. Foti
Committee Members:
A. Pappastergion
B. Peña
H. Vitale
B. Swett
J. Wolowicz

WASTEWATER POLICY & OVERSIGHT COMMITTEE MEETING

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

Date: Wednesday, September 17, 2025
Time: Immediately following the Administration, Finance & Audit Committee
Location: Deer Island Reception/Training Building, 1st Floor
33 Tafts Avenue – Favaloro Meeting Room
Boston, MA 02128

Photo ID required for entry.

The meeting will also be available virtually via Webex.

Webex meeting link (Registration required):

<https://mwra.webex.com/weblink/register/rb31a10e696470cf2457e912f550a5252>

Meeting Number: 2334 553 9657 Password: 091725

AGENDA

i. Approval of Wastewater Policy & Oversight Committee Minutes

MASSACHUSETTS WATER RESOURCES AUTHORITY
Meeting of the Wastewater Policy and Oversight Committee
of the MWRA the Board of Directors
December 11, 2024

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

Committee Chair Patrick Walsh presided at MWRA Headquarters. Board Members Flanagan, Pappastergion, Peña, Taverna, Jack Walsh, Patrick Walsh participated at MWRA Headquarters. Board Members Vitale and Wolowicz participated remotely. Board Members Foti and Swett were 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; Senior Program Manager for Engineering and Construction Senior Program Manager, Engineering and Construction Patricia Mallett; Chief Engineer Brian Kubaska; Program Manager, Engineering and Construction Margery Johnson; Director of Wastewater Operations Charles Ryan; Director of Construction Marty McGowan; Construction Coordinator Jeffrey Bina; ENQUAL Director David Wu; 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.

Acting Special Assistant for Affirmative Action Tomeka Cribb attended remotely.

Vandana Rao, EEA, also attended remotely.

Mr. Patrick Walsh called the meeting to order at 11:17am.

Contract Awards

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

Mr. Walsh noted that the first item was a proposed award to Hazen and Sawyer of Contract 7668, Resident Engineering and Inspection Services for the Hayes Pump Station Rehabilitation project.

A motion was duly made and seconded to recommend approval to the full Board of Directors of this contract award as presented in the December 11, 2024 Staff Summary.¹

(Ms. Wolowicz temporarily left the meeting after the motion.)

Patricia Mallett, Senior Program Manager, Engineering and Construction, presented an overview of the Hayes Pump Station Rehabilitation project in support of a proposed contract award for associated resident engineering/resident inspection (“RE/RI”) services to Hazen and Sawyer, P.C. She discussed the project’s location; contract scope and bid results. She noted that MWRA received one proposal from Hazen and Sawyer, and that it came in less than the Engineer’s Estimate, primarily due to lower than estimated hourly rates. She discussed Hazen and Sawyer’s experience working on MWRA projects, and satisfactory references.

Mr. Taverna requested more information about the proposed key personnel’s qualifications. Ms. Mallett described the proposed Resident Engineer’s qualifications and work experience, including on MWRA’s Wachusett Dam Gatehouse project. There was brief discussion about the timing of the Gatehouse project closeout; the startup of the Hayes Pump Station Rehabilitation project; Hazen and Sawyer’s proposed Resident Engineer’s availability for this project; and the benefits of engaging a project’s design engineer and resident engineer through the same firm, such as improved coordination and efficiency.

Brief discussion followed concerning the plan holders list for the project’s bidding process; and the firms that requested bid documents through MWRA’s procurement portal.

Hearing no further discussion or questions from the Board, Mr. Patrick Walsh requested a roll call vote in which the members were recorded as follows:

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

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

Contract Amendments/Change Orders

Ward Street and Columbus Park Headworks Upgrade: CDM Smith, Contract 7429, Amendment 1

Mr. Walsh noted that there were five items under Contract Amendments and Change Orders, and that the first was proposed Amendment 1 to Contract 7429, Ward Street and Columbus Park Headworks Upgrade, with CDM Smith.

A motion was duly made and seconded to recommend approval to the full Board of Directors of this Amendment 1 as presented in the December 11, 2024 Staff Summary.²

Staff discussed proposed Amendment 1 to the Ward Street and Columbus Park Upgrade Project Contract 7429. Brian Kubaska, MWRA Chief Engineer, presented an overview of the project's purpose and scope and a summary of previous upgrades at the Ward Street and Columbus Park facilities. He noted staff's intention to build a new structure to house the facilities' required equipment and office space during construction (citing lessons learned from the Chelsea Creek Headworks Upgrade project); and explained the new structure would help ensure that the facilities remain operational during construction.

Next, Margery Johnson, MWRA Program Manager, Engineering and Construction, discussed staff's efforts to incorporate carbon footprint reductions into the upgrade design in support of Massachusetts Executive Order No. 594: *Decarbonizing and Minimizing Environmental Impacts of State Government* ("EO 594"), which was issued after the execution of this contract. She presented a graph of MWRA's significant reduction in total carbon emissions since 2006, and summarized extensive evaluations performed on potential carbon-reducing heating technologies for the Ward Street and Columbus Park facilities, including wastewater heat recovery systems and heat pumps.

Ms. Johnson reported that while conceptually promising, heat recovery systems were not viable for this project due to large, variable wet weather flows at the installation sites, as well as a lack of demonstrated experience with installed systems of similar magnitude and complexity. She noted that staff can apply the heat recovery systems research to other projects, and that the planned Ward Street and Columbus Park upgrades would allow for the addition of flow extraction if more workable heat recovery technologies were developed in the future.

Next, Ms. Johnson discussed staff's evaluation of air source heat pumps. She reported that heat pumps are feasible for project locations that are unexposed to the wastewater stream or grit and screenings, such as administrative spaces and electrical rooms; therefore, heat pumps would be incorporated into final design for only these areas.

Ms. Johnson further noted that while this project could not meet EO 594's fossil fuel reduction targets, its final design would include improvements to the HVAC basis of design, such as natural gas condensing boilers for heating classified spaces; variable refrigerant flow heat pumps for non-classified spaces; and consideration for future heat recovery options. She then presented a summary of the project's planned wet weather operations improvements for choking events, and examples of models used to evaluate the various technologies considered, including the recommended blocks and baffles system. Finally, Ms. Johnson presented the terms, scope and costs of proposed Amendment 1 to Contract 7429, including a time extension

for Final Design delays due to the extensive evaluations performed in support of EO 594; the escalation for Final Design and Engineering During Construction; administrative costs; additional design items; a pneumatic ejection system; and an allowance to address design issues without further delay.

(Ms. Wolowicz left and returned to the meeting during the presentation.)

Mr. Taverna asked if staff had considered alternatives to natural gas. Ms. Johnson explained that the facilities currently use oil systems. Mr. Kubaska added that natural gas would be used in the facilities' classified areas. There was brief discussion about staff's efforts to support EO 594's requirements.

Mr. Flanagan asked if the design would include back-up heat systems in case of a gas line interruption. Mr. Kubaska advised that such back-up systems would be a design consideration.

Hearing no further discussion or questions from the Board, Mr. Patrick Walsh requested a roll call vote in which the members were recorded as follows:

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

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

(Mr. Taverna temporarily left the meeting after Roll Call.)

MWRA Executive Director Fred Laskey congratulated Ms. Johnson on her upcoming retirement.

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

Mr. Walsh noted that Proposed Amendment 1 to Contract S606, Union Park Pump Station/CSO Facility and Unstaffed Pump Stations, with Woodward & Curran was next.

A motion was duly made and seconded to recommend approval to the full Board of Directors of this Amendment 1 as presented in the December 11, 2024 Staff Summary.³

Charles Ryan, MWRA Director of Wastewater Operations, presented an overview of an

MWRA/Boston Water and Sewer Commission (“BWSC”) contract for the management, operation and maintenance of the Union Park Pump Station/CSO Facility and nine unstaffed pump stations, in support of proposed Amendment 1 to Contract S606. He presented the Union Park facility’s location; noted the existing contract with Woodard & Curran expires at the end of February 2025; and, explained staff sought the Board’s approval of two, one-year amendments for the contract; presented photos of the Union Park Pump Station’s gas turbine engines; pumps; and detention basins, and described their functions; summarized the duration and scope of the current contract S606; explained that Woodard & Curran has operated S606’s facilities under four consecutive contracts, and that the firm has met or exceeded qualifications; summarized proposed Amendment 1’s duration and cost, including a maintenance allowance; and noted the BWSC Board of Commissioners approved this Amendment in November 2024.

(Mr. Taverna returned to the meeting, and Ms. Wolowicz left the meeting during the presentation.)

There was brief discussion about the Union Park facility’s 24-7 operations and staffing, and its use as an operations control center for monitoring BWSC pump stations.

Mr. Vitale thanked MWRA for collaborating with BWSC on this contract; agreed with staff’s positive assessment of Woodard & Curran’s qualifications and noted that neighbors are satisfied with the Union Park facility’s operations.

Hearing no further discussion or questions from the Board, Mr. Patrick Walsh requested a roll call vote in which the members were recorded as follows:

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

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

(Mr. Flanagan temporarily left the meeting after Roll Call.)

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

Mr. Walsh noted that proposed Change Order 10 and further delegation of authority to the

Executive Director to approve additional change orders on Contract 7366, Braintree-Weymouth Pump Station Improvements, with Walsh Construction was next.

A motion was duly made and seconded to recommend approval to the full Board of Directors of Change Order 10 and further delegation of authority as presented in the December 11, 2024 Staff Summary.⁴

Marty McGowan, MWRA Director of Construction, advised that contract 7366 with Walsh Construction Co. II, LLC (“Walsh”) expired in November 2024. He explained that the project team evaluated and finalized the contractor’s request for a time extension prior to seeking Board approval for proposed Amendment 1 at this meeting; noted that some elements of Amendment 1 are compensable, while others are at no additional cost; advised that the proposed amendment includes a request for redelegation for known change order requests currently under evaluation; and, that potential future change orders that may arise during commissioning activities. He noted associated time extensions for consultants are included in the Delegated Authority Report for November 2024 (ref. AF&A A.1).

Next, Jeffrey Bina, MWRA Construction Coordinator, updated Board members on the Braintree-Weymouth Pump Station Improvements Project; presented an aerial progress photo of the existing pump station and addition; highlighted ongoing exterior and interior work; described coordination and scheduling challenges encountered during construction due to the site’s small footprint and location; discussed excess soil removal operations; and presented updates on the facility’s temporary odor control system and the installation of a new odor control system, mechanical bar screens. He described staff training and ongoing commissioning activities for the first process channel, with work on the second channel expected to begin in January 2026.

(Mr. Flanagan returned to the meeting during the presentation.)

Hearing no discussion or questions from the Board, Mr. Patrick Walsh requested a roll call vote in which the members were recorded as follows:

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

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

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

Mr. Walsh noted that proposed Amendment 4 to Contract 7435, Braintree-Weymouth Pump Station Improvements Design and ESDC Services, with Wright-Pierce, was next.

A motion was duly made and seconded to recommend approval to the full Board of Directors of this Amendment 4 as presented in the December 11, 2024 Staff Summary.⁵

Mr. McGowan explained that staff sought Board approval of proposed Amendment 4 to a Design and Engineering Services During Construction (“ESDC”) contract for the Braintree-Weymouth Pump Station Improvements project; and noted the proposed amendment’s scope included continued administrative and ESDC support for the project and added tasks.

Hearing no discussion or questions from the Board, Mr. Patrick Walsh requested a roll call vote in which the members were recorded as follows:

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

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

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

Mr. Walsh noted that proposed Amendment 3 to Contract OP-401B, Harbor and Outfall Monitoring, with Normandeau Associates was next.

A motion was duly made and seconded to recommend approval to the full Board of Directors of this Amendment 3 as presented in the December 11, 2024 Staff Summary.⁶

David Wu, MWRA ENQUAL Director, described the existing contract with Normandeau Associates, Inc. for Harbor and Outfall Monitoring, Bethnic, Fish and Shellfish Monitoring. He noted that this monitoring is required under the current draft NPDES discharge permit for the Deer Island Treatment Plant; however, it is not expected to be required under the new final permit, which is under EPA review.

Mr. Wu explained that the proposed amendment would allow required monitoring to continue

while staff await the issuance of the new permit; summarized the amendment's scope and duration, as well as the contract's award and amendment history; discussed proposed Amendment 3's cost, which is 12.3% less than that of Amendment 2 due to the particular tasks required for the 2025 monitoring cycle. He reported a cost escalation of 2.9% for the tasks that are included in both Amendments 2 and 3 and noted that staff found the escalation rate to be reasonable.

Mr. Pappastergion expressed concern about costs associated with the NPDES permit's finalization delays.

Hearing no further discussion or questions from the Board, Mr. Patrick Walsh requested a roll call vote in which the members were recorded as follows:

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

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

ADJOURNMENT

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

Hearing no discussion or questions from the Board, Mr. Patrick Walsh requested a roll call vote in which the members were recorded as follows:

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

The meeting adjourned 11:55am.

Approved: September 17, 2025

Attest:

Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- 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)

¹ Board Vote: 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.

² Board Vote: 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. (ref. WW B.1/VIII B.1)

³ Board Vote: 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. (ref. WW B.2/VIII B.2)

⁴ Board Vote: 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, 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. (ref. WW B.3/VIII B.3)

⁵ Board Vote: 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. (ref. WW B.4/VIII B.4)

⁶ Board Vote: 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. (ref. WW B.5/VIII B.5)



MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island
33 Tafts Avenue
Boston, MA 02128

Frederick A. Laskey
Executive Director

Chair: J. Wolowicz
Vice-Chair: J. Walsh
Committee Members:
B. Peña
L. Taverna
P. Flanagan
J. Foti
H. Vitale

PERSONNEL & COMPENSATION COMMITTEE MEETING

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

Date: Wednesday, September 17, 2025
Time: Immediately following the Wastewater Policy and Oversight Committee
Location: Deer Island Reception/Training Building, 1st Floor
33 Tafts Avenue – Favaloro Meeting Room
Boston, MA 02128

Photo ID required for entry.

The meeting will also be available virtually via Webex.

Webex meeting link (Registration required):

<https://mwra.webex.com/weblink/register/rb31a10e696470cf2457e912f550a5252>

Meeting Number: 2334 553 9657 Password: 091725

AGENDA

- i. Approval of Personnel & Compensation Committee Minutes**
- A. Approvals**
 - 1. PCR Amendments – September 2025
 - 2. Appointment of Ethan Wenger , Director, Wastewater
 - 3. Appointment of Chad A. Whiting, Director, Deer Island Wastewater Treatment Plant
 - 4. Appointment of Lisa Richardson-Lowery, Labor Relations Manager

MASSACHUSETTS WATER RESOURCES AUTHORITY
Meeting of the Personnel and Compensation Committee
of the MWRA the Board of Directors
December 11, 2024

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

Committee Chair Wolowicz presided via remote participation. Board Member Vitale also participated remotely. Board Members Flanagan, Pappastergion, Peña, Taverna, Jack Walsh, and Patrick Walsh participated at MWRA Headquarters. Board Members Foti and Swett were absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Director of Finance Thomas Durkin; Director of Administration Michele Gillen; Human Resources Director Wendy Chu; 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.

Acting Special Assistant for Affirmative Action Tomeka Cribb participated remotely.

Vandana Rao, EEA, also attended remotely.

ROLL CALL

Before the meeting was called to order, Board Vice-Chair Pappastergion delivered brief opening remarks, and announced that the Board of Directors’ Meeting would be held at 1:00pm. He requested a roll call of Board Members in attendance for the Committee meetings.

MWRA General Counsel Francisco Murphy took roll call and announced that Board Members Vitale and Wolowicz were participating remotely.

Mr. Pappastergion announced that the meeting was being held at MWRA Headquarters and virtually. He added that the meeting would be recorded, and that the agenda and meeting materials were available on MWRA’s website.

CALL TO ORDER

Ms. Wolowicz called the meeting to order at 10:01am.

INFORMATION

Compensation Study of Non-Union Management Salaries

Ms. Wolowicz noted that there was one information item for discussion, a compensation study for non-union management salaries, referred Board members to the Staff Summary for this agenda item, and invited MWRA staff to provide more information in advance of discussion.

Wendy Chu, MWRA Human Resources Director, noted that the Board of Directors had previously contemplated a compensation study for MWRA's non-union management salaries. She explained that staff were requesting the Committee's guidance on key decision points in order to develop a scope of services for a compensation study, pending Board approval, including: which non-union positions to review in a potential study; which entities to consider as potential comparators; and, whether to review the Authority's non-union structure or strategy.

Mr. Vitale advised that in his view, the main goals of such a study would be to ensure that MWRA staff are paid fairly and equitably, and to evaluate and benchmark MWRA salaries against those of comparable organizations. He described how the Boston Water and Sewer Commission has engaged consultants for similar studies, with particular focus on ensuring pay equity for its diverse workforce.

Referring to the Staff Summary, Mr. Pappastergion requested more information on an internal non-union managers' pay equity assessment that is currently underway under the Massachusetts Pay Equity Act ("MEPA"). Ms. Chu described the scope and status of the study and advised that staff would consider having its findings reviewed by an outside vendor. There was general discussion about MWRA's 2018 MEPA assessment and its outcomes, during which Ms. Chu advised that MEPA recommends that employers conduct such assessments every three years.

Mr. Pappastergion requested more information about the difference between the MEPA study and the potential non-union compensation study. Ms. Chu explained that the MEPA assessment compares salaries internally, while a non-union compensation study would compare MWRA's salaries with those of external peers. Mr. Pappastergion recommended that both studies move forward.

Next, Michele Gillen, MWRA Director of Administration, discussed the respective goals of the two studies and provided additional background on the 2018 MEPA assessment. She requested Board members' input on the scope of a potential non-union compensation study, noting that staff sought to avoid any potential conflicts of interest.

Mr. Pappastergion recommended that all MWRA employees be included in a potential

compensation study. There was discussion about non-union manager salary compression and collision, and differences between union and non-union compensation packages. Mr. Pappastergion expressed support for the non-union compensation study and noted that it could serve as a guide for future discussions about compensation adjustments.

Ms. Wolowicz advised that in her view, it is important for this study to have a broad scope that covers as many non-union staff as possible, and recommended that it include comparisons of benefits. Ms. Wolowicz discussed recent trends in benefits packages, and ways for staff to avoid the perception of conflicts of interest when conducting the study.

Mr. Pappastergion suggested that the study's scope include consultant recommendations on how frequently MWRA's non-union compensation assessments should be performed. Ms. Wolowicz agreed.

General Counsel Francisco Murphy requested additional recommendations from Board members on scope parameters, such as the potential study's comparator entities.

Mr. Patrick Walsh recommended that the study include comparisons of compensation with organizations that operate similarly to MWRA. Mr. Jack Walsh suggested taking regional differences in cost of living into account. Mr. Peña agreed, and recommended that the study's data be normalized. Mr. Pappastergion also agreed, and suggested the inclusion of organizations located in areas with different living costs.

Mr. Flanagan requested more information about how the study results would be used. Ms. Francisco Murphy explained that the results would be provided to the Board for informational purposes. There was brief, general discussion about the importance of clear communications about the study's purpose with staff.

Ms. Wolowicz recommended that the compensation assessment include comparisons with private sector entities and public agencies across the country. She also suggested that the study's consultant develop a list of recommended comparator entities for Board discussion.

Ms. Francisco Murphy asked if Board members would like the study to include a review of MWRA's compensation structure. Mr. Pappastergion responded in the affirmative, noting that the review would be helpful for salary collision analysis.

There was brief, general discussion about the types of consulting firms that typically conduct such studies. Mr. Taverna requested more information about the study's budget. Ms. Francisco Murphy explained that staff will develop a proposed budget for Board discussion at a later date, pending approval of the scope's parameters.

Matt Romero, MWRA Advisory Board Executive Director expressed support for this study and

for conducting such studies periodically in the future.

Ms. Francisco-Murphy reviewed Board members' recommendations on the compensation study's scope, as recorded during this agenda item's discussion. Ms. Wolowicz recommended that the scope also include a review of job descriptions.

A motion was duly made and seconded to recommend approval to the full Board of Directors 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.¹

Hearing no further discussion or questions from the Board, Ms. Wolowicz requested a roll call vote in which the members were recorded as follows:

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

(ref. P&C A.1)

APPROVALS

Appointment of John Parkurst, Director, Wastewater Operations and Maintenance

Ms. Wolowicz noted that there were two approval items, and that the first was the appointment of the Wastewater Operations and Maintenance Director.

A motion was duly made and seconded to recommend approval to the full Board of Directors of this appointment as presented in the December 11, 2024 Staff Summary.²

Ms. Chu advised that Charles Ryan, Director of Wastewater Operations and Maintenance would retire in January 2025, and described the position's job duties. She summarized the interview and selection process to fill the upcoming vacancy and described the qualifications and work experience of the recommended candidate, John Parkhurst.

Mr. Laskey thanked Mr. Ryan for his excellent work.

Hearing no further discussion or questions from the Board, Ms. Wolowicz requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Flanagan		
Pappastergion		
Peña		
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 and Compliance

Ms. Wolowicz noted that the next proposed appointment was for the Special Assistant for Affirmative Action.

A motion was duly made and seconded to recommend approval to the full Board of Directors of this appointment as presented in the December 11, 2024 Staff Summary.³

Ms. Wolowicz discussed the job responsibilities and reporting structure for the Special Assistant for Affirmative Action and Compliance (“AACU”) per MWRA’s Enabling Act. She thanked Tomeka Cribb for serving as the Acting Special Assistant.

Next, Ms. Wolowicz reviewed the process for recruiting, interviewing and selecting the recommended candidate, Rita Mercado, and described her qualifications and work experience.

Mr. Laskey thanked Ms. Cribb for her work as Acting Special Assistant for AACU, and Ms. Wolowicz for her contributions to the recruitment and selection process.

Hearing no further discussion or questions from the Board, Ms. Wolowicz requested a roll call vote in which the members were recorded as follows:

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

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
J. Walsh		
P. Walsh		
Wolowicz		

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

ADJOURNMENT

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

Hearing no further discussion or questions from the Board, Ms. Wolowicz requested a roll call vote in which the members were recorded as follows:

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

The meeting adjourned 10:40am.

Approved: September 17, 2025

Attest:

Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- 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)

¹ Board Vote: 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. (ref. P&C A.1/VI.A.1)

² Board Vote: 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. (ref. P&C B.1/VI A.2)

³ Board Vote: 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. (ref. P&C B.2/VI A.3)

STAFF SUMMARY


TO: Board of Director
FROM: Frederick A Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: September 2025 PCR Amendments



COMMITTEE: Personnel and Compensation

 INFORMATION
 X VOTE

Wendy Chu, Director of Human Resources
Preparer/Title


Michele S. Gillen
Director, Administration

RECOMMENDATION:

To approve amendments to the Position Control Register included in the attached chart.

DISCUSSION:

The Position Control Register (PCR) lists all positions of the Authority, filled and vacant. It is updated as changes occur and published at the end of each month. Any changes to positions during the year are proposed as amendments to the PCR. All amendments to the PCR, except those resulting only in a change in title or cost center, must be approved by the Personnel and Compensation Committee of the Board of Directors. All amendments resulting in an upgrade of a position by more than one grade level, and/or an increase in annual cost by \$10,000 or more must be approved by the Board of Directors after review by the Personnel and Compensation Committee.

September 2025 PCR Amendments

There are two PCR Amendments this month.

Organizational Changes:

1. Title and grade change to one filled position in the Administration Division, MIS Department from an IS Development Specialist (Unit 6, Grade 9) to Business Documentation and IT Training Specialist (Unit 6, Grade 10) per union agreement.
2. Title and grade change to one filled position in the Finance Division, Treasury Department from a Senior Financial Analyst (Unit 6, Grade 10) to Assistant Capital Finance Manager (Unit 6, Grade 11) per union agreement.

BUDGET/FISCAL IMPACT:

The maximum annualized budget impact of the PCR amendment will be a cost of \$18,808. Staff will ensure that the costs associated with the PCR amendment will not result in spending over the approved FY26 Budget.

ATTACHMENTS:

Job Descriptions

**MWRA
POSITION DESCRIPTION**



POSITION: IS Development Specialist

DIVISION: Administration & Finance

DEPARTMENT: Management Information Systems (MIS)

BASIC PURPOSE:

Designs, develops and delivers training, communication and application products and services in accordance with department standards. Provides day-to-day user support, troubleshooting and special projects assistance.

SUPERVISION RECEIVED:

Works under the general supervision of the I/S Custom Support Manager

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops and deploys custom multi-media and paper-based training products for all levels of users and computing environment/platforms.
- Solicits input from MIS staff and users on information systems, related customized documentation and training needs.
- Develops and maintains train-the-trainer application products.
- Conducts skills assessment needs analysis as required to design customized training documentation.
- Delivers classroom and one-on-one training to users as required.
- Develops multi-media and Intra/Internet products, which address business/user requirements in compliance with SDM and Change Control Procedures.
- Develops and deploys templates, macros, application front-ends, small database systems, etc., in compliance with SDM and Change Control Procedures.

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- Supports the unit's application development and maintenance activities as appropriate.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A four (4) year college degree program in a computer science, education or related field is required; and
- (B) Four (4) to seven (7) years experience in computer education, technical writing, software development and/or related field; or
- (C) Any equivalent combination of education and/or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated skills in the design, development and production of multi-media and paper-based curricula and the effective delivery of various platforms (MAC, PC, minicomputer, etc.) information systems training and small programming projects.
- (B) Knowledge of information technology and multi-media communication.
- (C) Proficiency with: (a) **Application Types** (word processor, database, spreadsheets, graphics, HTML and multi-media) and (b) **Product Development** (User training, User Documentation and Materials, Internet/Intranet pages, Automated program and Templates and Macros).
- (D) Excellent analytical, interpersonal, written and oral communication skills are also required.

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

Office equipment as normally associated with the use of telephone, personal computers including

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word processing and other software, copy and fax machines.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools or controls and reach with hands and arms. The employee frequently is required to stand and talk or hear. The employee is occasionally required to walk, sit, climb or balance, stoop, kneel, crouch or crawl, taste or smell.

The employee must occasionally lift and/or move up to 10 pounds and occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision and color vision, and the ability to adjust focus.

WORK ENVIRONMENT:

The work characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee occasionally works in various training facilities and in an office environment. The employee is occasionally exposed to risk of electrical shock.

The noise level in the work environment is a moderately quiet office setting.

June, 2000

**MWRA
POSITION DESCRIPTION**

NEW

POSITION: Business Documentation & IT Training Specialist

DIVISION: Administration

DEPARTMENT: Management Information Systems (MIS)

BASIC PURPOSE:

Creates, develops and implements technical training documentation including job aids. Analyzes and learns new systems to translate user requirements and needs to enhance adoption and smooth implementation of new technology and business processes, Provides day-to-day end-user support, troubleshooting and special projects assistance.

SUPERVISION RECEIVED:

Works under the general supervision of the Business Relationship Manager.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Develops and deploys custom training for all levels of users and computing environment/platforms including job aids, tutorials, videos, etc.
- Serves as a technical documentation and training resource for MIS staff and end-users tailoring job aids, testing, and training to meet the user needs.
- Provides individual and group training and technical assistance to users as needed.
- Develops and deploys templates, macros, application front-ends, small database systems, etc., in compliance with SDM and Change Control Procedures.
- Learns new business system applications and creates full documentation of functionality.
- Serves as the liaison to the Planning Department by gathering all documentation needed for management reporting indicators for monthly and quarterly reports.
- Reviews and drafts updates to MIS policies and standard operating procedures. Collaborates with others to ensure there is solid and comprehensive business and technical documentation about new or improved software or applications.
- Works with internal customers as part of change management activities to ensure smooth adoption of new technology and business processes. Helps users test and train new technology and business processes.
- Develop written documentation including job aids and performs quality assurance tests on functionality.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A Bachelor's degree in a computer science, education, business, or related field; and
- (B) At least four years of experience in technical training, business analysis, education, technical writing, software development and/or related field; or
- (C) Any equivalent combination of education and/or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated skills in the design, development and production of curricula and the effective delivery of information systems training through various platforms (MAC, PC, etc.).
- (B) Knowledge of information technology and multi-media communication.
- (C) Proficiency with: **(a)** Application Types (Learning Management Systems, Microsoft Office Suite, and Videoconferencing platforms,) and **(b)** Curriculum Development such as User training, Training Documentation and Materials, Documentation Templates and Macros.
- (D) Excellent analytical, interpersonal, written and oral communication skills.
- (E) Technical aptitude and ability to translate complex technical documentation into plain language understood by the end-user.

SPECIAL REQUIREMENTS:

Must possess a valid Massachusetts Motor Vehicle Class D Operators license (or one from an adjacent state) to travel between worksites.

TOOLS AND EQUIPMENT USED:

Office equipment as normally associated with the use of telephone, personal computers including word processing and other software, copy and fax machines.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, feel or operate objects, tools or controls and reach with hands and arms. The employee frequently is required to stand and talk or hear. The employee is occasionally required to walk, sit, climb or balance, stoop, kneel, crouch or crawl, taste or smell.

The employee must occasionally lift and/or move up to 10 pounds and occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision and color vision, and the ability to adjust focus.

WORK ENVIRONMENT:

The work characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee occasionally works in various training facilities and in an office environment. The employee is occasionally exposed to risk of electrical shock.

The noise level in the work environment is a moderately quiet office setting.

September 2025

**MWRA
POSITION DESCRIPTION**



POSITION: Senior Financial Analyst

DIVISION: Finance

DEPARTMENT: Treasury

BASIC PURPOSE:

Provides analysis on planning, financing and budgeting for the MWRA capital program and assists in the development and execution of the State Revolving Fund (SRF) program. Creates and maintains accurate records and computer databases for the capital finance and grants programs.

SUPERVISION RECEIVED:

Works under the general supervision of the Treasurer.

SUPERVISION EXERCISED:

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Coordinates all day-to-day operations of assigned project work.
- Works independently to analyze alternative strategies for financing MWRA's capital program.
- Reviews financial proposals presented by investment bankers.
- Assists in development and execution of strategy to acquire the maximum amount of federal grant and SRF financing.
- Assists in the coordination of MWRA staff responsible for choosing projects and drafting applications for funding in support of the capital improvement program.

- Prepares and submits applications for funding in an accurate and timely manner.
- Maintains records necessary for funding compliance and audit reviews.
- Analyzes alternative approaches to defining capital and operating expenses.
- Assists with the maintenance of the capital finance program including ensuring all compliance and rebate requirements are met.
- Prepares agenda and all supporting material for internal and external formal meetings.
- Assists in the development of schedules, applications, forms, spreadsheets, notices and with the collection and collation needed for Finance Division transactions.
- Works on special analytical projects.
- Assist with the development of the annual capital finance budget, of procurement documents and with maintaining financial applications and databases.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Completion of a four (4) year college program in business administration, engineering or a related field; and
- (B) Two (2) to five (5) years experience and demonstrated knowledge in capital finance programs. Public sector experience is preferred; or
- (C) Any combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) In-depth knowledge of principles of finance and public budgeting.

(B) Documented excellent analytical and quantitative skills.

(C) Documented ability to work independently in designing, executing and presenting analyses of detailed and complex financial issues.

(D) Documented excellent interpersonal, oral and written communication skills.

SPECIAL REQUIREMENTS:

None.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated with the use of telephone, personal computer including word processing and other software, copy and fax machine.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to sit, talk and hear. The employee is regularly required to use hands to finger, handle, feel or operate objects, including office equipment or controls to reach with hands and arms. The employee is occasionally required to stand and walk.

There are no requirements that weight be lifted or force be exerted in performing the duties of this job. Specific vision abilities required by this job include close vision and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

The employee regularly works in an office environment. The noise level in the office setting work environment is usually moderately quiet.

December 2015

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Senior Financial Analyst-Treasury OLD.Docx

**MWRA
POSITION DESCRIPTION**



POSITION: Assistant Capital Finance Manager

DIVISION: Finance

DEPARTMENT: Treasury

BASIC PURPOSE:

Provides deep analysis on planning, financing and budgeting for the MWRA capital program and assists in the development and execution of the State Revolving Fund (SRF) program. Creates and maintains accurate records and computer databases for the capital finance and grants programs. Performs complex financial analysis for projects within Finance Division. Reviews and ensures accurate financial data is provided for both internal and external partners including regulators, bond/disclosure counsel rating agencies, investment bankers, financial advisors and other in capital finance business partners. Oversees the operations of the Fore River Railroad Corporation. Reviews work of lower-level Treasury staff. Serves as subject matter expert on capital finance related matters within the Finance Division.

SUPERVISION RECEIVED:

Works under the general supervision of the Deputy Director of Finance/Treasurer. May receive assignments from other Finance Division Managers.

SUPERVISION EXERCISED:

Provides general supervision and training to Treasury Analyst staff and interns.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Coordinates all day-to-day operations of assigned project work.
- Works independently to analyze and research alternative strategies for financing MWRA's capital program.
- Reviews financial proposals presented by investment bankers and other financial consultants
- Assists in development and execution of strategy to acquire the maximum amount of federal grant and SRF financing.
- Serves as main MWRA liaison to Massachusetts Department of Environmental Protection (DEP) on the State Revolving Fund (SRF).
- Assists in the coordination of MWRA staff responsible for choosing projects and drafting applications for funding in support of the capital improvement program.
- Supervises the development and submission of final payment requests and all supporting records and data related to closeout of all grants.

- Prepares and submits applications for funding in an accurate and timely manner.
- Maintains records necessary for funding compliance and audit reviews.
- Analyzes alternative approaches to defining capital and operating expenses.
- Trains and advises Treasury Analysts. Serves as first reviewer of the draft work product.
- Assists with the maintenance of the capital finance program including ensuring all compliance and rebate requirements are met.
- Prepares agenda and all supporting material for internal and external formal meetings. Drafts presentations for review by Deputy Director, Finance/Treasurer to share with capital finance business partners including the rating agencies.
- Reviews and maintains debt service funding schedules for senior, subordinated and SRF bonds.
- Manages the budget for Fore River Railroad Corporation (FRRRC). Prepares agenda and documentation material for the FRRRC Board of Directors' monthly meetings.
- Assists in the development of schedules, applications, forms, spreadsheets, notices and with the collection and collation needed for Finance Division transactions.
- Works on special analytical projects.
- Assist with the development of the annual capital finance budget, of procurement documents and with maintaining financial applications and databases.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A Bachelor's degree in business administration or a related field; and
- (B) At least four (4) years of experience and demonstrated knowledge in capital finance programs. Public sector experience is preferred; or
- (C) Any combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) In-depth knowledge of principles of finance and public budgeting.
- (B) Documented excellent analytical and quantitative skills.
- (C) Documented ability to work independently in designing, executing and presenting analyses of detailed and complex financial issues.
- (D) Documented excellent interpersonal, oral and written communication skills.
- (E) Strong attention to detail and ability to reconcile data issues.
- (F) Ability to provide training and guidance to of lower-level staff.
- (G) Strong project management skills.

SPECIAL REQUIREMENTS:

A valid Massachusetts Class D driver's license (or one from an adjacent state).

TOOLS AND EQUIPMENT USED:

Office machines as normally associated with a professional environment, including the use of telephone, personal computers, typical office software, email, videoconferencing applications, copier, fax machine, printer, and scanner.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to sit, talk and hear. The employee is regularly required to use hands to finger, handle, feel or operate objects, including office equipment or controls to reach with hands and arms. The employee is occasionally required to stand and walk.

There are no requirements that weight be lifted or force be exerted in performing the duties of this job. Specific vision abilities required by this job include close vision and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

The employee regularly works in an office environment. The noise level in the office setting work environment is usually moderately quiet.

September 2025

MASSACHUSETTS WATER RESOURCES AUTHORITY
 POSITION CONTROL REGISTER AMENDMENTS
 FISCAL YEAR 2026

PCR AMENDMENTS REQUIRING BOARD APPROVAL - September 17, 2025																	
Number	Current PCR #	V/F	Type	Current Title	UN	GR	Amended Title	UN	GR	Current/Budget Salary	Estimated New Salary		Estimated Annual		Reason		
													\$ Impact		For Amendment		
B5	Administration MIS 8610028	F	T/G	IS Development Specialist	6	9	Business Documentation and IT Training Specialist	6	10	\$101,568	\$109,561	-	\$109,561	\$7,993	-	\$7,993	Union agreement.
B6	Finance Treasury 4510042	F	T/G	Senior Financial Analyst	6	10	Assistant Capital Finance Manager	6	11	\$107,449	\$118,262	-	\$118,262	\$10,813	-	\$10,813	Union agreement.
BOARD TOTAL =					2							TOTAL:		\$18,806 - \$18,806			

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Appointment of Director, Wastewater



COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE

Stephen D. Cullen, Deputy Chief Operating Officer
Wendy Chu, Director, Human Resources
Preparer/Title


Kathleen M. Murtagh, P.E.
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Mr. Ethan Wenger to the position of Director, Wastewater, (Non-Union, Grade 16), in the Operations Division at an annual salary of \$201,380, commencing on a date to be determined by the Executive Director.

DISCUSSION:

The position of Director, Wastewater became vacant as a result of the promotion of the incumbent. This position is responsible for the operation, maintenance, and ongoing development of MWRA's wastewater system and compliance with regulations governing all discharges and applicable water quality standards. In addition, it is responsible for the upkeep and maintenance of MWRA's Chelsea facility. The position manages the Director, Deer Island Wastewater Treatment Facility, the Director, Wastewater Operations and Maintenance, and the Manager, Facilities Management. It reports directly to the Deputy Chief Operating Officer, Operations.

Selection Process

This position was posted internally and externally. A total of four individuals applied and two candidates were referred for an interview. The Chief Operating Officer, the Deputy Chief Operating Officer, Operations, and the Special Assistant for Affirmative Action conducted the interviews. Mr. Ethan Wenger was determined to be the best qualified candidate for the position based on his education, experience, abilities, knowledge and skills.

Mr. Wenger has 30 years of experience at MWRA, starting in the Central Laboratory as a supervisor and later taking on management roles in Process Control on Deer Island. From 2016 to 2021, Mr. Wenger served as Deputy Director of the Deer Island Treatment Plant. While working in this role, he was responsible for ensuring effective operations, engineering and optimization of the Deer Island Plant. He oversaw the Process Control Department (including the Plant's SCADA group known as PICS), Deer Island Wastewater Operations, and the Thermal Power Plant. He was also responsible for compliance with Deer Island's NPDES permit and its Title V Air permit. In 2021, he became the Director of SCADA Metering and Monitoring, where he has been responsible for the control systems of the MWRA water and wastewater transmission, distribution and

collections systems, including the control systems at the John Carroll Water Treatment Plant, and the maintenance and data collection from all water and wastewater revenue meters.

Mr. Wenger is well respected by his managers, employees, and colleagues. During the interview, Mr. Wenger discussed the importance of the CSO Long Term Control Plan and its challenges. He also demonstrated his broad experience and the system knowledge that he has gained through his career at MWRA.

Mr. Wenger holds a Bachelor of Science degree in Environmental Engineering Science from MIT, a Master of Science degree in Environmental Engineering from the University of Massachusetts, Lowell and a Master of Business Administration from the Isenberg School of Management at the University of Massachusetts, Amherst. He holds a Grade 7C Wastewater Operators license (Full), a Massachusetts Professional Engineer license in Environmental Engineering, a Grade 4T Water license (OIT) and Grade 4D Water Operator license (OIT).

BUDGET/FISCAL IMPACTS:

There are sufficient funds for this position in the Operations Division's FY26 Current Expense Budget.

ATTACHMENTS:

Resume of Ethan Wenger
Position Description
Organizational Chart

Ethan Wenger

Experience

2021-present

MWRA

Chelsea, MA

Director, SCADA Metering and Monitoring

- Responsible for the control systems of the MWRA water and wastewater transmission, distribution and collection systems, as well as the control systems at the John Carroll Water Treatment Plant
- Responsible for the maintenance and data collection from all water and wastewater revenue meters in the MWRA system
- Direct 58 staff in the maintenance of various types of instrumentation, programmable controllers, and other equipment at hundreds of sites throughout the MWRA service area
- Manage annual budget of approximately \$8,000,000.
- Responsible for the ongoing security and cybersecurity of the SCADA network and provide cybersecurity support to other operational networks in the MWRA

2016-2021

MWRA

Winthrop, MA

Deputy Director, Deer Island Treatment Plant

- Directed the operation of the Deer Island Treatment Plant (DITP) in Winthrop, MA, one of the largest wastewater plants in the United States.
- Responsible for over 75 operators, engineers, and other wastewater professionals
- Managed annual budget of over \$24 million
- Direct the Process Control Department including Process Optimization, Process Monitoring, and PICS (Control system) groups
- Directed the Thermal Power Plant, including two Zurn steam boilers, two Pratt and Whitney Combustion Turbine Generators, two 1 MW hydroturbines, and two 600kW Vestas wind turbines
- Responsible for compliance with all operating permits including NPDES discharge permits and Massachusetts DEP air permits
- Directed Deer Island's Energy Program

Ethan Wenger

2014-2016

MWRA

Winthrop, MA

Manager, Process Control

- Managed department of sixteen technical professionals responsible for providing various types of support to the MWRA DITP
- Managed the optimization of the DITP process, including energy management, chemical usage, and implementation of new equipment processes
- Managed plant compliance with NPDES (discharge) permits and DEP air permits, including reporting to internal compliance units and interfacing directly with regulatory agencies when needed
- Responsible for managing the 30,000-point Process Information and Control System (distributed control system for DITP) which is valued at \$40m
- Responsible for the department's \$2.5 m budget, and DITP's \$3m chemical budget

2004-2014

MWRA

Winthrop, MA

Project Manager, Process Control

- Prepared and managed the service contract for recharging carbon beds on Deer Island, valued at \$900,000 for 3 years
- Co-managed the Oxygen Services Contract, valued at \$1,500,000 for 3 years
- Operated the oxygen generation facility, the odor control facility, and the centrifuge facility during complex conditions, such as start-up
- Gave technical advice to operations, maintenance, and safety department as needed for the safe operation and maintenance of the treatment facility
- Designed and directed nitrogen purges for the digester gas system, consisting of the feeding of 200,000 cubic feet of nitrogen through the ENVIREX DYSTOR membrane cover of the digested sludge and gas storage tank to allow the installation of new valves
- Managed the design of new motors and variable frequency drives for the reactor aerators, allowing them to operate at lower speed and saving up to \$300,000 per year in electrical costs.
- Led the effort to optimize secondary aeration process at Deer Island, saving a total of \$1,000,000 annually in electrical costs.

Ethan Wenger

1996-2004

MWRA

Winthrop, MA

Laboratory Supervisor II, Central Laboratory

- Managed 4-7 temporary and full-time employees. Recommended employees for hire and termination as needed
- Responsible for all DITP compliance sample collection and management of all samples taken at the MWRA, including chain of custody and field sampling/testing quality control.
- Used NPDES permit limits and regulatory requirements to write procedures for sampling and analysis
- Managed team budget and procurement for sampling equipment and containers

Education

MIT

Cambridge, MA

Bachelor of Science in Environmental Engineering Science

University of Massachusetts

Lowell, MA

Master of Science in Environmental Engineering

Isenberg School of Management (UMASS)

Amherst, MA

Master of Business Administration

Certifications

Grade 7-C Wastewater Operator's License # 9909

Massachusetts P.E. Environmental Engineering #50268

Massachusetts Drinking Water License (OIT) 4T #27445

Massachusetts Drinking Water License (OIT) 4D #26857

GIAC GLSC (Security Leadership) Certification #9650

PMP (Project Management Professional) Certification #2780907

Presentations and Publications

Presented "Energy Optimization of Large Plant Aeration Process" at the NEWEA Joint energy and Plant Operations Seminar on May 16, 2012.

Presented "Aeration System Optimization/Dissolved Oxygen Study at the Deer Island Treatment Plant" at the Boston NEWEA Conference on January 29, 2014 and at WEFTEC Conference in New Orleans on September 29, 2014.

Presented "Struvite the Deer Island Experience" at NEBRA Conference in South Portland on October 23, 2014.

Presented "Hi Flow Operation of the Deer Island Treatment Plant" at the NEWEA CSO conference on October 26, 2015.

Ethan Wenger

Presented “Twenty-year Valve Replacement at the Deer Island Treatment Plant” at the WEFTEC Conference on September 26, 2016 and at the NEWEA Conference in Boston on January 24, 2017. Paper was published in NEWEA Journal in Summer 2017.

Presented “Seven Miles of Sludge pipe” at the NEWEA Conference in Boston on January 22, 2018 and the WEFTEC conference in New Orleans on October 3, 2018.

Presented “MWRA Deer Island Treatment Plant Capital Improvement Program” at the 2020 NEWEA Conference and WEFTEC Connect 2020.

**MWRA
POSITION DESCRIPTION**

POSITION: Director of Wastewater

DIVISION: Operations

DEPARTMENT: Wastewater

BASIC PURPOSE:

Directs, supervises, and manages staff responsible for the operation of the authority's wastewater infrastructure. Responsible for all local, state and federal regulations governing all discharges and water quality standards.

SUPERVISION RECEIVED:

Reports to the Deputy Chief Operating Officer, Operations.

SUPERVISION EXERCISED:

Exercises close supervision of the Director of Deer Island, the Director of Wastewater Operations and Maintenance and facility support staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Directs and manages the operation and maintenance of all wastewater collections, headworks, CSO, and pumping facilities; the Deer Island and Clinton Treatment Plants; the Fore River pellet plant; and support facilities to ensure compliance with all federal and state laws and regulations.
- Oversees maintenance of MWRA physical and plant wastewater and metropolitan assets. Develops and implements systems and programs that properly maintain the Authority's wastewater operating facilities and metropolitan facilities. Promotes a positive working environment of the workforce by maintaining an active "field" presence.
- Provides input and direction for the long-term planning, engineering and construction of modernizing, rehabilitating and upgrading of the Authority's wastewater facilities.

- Confers with consultants, local officials from member communities and state and federal officials on matters relating to operations and maintenance of the wastewater system.
- Reviews and evaluates managers' performance according to MWRA procedures.
- Participates with senior managers and Labor Relations staff in the development of collective bargaining strategies. Supports as needed the implementation of collective bargaining agreements. Fosters productive labor/management relationships.
- Works collegially with other MWRA divisions and departments to ensure the goals, objectives, and strategies of the MWRA business plan are achieved.
- Directs safety programs, strategic planning and policy development, employee involvement programs and supports MWRA-wide safety programs.
- Provides opportunities for technical, supervisory and managerial training and education for all department employees.
- Represents the Operations Division as required with the Authority's Division Directors, Executive Director and the Board of Directors.
- Acts as interagency liaison with regard to operations of Wastewater Facilities.
- Manages the departments in a manner that is consistent with MWRA's goals of Diversity, Equity, and Inclusion

SECONDARY DUTIES:

- Performs other related duties as required

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Bachelor's degree in sanitary, civil, environmental or mechanical engineering, business, management, or associated field; and
- (B) Detailed understanding of wastewater operations, plants and programs, operating and

maintenance systems, and construction and engineering as acquired through twelve (12) to fifteen (15) years demonstrated success in progressively responsible management positions in operations, maintenance, engineering design, or technical planning relating to wastewater service delivery and major wastewater facilities; or

(C) Any equivalent combination of education and/or experience.

Necessary Knowledge, Skills and Abilities:

(A) Knowledge of principles and practices of engineering.

(B) Expert familiarity and management competence in the planning, regulation, operation and maintenance of large wastewater collection and treatment facilities and associated systems and equipment.

(C) Demonstrated analytical, writing and organization skills.

(D) Ability to work with personnel at various organizational levels, to balance competing priorities and to manage personnel and resources as required.

(E) Ability to provide technical leadership to subordinate employees, as well as the proven ability to inspire confidence customers and the general public.

SPECIAL REQUIREMENTS:

A valid Class D Motor Vehicle Operators License

Is required to be part of an on-call rotation for emergencies 24 hours a day, 7 days a week.

Massachusetts Registered Professional Engineer or eligibility for acceptance by reciprocity desirable.

Massachusetts Wastewater Treatment Plant Operators license, Grade VII, or equivalent from another jurisdiction required.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated, with the use of telephone, personal computer including word processing and other software, copy and fax machine.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to sit, talk or hear. The employee is regularly required to use hands to finger, handle, feel or operate objects, including office equipment, or controls and reach with hands and arms. The employee frequently is required to stand and walk.

There are no requirements that weight be lifted or force be exerted in the performance of this job. Specific vision abilities required by this job include close vision, and the ability to adjust focus.

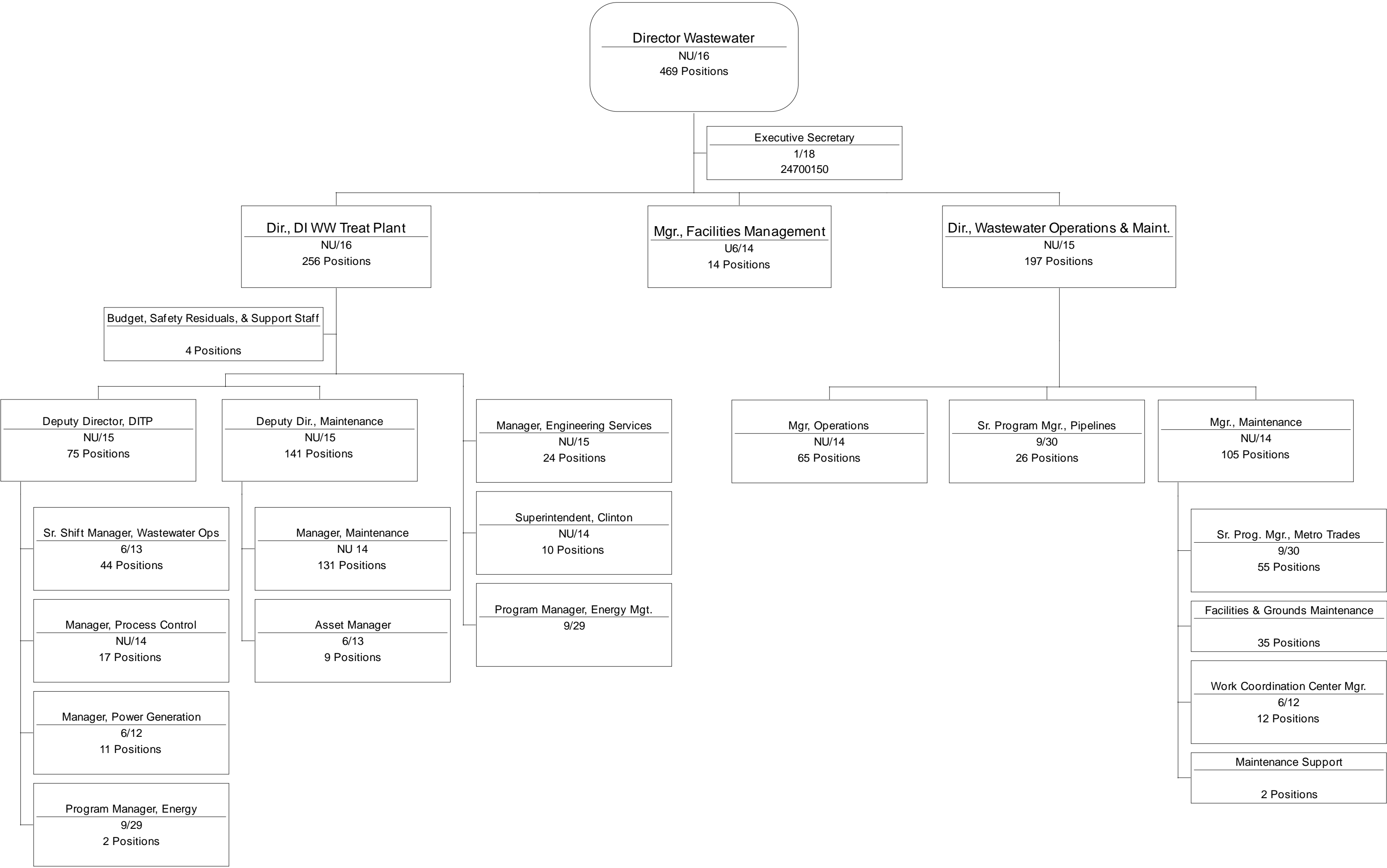
WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee regularly works in an office environment.

The noise level in the work environment is usually a moderately quiet office setting.

June 2025

Director Wastewater Summary Chart
(Includes DI O&M, Clinton, WW Operations, WW Pipe Maint, Metro Maint, & Chelsea Facility Management)
 Through August 20, 2025



STAFF SUMMARY




TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Appointment of Director, Deer Island Wastewater Treatment Plant

COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE

Wendy Chu, Director, Human Resources
Stephen D. Cullen Deputy Chief Operating Officer
Preparer/Title


Kathleen M. Murtagh, P.E.
Chief Operating Officer

RECOMMENDATION:

To approve the appointment of Mr. Chad A. Whiting to the position of Director, Deer Island Wastewater Treatment Plant (Non-Union, Grade 16) at an annual salary of \$195,000 commencing on a date to be determined by the Executive Director.

DISCUSSION:

The position of Director, Deer Island Treatment Plant will become vacant upon the retirement of the incumbent. This position oversees the operation and management of the Deer Island Wastewater Treatment Plant, the Clinton Wastewater Treatment Plant and the Pelletizing Facility in Quincy. This combined operation involves approximately 256 staff and an annual operating budget of \$103 million. Deer Island is the second largest wastewater treatment plant in the United States and is extremely complex and technically advanced. The Director, Deer Island Treatment Plant reports to the Director, Wastewater.

Selection Process:

The position was posted internally and externally. One internal and one external candidate applied. The internal candidate was determined to be qualified and was referred for an interview. The Chief Operating Officer, Deputy Chief Operating Officer, Operations and Manager, Talent Acquisition interviewed the candidate. Upon completion of the interview, Mr. Chad A. Whiting was recommended for this position based on his knowledge, experience, abilities, skills and education.

Mr. Whiting has 22 years of wastewater treatment experience. He is currently the Deputy Director of Deer Island and oversees the operating units of the Deer Island Treatment Plant (Wastewater Treatment, Thermal Power Plant and Process Control Departments). He spent his first eight years working in progressively more responsible operator positions for four private wastewater operations companies (Earth Tech, Earth Source, Veolia Water and Coler & Colantonio) supporting Gloucester, Raynham, Brockton and Taunton, Massachusetts. He was promoted to Lead Operator/Site Safety Coordinator after four months of employment with one company, and Assistant Chief Operator within one month of employment with another and worked for two years as a Project Manager for a third company. He then worked for the MWRA as an Operator at the

Deer Island Wastewater Treatment Plant for two years. In 2013, Mr. Whiting left MWRA to work as the Assistant Wastewater Manager for the Town of Plymouth. He was promoted to the Wastewater Superintendent, responsible for the operation and maintenance of a wastewater treatment facility, eight sewer pump stations, and 65 miles of sewer collection systems. Prior to rejoining MWRA in June 2021 as the Manager of Wastewater Operations, Mr. Whiting was the Director of Water & Sewer for the City of Somerville. Over the course of his career managing publicly owned treatment works, he has had responsibility for current expense and capital budgets, managed collective bargaining agreements, developed and enforced standard operating procedures and safety protocols and has been responsible for hiring and staff training.

During the interview, his knowledge of wastewater operations, process control and emergency response, as well as his management abilities, were very evident. Mr. Whiting has demonstrated his capability and has proven himself to be an effective leader.

Mr. Whiting holds a Bachelor of Science degree in Engineering Technology from Wentworth Institute of Technology, a Grade 7 Wastewater Treatment Operator License, a Grade 4 Collections System License, and Grade 4D and 1T Drinking Water Operator in Training licenses all from the Commonwealth of Massachusetts.

BUDGET/FISCAL IMPACT:

There are sufficient funds for this position in the Operations Division's FY26 Current Expense Budget.

ATTACHMENTS:

- Resume of Chad A. Whiting
- Position Description
- Organization Chart

CHAD A. WHITING

Objective

A Directorship role in the water quality or utility management industry where I can apply my expertise in operations, process optimization, and strategic planning to drive environmental compliance, safety, and efficiency.

Experience

Massachusetts Water Resources Authority – *Boston, MA*

Deputy Director – Operations, Deer Island Treatment Plant

August 2022 to Present

- Directs the 24-hour operations of the Deer Island Wastewater Treatment Plant and Onsite Thermal Power Plant. Advises the Director on all operational aspects of the facility. Responds to emergency situations 24 hours per day, seven days per week.
- Provides advice/assistance on all issues, to the Director, DIWWTP and acts in place of Director in his/her absence.
- Oversees plant process evaluations to ensure optimization of plant processes. Has overall responsibility for enhancement of all plant process systems to reduce chemical and utility costs without sacrifice to permit compliance. Establishes and updates operational procedures in accordance with process control strategies.
- Reviews, analyzes and prepares managerial reports for operational, process control, fiscal and personnel matters. Develop recommendations for ongoing improvements in facility operations.
- Manages the preparation of annual operations budgets and participates in the Authority budgetary process.
- Coordinates with the Maintenance Department, the Thermal Power Plant, and Laboratory Services to establish priorities to ensure successful facility operation.
- Represents plant operations and is an active participant in plant and/or Authority-wide initiatives.
- Directs the Process Control Department including Process Engineering, Process Monitoring/Data Management, and the PICS support functions.
- Directs Process Control Department in the implementation of new control strategy and/or process control modifications to improve plant performance or provide energy savings.
- Provides management input and technical review of plant wide or individual area energy initiatives including consultant studies and engineering projects.
- Works with the Process Control Manager to maintain and update the current inventory of all PICS hardware spare parts.

- Works with the Program Manager, Energy to coordinate CTG outages and plant notifications, monitor the electrical grid pricing and operate CTGs for peak days, demand response, or high electrical pricing to reduce energy costs.
 - Manages the development and updating of Operation Manuals and Systems/Station Operating procedures and works with the Program Manager – Technical Information to ensure timely production of updates.
 - Works with all Deer Island Department Managers to ensure the success of plant organization, including the development of staffing requirements and oversight of staff selection.
 - Partners with the Manager, Training and Development, to oversee and provide technical, supervisory and managerial training and education opportunities for all operations employees. Works with Human Resources on the continued implementation of the Wastewater Operator Shadowing Program.
 - Oversee staff productivity monitoring and continual improvement through staff skills development, strategic planning, standard operating procedures (SOP) improvements and research and implementation of technology advances.
 - Collaborate with Manager of Occupational Health and Safety to oversee and ensure Deer Island Operations Department's compliance with safety programs, maximize employee involvement, and support Deer Island and Authority-wide safety programs. Acts as liaison to the Manager, Occupational Health Safety and Health.
 - Works closely with Occupational Health and Safety and Training departments to establish, emergency response procedures, and oversees training via scheduled drills, audits and inspections.
 - Establish and administer operational records and procedures required for a 24-hour facility.
 - Ensures consistency and uniformity of work rules in accordance with established policies and procedures.
 - Reviews assigned employees' performance per MWRA procedures. Provides feedback and coaching to managers to maximize successful performance.
 - Reviews, analyzes and prepares managerial reports for operational, maintenance, budget, and personnel matters.
 - Oversee successful administration of collective bargaining agreement provisions. Participate in grievance resolution, collective bargaining and contract negotiations. Serves as Step I hearing officer. Hears disciplinary actions.
 - Manages the Department in a manner that is consistent with MWRA's goals of Diversity, Equity, and Inclusion.
-

Manager, Wastewater Operations

August 2021 to August 2022

- Directs the twenty-four (24) hour operations of all wastewater facilities under the control of the Wastewater Operations Control Center (OCC).
- Ensure proper readiness, staffing and operation of all wastewater facilities during wet weather events. Responsible for creating and implementing wet weather staffing plans and participating in management's storm coverage rotation.
- Coordinates with Operations Engineering staff on all wastewater pumping stations, Combined Sewer Overflow facility (CSO), and headworks facilities to optimize operations for proper treatment and flow control. Monitors facility flow control performance and identifies process control deficiencies. Plays an active role in the evaluation of long-range process control needs for the wastewater treatment and flow control.
- Establish and update operational procedures in accordance with control strategies. Works with SCADA and Operations Engineering staff to implement the wastewater facility SCADA changes.
- Works with MIS staff to establish priorities and ensure responsive computer systems and scanner hardware/software.
- Coordinates with the Maintenance Department and establishes priorities to assure successful facility operation.
- Plays an active role in capital project design, construction, and startup activities. Participates in the preparation of performance certification criteria and evaluation reports.
- Establish operational records and procedures required for all twenty-four (24) hour facilities.
- Oversees personnel management and staff hiring for the department. Ensures that major initiative and policy changes are properly communicated to all staff. Identifies organizational needs and proposes re-organization plans to address changing needs.
- Colleague with the Manager, Training and Development, providing opportunities for technical, supervisory and managerial training and education for all Wastewater Operations employees.
- Oversee staff productivity monitoring and continual improvement through staff skills development, strategic planning, standard operating procedures (SOP) improvements and research, and implementation of technology advances. Maximizes effective use of the Maximo maintenance software and related computer programs.
- Manages the department's safety programs, maximizing employee involvement, supporting the Authority-wide safety program, and making inspections. Acts as liaison to the Manager, Occupational Safety and Health. Immediately notify Occupational Safety and Health of any safety issues or risks that need attention.
- Oversee development, periodic review, and updating of SOPs and Facility Operations and Maintenance (O&M) manuals, and ensure all staff are properly trained.
- Oversees budget management for Wastewater Operations. Ensures that budget resources are allocated appropriately between units. Monitors spending and ensures budget compliance.
- Establishes emergency response procedures and oversees training and practice drills.

- Ensures consistency and uniformity of work rules in accordance with established policies and procedures. Identifies needed improvements to work practices.
 - Manages successful administration of collective bargaining agreement provisions to maintain harmonious labor management relations. Participate in grievance resolution, collective bargaining and contract negotiations. Serves as Step I hearing officer. Hears disciplinary actions.
-

City of Somerville – *Somerville, MA*

Director of Water & Sewer

December 2020 to August 2021

- Responsible for all aspects of water and sewer operations for the City of Somerville.
 - Ensure public safety through the responsible provision of potable water and adequate fire protection and through the proper discharge of sewage.
 - Supervise the construction, operation, metering, and billing of approximately 15,000 water and sewer accounts.
 - Oversee the lead sampling program as mandated by the Department of Environmental Protection (DEP) and the Massachusetts Water Resource Authority (MWRA).
 - Oversee the lead service replacement program as mandated by DEP.
 - Formulate written policies and procedures to ensure regulatory compliance.
 - Determine annual Budgetary needs and departmental goals.
 - Responsible for developing an annual rate structure and delivering the annual budget to the City Council totaling \$41 million annually.
 - Develop and implement safety procedures and practices.
 - Work with the Mayor's office to forecast proficient operation and maintenance strategies for department operations.
 - Manages collective bargaining agreements for the successful operations of the Department and serves as the Department grievance hearing officer.
 - Responsible for recruiting and hiring staff to meet departmental needs. Including the development of job descriptions for existing and new positions.
 - Works closely with engineering and asset management on capital projects including design, budgeting, construction, and implementation.
-

Town of Plymouth – Plymouth, MA

Wastewater Superintendent

October 2013 to March 2020

- Management over the operation and maintenance of a 3 MGD SBR wastewater treatment facility, 8 sewer pumping stations, and 65 miles of sewer collection system, Management & operation of satellite SBR wastewater treatment facility for the Plymouth Airport.
- Optimization of process control through the implementation of SCADA and instrumentation.
- Work collaboratively with Public Health to manage FOG Program.
- Monthly and annual reporting to MADEP and EPA.
- Development of Standard operating procedures for process and equipment optimization.
- Emergency response to sewer backups and overflows as needed.
- Customer relations for unpleasant situations dealing with sewer issues including building backflows.
- Complete insurance claim documents for Town Managers office related to sewer issues.
- Collaboration with Engineering for project plan reviews.
- Oversight of the Town's O&M contractor responsible for the wastewater facility operations, staff of 12, and three Town staff.
- Oversight of contractors and in-house staff working on or around the Town infrastructure.
- Collaboration with consulting engineers for the design and construction of large capital projects including sewer expansion (\$4.5M), pump station headworks rehabilitation (\$7.5M), Emergency Sewer force main repairs (\$48M).
- Responsible for grant application opportunities when applicable, successful recipient of two grants from MASS CEC in 2019 totaling \$285,000.
- Permitting new sewer connections.
- Development of annual operation & maintenance budgets.
- Development of Annual, 5-year, and 25-year capital planning needs.
- Development of sewer rules & regulations, mandatory connection policies.
- Processing & tracking of Invoices for capital projects & annual budgets.
- Trouble shoot process problems and equipment issues.
- Completion of Supervisory Development Training 2019.
- Presentation of budgets and capital projects to various boards, committees, and annual Town meetings.
- Provide public education through PACTV local television programming.

Massachusetts Water Resources Authority – Winthrop, MA

Wastewater Operations Operator, Deer Island Treatment Plant

June 2011 to October 2013

- Monitoring the operation of critical wastewater equipment
 - Process control sampling and testing for wastewater solids handling facilities
 - Interpret testing results and make adjustment to solids handling equipment
 - Tank Dewatering and cleaning
 - Plant operations monitoring with SCADA
 - Emergency on call operations during inclement weather events
 - Shutdown of complex pumping system for maintenance procedures
 - Successful completion of Supervisor Development Training Program
 - Successful completion of NEIWPC Management Training Program
 - Training of new employees in the operation of the MWRA wastewater treatment process
-

Coler & Colantonio – [City, ST]

Project Manager

June 2009 to June 2011

- Hired as Lead Operator/ Mechanic, Promoted to Project Manager 2 weeks after starting on the project
 - Operate and maintain the facility to receive the maximum amount of septage possible each day
 - Manage 9 person staff to operate and maintain the facility
 - Process control to meet discharge permit requirements
 - Monthly reporting to client and the city of Taunton, MA
 - Liaison between client and the City of Taunton for reporting and annual inspections
 - Successful management of client's high expectations of our company
 - Laboratory Sampling to meet permit testing requirements of discharge permit
 - Repair, maintenance, and replacement of process equipment and instrumentation
-

Veolia Water – Brockton, MA

Wastewater Operator

February 2008 to June 2009

- Plant operations and process equipment monitoring
 - Process sampling for process control
 - Centrifuge operation for solids thickening
 - Incinerator operation for the biosolids incineration
 - Completion of assigned work orders for equipment maintenance inspections
 - Process standard operating procedure development to optimize operations
-

EarthSource – Raynham, MA

Assistant Chief Operator

August 2006 to February 2008

- Wastewater Operator, promoted to Assistant Chief Operator in the first month of employment
 - Operate and maintain the facility to receive the maximum amount of septage possible each day
 - Manage 10-person staff to operate and maintain the facility
 - Process control to meet discharge permit requirements
 - Laboratory Sampling to meet permit testing requirements of discharge permit
 - Act as Chief Operator/ Plant Manager in his absence
 - Repair, replacement, and maintenance of equipment to keep facility operations running efficiently
 - Process optimization to produce desired product while controlling costs
 - Emergency on-call responsibility
-

Earth Tech – Gloucester, MA

Lead Operator / Site Safety Coordinator

August 2003 to August 2006

- Hired as Wastewater Operator, promoted to Lead Operator/ Site Safety Coordinator after 120 days of employment
 - Responsible for wastewater operations and process control to maintain plant compliance
 - Development of standard operating procedures for plant processes
 - Conduct site safety meetings and perform job hazard analysis on operations tasks
 - Laboratory Sampling to meet permit testing requirements of discharge permit
 - Act as Chief Operator/ Plant Manager in his absence
 - Repair, replacement, and maintenance of equipment to keep facility operations running efficiently
 - Emergency on-call response for plant issues
-

Education & Training Certifications

Bachelor of Science in Engineering Technology

Wentworth Institute of Technology – Boston, MA / Graduated 2012

- New England Interstate Water Pollution Control Commission, MA Wastewater Management Training Program
 - Massachusetts Wastewater Collection System Operator Certification, Grade IV
 - Massachusetts Wastewater Operator Certification, Grade 7C Full
 - Massachusetts Drinking Water Operator Certification, T-1 OIT
 - Massachusetts Drinking Water Operator Certification, D-4 OIT
 - 8-Hour OSHA Confined Space Training
 - Lockout Tagout Electrical Safety Training
-

Other Experience

- Member of the Water Environment Federation (WEF)
- WEF Water Leadership Institute Alumni
- MWRA Mentorship Program Mentor (past 3 years)
- New England Water & Environment Association Mentorship Training Program, Mentor

**MWRA
POSITION DESCRIPTION**

POSITION: Director, DIWWTP (Deer Island Wastewater Treatment Plant)

PCR#: 2915001

DIVISION: Operations

DEPARTMENT: Deer Island Treatment Plant (DITP)

BASIC PURPOSE:

Establishes and directs efficient, cost effective operational and maintenance services for Deer Island Treatment Plant Facilities. Provides overall supervision of the Clinton Wastewater Treatment Facility and MWRA's Pellet Plant. Plans for and ensures that the necessary resources and support are provided to meet the operational needs and regulatory requirements.

SUPERVISION RECEIVED:

Works under the general supervision of the Director of Wastewater.

SUPERVISION EXERCISED:

Exercises close supervision of assigned managerial and program staff.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Directs the operation and maintenance of all Deer Island Treatment Plant (DITP) and support facilities to ensure compliance with all federal and state laws and regulations.
- Develops, directs, and coordinates strategic plans with the Operations Division and MWRA staff managers to provide services to the Deer Island Facilities as required.
- Provides overall supervision of the Clinton Wastewater Treatment Facility and MWRA Pellet Plant. Develop capital and ongoing maintenance programs for each facility. Provides adequate resources to each facility to ensure federal and state regulatory compliance.
- Establishes and participates in the development of applicable agency-wide wastewater policies.
- Oversees and directs the continual upgrading and improvement of the facility-wide management systems.
- Maximizes effective use of the MWRA MIS application programs.
- Reviews plans and specifications for facilities and equipment improvements prepared by technical services and consultants to ensure costs effectiveness and compatibility with existing systems and operating requirements.
- Directs preparation of and exercises control over capital and current expense budgets.

- Directs the development, review, and selection of new and/or improved equipment, processes, and systems and their smooth transition into production.
- Reviews and evaluates managers' performance according to MWRA procedures.
- Participates in grievance resolution, collective bargaining, and contract negotiations.
- Directs the facilities' safety programs, strategic planning and policy development, employee involvement programs and supports MWRA-wide safety programs.
- Provides opportunities for technical, supervisory, and managerial training and education for all department employees.
- Represents the DITP and the Operations Division as required with the Authority's Division Directors, Executive Director and the Board of Directors.
- Acts as interagency liaison and public relations contact/spokesperson with regard to operations of the Deer Island Facilities.
- Manages the departments in a manner that is consistent with MWRA's goals of Diversity, Equity, and Inclusion.

SECONDARY DUTIES:

- Performs other related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) Knowledge of engineering principles and practices as normally attained through a Bachelor's degree in civil, mechanical, electrical, chemical or environmental engineering or a related field required; a Master's degree in engineering or business administration is preferred; and
- (B) Thorough knowledge of operation and maintenance systems and procedures as normally acquired through at least ten (10) years of experience, of which a minimum of five (5) years must be in the successful management of a large (100+ employees) utility or industrial process facility related workforce; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge in computerized financial, operations and maintenance management systems.
- (B) Ability in successfully managing in a union environment and a diverse workforce.
- (C) Excellent interpersonal, written and oral communication skills required.

SPECIAL REQUIREMENTS:

A valid Class D Motor Vehicle Operators License or equivalent.

Is required to be part of an on-call rotation for emergencies 24 hours a day, 7 days a week.

Massachusetts Wastewater Treatment Plant Operators license, Grade VII, or equivalent from another jurisdiction required.

Massachusetts Registered Professional Engineer or eligibility for acceptance by reciprocity is preferred.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated with professional office environment, including but not limited to the use of telephones, personal computers, word processing and other software, videoconference applications, copiers, scanners, and fax machines.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.

While performing the essential functions the employee is regularly required to use hands to finger, handle, feel or operate objects, tools, or controls and reach with hands and arms. The employee regularly is required to stand, talk, or hear. The employee is occasionally required to walk, sit, climb or balance, stoop, kneel, crouch, or crawl.

The employee must frequently lift and/or move up to 10 pounds, occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT:

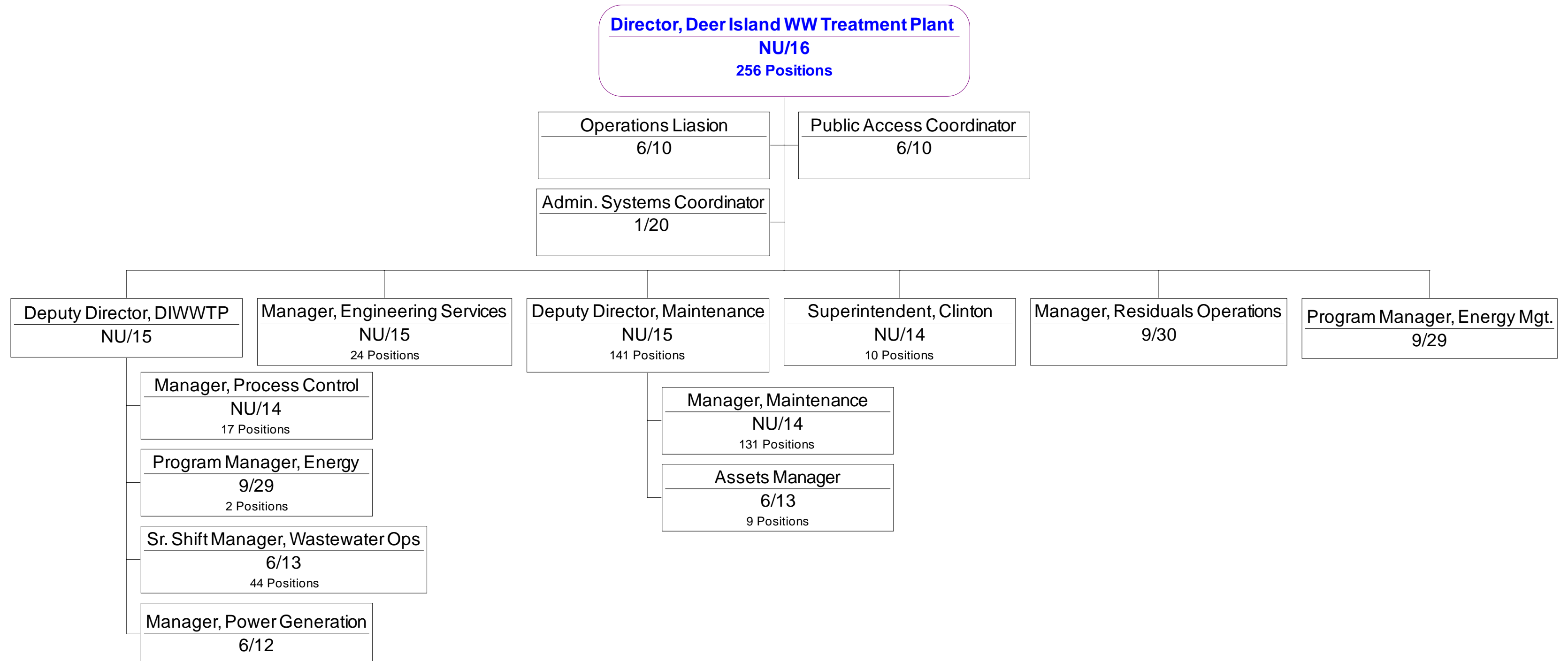
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee works near moving mechanical parts is occasionally exposed to wet and/or humid conditions. The employee is occasionally exposed to fumes and airborne particles, toxic or caustic chemicals, and risk of electric shock.

The noise level in the work environment is moderately quiet.

August 2025

Wastewater Treatment - Summary



STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Appointment of Manager, Labor Relations



COMMITTEE: Personnel & Compensation

 INFORMATION
 X VOTE

Wendy Chu, Director, Human Resources
Preparer/Title


Michele S. Gillen
Director, Administration

RECOMMENDATION:

To approve the appointment of Ms. Lisa Richardson-Lowery to the position of Manager, Labor Relations (Non-Union, Grade 14) in the Administration Division, at an annual salary of \$146,250, commencing on a date to be determined by the Executive Director.

DISCUSSION:

The Manager, Labor Relations is responsible for the Authority’s labor relations activities, including negotiating and administering the collective bargaining agreements, processing grievances, and serving as the primary point of contact with union representatives. The position became vacant upon the appointment of the incumbent in June 2025 to Manager, Operations Support in the Operations Division. The Manager, Labor Relations reports directly to the Director of Human Resources and oversees three labor relations staff positions.

SELECTION PROCESS:

The position was posted internally and externally. The Authority received 15 applications for the position (all external applicants). Four candidates were referred for an interview; however, only three applicants were interviewed as one withdrew from consideration when contacted. The selection committee was comprised of the Director of Human Resources, the Associate General Counsel, Labor & Employment, and the Director of Metropolitan Operations.

Ms. Lisa Richardson-Lowery is the recommended candidate for this position based on her experience, knowledge, skills, and abilities.

Ms. Richardson-Lowery has nearly 30 years of experience as a human resources professional, including close to 20 years in labor-management relations. Her relevant work experience includes grievance management and response, collective bargaining (as lead negotiator and as a member of the bargaining team), and contract implementation, interpretation, and guidance. She also has significant prior public sector experience in Massachusetts, having previously worked for

two different K-12 public school districts as well as a local community college. In addition, Ms. Richardson-Lowery's former places of employment include non-profit organizations, private institutions of higher education, and a public school district in the state of Ohio.

In her prior positions, Ms. Richardson-Lowery has served as the lead negotiator for non-teaching staff contracts, engaged in mid-term bargaining over subjects such as a school closure and changes to the hiring process, and managed grievances and arbitration cases, including preparing cases for hearing as well as negotiating settlements. In addition, Ms. Richardson-Lowery has extensive experience conducting workplace investigations and has provided assistance and testimony in matters before the MCAD. She has also testified in workers' compensation and unemployment hearings.

During the interview, Ms. Richardson-Lowery was able to demonstrate a solid work ethic, a strong understanding of how to engage with multiple stakeholders, the skills and abilities needed to maintain harmonious labor-management relations, and an ability to work as part of a team.

Ms. Richardson-Lowery has a Bachelor of Science degree from University of Dayton, a Master of Science in Administration from Central Michigan University (Human Resource Management), and a Certification in Restorative Justice from Suffolk University.

BUDGET/FISCAL IMPACTS:

There are sufficient funds for this position in the Administration Division's FY26 Current Expense Budget.

ATTACHMENTS:

Resume of Lisa Richardson-Lowery
Position Description
Organization Chart

EDUCATION:

CRJP (Restorative Justice Certification)

Suffolk University

MSA (Human Resource Management)

Central Michigan University

B. S. Degree

University of Dayton

PHR

PROFESSIONAL EXPERIENCE:

Bay Cove Human Services

May 2022 to Present

Deputy Director of HR Operations

- Responsible for leading and managing the day to day operations of the 20+ HR department
- Acts as a subject matter expert; revise and maintain employee processes and procedures; develop new policies, as needed.
- Assist with developing organizational strategies that create consistency and a more streamlined philosophy and approach for addressing workplace matters.
- Conduct investigations of complex employment matters including preparing comprehensive investigative reports and recommendations for resolution.
- Policy management including the development of new policies and revising current policies. This includes acting as a resource for policy interpretation and new and/or updated state and federal employment laws. Provide consultation and education on policies.
- Collaborate with others to develop and facilitate workplace trainings.
- Builds and enables strategies to ensure continuous improvement, consolidation and standardization for HR processes.
- Directs the strategy of all reporting and HR analytics including, but not limited to, performance dashboards, background checks, statutory compliance reporting, and custom reporting
- Drive standardization, process improvement and automation to areas of oversight
- Analyzes trends and metrics in partnership with the HR group to develop solutions, programs and policies.
- Supervisor of HRIS, Benefits, Talent Acquisition, Operations, Work Force Development & Employee Relations functions

Cambridge Public Schools

Chief Human Resource Officer

2020 to 2022

- Successfully guided the strategic direction and oversight of HR
- Oversee full lifecycle recruitment for all CPS staff members (2000+) including teachers, nurses, psychologists secretaries, and food service employees with a focus on diversity and inclusion
- Conducted behavioral based interviewing and consulted with managers over candidate's skills sets, and selection recommendations.
- Compiled all salary analysis and recommendations for hiring managers.
- Performed all offer meetings and oversaw all hiring process and paperwork

- Developed weekly recruitment activity reports for management, participated in weekly/monthly and recruitment calls with hiring managers
- Sourced candidates via job fairs, social media, e-mail campaigns, etc.
- Facilitated Behavioral Based Interviewing workshops
- Managed vendor contracts and relationships relating to recruitment process.
- Developed and maintained recruiting networks and relationships with various colleges, career centers and talent pipelines.
- Managed and Updated ATS, HRIS and LMS
- Partner with senior leadership to ensure a strong understating of role requirements, accountabilities and career path opportunities for director + level positions
- Proactively source to secure talent based on current and future needs
- Consult with and coach hiring managers through the selection process, provide overview of pre-screening to hiring managers and make recommendations for candidate interviews.
- Conduct and document post-interview feedback with hiring managers and candidates.
- Manage and respond to employment related concerns to include grievances and MCAD complaints
- Effectively managed employee benefits and salary compensation programs
- Work collaboratively with school principals and other administrators and financial offices to ensure a well-coordinated and responsive district wide staffing strategy
- Ensure compliance with local, state and federal employment laws
- Provide information and recommendation to the Superintendent and School Committee on staffing related matters.
- Serve as key member of the District's collective bargaining team and work to ensure equitable administration and compliance with union contracts
- Managed all employee relations issues including conducting investigations and resolving employee conflicts
- Oversee FMLA, Medical personal, sabbatical and other leaves; tuition reimbursement programs; the Employee Assistance Program (EAP), and other employment-related functions and initiative
- Regularly review and revise HR & District policies and procedures
- Collaborated with Unit leaders on succession planning, skills development, and training

Brookline Public Schools

Director of Human Resources

2017 – 2020

- Successfully guided the strategic direction and oversight of Human Resources employees and operations
- Trained managers and supervisors to interpret personnel policies and administrative procedures to school employees
- Provided high level regulatory compliance and budget oversight
- Guided the employee safety, welfare, wellness and health strategy including introducing a new health plan
- Served as lead negotiator during collective bargaining with the non-teaching union staff,
- Acted as first level grievance response. Worked closely with labor council on all grievances and arbitrations and MCAD matters.
- Provided evaluation trainings to managers and supervisors
- Implemented successful performance management system and improvement and organizational development metrics to reduce turnover and improve employee satisfaction

- Successfully managed the talent acquisition, talent management and on boarding process including difficult to fill positions
- Implemented a modified 360-degree performance appraisal system for administrative staff

Mount Ida College

2016 – 2017

Chief Human Resources Officer

(School Closed)

- Lead organizational change, partnering with leadership to create and implement programs and policies for faculty and staff to achieve the College's strategic goals.
- Develop and recommend benefits, programs, policies and procedures that ensure the effective delivery of human resources services that attract, motivate and retain a qualified and productive workforce.
- Provide leadership and oversight of all core human resources functions and related HR programs including Oversee and manage the administration of the College's benefits programs and services in a manner that ensures compliance with applicable laws and regulations.
- Manage and direct the staff evaluation and performance management process including ongoing performance counseling and the annual written evaluation process.
- Manage and direct the College's compensation program. Ensure integrity of compensation system and the consistent and fair application of compensation philosophy and established pay guidelines.
- Provide advice and counsel to the President and the senior executive team on complex human resources related matters and issues.
- Design, develop and manage human resources policies, practices and programs ensuring compliance with applicable federal and state laws and regulations.
- Manage the employee relations & performance management process. Serve as internal consultant to managers and executive team in addressing performance, disciplinary and employee grievance issues.
- Develop and manage the training and professional development programs.
- Serve as liaison to the College's Management Council to facilitate communication on key management issues and to ensure their engagement and support in key institutional initiatives and priorities.
- Manage annual departmental budget of approximately \$500k.
- Manage employee requests for accommodations in accordance with applicable Section 504.
- Serve as Deputy Title IX Coordinator in support of the College's Title IX Coordinator.
- Conduct employee exit interviews with senior level employees.
- Directed the administration of the College's benefits programs.

Cardinal Cushing Centers, Inc. (Non-profit, multi-site, treatment center and school) 2015 – 2016

Vice President of Human Resources

- Provided senior level advice and recommendations to the President and Vice Presidents for alignment of personnel and organizational structure.
- Successfully provided leadership for all human resources activities at the school including; talent management and acquisition, employee relations, employee development, compensation, training, employee relations.
- Led as internal consultant to management team, supervisors, and employees on employee relations issues and compensation.
- Guided successful implementation of an HRIS system and reorganization of HR department.
- Provided training and development of managers, supervisors and key stakeholders on a variety of topics.
- Sourced, screened and hired nurses, faculty members, aides, administrative personnel psychology staff etc.
- Developed and implemented a leadership succession plan resulting.

Massasoit Community College

2012 – 2015

Vice President of Human Resources and Affirmative Action

- Provided counsel and support as a member of the President's executive team (Cabinet) to ensure HR strategies and metrics are consistent with the College's strategic plan.
- Led all human resources activities at the College including; talent management and acquisition, employee relations, employee development, compensation, training, cultural ID change, employee relations and diversity initiatives.
- Led labor relations activities, including contract interpretation, grievances, arbitrations, training and hearings leading to a 5% reduction in grievances and arbitrations.
- Successfully managed the job classification review process to align with school metrics and be consistent with contractual guidelines and institutional needs.
- Provided internal leadership consultation to management teams, supervisors, and employees on employee relations issues.
- Implemented sourcing and screening metrics to determine effectiveness of recruiting efforts resulting in a 20% increase in minority recruiting.
- Provided principal direction as the College's primary designated person for resolving all internal and external complaints of discrimination or harassment.
- Ensured that all HR programs and policies are aligned with mission, vision and values.
- Successful development and execution of the college's HR strategic vision.

Middletown City Schools

2007 – 2012

Director of Human Resources

- Successfully guided the strategic direction and oversight of Human Resources employees and operations.
- Trained managers and supervisors to interpret personnel policies and administrative procedures to school employees.
- Developed policy and directed and coordinated Human Resources activities, such as employment, compensation, labor relations, benefits, training, sourcing and screening and employee services.
- Led labor relations activities, including contract interpretation, grievances, arbitrations, training and hearings leading to improved relations with union officials.
- Effectively changed the school culture to reflect new educational standards.
- Provided high level regulatory compliance and budget oversight.
- Guided the employee safety, welfare, wellness and health strategy including introducing a new health plan.
- Provided Principal and Staff evaluation trainings to managers and supervisors.
- Implemented successful performance management system and improvement and organizational development metrics to reduce turnover and improve employee satisfaction.
- Managed the talent acquisition, talent management and on boarding process including difficult to fill positions.
- Implemented a modified 360-degree performance appraisal system for administrative staff.

Antioch University (multi-national Institution)

2002 – 2007

HR Business Partner

- Successful sourcing, screening, interviewing, tracking and hiring applicants for multiple campuses in America and Europe.
- Successfully managed the HR budget which resulted in savings for the organization of over \$100k.
- Maintained applicant database and preparing federal and state reports and assisting in the preparation and settlement of EEO Charges.

- Prepped and tracked Affirmative Action and minority levels reports, including statistical analysis resulting in increased minority applicants.
- Provided support for the benefit and compensation function on an as needed basis.
- Assisted with union negotiation and contract administration including interpretation, investigation and grievance resolution & disciplinary hearings for four on campus unions.
- Delivered supervisor and employee training, development and evaluation programs including designing metrics to ensure training effectiveness.
- Managed preparation and participated in negotiation of Non-Union Contract agreements for three Yellow Springs, Ohio campuses.
- Effectively planned for workforce changes including short and long term forecasting and job classification.
- Provide advice to managers, supervisors and presidents regarding employee relations issues.
- Successful management of the HRdatabase (Datatel's Colleague) auditing, payroll, salary and benefit data entry.

Premiere Integrated Medical Services (PriMed)

1998 – 2002

HR Generalist

- Administered the benefit program for 300 employees
- Provided advice and support to the practice managers regarding the employee handbook
- Managed the employee personnel files
- Assisted with JCAHO accreditation
- Sourced and screened candidates

**MWRA
POSITION DESCRIPTION**

POSITION: Manager, Labor Relations

PCR #:

DIVISION: Administration

DEPARTMENT: Human Resources

BASIC PURPOSE:

Responsible for managing the Authority's labor relations functions within the Human Resources Department, including but not limited to negotiating and administering collective bargaining agreements, processing grievances, and serving as the primary point of contact with MWRA's union representatives. Manages employee drug testing program, uniform program, and debit card program for employee clothing allowances. Workforce is comprised of approximately 1000 employees in 5 collective bargaining units covering administrative, professional, trades, scientist, and engineering positions.

SUPERVISION RECEIVED:

Works under the general supervision of the Director, Human Resources.

SUPERVISION EXERCISED:

Exercises direct supervision over assigned labor relations staff. Exercises functional supervision over other staff in the Human Resources Department as required for projects, initiatives, and other assignments.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Serves as chief spokesperson for successor collective bargaining negotiations. Conducts mid-term and impact bargaining as necessary. Responsible for coordinating implementation of negotiated contracts and all human resources initiatives resulting from collective bargaining agreements.
- Gathers pertinent data and analyzes impact of collective bargaining proposals and tentative contractual agreements such as Authority costs, wage comparisons, budget data, and position titles.
- Advises managers and supervisors on labor relations matters, contract interpretation,

employee performance issues, and disciplinary matters.

- Serves as management representative on Labor-Management committees and other relevant committees impacting labor relations.
- Provides support to legal counsel in arbitration cases, unfair labor practice charges, and other litigation matters.
- Assists with workplace investigations relative to claims of harassment, misconduct, workplace violence, and discrimination. Prepares appropriate reports and recommendations for action.
- Provides direction and advice to managers and supervisors in disciplinary matters including serving as hearing officer in pre-disciplinary hearings, preparing and reviewing hearing reports, and making appropriate recommendations at conclusion of such hearings.
- Manages employee drug testing program, uniform program, and debit card program for employee clothing allowances. Manages related vendor contracts, including scope of services development, vendor selection, and approvals by the MWRA Board of Directors.
- Implements training sessions for management and supervisory staff regarding managing in a unionized environment, disciplinary procedures, grievance administration, and interpretation of negotiated union contracts.
- Assists Director, Human Resources in implementation of special projects as assigned.
- Oversees the Authority's responses to union information requests.
- Manages the department in a manner consistent with the MWRA's goals of Diversity, Equity, and Inclusion.

SECONDARY DUTIES:

- Performs related duties as required.

MINIMUM QUALIFICATIONS:

Education and Experience:

- (A) A Bachelor's degree in labor relations, human resources, public administration or related field; and
- (B) A thorough understanding of collective bargaining principles, labor and employee

relations, human resources, and grievance administration as acquired through at least seven (7) years of experience in labor-management relations (preferably in the public sector), with at least three (3) years of supervisory experience in any field; or

- (C) Any equivalent combination of education or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Demonstrated critical thinking skills and ability to draw conclusions based upon available evidence.
- (B) Excellent interpersonal, oral and written communication, and negotiation skills.
- (C) Demonstrated supervisory skills.
- (D) Strong understanding of relevant state and federal laws, including Massachusetts General Laws c. 150E.
- (E) Demonstrated ability to work effective as part of a team and to function independently with minimal supervision.
- (F) Proficiency with computer software, such as Microsoft Office Suite and videoconference applications.
- (G) Ability to maintain confidentiality and exercise discretion while handling sensitive matters.
- (H) Strong organizational skills and a demonstrated ability to oversee multiple projects simultaneously.

SPECIAL REQUIREMENTS:

Valid Class D Massachusetts Motor Vehicle Operator's License (or equivalent).

Ability to provide evening and weekend coverage on a rotating basis.

TOOLS AND EQUIPMENT USED:

Office machines as normally associated with a professional office environment, including the use of telephones, personal computers, typical office software, email, videoconference applications, copiers, scanners, and fax machines.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to sit, talk or hear. The employee is regularly required to use hands to finger, handle, feel or operate objects, including office equipment, and frequently required to reach with hands and arms. The employee is occasionally required to stand, walk, climb, balance, stoop, kneel, crouch, crawl, or sit.

There are no requirements that weight be lifted or force be exerted in the performance of this job. Specific vision abilities required by this job include close vision, distance vision, peripheral vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee regularly works in an office environment.

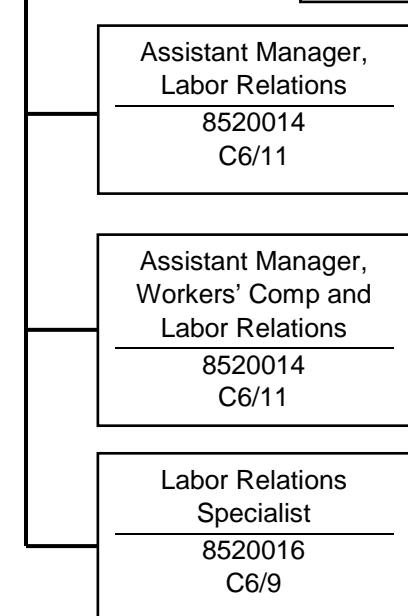
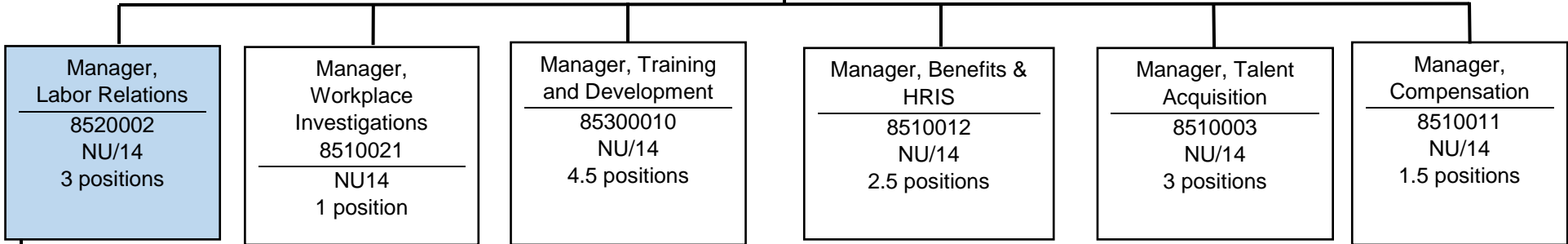
The noise level in the work environment is usually a moderately quiet office setting. This position may be eligible for up to 50% telework.

June 2025

**Administration Division
Human Resources Department
Org Chart September 2025**

Director, Human Resources

8510001
NU/16
22.5 positions





MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island
33 Tafts Avenue
Boston, MA 02128

Frederick A. Laskey
Executive Director

Chair: L. Taverna
Vice-Chair: B. Swett
Committee Members:
J. Foti
P. Flanagan
J. Walsh
P. Walsh
J. Wolowicz

WATER POLICY & OVERSIGHT COMMITTEE MEETING

Telephone: (617) 242-6000
Fax: (617) 788-4899
TTY: (617) 788-4971

Date: Wednesday, September 17, 2025
Time: Immediately following the Personnel & Compensation Committee
Location: Deer Island Reception/Training Building, 1st Floor
33 Tafts Avenue – Favaloro Meeting Room
Boston, MA 02128

Photo ID required for entry.

The meeting will also be available virtually via Webex.

Webex meeting link (Registration required):

<https://mwra.webex.com/weblink/register/rb31a10e696470cf2457e912f550a5252>

Meeting Number: 2334 553 9657 Password: 091725

AGENDA

- i. Approval of Water Policy & Oversight Committee Minutes**
- A. Contract Awards**
 1. Cathodic Protection System Improvements Shafts E, L, N and W: CorrTech Inc., Contract 6439
- B. Contract Amendments/Change Orders**
 1. Dam Safety Compliance and Consulting Services – Repairs, Design and Engineering Services During Construction: GZA Geoenvironmental, Inc., Contract 7614, Amendment 4
 2. Quinapoxet Dam Removal Design, Permitting and Engineering Services During Construction: SLR International Corporation Contract 7347, Amendment 3

MASSACHUSETTS WATER RESOURCES AUTHORITY
Meeting of the Water Policy and Oversight Committee
of the MWRA the Board of Directors
December 11, 2024

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

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

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Director of Finance Thomas Durkin; Director of Administration Michele Gillen; Regulatory and Environmental Affairs Director Collen Rizzi; Assistant Director of Engineering Ester Lwebuga; Construction Coordinator Jeremiah Sheehan; 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 participated remotely.

Vandana Rao, EEA, also participated remotely.

Mr. Taverna called the meeting to order at 11:55am.

WATER POLICY AND OVERSIGHT

Approvals

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

Mr. Taverna noted that there was one item for approval: Water Supply Continuation Agreements with Cambridge, Canton, Framingham, Lynn Water and Sewer Commission, Needham, Northborough, Peabody, Weston and Winchester.

A motion was duly made and seconded to recommend approval to the full Board of Directors of these Water Supply Continuation Agreements as presented in the December 11, 2024 Staff Summary.¹

Colleen Rizzi, MWRA Environmental and Regulatory Affairs Director, noted that MWRA provides water service to 53 cities and towns, including 27 communities that receive water pursuant to

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>

water supply contracts. She advised that staff sought approval to renew nine Water Supply Continuation agreements that are set to expire on December 31, 2024, and invited Board members' questions.

Mr. Pappastergion asked if the proposed continuation agreements included any changes. Ms. Rizzi explained that the proposed agreements included some language updates for consistency, but no substantive changes.

Hearing no further discussion or questions from the Board, Mr. Taverna 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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Flanagan		
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Pappastergion		
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Peña		
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Taverna		
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Vitale		
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J. Walsh		
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P. Walsh		
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(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

Mr. Taverna noted that there were two proposed contract awards, and that the first was to P. Gioioso & Sons of Contract 7484, Intermediate High Pipeline Improvements, CP1 Sections 75A and 47.

A motion was duly made and seconded to recommend approval to the full Board of Directors of award of this contract as presented in the December 11, 2024 Staff Summary. ²

Ester Lwebuga, MWRA Assistant Director of Engineering, presented an overview of the Intermediate High Pipeline Improvements, CP1 Sections 75A and 47 project, which is one of three contracts to interconnect the two geographically distinct and hydraulically unconnected Intermediate High pressure zones supplied by the Commonwealth Avenue and Belmont Pump Stations.

She presented a map of the project's location; highlighted pipeline section 59, which is 88 years old and cannot be taken out of service for rehabilitation; advised that its failure would interrupt water service for portions of Belmont and Watertown; described the goals of the project, including improvements to system reliability, redundancy, operational flexibility, and, water quality; and, summarized the three construction packages ("CP-1, CP-2, and CP-3") that comprise the larger Intermediate High Pipeline Improvements project. She noted CP-2 is

currently in construction, and that CP-3 was postponed pending the collection of additional existing pipe data, which would take place after CP-1's activation.

Ms. Lwebuga then discussed the scope of proposed CP-1, including the installation of a pipeline extension to create a connection between the two distinct regions of the Intermediate High pressure zone; presented a summary of the bids received for CP-1 Contract 7484; noted that proposed CP-1 includes the replacement and rehabilitation of water mains owned by the City of Newton, per a Memorandum of Agreement that was approved by the Board of Directors in October 2023. She discussed the bid amount for the recommended contractor, P. Gioioso & Sons, Inc., and noted it included costs for work to be performed for MWRA and the City of Newton, and allowances, such as for police details.

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

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

(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

Mr. Taverna advised that the next proposed award was to CDM Smith of Contract 8067, Intermediate High Pipeline, CP1 Sections 75A and 47 Resident Engineering and Inspection Services.

A motion was duly made and seconded to recommend approval to the full Board of Directors of award of this contract as presented in the December 11, 2024 Staff Summary.³

Ms. Lwebuga reported that staff received one proposal for RE/RI services for the Intermediate High Pipeline Improvements CP-1 project from CDM Smith, in an amount not-to-exceed \$1,821,258.30.

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

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

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Taverna		
Vitale		
J. Walsh		
P. Walsh		

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

Contract Amendments/Change Orders

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

Mr. Taverna noted that proposed Change Order 10 and a further delegation of authority to the Executive Director to approve additional change orders on Contract 7117, Northern Intermediate High Section 89 Replacement Pipeline, with P. Gioioso & Sons, was next.

A motion was duly made and seconded to recommend approval to the full Board of Directors of this Change Order 10 and the further delegation of authority as presented in the December 11, 2024 Staff Summary.⁴

Jeremiah Sheehan, MWRA Construction Coordinator, presented the reasons for proposed Change Order 10 to the Northern Intermediate High Section 89 Replacement Pipeline Contract 7110, including unforeseen road conditions on Eugene Drive in Winchester that impacted trench work; unanticipated utility conflicts on Montvale Avenue in Woburn; and a design error related to vent piping for air release manhole structures.

Mr. Sheehan presented project progress photos, including a slip lining operation under a Route 93 exit ramp; and the installation of steel sheeting along an easement between Stoneham and Winchester to make the final pipeline connection for Phase 3. Finally, he discussed upcoming project Phase 4, including the complete deactivation of all of existing Section 89's pre-stressed concrete cylinder pipe ("PCCP"), which will greatly reduce any liability with respect to potential catastrophic failure related to PCCP manufactured during the existing pipeline's 1970s timeframe.

There was brief discussion about the unforeseen road conditions in Winchester, which require additional reconstruction of the roadway subbase prior to installing full width overlay pavement to ensure the road's structural integrity. Mr. Sheehan explained that this technical approach was chosen at the Town's request.

Hearing no further discussion or questions from the Board, Mr. Taverna requested a roll call vote in which the members were recorded as follows:

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

Yes
 Taverna
 Vitale
 J. Walsh
 P. Walsh
 (ref. W C.1/IX C.1)

No

Abstain

ADJOURNMENT

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

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

Yes
 Flanagan
 Pappastergion
 Peña
 Taverna
 Vitale
 J. Walsh
 P. Walsh

No

Abstain

The meeting adjourned 12:10pm.

Approved: September 17, 2025

Attest:

Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- 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)

¹ Board Vote: 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. (ref. W A.1/IX A.1)

² Board Vote: 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. (ref. W B.1/IX B.1)

³ Board Vote: 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. (ref. W B.2/IX B.2)

⁴ Board Vote: 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, 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. (ref. W C.1/IX C.1)

STAFF SUMMARY



TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Cathodic Protection System Improvements Shafts E, L, N and W
CorrTech, Inc.
Contract 6439

COMMITTEE: Water Policy & Oversight

 INFORMATION

 X VOTE


Michele S. Gillen

Director of Administration



Kathleen M. Murtagh, P.E.
Chief Operating Officer

Thomas Renaud, P.E., Project Manager
Patricia Mallett, P.E., Sr. Program Manager
Brian Kubaska, P.E., Chief Engineer
Preparer/Title

RECOMMENDATION:

To approve the award of Contract 6439, Cathodic Protection System Improvements Shafts E, L, N and W, to the lowest responsible and eligible bidder, CorrTech, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of \$7,324,782, with a contract term of 912 calendar days from the Notice to Proceed.

DISCUSSION:

Testing identified the need for improvements to the existing cathodic protection systems at Shafts E, L, N and W to ensure that MWRA’s pipelines that connect to these shafts are adequately protected from corrosion. These shafts are located in Southborough, Framingham, and Weston, as shown in Figure 1.

The cathodic protection system at Shaft E in Southborough was replaced with a new impressed current system in 2019. A Cathodic Protection Certification Survey was conducted in October 2020. Two of the 16 test stations at the site did not meet the criteria of the National Association of Corrosion Engineers (NACE). Further testing was conducted in April 2021, confirming these results. These two test stations are located in areas of shallow bedrock on the east side of

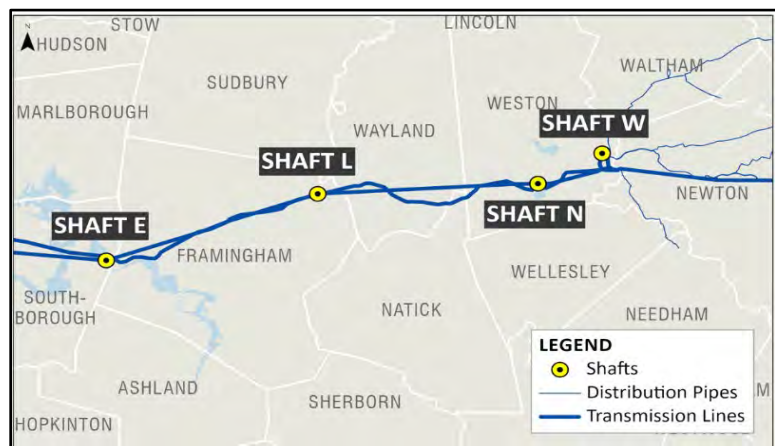


Figure 1. Shafts E, L, N and W Locations

Stony Brook and are the farthest away from the replacement impressed current system deep well anode ground beds. As a result, there was not adequate cathodic protection current distributed to these test stations to meet the NACE criteria. Prior to installation in 2019, initial soil conductivity testing was performed during design at select locations throughout the Shaft E site, but not at the specific locations where shallow bedrock was found during installation of the replacement system. Under Contract 6439, a new impressed current cathodic protection system will be installed at Shaft E in the area adjacent to the two failing test stations to ensure complete protection of the Shaft E infrastructure.

The galvanic anode cathodic protection system at Shaft L in Framingham was also replaced in 2019 with a new impressed current system. Testing of Shaft L was conducted in April 2022, and results indicated that a buried three-foot section of 120-inch diameter pipe between Valve Chamber L1 and a flexible coupling at Shaft L is unprotected by the existing system as it is electrically disconnected from the rest of the pipe. Testing at Shaft L during design for electrical continuity of the piping system did not show any deficiencies. Under this contract, a supplemental impressed current system will be installed to protect this section of pipe.

Incomplete protection of part of the pipelines at both Shafts E and L is believed to be attributed to unforeseen site conditions noted above that were not known at the time of design. At the time of finding the noted deficiencies at Shafts E and L, staff determined it was more cost effective to include these corrections under a future cathodic protection contract.

Testing of the existing galvanic cathodic protection systems at Shafts N and W in Weston was conducted in October 2019. The existing systems were installed in 2004 as part of the construction of the MetroWest Water Supply Tunnel, and the test results showed that the anodes were depleted, as they were reaching the end of their expected life span. Under this contract, these existing systems will be completely replaced with an impressed current cathodic protection system to protect the buried steel pipe from corrosion.

Procurement Process

Contract 6439 was advertised in the Boston Herald, the Central Register, Banner Publications, El Mundo and The Dorchester Reporter and bid in accordance with Chapter 30 of the Massachusetts General Laws. In addition, bid documents were made available for public viewing and downloading on the MWRA Supplier Portal as Event 6245. Pre-bid conferences were held on June 4 and June 25, 2025. While two general contractors and one electrical subcontractor attended the site visits, only one general bid was received and opened on July 25, 2025. Staff sought feedback from the general contractor who did not bid. Although two site visits were held, this general contractor indicated there was inadequate time for subcontractors to visit the site and, therefore, the general contractor was not able to receive bids from subcontractors. The bid result for Contract 6439 is presented below.

<u>Bidder</u>	<u>Bid Amount</u>
<i>Engineer's Estimate</i>	\$6,728,000
CorrTech, Inc.	\$7,324,782

MWRA staff reviewed the bid from CorrTech, Inc., which is 8.9% higher than the Engineer's Estimate. CorrTech, Inc. explained to staff that the difference between its bid and the Engineer's Estimate is largely due to escalation measures included in the bid price to account for increased

market volatility and the cost of materials. CorrTech also explained that its cost estimate for Shaft W reflects a conservative approach due to the steep slopes, rock ledge and number of trees that will require trimming or removal.

References for CorrTech were checked and found to be very good. The company has been in business for 29 years and has successfully completed many similar cathodic protection projects for MWRA, including the Cathodic Protection Replacement at Shafts E and L (Contract 6440 in 2019) and cathodic protection work associated with Sections 24 and 25 (Contract 6956 in 2024). Staff reported that CorrTech performed and communicated well during construction of these previous projects, and the work was completed on time and on budget. The issues noted above regarding performance testing at Shafts E and L were not due to the quality of construction, but were unforeseen site conditions that were unknown during design.

Staff conducted a review of the OSHA database and found no violations by CorrTech within the last five years. Staff report that CorrTech has displayed safety consciousness on other MWRA projects, including the Cathodic Protection Replacement at Shafts E and L.

Staff have determined that CorrTech possesses the skill, ability, and integrity necessary to perform the work under this contract and is qualified to do so. Staff have further determined that the bid price is reasonable, complete, and incorporates all necessary labor and materials, including payment of prevailing wages, as required. Therefore, staff recommend the award of this contract to CorrTech, Inc. as the lowest responsible and eligible bidder.

BUDGET/FISCAL IMPACT:

The FY26 CIP includes \$5,558,000 for Contract 6439. The award amount is \$7,324,782 or \$1,766,782 over the CIP amount. This amount will be absorbed within the five-year CIP spending cap.

MBE/WBE PARTICIPATION:

The minimum MBE and WBE participation requirements for this contract are 7.24% and 3.6% respectively. CorrTech submitted a partial waiver request for MBE participation on July 31, 2025. After review of the bid and the partial waiver request, the Affirmative Action and Compliance Unit determined that CorrTech performed due diligence in attempting to meet the MBE participation requirements, and the partial waiver request was approved.

STAFF SUMMARY




TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Dam Safety Compliance and Consulting Services – Repairs, Design and Engineering Services During Construction
GZA GeoEnvironmental, Inc.
Contract 7614, Amendment 4

COMMITTEE: Water Policy & Oversight

 INFORMATION
 X VOTE

Valerie Moran, P.E., Director, Waterworks
John J. Gregoire, Sr. Prog. Manager, Reservoir Operations
Preparer/Title


Kathleen M. Murtagh, P.E.
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 4 to Contract 7614, Dam Safety Compliance and Consulting Services - Repairs, Design and Engineering Services During Construction, with GZA GeoEnvironmental, Inc., increasing the contract amount by \$25,100, from \$582,811.51 to \$607,911.51 and increase the contract term by 24 months from October 21, 2025 to October 21, 2027.

DISCUSSION:

On February 20, 2019, the Board of Directors approved the award of Dam Safety Compliance and Consulting Services - Repairs, Design and Engineering Services During Construction, to GZA GeoEnvironmental, Inc. Contract 7614 provides for qualified dam safety engineers to design construction repairs and provide Engineering Services During Construction (ESDC) at several reservoir dams. This includes Sudbury Dam Spillway Masonry Repair and Gatehouse Vent Repair, North Dike Overtopping Protections, Wachusett North and South Dikes Instrumentation (piezometers), Foss Reservoir Dam Overtopping Protections, and Chestnut Hill Dam Emergency Seepage Repair. To date, much of the Contract 7614 work has been completed except for work on the Foss Dam Overtopping Protection and the River Road Slope Repair, which remain.

Foss Dam Overtopping. The regulatory Spillway Design Flood (SDF)¹ for Foss Reservoir Dam is the 500-year flood. Reservoir modeling has shown that at the SDF wave overtopping will occur on the crest of this dam (Figure 1). Dam safety regulations require the mitigation for the potential for overtopping. After consulting with the Massachusetts Office of Dam Safety on likely overtopping approaches, MWRA and GZA determined that a combination of slight embankment raising, plus installation of Turf Reinforcement Matting (TRM), and some additional riprap enhancements, would be the best solution.

¹ A spillway design flood (SDF) is the largest flood that a spillway is designed to safely handle.



Figure 1. Foss Reservoir Dam

Pre-construction permitting is underway and is anticipated to be complete in late 2025. Final Design is completed and pending advertisement for bid. Bidding and construction contract award are expected to extend into early 2026. The bulk of construction is expected to occur during the summer and fall of 2026, with final grass cover well established by spring 2027, which is critical to the armor protection. The one-year, post-construction warranty period will extend to fall 2027.

River Road Slope Repair. River Road is the primary access to Wachusett Dam and Lower Gatehouse. It had suffered from two landslides preventing access and ultimately requiring a rebuild of some 900 feet of road. In March of 2023, MWRA issued a change order on a separate construction project (Contract 7701, River Road Rehabilitation) to address additional slope erosion repair work up-slope of the completed River Road (Figure 2.). Significant erosion (Figure 3.) resulted from a severe storm that saturated the recently repaired slope causing groundwater breakout just days after the section of slope was restored.



Figure 2. Completed River Road Rehabilitation 2021



Figure 3. Groundwater breakout, Erosion and Soil Creep Upslope of River Road.

To address this slope erosion, in March 2023, MWRA requested an amendment to the Clinton Conservation Commission’s Order of Conditions under this original River Road Contract 7701 to perform these repairs. However, the Commission did not agree with the repair approach, denied that amendment request and required MWRA to file a completely new Notice of Intent (NOI) for the slope repair work.

Given that the Contract 7701 contractor (E.T. & L. Corp.) was essentially complete with the main River Road Rehabilitation project, and recognizing the additional time and effort for a new NOI, MWRA released the contractor and evaluated other mechanisms to address the slope erosion repair. Design Contract 7614 was determined to be the best solution to address the new NOI filing and to make necessary modifications to the design to address the Clinton Conservation Commission’s concerns.

After numerous delays as detailed below, the project received approval with an Order of Conditions on June 25, 2025.

Prior Amendments

This Contract has been amended three times under delegated authority.

- Amendment 1 was for emergency design and construction support for a seepage event at Chestnut Hill Reservoir Dam.
- Amendment 2 increased the Contract duration by 12 months (October 21, 2025) to ensure adequate time for ESDC on the revised schedule due to Covid 19 delays.
- Amendment 3 addressed additional requirements from the MA Office of Dam Safety as a result of additional overtopping modeling, as well as a revised design of North Dike Overtopping Protections due to updated modeling, the latter of which resulted in reduced project scale and substantial construction savings.

This Amendment

If approved this proposed amendment would add \$25,100 and 24 months to the Contract. The increase in funding and time extension is requested for the following changes from the original scope.

Foss Dam Overtopping

During the 2024 Regulatory Phase I Dam Inspection, dam safety deficiencies were identified that require repair to maintain compliance with 302 CMR 10.00 Dam Safety Regulations, including:

- concrete deficiencies found on the upstream spillway apron;
- voids within the upstream riprap; and
- training walls without fencing to prevent falls into the spillway area and outlet channel (see Figure 4).

After discussion with GZA, MWRA staff decided to address these noted deficiencies as part of the Contract 7614 design, and realize construction mobilization savings, time, and to consolidate permitting by integrating these repairs with the planned armoring and overtopping construction project.



Figure 4. Foss Reservoir Gatehouse and Training Walls Requiring Safety Fencing

In addition to the design changes due to deficiencies identified during the dam safety inspection, other design changes transpired over the course of the project. These included added access roads and access ramps for dam and gatehouse maintenance personnel, modification to the piezometer instrument plan to add an additional instrument monitoring location, and a DCR request to consider constructing a boat ramp that resulted in permitting investigations. This requested amendment includes the time required to investigate, evaluate, and address these design changes, as well as the one-year warranty period, which will extend to an additional 24 months (October 21, 2027).

River Road Slope Repair

Work associated with the River Road slope repair has encountered numerous delays as noted below.

- Since March 2023, the Clinton Conservation Commission (CCC) review and requirements substantially delayed finalization. The CCC and MWRA reached an impasse over design direction.² The CCC subsequently ordered a peer review of the project, requiring evaluation of the proposed recommendations for slope drainage and stabilization, which added several months to the process. That peer review was completed in April 2025, and was generally in concurrence with the initial GZA armoring plan, but suggested an alternative option and further site evaluations. On May 8, 2025, MWRA issued a response letter to CCC disagreeing with the alternative option and essentially holding to the original repair plan. This was further discussed in great detail at the May 28, 2025, follow-up CCC Continued Hearing with additional actions placed on MWRA by CCC as detailed below.
- The CCC also required MWRA to re-evaluate the potential for an up-slope Route 62 MassDOT drainage connection to the River Road slope repair location. MWRA evaluated MassDOT’s construction records and performed a site investigation with MassDOT personnel. These activities revealed the original connection had been removed and no up-slope piped connection to the slope repair site remains.
- At the June 25, 2025, CCC hearing, MWRA received approval of the project with an Order of Conditions. These actions and requirements by the CCC regarding the project have increased the consultant’s level of effort through June 25, 2025, at a cost of \$7,500 to cover CCC meeting attendance, and review and response to the Peer Review reports. Additionally, based on that hearing, the CCC’s Order of Conditions and Special Conditions have forecasted an additional project cost of \$15,600. This includes attendance at future hearings, permitting application, construction phase coordination, record drawings, and the requirement for a Qualified Specialist for oversight of plantings installation for a two-year post monitoring program with reporting to CCC twice per year.

For the reasons set forth above, staff recommend the Board’s approval of proposed Amendment 4 increasing the Contract amount by \$25,100 and extending the Contract term by two years.

CONTRACT SUMMARY:

	<u>AMOUNT</u>	<u>TIME</u>	<u>DATED</u>
Contract Amount:	\$432,028.54	48 Months	03/27/19
Amendment 1*	\$49,013.00	0 Days	07/25/19
Amendment 2*	\$0.00	12 Months	08/24/22
Amendment 3** ³	\$101,769.97	15 Months	06/26/24
Proposed Amendment 4	<u>\$25,100.00</u>	<u>24 Months</u>	Pending
Adjusted Contract Amount	\$607,911.51	99 Months	

*Approved under delegated authority

** Board approved.

² GZA geotechnical engineering design called for an armoring-oriented solution while the CCC preferred a plantings-oriented solution. MWRA held firm on the need for armoring to preserve slope factors of safety and prevent another landslide impact to River Road.

³ During preparation of this Staff Summary, a review of the prior amendments found that Amendment 3 had a clerical error in that it reported an “increase in contract duration of 15 months from July 21, 2024 to October 21, **2026** [Emphasis added].” The latter date should have stated October 21, 2025, which is the correct end date of Contract 7614 per a 15 month contract time extension outlined in Amendment 3.

BUDGET/FISCAL IMPACTS:

The FY26 CIP includes \$582,812 for Contract 7614. Including this amendment for \$25,100, the adjusted contract value will be \$607,911.51, or \$25,099.51 over the amount in the CIP. This difference will be absorbed in the FY24-28 CIP spending cap.

MBE/WBE PARTICIPATION:

There are no MBE and WBE participation requirements established for this contract due to the limited opportunities for subcontracting. However, GZA GeoEnvironmental, Inc. proposed 3% WBE participation, which became a requirement for this contract and will remain unchanged by this amendment.

STAFF SUMMARY


TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Quinapoxet Dam Removal Design, Permitting and Engineering Services During Construction
SLR International Corporation
Contract 7347, Amendment 3



COMMITTEE: Water Policy & Oversight

 INFORMATION
 X VOTE

Valerie L. Moran, P.E., Director, Waterworks
John J. Gregoire, Program Manager, Reservoir Operations
Preparer/Title



Kathleen M. Murtagh, P.E.
Chief Operating Officer

RECOMMENDATION:

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 3 to Contract 7347, Quinapoxet Dam Removal, Design and Engineering Services During Construction, with SLR International Corporation, increasing the contract amount by \$148,000 from \$620,428.67 to \$768,428.67, and extending the contract term by 36 months from April 1, 2026 to April 1, 2029.

DISCUSSION:

The Quinapoxet Dam was located on the Quinapoxet River, immediately upstream of the Wachusett Reservoir and directly adjacent to Quabbin Aqueduct’s Shaft 1/Oakdale Power Station (Figure 1). The dam, completed circa 1905, was constructed to control river sediment before entering the reservoir. Due to modern reservoir operations and water treatment, this dam had become obsolete and had fallen into disrepair. It was successfully removed in late 2024, ultimately restoring the natural riverine hydrology, climate resilience, and related environmental benefits to the Quinapoxet River. The riverbed, floodplain and riverbank areas were restored through a detailed grading and revegetation plan (Figure 2.).



Figure 1. Quinapoxet Dam Before Removal 2024



Figure 2. Restored Quinapoxet River Post Dam Removal, 2025

This project is nearing completion. This project involved substantial, multi-year permitting at the local, state and federal levels. Each of these permits must be closed out. Of particular importance is the U.S. Army Corps of Engineers Section 404 Clean Water Act General Permit (404 Permit), which requires monitoring of the dam removal site post-construction for three years to ensure that the stream channel and restoration goals are achieved.

The 404 Permit requires a post-construction survey of the river channel to modify record drawings (as-built plans) and serve as a baseline for the annual surveys of the channel profile and cross sections to identify any geomorphic adjustments. Additionally, annual photographs are required to be taken at designated locations to document any changes. The permit also requires a wetland scientist to document site restoration activities and conditions, and report on the success of native plant establishment.

Prior Amendments

Amendment 1 extended the contract term to complete permitting and final design due to the unforeseen application of the then-new, Department of Conservation and Recreation “Green Docket” permit review program.

Amendment 2 included additional time and funding due to additional level of effort resulting from the Green Docket review, design changes to modify the turbidity monitoring plan, increased submittals and associated contract administration, and a greater allowance for unforeseen conditions.

This Amendment

If approved, this Amendment will include the following U.S. Army Corps of Engineers 404 Permit tasks.

- Annual Post Construction Monitoring, Documentation and Reporting

This additional work will include annual post-construction site investigations into 2029 to evaluate geomorphic changes to the site and to document any changes over the prior year. Additionally, a post-construction topographic survey of the project site for one-year post-construction will be performed. The survey will record changes that may have occurred to the stream channel since the previous year’s post-construction survey. A post-construction survey from the upstream project limit to the downstream project limit will also be conducted. The proposed cost for these additional services is \$128,000.

- Invasive Species Management

As part of the Post Implementation Monitoring and Restoration Plan, MWRA is required to document native vegetation cover and the presence of invasive vegetation species. This task will address management of invasive species throughout the three-year, post-construction monitoring period. If a significant population of invasive species is identified within the restored project area, management of invasive species may be recommended such that the native establishment goals are met. No chemical or herbicidal treatments will be allowed within the project site. The proposed cost for these additional services is \$30,000.

The monitoring and species management requirements are included in the 404 Permit which was issued after the original contract award, and if approved by the Board the additional services will extend the contract duration by three years; ending on April 1, 2029. The total proposed cost for this additional level of effort, including escalation for these services over the contract extension period, is \$148,000.

CONTRACT SUMMARY:

	<u>AMOUNT</u>	<u>TIME</u>	<u>DATED</u>
Original Contract:	\$425,442.07	24 Months	02/20/2020
Amendment 1:	\$0.00	24 Months	06/07/2022
Amendment 2:	\$194,986.60	24 Months	12/01/2023
Amendment 3:	<u>\$148,000.00</u>	<u>36 Months</u>	Pending
Adjusted Contract:	\$768,428.67	108 Months	

BUDGET/FISCAL IMPACTS:

The FY26 CIP includes \$620,429 for Contract 7347. Including Amendment 3 which is for a 36-month time extension and additional funding of \$148,000, the adjusted contract value will be \$768,428.67, or \$147,999.67 over the amount in the CIP. This difference will be absorbed in the FY24-28 CIP spending cap.

MBE/WBE PARTICIPATION:

There are no MBE and WBE participation requirements established for this contract due to the limited opportunities for subcontracting.



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
TTY: (617) 788-4971

Date: Wednesday, September 17, 2025
Time: 1:00pm
Location: Deer Island Reception/Training Building, 1st Floor
33 Tafts Avenue – Favaloro Meeting Room
Boston, MA 02128

Photo ID required for entry.

The meeting will also be available virtually via Webex.

Webex meeting link (Registration required):

<https://mwra.webex.com/weblink/register/r8b34bb8306fe836958cceaabc622384c>

Meeting Number: 2345 764 4730 Password: 091725

AGENDA

I. APPROVAL OF MINUTES

II. REPORT OF THE CHAIR

III. REPORT OF THE EXECUTIVE DIRECTOR

IV. EXECUTIVE SESSION

i. Approval of Executive Session Minutes

A. Litigation

To Discuss Strategy with Respect to Litigation:

1. *U.S. v. M.D.C., et al.*, USDC (Mass) No. 85-0489-RGS (Boston Harbor Case) (verbal)
2. *In the Matters of MWRA Challenge to Certain Conditions in Alewife Brook/Upper Mystic River Basin and Lower Charles River/Charles River Basin Variances, OADR Nos. 2024-029 and 2024-030; MWRA v. Massachusetts Department of Environmental Protection, Suffolk Sup. Ct. No. 2484CV02837* (verbal)
3. *Barletta Heavy Division, Inc. v. MWRA*, Suffolk Sup. Ct. No. 2484CV02185-BLS

V. PRESENTATIONS

- A. Progress on Development of Updated Combined Sewer Overflow Control Plan
- B. MWRA's Resilience Efforts and Climate Change Adaptation

VI. ADMINISTRATION FINANCE & AUDIT**A. APPROVALS**

1. Approval of the Ninety-First Supplemental Bond Resolution (ref. AF&A B.1)

B. CONTRACT AWARDS

1. Remarketing Agent for the 2008 Series A-1 and 2025 C-F and Commercial, Paper Dealer for the 2025 Notes, BofA Securities, Inc., Goldman Sachs & Co. LLC, Jefferies LLC, RBC Capital Markets, LLC and TD Securities (USA) LLC, Contract F283 (ref. AF&A C.1)
2. Assignment and Assumption of Contract EXE-047 Viscom Systems, Inc. to Sullivan & McLaughlin Companies, Inc. (ref. AF&A C.2)

VII. PERSONNEL & COMPENSATION**A. APPROVALS**

1. PCR Amendments – September 2025 (ref. P&C A.1)
2. Appointment of Ethan Wenger , Director, Wastewater (ref. P&C A.2)
3. Appointment of Chad A. Whiting, Director, Deer Island Wastewater Treatment Plant (ref. P&C A.3)
4. Appointment of Lisa Richardson-Lowery, Labor Relations Manager (ref. P&C A.4)

VIII. WATER POLICY & OVERSIGHT**A. CONTRACT AWARDS**

1. Cathodic Protection System Improvements Shafts E, L, N and W: CorrTech Inc., Contract 6439 (ref. W A.1)

B. CONTRACT AMENDMENTS/CHANGE ORDERS

1. Dam Safety Compliance and Consulting Services – Repairs, Design and Engineering Services During Construction: GZA Geoenvironmental, Inc., Contract 7614, Amendment 4 (ref. W B.1)
2. Quinapoxet Dam Removal Design, Permitting and Engineering Services During Construction: SLR International Corporation Contract 7347, Amendment 3 (ref. W B.2)

IX. OTHER BUSINESS**X. CORRESPONDENCE TO THE BOARD****XI. ADJOURNMENT**

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Board of Directors

July 23, 2025

A meeting of the Massachusetts Water Resources Authority (MWRA) Board of Directors was held on July 23, 2025 at MWRA's Administration Facility in Chelsea and via remote participation.

Chair Tepper presided from MWRA Headquarters. Board Members Flanagan, Peña, Taverna, Vitale, Jack Walsh and Patrick Walsh also participated from MWRA's Administration Facility in Chelsea. Board Members Foti, Pappastergion and Swett participated remotely. Board Member Wolowicz was absent.

MWRA Executive Director Frederick Laskey attended at MWRA's Administration Facility in Chelsea. General Counsel Carolyn Francisco Murphy; Chief Operating Officer Kathleen Murtagh; Deputy Chief Operating Officer Stephen Cullen; Director of Finance Thomas Durkin; Director of Administration Michele Gillen; Special Assistant For Affirmative Action Rita Mercado; Director of Environmental and Regulatory Affairs Colleen Rizzi; Chief Engineer Brian Kubaska; Energy Manager Kristen Patneaude; Deputy Finance Director/Treasurer Matthew Horan; Deer Island Treatment Plant Director David Duest; Engineering Services Manager Richard Adams; Senior Program Manager Patricia Mallett; Toxic Reduction and Control Director Matthew Dam; Director of Tunnel Design and Construction Paul Savard; Director of Construction Martin McGowan; Construction Coordinator Terrence Flynn; Human Resources Director Wendy Chu; Chief of Staff Katherine Ronan; and, Assistant Secretary Kristin MacDougall were among the staff who also attended at MWRA's Administration Facility in Chelsea . Deputy Chief Operating Officer Rebecca Weidman and Program Manager Christian Murphy attended remotely.

Vandana Rao, EEA, and Matt Romero, MWRA Advisory Board (Advisory Board) attended remotely.

Chair Tepper called the meeting to order at 1:00pm.

ROLL CALL

MWRA General Counsel Francisco Murphy took roll call of Board members in attendance and announced that Messrs. Foti, Pappastergion and Swett were participating remotely. The Chair announced that the meeting was being held at MWRA's Chelsea Administration Facility and virtually, via a link posted on MWRA's website. She added that the meeting was being recorded, and that the agenda and meeting materials were available on MWRA's website.

APPROVAL OF JUNE 18, 2025 MINUTES**A motion was duly made and seconded to approve the minutes of the Board of Directors' meeting of June 18, 2025.**

Hearing no further 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		
Foti		
Pappastergion		
Peña		
Swett		
		Taverna
Vitale		
J. Walsh		
P. Walsh		

(ref. I)

REPORT OF THE CHAIR

Secretary Tepper updated the Board on the Mass Ready Act, a \$300 billion bond bill filed by Governor Healey on June 24, 2025. She noted that the bill focuses on strengthening infrastructure, protecting water and nature, and investing in farms and local economies by providing resources for maintenance, repair and planning, including \$385 million for upgrading drinking water and wastewater systems. She explained that the bill includes \$250 million to support municipalities and water utilities in upgrading critical water infrastructure, as well as investments in the protection of water ways and water quality such as support of the DEP's Water Quality Monitoring Program and pollutant discharge reduction efforts. She added that the Act's funding will help communities comply with storm water permits; reduce nitrogen levels; improve infrastructure to prevent contamination; and support water body monitoring.

The Chair advised that the Healey-Driscoll Administration recognizes the importance of Payments in Lieu of Taxes (PILOT) for state land and concerns surrounding it and reported that the Administration plans to engage with stakeholders to address the issue further; additionally, the bill includes \$50,000 per year for each Quabbin community for FY26 and FY27 that will be considered within the broader context of issues around PILOT during that time period.

Finally, Chair Tepper noted that the Healey-Driscoll Administration is investing \$600 million in urgent repairs to safeguard communities from flooding by fixing seawalls,

upgrading dams, and replacing culverts, and provided a brief update on the bill's status. (ref. II)

REPORT OF THE EXECUTIVE DIRECTOR

MWRA Executive Director Fred Laskey referenced correspondence to the Board regarding the Oakham Battery Energy Storage System (BESS) project (ref. IX) and reported that it's outside of the watershed and thus poses no risk to MWRA's water supply.

Next, Mr. Laskey reminded the Board of the decision that needs to be made this fall regarding the updated CSO control plan that MWRA is required to submit by the end of the year, which has the potential for \$1 billion in spending for the program, and noted the importance of the Board's decision-making input.

Finally, Mr. Laskey explained that staff hoped to seek the Board's approval for the admission of Lynnfield Center Water District (LCWD) to the MWRA water system (ref. VII B.1) at this meeting, but because legislation has not yet been passed approval may be sought at the September Board meeting. He noted that LCWD is eager to be admitted to the MWRA system.

Colleen Rizzi, MWRA Director of Environmental and Regulatory Affairs, added that staff could also convene a virtual meeting to discuss the matter when the legislation is signed, pending the will of the Board. She advised that LWCD may request an emergency withdrawal from MWRA this summer and that emergency water withdrawal authorization may be given for up to 60 days. There was brief discussion about the legislation, MWRA's admissions policy, and the procedures for Board approval of water system admissions.

In response to a question from Mr. Taverna, Mr. Laskey explained that the BESS site is located at 358 Coldbrook Road in Oakham. (ref. III)

EXECUTIVE SESSION

Chair Tepper requested that the Board move into Executive Session to discuss litigation, since discussing such in Open Session could have a detrimental effect on the litigating positions of the Authority. She announced that the planned topics for Executive Session were discussions of strategy with respect to litigation regarding the federal court Boston Harbor case; the variance appeals relating to the Alewife Brook/Upper Mystic and Charles Rivers; and, the *Massachusetts Natural Fertilizer Co., Inc., et al. v. MWRA et al.*, Superior Court case. She advised 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 the 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		
Foti		
Pappastergion		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		

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

*** EXECUTIVE SESSION ***

The meeting entered Executive Session at 1:09pm and adjourned at 1:30pm.

*** CONTINUATION OF OPEN SESSION ***

ADMINISTRATION, FINANCE AND AUDIT

Information

Delegated Authority Report – May 2025

Committee Chair Flanagan invited Board Members’ questions and comments on the June 2025 Delegated Authority Report.

In response to a question from Mr. Jack Walsh, Stephen Cullen, MWRA Deputy Chief Operating Officer, explained that Item C-3: *Braintree-Weymouth Pump Station Improvements*, was related to the facility’s fire system connection.

Regarding Item P-6: *Two Separate Two-Year Purchase Order Contracts for Trash and Single Stream Recycling Services*, Mr. Pappastergion asked if the ongoing Republic Services strike could impact this contract. Douglas Rice, MWRA Procurement Director, explained that communications with Republic Services indicate that the contract’s service area in Western Massachusetts is not affected by the strike, and staff will monitor any new

developments.

In response to Mr. Jack Walsh's question regarding Item C-5: *Saugus River Crossing Section 56 Pipe Replacement Resident Engineering/Inspection Services*, Brian Kubaska, MWRA Chief Engineer, explained that this contract includes a full-time Resident Engineer and Resident Inspector, a part-time, off-hours Resident Inspector, and additional project management services. Mr. Jack Walsh expressed concern about the contract's cost. Mr. Taverna asked if AECOM Technical Services, Inc. was the original design engineer of record. Mr. Kubaska responded in the affirmative and noted that AECOM was the low bidder. (ref. V A.1)

MWRA Energy and Sustainability Program Overview

Kristen Patneau, MWRA Energy Manager, presented that MWRA had completed over 60 energy audits that resulted in the implementation of energy efficiency measures that saved over 25 million kilowatt hours (kWh) annually and established internal operating procedures that require consideration of energy efficiency for all new projects.

She then reviewed MWRA's progress on renewable energy initiatives that generated approximately 58 kWh in FY24 and totaled nearly \$8 million in avoided purchased energy costs; some challenges related to MWRA's older solar installations, such as failed panels and wire management issues; challenges of replacing failed, out-of-warranty inverters due to lack of manufacturer support and industry voltage changes; and MWRA's drivers for energy management including the Commonwealth's climate goals, executive orders, environmental agency, and fiscal responsibility.

Ms. Patneau highlighted MWRA's Deer Island Treatment Plant (DITP) Combined Heat and Power (CHP) project, which is expected to more than double electricity generation and significantly reduce fuel consumption; and a \$20 million MassDEP Climate Mitigation Trust Grant that MWRA received in support of its renewable energy and decarbonization efforts. She also updated the Board on MWRA's ongoing project to install a solar parking canopy and roof mount options at Deer Island.

She then discussed the replacement of a Deer Island wind turbine that catastrophically failed in 2023. She advised that engineering consultants had determined that an in-kind replacement with a new tower and a refurbished nacelle would be the most cost-effective and efficient solution, and noted the foundation is structurally sound and can be reused. She summarized the project schedule, noting that MWRA plans to advertise the turbine construction contract in summer 2025.

Next, Ms. Patneau outlined ongoing solar initiatives, including a solar array on top of the Norumbega Water Storage Tank, noting potential interconnection challenges that are under review. She also updated the Board on the electrification and replacement of fossil fuel heating systems at MWRA's administrative buildings. She advised that a procurement

for replacing 19 existing gas-fired rooftop units in Chelsea received no bids, attributable to challenges related to DCAMM single project limits and design/build requirements, and a highly competitive bidding environment for this type of work. She also described a recent HVAC update at MWRA's Chelsea facility.

Ms. Patneau de also discussed a recently advertised project for electrification at three facilities, including a wastewater pump station. She explained that this procurement received one proposal that was rejected because it did not meet the DCAMM single project limit. She advised that costs for electrification at wastewater facilities were significantly higher than anticipated, attributable to necessary explosion-proof equipment, 100% outside air requirements and associated factors such as larger tonnage heat pumps, space availability and noise. She noted that this project would be modified and repackaged as three separate procurements and explained that the most efficient design may include a combination of heat pumps, electric resistance heaters, and gas-fired boilers as backups. She briefly reviewed ongoing facility electrification audits.

Ms. Patneau de then presented MWRA's progress on clean transportation initiatives, including a transition to an electric fleet and increased electric vehicle (EV) charging capacity. She highlighted recently completed level 2 charging stations at MWRA's Southborough facility, and a partially completed level 2 and level 3 project in Chelsea. She noted that the charging stations will be available to employees at cost per a policy in development.

Finally, Ms. Patneau de discussed new and innovative technologies and applications to promote climate resiliency, such as a large-scale battery energy storage feasibility study for Deer Island; ongoing Eversource BESS pilots at Chelsea and the Brattle Court Pump Station; and potential opportunities for wastewater heat recovery.

There was brief, general discussion with questions and answers about inverter voltage and phasing.

Chair Tepper complimented staff on the Energy and Sustainability Program's thoroughness and comprehensiveness and asked if supply chain issues were affecting any of its projects. Ms. Patneau de explained that MWRA hasn't yet seen significant delays for smaller heat pump projects and noted that solar projects could potentially be impacted by equipment safe harboring. Chair Tepper suggested that staff meet with EEA staff and representatives of other utilities to discuss lessons learned and challenges.

Mr. Taverna asked if larger EVs were becoming more available. Ms. Patneau de explained that some larger EVs are becoming more available to MWRA, adding that availability could be affected by federal policy changes. She noted that staff are awaiting the results of a no-cost electrification assessment through an Eversource program that will provide more details on the total cost of ownership and availability of EVs over the next 10 years. She

advised that heavy duty EVs are unlikely to become available to MWRA for approximately a decade; medium duty EVs could potentially become available sooner; and MWRA's requirements for vehicles with special equipment and plowing capabilities currently pose challenges to fleet electrification.

Mr. Swett suggested that MWRA work with the City of Boston to explore the collective procurement of EVs. He asked if the winding down of solar tax credits is a driver of the approach to the Deer Island wind turbine replacement project. Ms. Patneau responded in the negative. Ms. Francisco Murphy added that staff could potentially seek reimbursement through the Climate Mitigation Trust Grant. Ms. Patneau noted that the decision to install a refurbished nacelle at the Deer Island wind turbine was mainly driven by the longer (approximately 1 year) delivery time for a new one.

Mr. Swett requested an update on MWRA's progress in meeting the Commonwealth's 2030 and 2050 targets for emissions reductions. Ms. Patneau explained that MWRA has already met the 2030 goal and is on track to meet the 2050 goal a few years after deadline, when the DITP CHP project is completed. (See correction below.)¹

Hearing no further discussion or questions from the Board, Mr. Flanagan moved to Approvals. (ref. V A.2)

Approvals

Approval of Eighty-Ninth and Ninetieth Supplemental Resolutions and Award of Liquidity Agreement

A motion was duly made and seconded to approve the recommendation of the Selection Committee to award Letter of Credit Agreements in the aggregate amount not-to-exceed \$191,723,000.00 to Bank of America, N.A. and Standby Bond Purchase Agreements in the aggregate amount not-to-exceed \$141,615,000.00 to the Royal Bank of Canada, TD Bank, N.A. and U.S. Bank, N.A. as further described in the July 23, 2025 Staff Summary presented and filed with the records of this meeting;

Further, a motion was duly made and seconded to adopt the Eighty-Ninth Supplemental Resolution authorizing the issuance of up to \$184,338,000.00 of Massachusetts Water Resources Authority Multimodal Subordinated General Revenue Refunding Bonds and the supporting Issuance Resolution and further authorizing amendments to the definition of Credit Facility in the Amended and Restated General Revenue Bond Resolution; and,

Lastly, a motion was duly made and seconded to adopt the Ninetieth Supplemental Resolution authorizing the issuance of up to \$150,000,000.00 of Massachusetts Water

¹ Correction: The actual progress is as follows: MWRA has already met the 2025 goals (33% emissions reduction) and is on target to meet the 2030 goals (50% emissions reduction) a few years after deadline, when the DITP CHP project is expected to be completed.

Resources Authority Tax Exempt Commercial Paper Notes, Series 2025 and the supporting Issuance Resolution.

Matthew Horan, MWRA Deputy Finance Director/Treasurer, explained that the proposed Ninetieth Supplemental Resolution (SR), which would authorize \$150 million of new commercial paper (CP) short-term borrowing, is needed as MWRA's Capital Improvement Program (CIP) grows, and to address the variability of some Community Loans. He added that this new CP program would allow MWRA more flexibility on the timing of borrowing and increase the overall CP capacity.

Mr. Horan then discussed the Eighty-Ninth SR, which would authorize the issuance of \$184.3 million through four new series of variable rate bonds that would replace existing series and amend the definition of Credit Facility in MWRA's Bond Resolution to remove the long-term credit rating requirement for all future issuances. He explained that the existing definition has significantly limited the number of institutions eligible to provide proposals for Letters of Credit or Standby Purchase Agreements. He noted that staff had run a procurement with the amendment that resulted in higher numbers of proposals.

Finally, Mr. Horan described the procurement and allocation processes, and the benefits of the amendment, including more flexibility, increased diversification, and reduced risk.

Mr. Taverna requested examples of eligible bond revenue expenditures. Mr. Horan explained that bond funds can be used for all capital expenditures in support of construction projects, including land purchases and new assets, but not for operating costs.

Mr. Jack Walsh asked how many basis points are used for standby bond purchase agreements. Mr. Horan advised that basis points generally range from 17 to 73, depending on the duration of the facility. There was brief discussion about the benefits of diversifying the durations of facilities in MWRA's portfolio and the credit ratings of various banks.

Mr. Vitale requested the amounts of MWRA's outstanding bond debt and commercial paper, and their anticipated amounts after the proposed SRs. Mr. Horan explained that MWRA has \$4.2 billion in outstanding bond debt and \$139 million in outstanding commercial paper (\$100 million for construction and \$39 million for refunding of the 2018A bond series), and that staff expect to have \$100 million of outstanding commercial paper after the proposed transactions. He advised that staff project the Community Loan Program to reach up to \$75 million for the month of August, in which case staff would issue more short-term borrowing capacity to meet MWRA's construction needs until the next long-term borrowing.

Mr. Vitale requested staff's estimate of additional outstanding debt service from the proposed SRs. Mr. Horan explained that refunding and commercial paper should have little

effect until the commercial paper is issued and described potential interest capitalization strategies. There was discussion about MWRA's commercial paper structure, credit rating, and debt management strategy.

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		
Foti		
Pappastergion		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		

(ref. V B.1)

WASTEWATER POLICY AND OVERSIGHT

Contract Amendments/Change Orders

Deer Island Treatment Plant Clarifier Rehabilitation, Phase II: Walsh Construction Company II, LLC, Contract 7395, Change Order 2

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Change Order 2 to Contract 7395, Deer Island Treatment Clarifier Rehabilitation, Phase II, with Walsh Construction Company II, LLC to increase the contract amount by \$6,956,606.00, from \$289,595,007.12 to \$296,551,613.12 and to increase the contract term by 209 days, from November 14, 2027 to June 10, 2028.

Further, a motion was duly made and seconded to authorize the Executive Director to approve additional change orders as may be needed to Contract 7395 in an amount not-to-exceed the aggregate of \$1,000,000.00 and 180 days in accordance with the Management Policies and Procedures of the Board of Directors.

David Duest, MWRA Deer Island Treatment Plant Director, reviewed the scope of the Deer Island Clarifier Rehabilitation project, including the replacement of remaining original sludge and scum equipment; and the remediation of concrete and coating systems, channel aeration systems, primary influent and effluent gates, and secondary influent isolation gates.

Next, Richard Adams, MWRA Engineering Services Manager, presented a progress update and the reasons for proposed Change Order 2, including necessary modifications to extend existing concrete slabs that support secondary clarifier tank isolation valves in 108 locations due to a design error (contract drawings that did not correctly reflect the locations of the existing grating, therefore preventing the installation of new gate sleeves); a time extension to support this work; and a 2.4% increase to the allowance for the removal of rags (disposable wipes that should not be flushed).

Finally, Mr. Adams noted that staff have observed a significant increase in rags in the wastewater system since the start of the Covid pandemic and presented photos of the rag removal process.

(Mr. Pappastergion left the meeting during the presentation.)

In response to questions from Mr. Jack Walsh, Mr. Adams described MWRA's ongoing evaluation of ways to reduce system damage from rags, including upstream screening, and Mr. Duest explained that the clarifiers' concrete coating systems are expected to need renewal approximately every 20 years. Mr. Adams added that the new, epoxy-based coating has a longer life expectancy than the existing coating.

Mr. Taverna asked if MWRA was conducting any public outreach to minimize the rag issue. Stephen Estes-Smargiassi described ongoing outreach efforts such as website postings; information in the latest Annual Water Quality Report and a new conservation bill-stuffer; advocacy for legislation changes by groups such as MWRA's Wastewater Advisory Committee; utility-wide outreach to wipe manufacturers and consumers; and MWRA School Program demonstrations. There was general discussion about the high cost of rag removal.

Chair Tepper suggested that the press may be interested in covering the impact of rags on wastewater systems.

Mr. Peña asked why the contractor could not use the existing gate sleeve locations. Mr. Adams explained that the gates' existing locations would have required the contractor to core through the tank walls. Mr. Peña asked if isolation gates were currently installed in the tanks. Mr. Adams responded in the affirmative, noting they are being replaced. He added that the gates are being moved because their current locations require shutting down clarifier channels to perform maintenance. There was brief discussion about MWRA's investigation of the design error.

Chair Tepper asked if there was any further discussion or questions for 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>
Flanagan		
Foti		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		

(ref. VI A.1)

Deer Island Treatment Plant Clarifier Rehabilitation, Phase II Design/Engineering Services During Construction CDM Smith Inc. Contract 7394, 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 7394, Deer Island Treatment Clarifier Rehabilitation, Phase II, with CDM Smith Inc. for a not-to-exceed amount of \$1,612,000.00, from \$2,488,930.00 to \$4,100,930.00, and to increase the contract term by 18 months, from December 20, 2026 to June 20, 2028.

Mr. Duest explained that proposed Amendment 4 to a design/engineering services during construction (design/ESDC) contract with CDM Smith Inc. would support the Deer Island Treatment Plant Clarifier Rehabilitation, Phase II construction project (ref. VI A.1). He noted that this procurement was highly competitive, and its original scope stipulated that inspection would be mostly performed by in-house staff.

Next, Mr. Adams discussed some construction-related challenges that have impacted the design/ESDC contract, and necessitate a time extension, such as the complexity of the equipment; manufacturing issues and delays, including some that required redesign; a large number of submittals; and clarifier concrete and coating issues due to design error that was discussed in the previous agenda item.

Mr. Adams emphasized that staff are tracking costs related to the design error, and that no payment would be made to the design consultant for work to correct the design and construction related documents. He presented some construction photos depicting the locations of concrete supports.

Mr. Adams then noted that the scope of this proposed change order also includes specialty corrosion engineering inspection services. He explained that construction of the first four DITP primary tanks is nearly complete; however, inspections revealed the corrosion rates and physical conditions of the existing concrete within each tank varied significantly. He advised that the tanks require a more detailed inspection than anticipated to determine the method and extent of the concrete repairs needed, and this level of

inspection is beyond in-house staff's level of expertise. He presented photos of the tanks' conditions.

Finally, Mr. Adams briefly reviewed the reasons for proposed Amendment 4, and a presented a cost breakdown.

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		
Foti		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		

(ref. VI A.2)

Hayes Pump Station Rehabilitation Design and Engineering Services Hazen and Sawyer, P.C. Contract 7162, 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 7162, Hayes Pump Station Rehabilitation Design and Engineering Services During Construction, with Hazen and Sawyer P.C., increasing the contract amount by \$582,804.00, from \$2,330,751.00 to \$2,913,555.00, and extending the contract term by three months, from September 22, 2028 to December 22, 2028.

Further, a motion was duly made and seconded to authorize the Executive Director to approve additional amendments as may be needed to Contract 7162 in an amount not-to-exceed the aggregate of \$500,000.00 and 12 months in accordance with the Management Policies and Procedures of the Board of Directors.

Patricia Mallett, MWRA Senior Program Manager, presented a summary of amendments to date for a design/ESDC contract with Hazen and Sawyer, P.C. for the Hayes Pump Station Rehabilitation project and a map of the station's location. She requested Board approval for Amendment 4 to extend the design/ESDC contract by three months, at an additional cost of \$582,804. She explained that staff sought the time extension to support a longer than anticipated bid phase because of the large number of sub-bids received and a prolonged review process due to a low general bid.

Next, Ms. Mallett discussed the reasons for the requested budget increase for additional ESDC services, including a longer contract duration; increased submittals and requests for information; and the need for start-up services for the interim bypass pumping system. She added that proposed Amendment 4 also includes budget increases for tasks outside of the original scope; escalation; and a delegation of authority not-to-exceed \$500,000 over 12 months for unanticipated expenses and to keep the project moving forward. Finally, Ms. Mallett presented some early construction photos.

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		
Foti		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		

(ref. VI A.3)

WATER POLICY AND OVERSIGHT

Information

8(m) Permitting Update

Matthew Dam, MWRA Toxic Reduction and Control Director, presented an update on MWRA's 8(m) Permitting program; described the Program's scope; reviewed 8(m) permit requirements; and explained that the entities responsible for a project's work must hold the permits.

Mr. Dam then discussed recent outreach activities to promote a better understanding of the 8(m) permit requirements, such as a flyer that was distributed to all municipalities and a campaign conducted in partnership with the Advisory Board that targeted all Massachusetts communities with MWRA infrastructure, including facilities and tunnels.

Mr. Dam noted the campaign included an Advisory Board "Board Brief" that called for enhanced protocols; wider cross-community outreach; rigorous protection of essential water systems; a reconfigured permitting web page; statewide distribution of community maps showing all MWRA infrastructure within each respective municipality's boundary; a survey to gather contact information for permitting activities in each community and to determine ways for sharing information about permitting; and a presentation/questions

and answers session for the Advisory Board and community representatives. Finally, Mr. Dam presented examples of 8(m) permitted projects.

There was general discussion about the number of pending permits and the 8(m) permitting process. In response to a question from Mr. Swett, Mr. Dam discussed how outreach to municipal leaders and contractors for routine 8(m) permits and providing infrastructure maps afford opportunities for MWRA to remind applicants about the importance of reaching out to MWRA before excavation, and to call attention to existing infrastructure, such as tunnels, aqueducts and water/sewer mains. Mr. Swett suggested that MWRA work with the Boston Public Health Commission (BPHC) on geothermal well permits in Boston. Mr. Dam affirmed that BPHC is one of the signoffs for 8(m) geothermal well permit applications. There was brief discussion about potential repercussions for 8(m) permit noncompliance.

Committee Chair Taverna asked if there was any further discussion or questions from the Board. Hearing none, he moved to the next Information item. (ref. VII A.1)

Metropolitan Water Tunnel Program Look Ahead

Paul Savard, MWRA Director of Tunnel Design and Construction, presented an organizational chart of MWRA's Metropolitan Tunnel Program staff and consultant team, including the Preliminary Design Engineer that completed its work in early 2024; Geotechnical Services team, which has completed over 66 deep rock borings; and Final Design Engineer, which began work November 2024. He discussed upcoming procurements for the Construction Manager and Owner's Representative contracts.

Next, Mr. Savard presented the Tunnel Program schedule, noting that staff plan to engage the Construction Manager and Owner's Representative in March 2026 after the Final Design Engineer submits the 60% design package for the South Tunnel, and pending Board approval. He outlined the anticipated scopes of work, costs and schedules.

Mr. Savard noted that MWRA had not used Owner's Representative services for previous tunnel contracts and explained that an Owner's Representative is planned for the Metropolitan Tunnel Program as required by Massachusetts General Laws Chapter 30, §39M½. He reviewed the anticipated scope and duration of the Owner's Representative contract.

Next, Mr. Savard presented a map of the Tunnel Program's shaft site locations and discussed land acquisition activities. He reported that MWRA currently owns three shaft sites (School Street in Waltham, St. Mary Street Pumping Station in Needham, and Newton Street Pump Station,) and noted that the remaining sites will require land acquisition from the Massachusetts Department of Transportation (MassDOT), the Department of Conservation and Recreation (DCR), City of Waltham, and Town of Wellesley.

He explained that the five properties to be acquired from MassDOT include all three of the tunnel boring machine launching shaft sites, one receiving shaft site, and one large connection shaft site, and described their locations in Weston and Needham.

Mr. Savard also discussed two properties for acquisition from DCR for a South Tunnel receiving shaft site in Mattapan and connection shaft site in Jamaica Plain. He advised that disposition of land for the Jamaica Plain site will require Article 97 legislation to meet the obligations of the Open Space Act, including the identification of replacement land, and that MWRA is working with DCR to identify an appropriate parcel.

He then updated the Board on the progress of acquiring land for a South Tunnel connection shaft site in Wellesley that will also require Article 97 legislation with Open Space obligations; and, for a North Tunnel receiving shaft site and connection site in Waltham. He noted that staff are working with municipal representatives on these acquisitions.

Finally, Mr. Savard discussed the acquisition of a series of subterranean sites along the tunnel alignment under approximately 600 individual properties, pending the determination of the tunnel alignments' final locations, which are expected with the 60% design submittal in early 2026.

Mr. Peña asked how many tunnel boring machines (TBMs) will be used for the Tunnel Program, and the timeline for building and delivering them. Mr. Savard explained that the tunnel will be built in three segments; three TBMs could potentially be in simultaneous operation at some point during construction; and TBM fabrication typically takes 12-18 months. There was brief discussion about TBM delivery and onsite assembly. There was also discussion about the responsibilities of the Owner's Representative, including independent monitoring and review of the Tunnel Program, and filing annual reports with the Inspector General's office.

Mr. Taverna asked how many rock core samples were expected to be obtained. Mr. Savard explained that approximately 30% of the samples have yet to be completed; work is ongoing; and large volumes of data have been collected. Citing the emergency response for a recent tunnel collapse in Los Angeles, Mr. Taverna requested information about MWRA's emergency response plan for the Tunnel Program. Mr. Savard explained that staff and local officials are developing emergency response plans, and the tunnel contractor will be required to have OSHA teams on site. There was general discussion about the Los Angeles tunnel project and the Metropolitan Water Tunnel Program.

Committee Chair Taverna asked if there was any further discussion or questions from the Board. Hearing none, he moved to Approvals. (ref. VII A.2)

ApprovalsApproval for Admission of Lynnfield Center Water District to the MWRA Water System, Waiver of Entrance Fee and Authorization to Execute a Water Supply Agreement

Mr. Taverna announced that this agenda item was postponed. (ref. VII B.1)

Contract AwardsTechnical Assistance Consulting Services for the John J. Carroll Water Treatment Plant: Hazen and Sawyer, P.C., Contract 8130, CDM Smith, Inc., Contract 8131

A motion was duly made and seconded to approve the recommendation of the Consultant Selection Committee to award two separate contracts to provide Technical Assistance Consulting Services for the John J. Carroll Water Treatment Plant, and to authorize the Executive Director, on behalf of the Authority, to execute Contract 8130 with Hazen and Sawyer, P.C. and Contract 8131 with CDM Smith, Inc., each in an amount not-to-exceed \$2,000,000.00, with a contract term of 24 months from the Notice to Proceed.

Ms. Mallett requested Board approval of two separate technical assistance consulting services contracts for the Carroll Water Treatment Plant with Hazen and Sawyer, P.C. and CDM Smith, Inc. She presented a summary of the contracts' costs and the project selection committee's points and rankings for the four proposals received.

Mr. Taverna asked if staff had interviewed the two selected firms. Ms. Mallett responded in the negative and explained that both firms hold contracts with MWRA. Mr. Jack Walsh asked how many staff served on the selection committee. Ms. Mallett explained that there were five members. There was brief discussion about the points and rankings.

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		
Foti		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		

(ref. VIII C.1)

Contract Amendments/Change OrdersSection 101 Pipeline Extension (Waltham): Baltazar Contractors, Inc., Contract 7457, Change Order 14

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Change Order 14 to Contract 7457, Section 101 Pipeline Extension, with Baltazar Contractors, Inc., for a not-to-exceed amount of \$540,000.00, increasing the contract amount from \$36,717,495.15 to \$37,257,495.15, 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 7457 in an amount not-to-exceed the aggregate of \$500,000.00 and 180 days in accordance with the Management Policies and Procedures of the Board of Directors.

Martin McGowan, MWRA Director of Construction, discussed a proposed change order 14 to the Section 101 Pipeline Extension Contract (Waltham) with Baltazar Contractors, Inc., for final pavement restoration on Lexington Street and to address an unforeseen utility conflict: a City drain crossing the MWRA water main near the Lexington Town line. He presented a photo of the conflict.

Mr. McGowan explained that staff had worked closely with the City's engineers to evaluate options to revise the drain crossing and maintain the drain's capacity; the final design included a dual ductile line and additional structures. He presented photos of extended excavation and pavement disturbance due to the location of the crossing. He advised that the road's condition requires full-width mill and overlay, rather than trench restoration, and noted that the City has agreed to reimburse MWRA for the cost to repave portions of the road that were undisturbed by the construction contract.

Mr. McGowan presented a drawing of the contract's paving requirements and reiterated that the City of Waltham has agreed to reimburse MWRA for \$160,000 of the total change order amount. Finally, he reported that the pipeline's construction and pressure testing are complete; disinfection is underway; and activation is anticipated this summer.

In response to a question from Mr. Taverna, Mr. McGowan affirmed that construction and pressure-testing are complete, and that final paving is expected to take place in early fall, pending water quality test results. Mr. Laskey discussed the complexity of this project.

Hearing no further 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		

Yes No Abstain

Foti

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

(ref. VIII C.1)

PERSONNEL AND COMPENSATION

Approvals

July 2025 PCR Amendments

A motion was duly made and seconded to approve an amendment to the Position Control Register (PCR) as presented in the June 18, 2025 Staff Summary and filed with the records of this meeting.

Wendy Chu, MWRA Human Resources Director, invited Board members' questions on the June 2025 Position Control Register (PCR) amendments, which included the creation of two positions and two salary adjustments.

There was brief discussion with questions and answers about one of the two proposed salary adjustments.

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

Yes No Abstain

Tepper

Flanagan

Foti

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

(ref. VIII A.1)

Appointment of Manager, Maintenance, Deer Island Operations Division

A motion was duly made and seconded to approve the appointment of Mr. Mark Lavino to the position of Manager, Maintenance, Deer Island (Non-Union, Grade 14) at the recommended salary of \$168,000 commencing on a date to be determined by the

Executive Director.

Ms. Chu referred Board Members to the Staff Summary for details about the recommended candidate's qualifications and noted that he is a long-term MWRA employee.

Mr. Laskey briefly discussed the candidate's work background.

Hearing no further 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		
Foti		
Peña		
Swett		
Taverna		
Vitale		
J. Walsh		
P. Walsh		

(ref. VIII A.2)

CORRESPONDENCE TO THE BOARD

Chair Tepper announced that the Board of Directors received correspondence from the Town of Oakham's Planning Board Chairman Phillip Warbasse, regarding the effect of battery storage fire on the MWRA Quabbin water system, and from Michael Horvitz of Brookline regarding a proposed battery storage facility near the Ware River.

Chair Tepper noted that Mr. Laskey had discussed the battery storage facility in his report (ref. III). There was brief discussion about the location of the proposed facility.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she moved to Other Business. (ref. IX A and B)

OTHER BUSINESS

There was no Other Business. (ref. X)

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		

Yes No Abstain

Foti

Peña

Swett

Taverna

Vitale

J. Walsh

P. Walsh

(ref. XI)

The meeting adjourned at 3:05pm.

Approved: September 17, 2025

Attest:

Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- Draft Minutes of the May 21, 2025 MWRA Board of Directors' Meeting (ref. I)
- July 23, 2025 Staff Summary – Delegated Authority Report – June 2025 (ref. V A.1)
- July 23, 2025 Staff Summary and Presentation – MWRA Energy and Sustainability Program Overview (ref. V A.2)
- July 23, 2025 Staff Summary – Approval of Eighty-Ninth and Ninetieth Supplemental Resolutions and Award of Liquidity Agreements (ref. V B.1)
- July 23, 2025 Staff Summary and Presentation – Deer Island Treatment Plant Clarifier Rehabilitation, Phase II Walsh Construction Company II, LLC Contract 7395, Change Order 2 (rev. VI A.1)
- July 23, 2025 Staff Summary and Presentation – Deer Island Treatment Plant Clarifier Rehabilitation, Phase II Design/Engineering Services During Construction CDM Smith Inc. Contract 7394, Amendment 4 (ref. VI A.2)
- July 23, 2025 Staff Summary and Presentation – Hayes Pump Station Rehabilitation Design and Engineering Services Hazen and Sawyer, P.C. Contract 7162, Amendment 4 (ref. VI A.3)
- July 23, 2025 Staff Summary and Presentation – 8(m) Permitting Update (ref. VII A.1)
- July 23, 2025 Staff Summary and Presentation– Metropolitan Water Tunnel Program Look Ahead (ref. VII A.2)
- July 23, 2025 Staff Summary and Presentation – Technical Assistance Consulting Services for the John J. Carroll Water Treatment Plant Hazen and Sawyer, P.C.,

Contract 8130 CDM Smith, Inc., Contract 8131 (ref. VII C.1)

- July 23, 2025 Staff Summary and Presentation – Section 101 Pipeline Extension (Waltham) Baltazar Contractors, Inc. Contract 7457, Change Order 14 (ref. VII D.1)
- June 18, 2025 Staff Summary – July 2025 PCR Amendments (ref. VIII A.1)
- June 18, 2025 Staff Summary – Appointment of Manager, Maintenance, Deer Island Operations Division (ref. VIII A.2)
- July 11, 2025 correspondence from Phillip Warbasse, Chairman, Town of Oakham Planning Board regarding Effect of Battery Storage (BESS) Fire on MWRA Quabbin Water System (ref. IX.A)
- July 11, 2025 correspondence from Michael Horvitz of Brookline, MA regarding Proposed battery storage facility near Ware River (ref IX.B)

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Board of Directors

August 20, 2025

A meeting of the Massachusetts Water Resources Authority (“MWRA”) Board of Directors was held on August 20, 2025 via remote participation.

Chair Tepper presided. Board Members Foti, Pappastergion, Peña, Taverna, Vitale, Patrick Walsh and Wolowicz also participated. Board Members Flanagan, Swett and Jack Walsh were absent.

MWRA Executive Director Frederick Laskey was in attendance. General Counsel Carolyn Francisco Murphy; Chief Operating Officer Kathleen Murtagh; Deputy Chief Operating Officers Stephen Cullen and Rebecca Weidman; Director of Finance Thomas Durkin; Director of Environmental and Regulatory Affairs Colleen Rizzi; Associate General Counsel Michael Altieri; Public Affairs Director Sean Navin; Deputy Finance Director/Treasurer Matthew Horan; Procurement Director Douglas Rice; Human Resources Director Wendy Chu; Chief of Staff Katherine Ronan; Associate General Counsel Angela Atchue; and, Assistant Secretary Kristin MacDougall were among the MWRA staff members who were also in attendance.

Representative Bradley Jones; Lynnfield Center Water District (LWCD) Commissioners Jack Dahlstedt and Anders Youngren; LCWD Working Superintendent Nick Couris; LCWD and Lynnfield DPW Director John Scenna; Anne Malenfant, Camp, Dresser & McKee; Vandana Rao, EEA; and Matt Romero, MWRA Advisory Board (Advisory Board) were also among the meeting participants.

Chair Tepper called the meeting to order at 1:00pm.

ROLL CALL

MWRA General Counsel Francisco Murphy took roll call of Board members in attendance and announced that they were participating remotely.

Chair Tepper announced that the meeting was being recorded and that the agenda and meeting materials were available on MWRA’s website.

INTRODUCTION

MWRA Executive Director Fred Laskey welcomed and introduced LWCD and Lynnfield staff in attendance and invited LCWD and Lynnfield DPW Director John Scenna to offer remarks.

Mr. Scenna thanked the Board of Directors and MWRA staff for the proposed opportunity to join the MWRA water system. He described how the Town of Lynnfield and its residents would benefit if admission were approved by the Board and introduced some Town staff in

attendance.

Next, Mr. Laskey advised the Board on the dates for the annual MWRA Advisory Board tour (August 21, 2025) and the Quinapoxet River Restoration Celebration (September 10, 2025).

Mr. Laskey then acknowledged the efforts of Representative Bradley H. Jones, Jr. and Senator Brendon P. Crighton with respect to LWCD water system admission. Finally, he thanked EEA and MWRA staff for their work on the project and requested Board approval.

(Mr. Vitale joined the meeting during the Introduction.)

WATER POLICY AND OVERSIGHT

Approvals

Approval for Admission of Lynnfield Center Water District to the MWRA Water System, Waiver of Entrance Fee, and Authorization to Execute a Water Supply Agreement

A motion was duly made and seconded to approve Lynnfield Center Water District's application to become a member of the MWRA waterworks system with a purchase of up to 102 million gallons annually via an interconnection with the Town of Wakefield water system.

Further, a motion was duly made and seconded to waive the entrance fee for the volume of water for said purchase due to water quantity and water quality issues.

Lastly, a motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to execute a water supply agreement with Lynnfield Center Water District, substantially in the form shown in Attachment E of the August 20, 2025 Staff Summary presented and filed with the records of this meeting, stipulating the terms and conditions of service.

Colleen Rizzi, MWRA Director of Environmental and Regulatory Affairs, presented background information on LWCD's application for admission to the MWRA water system via a Wakefield interconnection, including the District's service area; existing water system and groundwater supplies; and water supply challenges, such as inadequate supply during the summer, lack of redundancy, and elevated manganese, PFAS and nitrate levels. She noted that LWCD has requested an Entrance Fee waiver.

Ms. Rizzi then outlined some terms of the proposed LCWD connection for MWRA water purchase, including the Massachusetts Water Resources Commission's (WRC) interbasin transfer limits; LCWD's requested average and maximum daily flows, and emergency water supply request requirements. She explained that the proposed connection would provide a daily, supplemental water supply.

Next, Ms. Rizzi presented maps of the planned project area, service area, and location. She explained that LWCD meets MWRA's Entrance Fee waiver criteria for water quality and

public health concerns and described the District's existing water system and new treatment facilities in construction. She noted that LWCD also meets the Entrance Fee waiver criteria for stressed basins because a large portion of the District's existing water supply is sourced from the Ipswich River basin.

Finally, Ms. Rizzi explained that all required regulatory and legislative approvals for the proposed new connection have been met, noted that the MWRA Board of Directors' approval would be the last step, and requested Board approval.

Mr. Taverna asked for more information about the LWCD's water conservation plan and how it would be implemented. Ms. Rizzi explained that LWCD's bylaws include water conservation measures, including a set of escalating restrictions triggered by drought levels. Mr. Taverna asked if these measures would continue if the MWRA connection were approved. Ms. Rizzi advised that the WRC requires compliance with water conservation requirements and the Drought Management Plan, and that water restrictions would continue if the Board approves the LWCD connection.

Mr. Taverna asked which entity would call for and enforce LWCD water restrictions. John Scenna, LCWD and Lynnfield DPW Director explained that he and staff recommend restrictions to the LWCD Board based on data, including for Ipswich River stream flow, storage tank volumes, and the ability to maintain system pressure.

Mr. Pappastergion requested the status of the interconnection's construction. Ms. Rizzi explained the construction and inspections are complete. In response to a question from Mr. Taverna, Ms. Rizzi explained that metering must be in place before the connection is activated.

Mr. Laskey introduced Representative Bradley Jones, who was in attendance, and thanked him for his work on the required legislation for the LWCD connection.

Mr. Peña asked if the motion for this agenda item would satisfy the findings requirements. MWRA Associate General Counsel Michael Altieri responded in the affirmative and noted that the findings are outlined within the body of the Staff Summary.

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		
Foti		
Pappastergion		
Peña		
Taverna		

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Vitale		
P. Walsh		
Wolowicz		

(ref. I A.1)

OTHER BUSINESS

There was no Other Business.

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		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
P. Walsh		
Wolowicz		

(ref. II)

The meeting adjourned at 1:18 pm.

Approved: September 17, 2025

Attest:

Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- August 20, 2025 Staff Summary and Presentation – Approval for Admission of Lynnfield Center Water District to the MWRA Water System, Waiver of Entrance Fee, and Authorization to Execute a Water Supply Agreement (ref. I A.1)

STAFF SUMMARY




TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: Progress on Development of Updated Combined Sewer Overflow Control Plan

COMMITTEE: Wastewater Policy & Oversight

X INFORMATION
 VOTE

Brian L. Kubaska, P.E., Chief Engineer
Colleen Rizzi, P.E., Director, Env. & Reg. Affairs
Rebecca Weidman, Deputy Chief Operating Officer
Preparer/Title


Kathleen M. Murtagh, P.E.
Chief Operating Officer

RECOMMENDATION:

For information only.

DISCUSSION:

This staff summary is a continuation of the informational staff summary provided to the Board on February 12, 2025.



Over the last 35 years substantial progress has been made toward reducing Combined Sewer Overflow (CSO) discharges within the Metropolitan Boston area. In 1997 the Massachusetts Surface Water Quality Standards were modified to allow limited CSO discharges at MWRA and community outfalls in several receiving waters. However, the Alewife Brook/Upper Mystic River Basin and the Lower Charles River/Charles Basin were not among those receiving waters that were subject to these changes. The Class B water quality classification for the Alewife Brook/Upper Mystic River Basin and the Lower Charles River/Charles Basin, where MWRA and the Cities of Cambridge and

Somerville each have CSOs, effectively does not permit any CSO discharge to the receiving waters.¹

Historically, the Massachusetts Department of Environmental Protection (MassDEP) began issuing in 1998 Water Quality Standards Variances, which authorize limited CSO discharges from the MWRA, Cambridge and Somerville CSO outfalls in these water bodies. The most recent Variances, issued on August 30, 2024, have multiple requirements, including:

- development of Updated CSO Control Plans;
- consideration of climate change when evaluating control alternatives; and
- an extensive public outreach program during planning efforts.

As noted above, MWRA, Cambridge, and Somerville are each required to submit a Draft Updated CSO Control Plan for their respective outfalls (or a joint plan) to MassDEP and the U.S. Environmental Protection Agency (EPA) by December 31, 2025. Plans are required to include evaluation of CSO control alternatives *up to and including full elimination*. In addition to providing a recommended CSO Control Plan, the draft Plan will include an affordability analysis in accordance with EPA’s February 2023 Clean Water Act Financial Capability Assessment Guidance, as well as documentation necessary to support further issuance of Water Quality Standards Variances if full elimination is recommended (further Variances would be required until full elimination is achieved); or, if full elimination is not recommended, documentation to support reclassification of the receiving waters from Class B to Class B (CSO), permitting limited CSO discharges. At this time, it is unclear what level of CSO control would be considered elimination by MassDEP and EPA.

Alternatives Development and Level of CSO Control

MWRA, Cambridge, and Somerville, with input from Boston Water and Sewer Commission (BWSC), have been developing and evaluating alternatives for CSO control for the Alewife Brook/Upper Mystic River Basin and the Lower Charles River/Charles Basin. Four levels of CSO control for the future 2050 planning year are being evaluated: (i) significantly reducing CSO discharges in the waterbody from those predicted to occur in a 2050 Typical Year (“Breakpoint”); (ii) zero CSO discharges in a 2050 Typical Year (“2050 Typical Year”); (iii) zero CSO discharges in a 2050 5-year, 24-hour design storm (“2050 5-year”); and (iv) zero CSOs in a 2050 25-year, 24-hour design storm (“2050 25-year”).

For Breakpoint and 2050 Typical Year levels of control, alternatives included various combinations of projects (localized storage tanks, micro tunnels, sewer separation, etc.) to address CSO discharges at individual CSO outfalls or smaller groupings of CSO outfalls. For 2050 Typical Year level of control, alternatives also included regional tunnel solutions and full sewer separation of combined areas tributary to the variance water CSO outfalls.

Attachments A, B, and C summarize the various alternatives under consideration for the four levels of control for each of the three Variance water bodies. To provide a 2050 five-year or 2050 25-year level of control, large storage tanks (sometimes in combination with sewer separation) are being evaluated to control CSO discharges from the one remaining CSO outfall to the Upper

¹At the Alewife Brook/Upper Mystic River Basin, MWRA has one outfall, Cambridge has four outfalls, Somerville has one outfall and one outfall is shared by Somerville and MWRA. At the Lower Charles River/Charles Basin, MWRA has six outfalls and Cambridge has three outfalls.

Mystic River, and regional tunnels that would collect all the CSO discharges to the associated water body are being evaluated for the Alewife Brook and Charles River.² As detailed in the Attachments, the four levels of control bracket a large range of project type, cost, construction durations and impacts, with limited variation in annual water quality benefits.

Alternative Evaluation and Scoring Process

Staff from MWRA, Cambridge, and Somerville have been collaborating on a means of comparing/contrasting and evaluating the various alternatives for the three waterbodies at each individual level of control. A scoring rubric was developed to assign comparative values to the following criteria.

- Water Quality Impact: Improve/Reduce Phosphorus Loads
- Schedule: Minimize Timeline to CSO Reduction Benefits
- Impact on Public Uses during Construction
- Neighborhood Impacts during Construction
- Construction Complexity/Risk due to Depth of Excavations
- Overall Construction Complexity
- Operation & Maintenance/Safety Consideration
- Resiliency and Adaptability
- Opportunity to Upgrade Existing Infrastructure
- Flooding: Reduce Sewer/Stormwater Flooding Risk
- Community Co-benefits
- Permanent Impacts to Public Uses
- Impact to Non-Variance CSOs

Other considerations that are important in assessing the viability of a project include permitting uncertainties and land acquisition risks. For example, the ability to acquire Article 97 legislation to use public parklands cannot be determined at this time, but should be considered as a risk of being able to effectively advance a project. Further, examples of permitting uncertainties include compliance with existing NPDES MS4 requirements and Total Maximum Daily Loads (TMDLs) for phosphorus (i.e., increase in pollutant loads from stormwater discharges), compliance with Chapter 91 (i.e., permanent or temporary changes to existing shorelines or waterways), and construction permitting (i.e., transportation of equipment and construction materials or debris, and occupation of public right of ways, etc.). In many cases, project components of an alternative require physical space for permanent above grade assets. Where this involves acquiring private property, other parcels of land, or easements from others, land acquisition also introduces uncertainties.

Planning-level opinions of probable capital cost have been developed for each alternative for comparative purposes. For many CSO control alternatives, preliminary capital costs were based on general unit costs derived from similar projects. For large tunnels and alternatives requiring known unique features, preliminary capital costs were based on more project-specific features. Preliminary capital costs are current day estimates, without escalation to the mid-point of construction. The planning-level estimates include preliminary construction costs plus 25%

² Local storage to collect CSOs well within BWSC's system is also required to prevent CSO discharges to the Lower Charles Basin through outfall MWR023.

contingency and 37% for “soft costs” (e.g., design, construction administration, resident engineering, general permitting, etc.). The project team continues to refine these estimates. Costs to operate and maintain the new assets constructed as part of the alternatives are not included in the costs presented herein. Capital cost estimates at this alternatives level are included in Attachments A, B & C and are presented as a range until further cost estimating is completed. Planning level capital cost estimates for the alternatives included in Attachments A, B, and C, range from approximately \$0.4 to \$5.6 Billion.

Updated Water Quality Analysis

MWRA’s consultant, AECOM, has updated receiving water quality modeling utilized under the prior CSO Performance Assessment to reflect the impact of larger, more intense storms projected in the 2050 Typical Year rainfall. Results have been prepared using the more stringent Massachusetts Department of Public Health water quality standards for swimming beaches that look at single sample maximums as well as the recently-adopted MassDEP methodology, which averages samples over 30 days. Although the 2050 Typical Year rainfall results in additional CSO volumes to the three variance waters, the impact of CSO on the total duration of water quality exceedance when considering E. coli bacteria remains to be the equivalent of only approximately two days per year for the Charles River, four days per year for the Alewife Brook, and 15 days per year for the Upper Mystic River. However, the impact of other sources (stormwater, upstream boundary conditions) continues to be the primary cause of water quality standard exceedances during most of the 2050 planning year, with water quality exceedance when considering non-CSO sources predicted to be the equivalent of 226 days per year for the Charles River, 234 days per year for the Alewife Brook, and 201 days per year for the Upper Mystic River. When applying the recently-adopted MassDEP methodology for compliance with water quality standards (average samples over 30 days), CSO discharges are not shown to contribute to water quality standards exceedances as the impact of the CSO discharges are typically short duration.

Cost Allocation

MWRA, Cambridge and Somerville each own permitted CSO outfalls to the Variance waters. As such, each entity is responsible for preparing and implementing an Updated CSO Control Plan for their permitted CSO outfalls. Staff for the three entities have been working on developing a fair and equitable method of distributing the cost of implementing further CSO control work. Several meetings have been held to date, with further meetings in the coming weeks, to advance method(s) to allocate costs. Various means of allocating costs are being evaluated, including distributing cost by CSO ownership, project type and location, and share of CSO volume reduction. The aim is to have a proposed method on cost allocation for each recommended alternative that will be presented to the MWRA’s Board of Directors as well as the city councils of Cambridge and Somerville.

Stakeholder Engagement

MWRA, Cambridge and Somerville have met regularly with MassDEP and EPA, and have also met with the watershed associations, during the planning process. The most recent meeting was held with the watershed associations on September 4th to review and receive feedback on much of the information summarized in this staff summary. The major takeaways from the watershed associations included: (i) their belief that the acute impact of CSO discharges when they occur and their impact to public health are not being appropriately portrayed in the Water Quality Analysis performed; (ii) their dissatisfaction in the time it is taking to develop and implement further CSO

control plans; (iii) their desire to see more investment in green infrastructure; and (iv) their concern that the level of control that may be chosen will not meet their expectations for elimination.

In addition, four recent public meetings, held virtually on Zoom, have nearly all exceeded 200 participants. These meetings are aimed at advancing an understanding of what CSO discharges are, why they occur, and what has been done already to reduce their frequency and volumes. Additional topics included reviewing potential tools to help reduce or eliminate CSO discharges, providing an overview of the planning process, and sharing potential control alternatives under consideration and the range of potential costs with an explanation of regulatory guidelines used to evaluate affordability. These public meetings have provided valuable public feedback along the way and have been a means of responding to over 450 questions during the two-to-three-hour meetings. The fifth meeting is scheduled for the evening of September 25, to present the array of control levels and alternatives under evaluation and the expected CSO control impacts to water quality and to review next steps before a Draft Plan is submitted by December 31, 2025. All of the public presentations have been recorded and may be found on the joint project website at: <https://voice.somervillema.gov/joint-cso-planning>.

Next Steps

To ensure that MWRA's Advisory Board is well informed on alternatives under consideration and the potential cost to MWRA and its ratepayers, staff will also make a presentation(s) to the Advisory Board during an upcoming meeting(s). After considering comments from this Board, the Advisory Board, those obtained from Somerville and Cambridge's respective city council meetings, as well as those received at the public meetings, MWRA, Cambridge and Somerville will complete the scoring of alternatives and alternative selection process. Staff plan to make a recommendation to this Board for each of the three variance waters at the October 22, 2025, Board of Directors' meeting.

MWRA, Cambridge, and Somerville are working toward submitting a single Draft Updated CSO Control Plan document to MassDEP and EPA in December 2025. The Draft Plan will include a review of regulatory drivers for CSO control and a summary of past and current CSO control efforts, documentation of the planning process including outreach and engagement efforts, a complete summary of all the tools and alternatives considered for further CSO control, with additional information on those that warranted further consideration, and documentation on scoring and other factors leading to a recommended Updated CSO Control Plan for each of the three variance waters. If the recommended Plan does not achieve what staff believe would be considered CSO elimination, the report will also provide data to support a future change in water quality standards to authorize limited CSO discharges.

The Draft Updated CSO Control Plan submittal will be followed by a public meeting and hearing on the Draft Plan within a five-month DEP/EPA and Public Review Period. Staff envision robust public involvement following submittal of the Draft Plan. Further adjustment to the Draft Plan will likely be made, prior to submitting the Final Updated CSO Control Plan in January 2027 for MEPA review. Staff will provide regular updates to the Board throughout this process, and will present the recommended final plan for each of the three variance waters at future Board of Directors' meetings.

BUDGET/FISCAL IMPACTS:

The FY26 CIP includes \$5,000,000 (as a placeholder) for future CSO Updated Control Plan Design. Once a plan is recommended to and approved by the BOD, additional projects will be added to the CIP.

ATTACHMENTS:

- Attachment A: Alternatives for CSO Control to Alewife Brook
- Attachment B: Alternatives for CSO Control to Upper Mystic River
- Attachment C: Alternatives for CSO Control to Charles River



Alewife Brook – Breakpoint Typical Year Alternatives

Control Level	Alternative Name	Combined Sewer Overflow Outfalls						Estimated Duration ¹ (years)	Preliminary Estimated Cost ² (Millions)
		CAM001	CAM002	CAM401A	CAM401B	MWR003	SOM001A		
Limited CSOs in 2050 TY	AB - Hybrid 1	8 acres sewer separation	No action	Conveyance + Storage Tank 0.6 MG	Storage Tank 0.4 MG	Storage Tank 1 MG (200'x70'x15')	100 acres sewer separation with wetland in Davis Square	20	\$260-\$430
		0 act/0 MG remaining	0 act/0 MG remaining	0 act/0 MG remaining	0 act/0 MG remaining	1 act/0.5 MG remaining	12 act/5.91 MG remaining		
Limited CSOs in 2050 TY	AB - Hybrid 2	Same as above	Same as above	Same as above	Same as above	Same as above	Microtunnel 0.9 MG (2,300 LF, 8.5 ft. dia.) 3 act/3 MG remaining	10-20	\$130-\$220

Notes:

1. Estimated duration is the approximate time period for construction and timeline to full CSO reduction benefit for each alternative. Some alternatives include the potential for earlier partial benefits
2. Preliminary estimated cost is a planning level capital cost estimate that is not escalated to mid point of construction. Land acquisition and extensive permitting costs are not included.

Legend:

TY = Typical Year
 # act = number of activations annually in 2050 TY
 # MG = total discharge volume in million gallons
 GSI = Green Stormwater Infrastructure



Alewife Brook 2050 Typical Year (TY) Alternatives

Control Level	Alternative Name	Combined Sewer Overflow Outfalls						Estimated Duration ¹ (years)	Preliminary Estimated Cost ² (Millions)
		CAM001	CAM002	CAM401A	CAM401B	MWR003	SOM001A		
0 CSOs 2050 TY	AB - Integrated Alternative	No action	No action	Storage Tank 2.1 MG	Storage Tank 0.4 MG	Storage Tank 0.5 MG (160' x 50' x 15' sidewater depth)	264 acres sewer separation inline storage with throttles	31	\$710 - \$1,180
0 CSOs 2050 TY	AB - Hybrid Alternative 1	8 acres sewer separation	No action	Conveyance + Storage Tank 1.5 MG	Included w/ SOM001A project	Storage Tank 1.4 MG (225' x 85' x 15' sidewater depth)	100 acres sewer separation with wetland in Davis Square) Microtunnel 1.3 MG (2,900 LF, 9 ft dia.) to store CAM401B and SOM001A	20	\$350 - \$580
0 CSOs 2050 TY	AB - Hybrid Alternative 2	Same as above	No action	Same as above	Included w/ SOM001A project	Storage Tank 1.5 MG (230' x 90' x 15' sidewater depth)	Microtunnel 2.3 MG (5,400 ft. and 9 ft. dia.) to store CAM401B and SOM001A	15	\$200 - \$340
0 CSOs 2050 TY	AB - Tunnel Alternative	Tunnel 4.9 MG (7,600 LF, 11 ft. dia.) with dewatering pump station (aboveground), odor control Conduit (4,500 ft., 6 ft. dia.) to convey CAM401A overflow to drop shaft at MWR003						15 - 20	\$440 - \$740
0 CSOs 2050 TY	AB - Tunnel Alternative + GSI	Same as Tunnel Alternative + GSI						20	\$460 - \$770
0 CSOs 2050 TY (minimum)	Sewer Separation	560 acres (SOM) + 438 acres (CAM) + Treatment + Flow Attenuation						>50	\$1,140 - \$1,900



Alewife Brook 2050 5-Year and 25-Year Alternatives

Control Level	Alternative Name	Combined Sewer Overflow Outfalls						Estimated Duration ¹ (years)	Preliminary Estimated Cost ² (Millions)
		CAM001	CAM002	CAM401A	CAM401B	MWR003	SOM001A		
0 CSOs in 5-Yr	AB - 5YR Storage Tunnel	Tunnel 20.6 MG (7,600 LF, 22 ft dia.) with dewatering pump station (aboveground), odor control						12-15	\$740 - \$1,230
	AB - 5YR Storage Tunnel + GSI	Tunnel 20.3 MG (7,600 LF, 22 ft dia.) with dewatering pump station (aboveground), odor control						12-15	\$760 - \$1,270
0 CSOs in 25-Yr	AB - 25YR Storage Tunnel	Tunnel 41.6 MG (7,600 LF, 32 ft dia.) with dewatering pump station (aboveground), odor control						12-15	\$1,220 - \$2,040
	AB - 25YR Storage Tunnel + GSI	Tunnel 41.0 MG (7,600 LF, 32 ft dia.) with dewatering pump station (aboveground), odor control						12-15	\$1,250 - \$2,080



Upper Mystic River - Breakpoint Typical Year Alternatives

Control Level	Alternative Name	Combined Sewer Overflow Outfalls SOM007A / MWR205A	Estimated Duration ¹ (years)	Preliminary Estimated Cost ² (Millions)
Limited CSOs in 2050 TY	MR - Hybrid 1	95 acres of sewer separation Storage Tank 2.7 MG (205' x 60' x 40') 2 act/6.77 MG remaining (treated discharge)	5-10	\$150 - \$250
Limited CSOs in 2050 TY	MR - Hybrid 2	Storage Tank 5 MG (205' x 100' x 40') 2 act/8.23 MG remaining (treated discharge)	5	\$70 - \$110

Notes:

1. Estimated duration is the approximate time period for construction and timeline to full CSO reduction benefit for each alternative. Some alternatives include the potential for earlier partial benefits.
2. Preliminary estimated cost is a planning level capital cost estimate that is not escalated to mid point of construction. Land acquisition and extensive permitting costs are not included.

Legend:

- TY = Typical Year
- # act = number of activations annually in 2050 TY
- # MG = total discharge volume in million gallons
- GSI = Green Stormwater Infrastructure



Upper Mystic River 2050 Typical Year (TY) Alternatives

Control Level			Estimated Duration ¹ (years)	Preliminary Estimated Cost ² (Millions)
	Alternative Name	Combined Sewer Overflow Outfalls SOM007A / MWR205A		
0 CSOs 2050 TY	MR - Integrated Alternative	366 acres of sewer separation Storage Tank 4.0 MG (205' x 82' x 40')	20	\$400 - \$670
0 CSOs 2050 TY	MR - Hybrid Alternative	95 acres of sewer separation Storage Tank 7.4 MG (205' x 120' x 50')	5 - 7	\$190 - \$310
0 CSOs 2050 TY	MR - Storage Alternative	Storage Tank 10.5 MG (205' x 165' x 50')	5 - 7	\$120 - \$190
0 CSOs 2050 TY	MR - Storage Alternative + GSI	Storage Tank 9.4 MG (205' x 150 x 50') + GSI	5 - 7	\$120 - \$200



Upper Mystic River 2050 5-Year and 25-Year Alternatives

Control Level			Estimated Duration ¹ (years)	Preliminary Estimated Cost ² (Millions)
	Alternative Name	Combined Sewer Overflow Outfalls SOM007A / MWR205A		
0 CSOs in 5-Yr	MR - 5YR Storage Tank	Storage Tank 10.5 MG Storage Tank (205' x 165' x 50') (will control the 2050TY and 5 Yr mid tide volume)	5-10	\$110 - \$190
	MR - 5YR Storage Tank + GSI	Storage Tank 9.4 MG (205' x 150' x 50') + GSI	5-7	\$120 - \$200
	MR - 5YR Hybrid	95 acres of sewer separation Storage Tank 7.4 MG (205' x 120' x 50') (will control the 2050TY and 5 yr mid tide volume)	5-7	\$200 - \$330
0 CSOs in 25-Yr	MR - 25YR Storage Tank	Storage Tank 16.7 MG (205' x 260' x 50') (mid tide)	5-10	\$150 - \$250
	MR - 25YR Storage Tank + GSI	Storage Tank 15 MG (205' x 235' x 50') (mid tide) + GSI	5-10	\$150 - \$260
	MR - 25YR Hybrid	95 acres of sewer separation Storage Tank 14.2 MG (205' x 225' x 50') (mid tide)	5-10	\$240 - \$400



Charles River - Breakpoint Typical Year Alternatives

Control Level	Alternative Name	Combined Sewer Overflow Outfalls						Estimated Duration ¹ (years)	Preliminary Estimated Cost ² (Millions)
		CAM005	CAM017	MWR018-020	MWR023	MWR010	MWR201		
Limited CSOs in 2050 TY	CR – Hybrid Alternative 1	2.5 MG SW storage tank 0 act/0 MG remaining	80 acres separation 0 act/0 MG remaining	188 acres of partial sewer separation 2 act/0.88 – 0.94 MG remaining	0.06 MG Storage Box Conduits 2 act/0.11 MG remaining	No Action 0 act/0 MG remaining	No Action 4 act/26.81 MG remaining (treated discharge)	25	\$220 - \$360
Limited CSOs in 2050 TY	CR – Hybrid Alternative 2	Same as above	Same as above	Microtunnel 1.19 MG (3,600 LF, 8 ft dia.) 2 act/1.10 – 2.18 MG remaining	Same as above	Same as above	Same as above	10	\$180 - \$300

Notes:

1. Estimated duration is the approximate time period for construction and timeline to full CSO reduction benefit for each alternative. Some alternatives include the potential for earlier partial benefits
2. Preliminary estimated cost is a planning level capital cost estimate that is not escalated to mid point of construction. Land acquisition and extensive permitting costs are not included.

Legend:

TY = Typical Year
 # act = number of activations annually in 2050 TY
 # MG = total discharge volume in million gallons
 GSI = Green Stormwater Infrastructure



Charles River 2050 Typical Year (TY) Alternatives

Control Level	Alternative Name	Combined Sewer Overflow Outfalls						Estimated Duration ¹ (years)	Preliminary Estimated Cost ² (Millions)
		CAM005	CAM017	MWR018-020	MWR023	MWR010	MWR201		
0 CSOs in 2050 TY	CR – Integrated Alternative	Stormwater Storage Tank with Underflow Restrictions 2.5 MG	CSO Storage Tank 0.6 MG	MWR018-020 included in MWR201	Storage Box Conduits 0.08 MG at RE046-381 0.16 MG at RE046-100	No Action	Tunnel 17.2 MG (11,700 LF, 17' dia.) to store MWR201 and MWR018-020	15	\$770 – \$1,280
0 CSOs in 2050 TY	CR – Hybrid Alternative 1	Same as above	80-acre sewer separation	Same as above	Same as above	Same as above	Same as above	15	\$810 – \$1,350
0 CSOs in 2050 TY	CR – Hybrid Alternative 2	Same as above	Same as above	204 acres partial sewer separation Microtunnel 1.73 MG (3,800 LF, 9 ft dia.)	Same as above	Same as above	Storage Tank 10.2 MG (305' x 150' x 40' sidewater depth)	25	\$440 - \$740
0 CSOs in 2050 TY	CR – Hybrid Alternative 3	Same as above	Same as above	366 acres partial sewer separation	Same as above	Same as above	Storage Tank 10.1 MG (300' x 150' x 40' sidewater depth)	30	\$400 - \$670
0 CSOs in 2050 TY	CR – Tunnel	Tunnel 17.8 MG (23,700 LF, 12' dia.) with dewatering pump station and odor control MWR023 Storage Box Conduits (same as other alternatives)						15-20	\$1,000 – \$1,660
0 CSOs in 2050 TY	CR – Tunnel + GSI	Tunnel 17.1 MG (23,700 LF, 12' dia.) with dewatering pump station and odor control MWR023 storage (same as other alternatives) + 74 impervious acres GSI						15-20	\$1,060 – \$1,760
0 CSOs in 2050 TY (minimum)	CR – Sewer Separation	481 acres (BOS) + 1231 acres (CAM) + 1101 acres (SOM) for SS + treatment 695 acres (BOS) + 930 acres (CAM) for conveyance + treatment						>50	\$2,280 – \$3,800



Charles River 2050 5-Year and 25-Year Alternatives

Control Level	Alternative Name	Combined Sewer Overflow Outfalls						Estimated Duration ¹ (years)	Preliminary Estimated Cost ² (Millions)
		CAM005	CAM017	MWR018-020	MWR023	MWR010	MWR201		
0 CSOs in 5-Yr	CR – 5YR	Tunnel 71.9 MG (23,700 LF, 24' dia.) with dewatering pump station and odor control MWR023 Storage						15-20	\$1,330 – \$2,220
	CR – 5YR + GSI	Tunnel 71.4 MG (23,700 LF, 24' dia.) with dewatering pump station and odor control MWR023 Storage						15-20	\$1,390 – \$2,320
0 CSOs in 25-Yr	CR – 25YR	Tunnel 132 MG (23,700 LF, 32' dia.) with dewatering pump station and odor control MWR023 Storage						15-20	\$1,860 – \$3,100
	CR – 25YR + GSI	Tunnel 131.43 MG (23,700 LF, 32' dia.) with dewatering pump station and odor control MWR023 Storage						15-20	\$1,920 – \$3,200

STAFF SUMMARY




TO: Board of Directors
FROM: Frederick A. Laskey, Executive Director
DATE: September 17, 2025
SUBJECT: MWRA's Resilience Efforts and Climate Change Adaptation Strategy

COMMITTEE: Administration, Finance and Audit

INFORMATION
 VOTE

Malcolm Ragan, Senior Planner
Andrew Taylor, Environmental Planner
Michael O'Keefe, Senior Program Manager
Preparer/Title


Kathleen M. Murtagh, P.E.
Chief Operating Officer

MWRA is dedicated to both mitigating the impacts of climate change by reducing greenhouse gas emissions and adapting its infrastructure to increase resilience to those impacts. To inform the Board on MWRA's sustainability and resiliency efforts, staff have provided a series of three staff summaries and presentations. This item, focusing on MWRA's resiliency efforts and climate change adaptation strategy, is the third in the series.

RECOMMENDATION:

For information only.

DISCUSSION:

MWRA has a long standing and pragmatic commitment to adapting to the impacts of climate change. Over the years, the Authority has worked extensively to create an enduring climate resilient water and wastewater system that will reliably provide clean drinking water and wastewater services well into the future. It is evident that the impacts of climate change will be widespread and significant. The Boston metro area is projected to experience substantial sea level rise, stronger coastal storms, more frequent, intense precipitation events, and hotter and longer heat waves over the coming decades, all of which will impact MWRA operations. In response, the Authority has taken proactive steps to prepare for this new normal and fortify critical infrastructure, including protecting vulnerable coastal wastewater facilities (initially to a 2050 projected rise in sea level); ensuring water supply dams are prepared for intense precipitation events; and working closely with local partners on regional resiliency efforts.

This staff summary provides an overview of MWRA's substantial progress in protecting coastal facilities over the past ten years, other adaptation efforts throughout the system, and plans to continue to make the Authority's infrastructure and operations more resilient.

Sea Level Rise and Coastal Storms

Climate change continues to cause sea levels to rise, with the Boston area expected to see multiple feet of elevation increase throughout the century. As a wastewater system with many exposed facilities along the coast, MWRA has taken proactive steps to address this vulnerability, based on the best information available.

Deer Island

MWRA was ahead of its time in adapting to the impacts of climate change with the design of Deer Island in the 1980s. Deer Island was designed to survive a direct hit from a Category 3 hurricane with minimal damage, limited to support systems, and with no flooding in the process areas. The plant was designed for a 100-year storm event plus two feet of sea level rise. During construction, plant process tanks were raised almost two feet, the diameter of the outfall was increased to accommodate sea level rise without reducing the plant capacity, and the plant is protected from wave action of 14 feet on the eastern shore. Deer Island represents one of the nation's first major physical climate adaptation efforts and MWRA's commitment to make its largest infrastructure investment resilient, well before it was a common concern.

Coastal Facilities

Previous Efforts

In 2016, prompted by the impacts of Hurricane Sandy a few years earlier, staff initiated a program to evaluate the vulnerability of critical coastal facilities to sea level rise and severe storms. Prior to embarking on this work, MWRA's initial approach focused on three aims. First, understanding how exposed MWRA's facilities were to sea level rise and storms and then prioritizing them for protection. The second was to act quickly. In 2016, as is true today, there were varying projections for sea level rise, but it was important not to get overly fixated on waiting for the best or most accurate forecasts. Instead, it was more imperative to choose a conservative projection and implement protection measures expediently. The third aim was the development of institutional standards to create long-term resiliency and ensure that MWRA continued to adapt.

With these objectives in mind, staff began evaluating the flood vulnerability of facilities against two benchmarks: 1) the most recent 100-year flood elevation from the Federal Emergency Management Agency (FEMA) flood maps; and 2) adding 2.5 feet of elevation for sea level rise. At the time, several other organizations were using a 2.5 feet sea level rise assumption as a conservative mid-term projection. And further, a Boston Research Advisory Group report, released in 2016, estimated a similar amount of rise around 2070. Therefore, staff thought 2.5 feet was a rational benchmark.

Staff evaluated 30 coastal or near coastal facilities, using record drawings to identify their lowest critical flood elevations. In many cases, this was the first floor elevation; however, it also included hatches and other access points on the facility exterior. Staff also performed specific site inspections of all the facilities and took note of any major exterior equipment, such as emergency power generators, that might be damaged during a major storm.

The lowest critical elevations were compared to the two benchmarks, resulting in a list of the most critical facilities. As shown in Table 1, eight facilities were vulnerable to flooding during a FEMA 100-year storm, five were within a foot of a 100-year storm, and three would be flooded in a 100-year storm with 2.5 feet of sea level rise. The columns on the right of Table 1 show the level of flooding that would occur at each facility over the first floor elevation in both a 100-year event and with an additional 2.5 feet of sea level rise.

Once staff identified which facilities were vulnerable, MWRA developed adaptation plans for each, determining how to protect the points where flooding could occur. Next, a variety of flood prevention measures were implemented in-house, including deployable stop log flood barriers at entrances, raised manhole rings, and covered underground entrances. Where stop logs were impractical, staff ensured that sand bags were ready for deployment during major storms. Staff also built protective walls around critical exterior equipment, such as emergency generators, and moved or raised electrical equipment. See Figure 2 for examples of these flood protection measures. MWRA conducts regular exercises on installing flood protection measures at each facility to confirm that stop logs and other barriers remain operational and to train staff on the deployment of equipment before storms.

Table 1: Facility Vulnerability Ranking

Flood Level	Facility Ranking	Facility Name	Depth (ft)	
			100yr	100yr+2.5
Flooding During 100-yr Storm	1	PELLETIZING PLANT	3.42	5.92
	2	HOUGHS NECK PUMP STATION	2.63	5.13
	3	SQUANTUM PUMP STATION	2.53	5.03
	4	ALFORD ST FACILITY	1.93	4.43
	5	QUINCY PUMP STATION	1.73	4.23
	6	CHELSEA CREEK SCREENHOUSE	1.43	3.93
	7	BRAINTREE-WEYMOUTH PUMP STATION	0.93	3.43
	8	SOUTH BOSTON CSO TUNNEL	0.43	2.93
Flooding Within 1 ft of Elevation of 100-yr Storm	9	S BOSTON CSO PUMP STATION	-0.07	2.43
	10	CHARLESTOWN NAVY YARD	-0.30	2.20
	11	ALEWIFE BROOK PUMP STATION	-0.67	1.83
	12	CHELSEA CREEK HEADWORKS	-0.69	1.81
	13	UNION PARK TREATMENT FACILITY	-0.82	1.68
Flooding During 100-yr+2.5ft Storm	14	MYSTIC RIVER GATEHOUSE	-1.07	1.43
	15	CHELSEA ADMIN FACILITY	-1.32	1.18
	16	CHELSEA MAINTENANCE FACILITY	-1.40	1.10

Figure 1: Flood Elevations at Braintree-Weymouth Pump Station



Figure 2: Braintree-Weymouth Pump Station Hatch to Screen Room (Left) and Stop Log at Entryway (Right)



Aside from the spot flood protection measures described above, MWRA established longer-term guidance on coastal resiliency. At the time of these assessments, three vulnerable facilities were in design for major rehabilitation: Chelsea Creek Screenhouse, Chelsea Creek Headworks, and Alewife Brook Pump Station. The design of these facilities, and all those vulnerable facilities moving forward, included and will include construction of flood barriers and raised critical equipment above at least the 100-year storm, plus 2.5 feet of sea level rise elevation.

To date, all but three coastal facilities have been protected to the two benchmarks mentioned above, ensuring that these facilities are resilient for decades. Work is ongoing to protect the Union Park Pump Station and CSO Facility, which is jointly owned with Boston Water and Sewer Commission to beyond 2050. MWRA is also working on further protecting the Pelletizing Plant with in-house resources. Initially, a floodwall was constructed around the transformer, but staff are now preparing to also protect critical operational areas within the facility based on updated projections. Lastly, to protect the South Boston Tunnel ventilation building, MWRA is collaborating closely with Boston on its Resilient Moakley Park Plan Connectors Project, in order to avoid constructing barriers that would be unnecessary if the facility is protected by the Moakley Park Project. Based on the current design alignment, the ventilation building will be protected once Park construction is complete. The rehabilitation of the Columbus Park Headworks is also being coordinated with the Moakley Park Project, which may provide additional protection to that facility.

Recent Projections and Planning for the Future

As described above, the FEMA 100-year storm and 2.5 sea level rise benchmarks were determined in 2016 as a way to proactively start protecting coastal facilities. Since then, climate change models have improved and become more localized. Most notably, the Commonwealth, in collaboration with the Woods Hole Group and the National Oceanic and Atmospheric Administration, developed the Massachusetts Coastal Flood Risk Model (MC-FRM), which projects sea level rise, storm surge, and the other impacts of major storms, for 2030, 2050, and 2070 time horizons. Fortunately, MC-FRM projects sea level rise of 2.4 feet by 2050, closely aligning with MWRA's benchmark.

In order to ensure MWRA's flood protection infrastructure is aligned with the latest climate projections, staff applied MC-FRM data to each coastal facility for a 100-year storm for both 2050 and 2070. As expected, most facilities are resilient to 2050, aside from a few along the Mystic River, which will be protected from inundation once the regional project to raise the Amelia Earhart Dam is complete. Although some of the facilities MWRA protected will be resilient through 2070, such as the Braintree-Weymouth and Squantum Pump Stations, the barriers installed for others will likely be insufficient 45 years from now. Due to MWRA's commitment to building infrastructure that will last decades, planning and engineering staff are working to determine when facilities that need further protection are scheduled for rehabilitation and to assess what resiliency measures are appropriate to include in those projects. By using the State's Climate Resilience Design Standards Tool, which integrates MC-FRM and hazards data to inform early and conceptual planning and design of infrastructure, staff will be able to continue to implement feasible flood protection measures as facilities are rehabilitated.

It is important to note that all climate projections include key assumptions about how quickly the world will move to mitigate greenhouse emissions, and design decisions are made based on providing a level of protection for storms of certain recurrence probabilities. Staff will continue to monitor climate projections and evaluate the appropriate levels of acceptable risk.

Regional Collaboration

Regional resiliency is critical for the long-term protection of MWRA infrastructure. As sea level rises and intense storms become more frequent, flood-proofing individual facilities becomes more and more difficult. In support of more area-wide approaches, MWRA has collaborated with regional stakeholders, municipalities, and other State agencies on strategies and projects to make Metro Boston more resilient to sea level rise. Since its creation in 2018, MWRA has participated in the Resilient Mystic Collaborative (RMC), a partnership among neighboring communities in Greater Boston's Mystic River Watershed working to protect people and places from climate risk. MWRA is currently collaborating with RMC and the City of Cambridge on a regional coastal flood project for the Mystic and Charles Rivers that will likely protect some of the Authority's facilities. As mentioned above, MWRA is also working closely with Boston on its plan to build resilient features protecting Moakley Park, which is expected to also shield Columbus Park Headworks and the South Boston Tunnel ventilation building. Lastly, MWRA is participating in the development of the Massachusetts Office of Coastal Zone Management's Resilient Coasts Plan; a draft was recently released for public review and comment.

Intense Precipitation

More frequent and intense storms, such as the ones seen throughout New England over the last few years, as well as potentially longer periods of drought -- both of which are expected with climate change -- could impact MWRA's water supply operations, management of combined sewer overflows, and inland facilities susceptible to flooding.

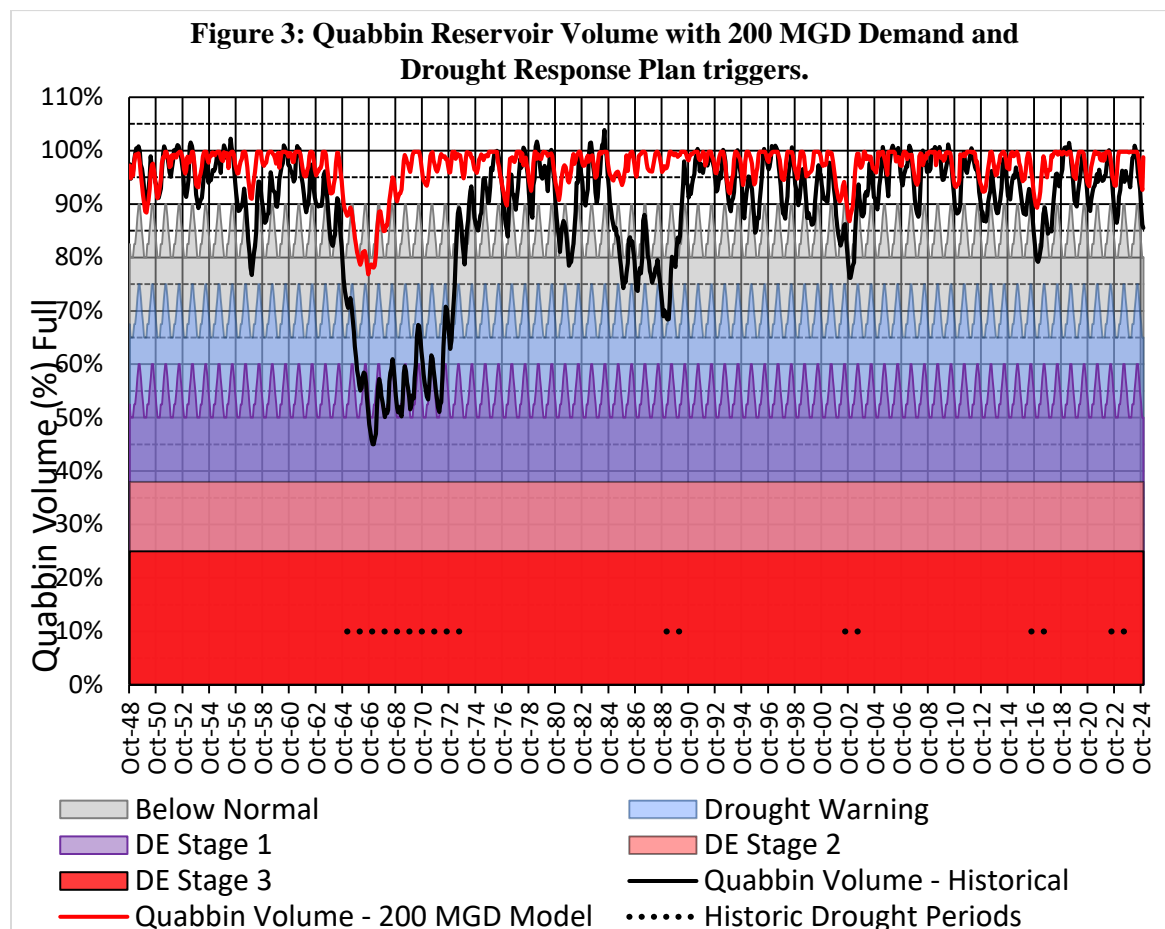
Water Supply

Safe Yield

MWRA's source reservoirs are resilient to both extreme precipitation and extended periods of drought, as exhibited by the system's safe yield. The safe yield is the amount of water that can be reliably supplied during extended periods of system stress, such as a critical drought. For the

Quabbin-Ware-Wachusett system, the safe yield is an annual average of 300 million gallons per day (MGD). MWRA’s recently updated Drought Response Plan, which was submitted to MassDEP in April 2025 in accordance with the Water Management Act regulations, assessed the potential impacts of climate change on safe yield. Through collaboration with climate specialists at the National Center for Atmospheric Research, MWRA concluded that the system is projected to have a modest increase in safe yield in the coming decades. The projected increase is largely attributed to the Quabbin Reservoir’s multi-year storage capacity. The reservoir’s watershed captures increased precipitation and inflows from more intense storms, making additional water available for use during dry periods. By contrast, systems with smaller reservoirs may experience overflows during wet periods, but lack sufficient storage to sustain supply through dry periods, reducing their overall reliability. Communities on the periphery of the MWRA service area, particularly those with limited or no over-year storage, may face increased vulnerability and could require emergency water supplies from MWRA during drought conditions.

In addition to the massive storage capacity of Quabbin, the substantial reduction in water demand spurred by an aggressive water conservation program by MWRA, and efficient water fixtures, results in greater resiliency of the water supply to even the most severe droughts. During the drought of historical record in the 1960s, Quabbin levels dipped to around 45 percent, well within Drought Emergency Stage 1. (See black line in Figure 3.) However, demand was over the safe yield at that time. To exhibit the resiliency of Quabbin, staff modeled the impact of the 1960s drought with the current demand of 200 MGD. As shown in Figure 3, the red 200 MGD line only dips to Below Normal operating range and would not drop to Drought Warning or Drought Emergency status.



Dams

There are 28 water supply dams and dikes across the MWRA water system and it is critical that they are able to withstand periods of intense precipitation. To that end, MWRA has invested nearly \$30 million in its water supply dams, completing major spillway upgrades, clearing trees off dams, seepage control, and earthen and masonry improvements. The work continues at other dams with planned overtopping protection, spillway repointing, and new instrumentation. These investments have added decades of life to the dams and will ensure their service continues well into the future. All structural, physical, and operational upgrades (as well as required inspections and studies), help to maintain compliance with the Massachusetts Dam Safety Regulations. All MWRA dams are also designed to meet the Spillway Design Flood, which is typically half the probable maximum flood (the theoretical highest rainfall for a given area).

MWRA also recognizes that not all historic dams are necessary and their removal is of greater benefit than their long-term upkeep. One such dam is the Quinapoxet Dam, constructed in 1905, which was designed to protect the Wachusett Reservoir from turbidity impacts due to sediment carried by the Quinapoxet River. However, the Dam had become obsolete due to modern reservoir operations and water treatment. Additionally, the Dam had fallen into serious disrepair, making costly repairs unwarranted. MWRA, in partnership with the Massachusetts Department of Fish and Game and DCR, removed the obsolete Dam, which allows for more natural and resilient river hydrology.

Combined Sewer Overflows and Inflow and Infiltration

Combined sewer overflows (CSOs) occur when sewers that hold both sanitary and storm water reach capacity during heavy rainfall and must overflow into nearby waterbodies to prevent sewage backups on streets and in homes. As the type of intense precipitation events that cause CSOs become more common due to climate change, both the frequency and volume of CSOs are expected to increase. Recognizing this, MWRA, along with Cambridge and Somerville, have developed a first-of-its-kind approach to evaluating future projects to reduce CSOs. As presented to the Board in February 2025, work is well underway on updated CSO control plans for the Charles and Mystics Rivers and Alewife Brook. Since the CSO reduction projects that will be included in the plans will last for decades, MWRA, Cambridge and Somerville recognized the importance of looking at future rainfall projections rather than past rainfall events as required by regulation. Using climate models, a 2050 Typical Year was developed that reflects the extreme rainfall projected in that period. This new 2050 Typical Year is being used to evaluate the effectiveness of CSO control alternatives.

In addition to reducing CSOs, MWRA's Inflow and Infiltration (I/I) Financial Assistance Program, which provides grant and interest free loans to communities, furthers the resiliency of the sewer system to climate change. Reductions in water entering the system during rain events frees up capacity in pipes for storm water in combined sewer areas to be conveyed to Deer Island and be treated. Through 2024, MWRA distributed \$566 million to fund 688 I/I reductions projects, leading to over 80 miles of sewer replacement, over 3,000 repairs, and over 4,000 manholes replaced. Although it is difficult to measure the specific direct impact on wastewater flow of these projects, there is a clear downward trend in flow to Deer Island over the years.

MWRA is also implementing resilience to climate change in its pipeline projects. As part of an ongoing project to rehabilitate siphon structures throughout the system, staff prioritized sites not only by structural condition, but also risk to surface flooding. Once rehabilitated, structures will

limit inflow into the MWRA system during floods and protect infrastructure from a 2050 100-year storm.

Inland Facilities

While the main risk to MWRA infrastructure is from coastal flooding, a small number of inland facilities are vulnerable to inundation from extreme precipitation. Staff have used 100-year and 500-year FEMA flood maps to identify these sites, but are awaiting the State's River Hydraulic Model that will allow for a more detailed projection of riverine flooding elevations throughout Massachusetts before MWRA commences any additional major protection programs.

Extreme Heat

Climate change is also intensifying the frequency and severity of extreme heat events, potentially impacting both MWRA's workforce and water quality. While MWRA has not seen substantial impacts in these areas, staff are preparing for a hotter future.

Workforce

Ensuring a safe working environment during extreme heat is a priority for the Authority. To ensure workforce safety, MWRA has a Heat Stress Prevention Plan that includes trainings on how to recognize symptoms of heat related illness as well as policies to mandate cooling breaks, and rescheduling of outdoor work when possible.

Water Quality

Water quality at MWRA's source and standby reservoirs can be affected by both hotter temperatures and intense rainfall. Some of these concerns are outlined below.

- Algal blooms, which can cause taste and odor or cyanotoxin issues, can become more frequent with higher climate temperatures and increased nutrient runoff from storms. Staff institute routine monitoring and response during the months of concern.
- Turbidity events usually coincide with intense rainfall or strong wind events, and require response if above certain turbidity thresholds. Staff follow a response plan during events.
- Climate change could impact both the health and biodiversity of forests¹ surrounding MWRA's reservoirs that naturally filter drinking water.
- Precipitation events can increase local tributary flows into the reservoirs, resulting in higher levels of natural organic matter requiring additional treatment and increasing the risk of disinfection byproducts.

MWRA and DCR staff are aware of and preparing for these potential impacts and the consequences for water quality and treatment in the coming decades.

¹ To evaluate these impacts, DCR is conducting a vulnerability assessment of its forests that will identify and assess the condition of critical natural assets and identify vulnerability under future climate scenarios. A report is expected this summer.

Next Steps

As described above, MWRA continues to build on prior achievements and plan for the future impacts of climate change. Most coastal facilities are already protected to for the impacts expected through 2050, but through both site-specific solutions and regional collaboration, the Authority is committed to further limiting vulnerability where feasible. Similarly, while MWRA's water supply is resilient for both extreme precipitation and drought, and will continue to deliver high water quality for the foreseeable future, MWRA is investigating and preparing for the impacts of changing heat and rainfall conditions on source water.