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.

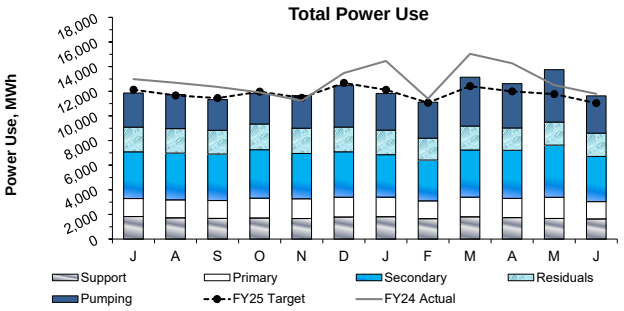
Frederick A. Laskey, Executive Director
Kathleen Murtagh, Chief Operating Officer

September 17, 2025

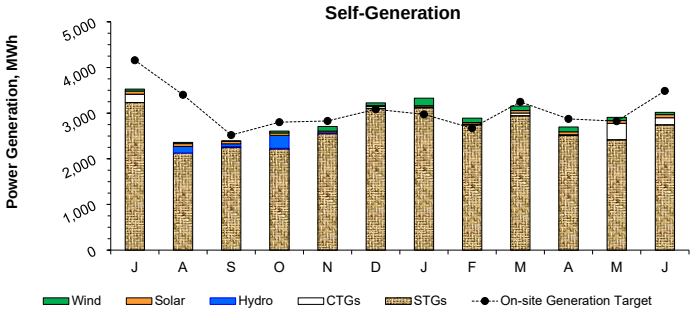
OPERATIONS AND MAINTENANCE

Deer Island Operations

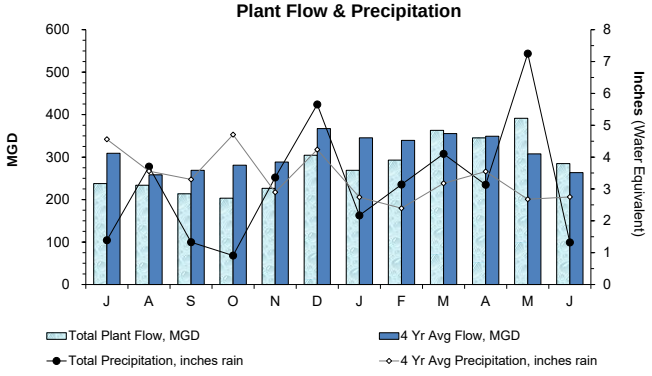
4th Quarter - FY25



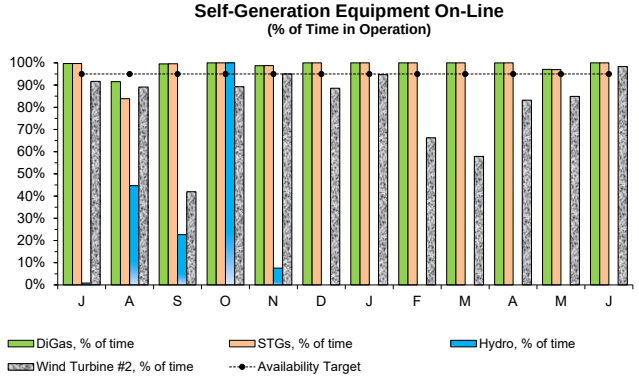
Total power usage in the 4th Quarter was 9.2% above budgetary estimates as plant flow was 11.0% higher than the historical (4 year average) estimate used to generate the electricity model. Power used for raw wastewater pumping was 12.2% above target due to the higher plant flows. Additionally, power 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.**



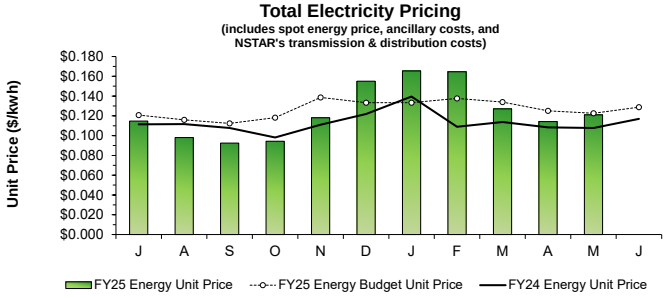
Power generated on-site during the 4th Quarter was 6.1% below target. STGs generation was 8.3% higher than budget due to supplemental fuel oil usage for boiler operation during periods of lower or unstable digester gas production, thus allowing for greater generation by the main STG. CTGs generation was nearly three (3) times the budget estimate as a CTG was operated over 25 continuous hours for backup power during a Nor'easter storm in May. Additionally, the CTGs 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.**



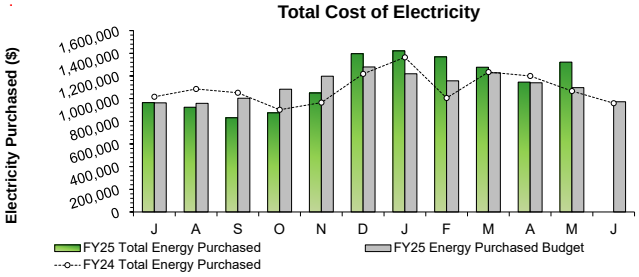
Total Plant Flow for the 4th Quarter was 11.0% above target with the budgeted 4 year average plant flow (340.4 MGD actual vs 306.7 MGD expected) as precipitation was 30.4% higher than target this quarter (11.7 inches actual vs. 8.97 inches expected). Plant flows had been well below target following a 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.**



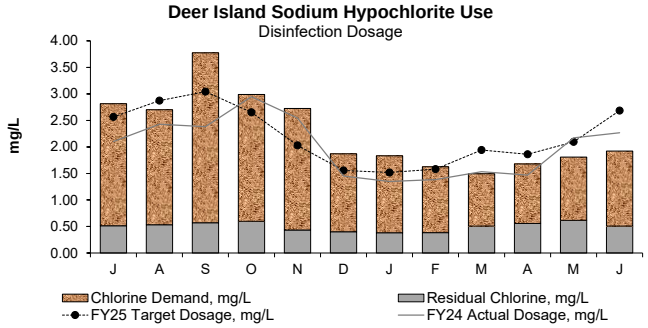
Under the current energy supply contract, a block portion of DI's energy is a fixed rate and the variable load above the block is purchased in real time. The Total Energy Unit Prices for January through May are estimated pending receipt of the Direct Energy invoices, and the Eversource invoice for June 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.

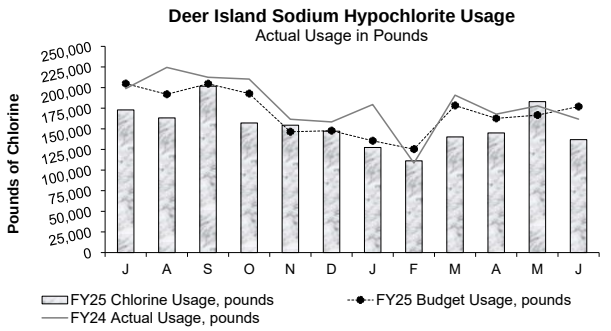


Year-to-date Total Cost of Electricity is estimated to be $249,705 (2.0%) higher than budgeted through May. The Total Cost of Electricity depicted for January through May are estimated pending receipt of the Direct Energy invoices, and the Eversource invoice for June has not yet been received. The Total 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 rehabilition 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 & 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 onffline 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.

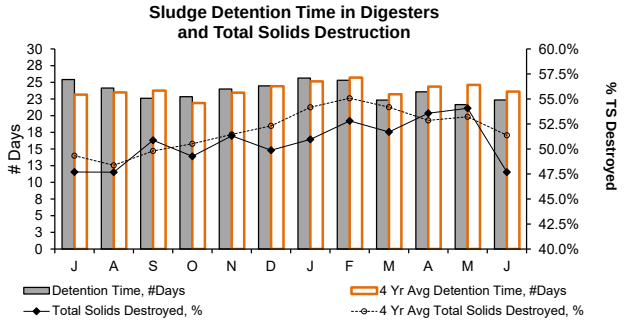
Phosphorus Building
The M&O and the Area Supervisor broom cleaned the entire outfall channel. A contractor calibrated the pH meters and repaired the Model 5500 phosphorus analyzer. Operations and Maintenance staff cleaned the trough and acid washed the #1, #2, and #3 disc filters. Operations staff cleaned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

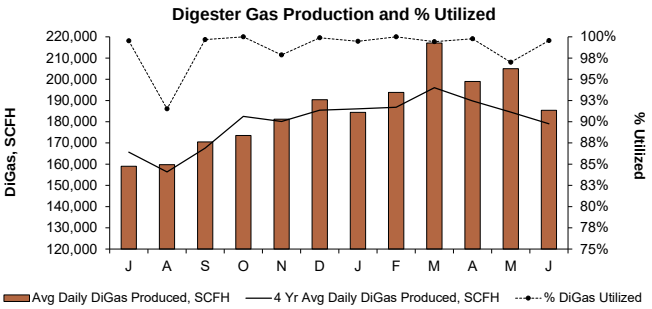
Deer Island Operations and Residuals

4th Quarter - FY25



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.**

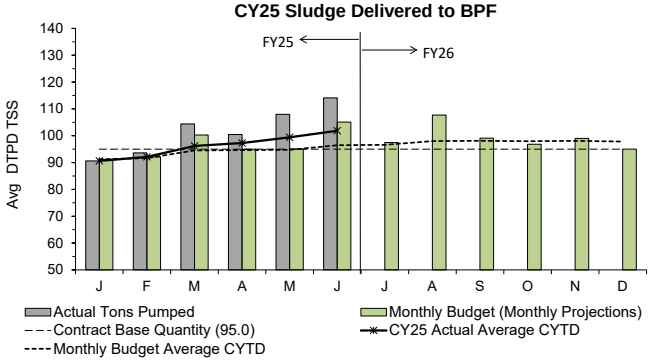
Total solids (TS) destruction is dependent on sludge detention time which is determined by primary and secondary solids production, plant flow, and the number of active digesters in operation. Solids destruction is also significantly impacted by changes in the number of digesters and the resulting shifting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



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 utlized at the TPP.**

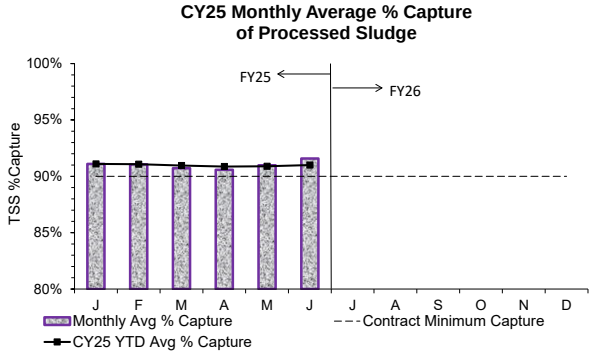
Residuals Pellet Plant

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).



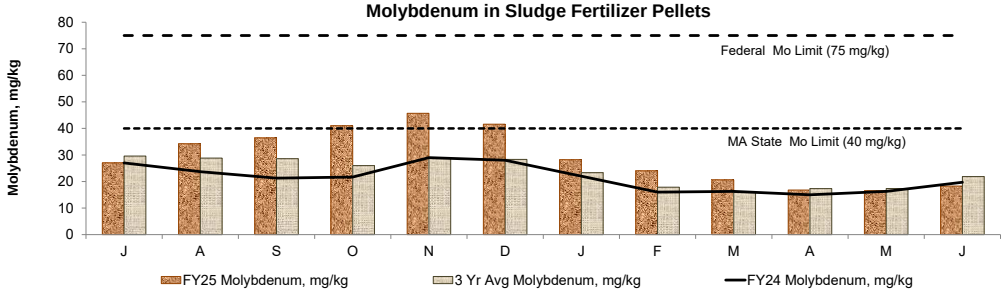
The average quantity of sludge pumped to the Biosolids Processing Facility (BPF) in the 4th Quarter was 107.5 TSS Dry Tons Per Day (DTPD), 9.3% above target with the FY25 budget of 98.4 TSS DTPD for the same period. The higher amount of sludge sent to the BPF this quarter can be partially attributed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



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%.



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 I 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.

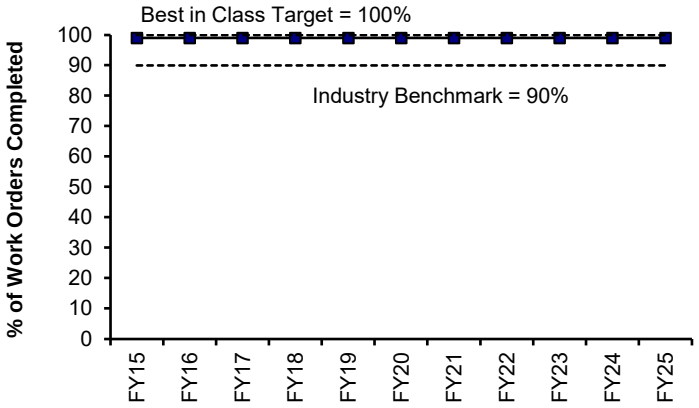
The levels were below the DEP Type 1 limit for copper and lead during the 4th Quarter. For Mo, the preliminary level in the MWRA sludge fertilizer pellets for the 4th Quarter averaged 17.2 mg/kg, 9% below the 3 year average, 57% below the MA State Limit, and 77% below the Federal Limit. The 18.3 mg/kg 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

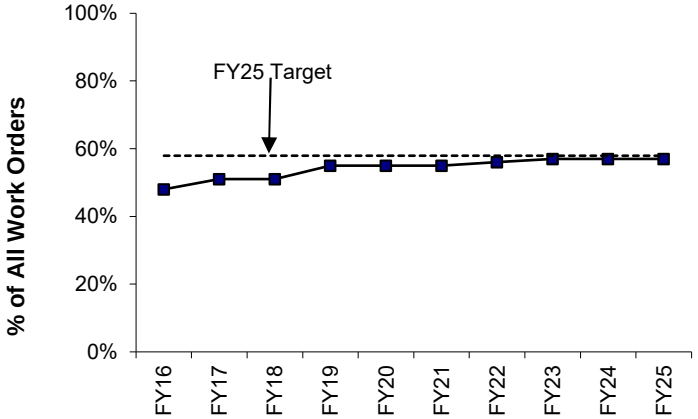
Proactive and Productivity Measures

Preventative Maintenance



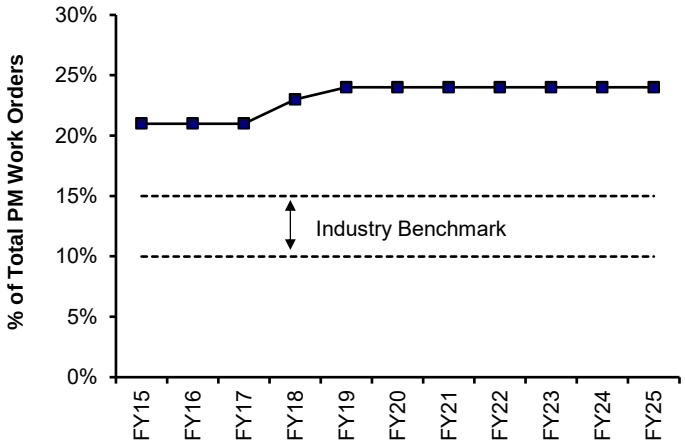
The industry benchmark is 90% for Preventative Maintenance (PM) completion. Upon reaching the 90% goal in FY05, the target goal was increased to the "Best in Class" Target of 100% PM completion. Reliability-Centered Maintenance (RCM) and PM optimization efforts have continued. PM completion rate was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

Maintenance Kitting



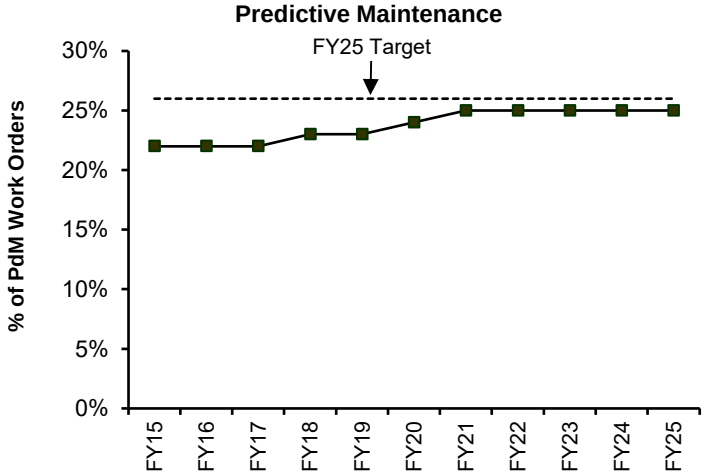
Preventive Maintenance (PM) inventory items were loaded into Maximo to assign spare parts for equipment to PM work orders. DITP reached the PM kitting goal of 100%. In FY12 a new graph was developed to track kitting of all maintenance work orders in an effort to increase wrench time. Staff continues 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%.

Operations Light Maintenance PMs



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

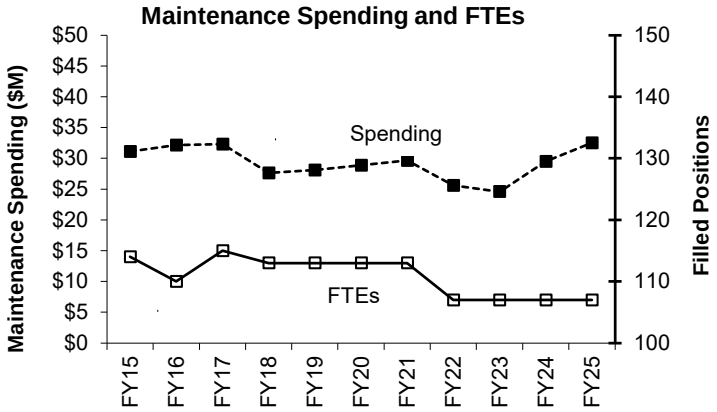


Predictive maintenance has steadily increased from 2% in FY03 to 25% in FY25, DITP was slightly below our new goal of 26%. This percentage in predictive maintenance was achieved through the expanded use of lubrication, vibration, thermography, and acoustic ultrasonic testing techniques. The Condition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

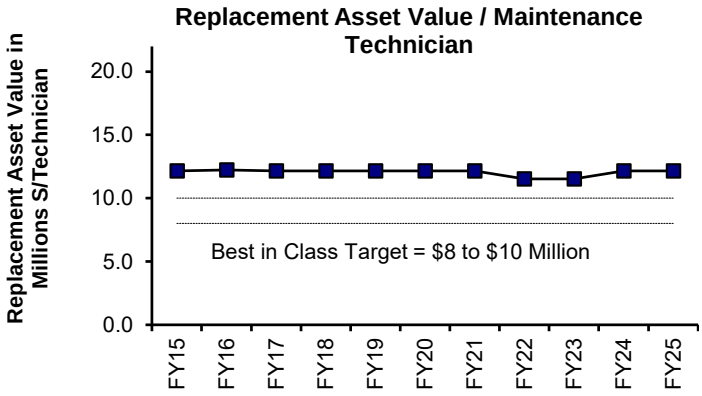
Deer Island Yearly Maintenance Metrics

FY25

Overall Maintenance Program Measures

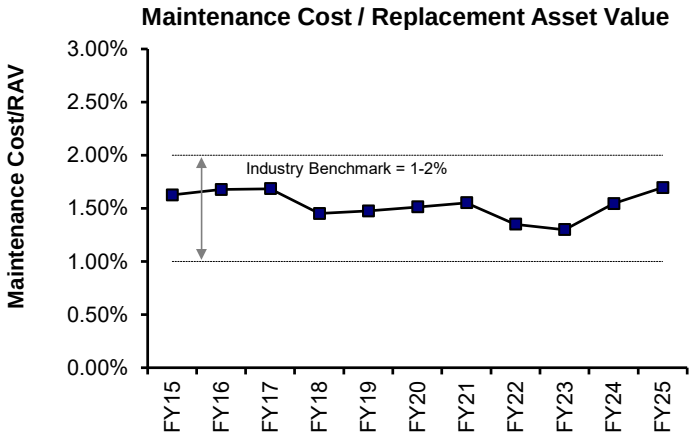


DITP's Maintenance staff is currently at 107 FTE's. Maintenance staff levels ended at 107 due to retirements and hiring challenges for trades personnel. Maintenance has worked to meet our goals though implementation of numerous maintenance efficiencies including: Operations performing light maintenance,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

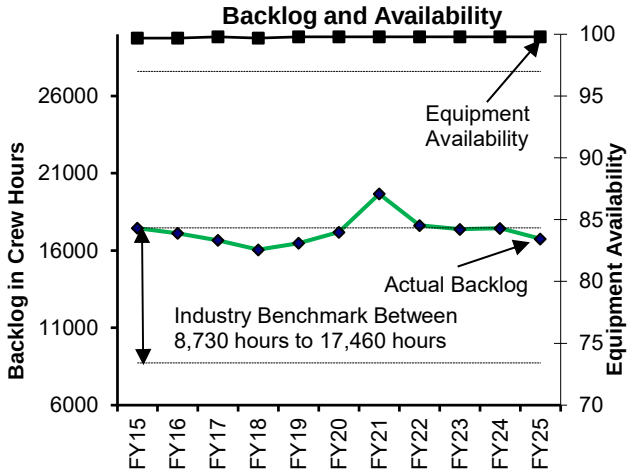


DITP adopted a "best in class" target of $8-$10 Million/Technician for maintenance staffing. DITP remains above this Best in Class. However, as the plant ages and additional equipment replacements are expected, DITP management will reassess staffing as needed.

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.



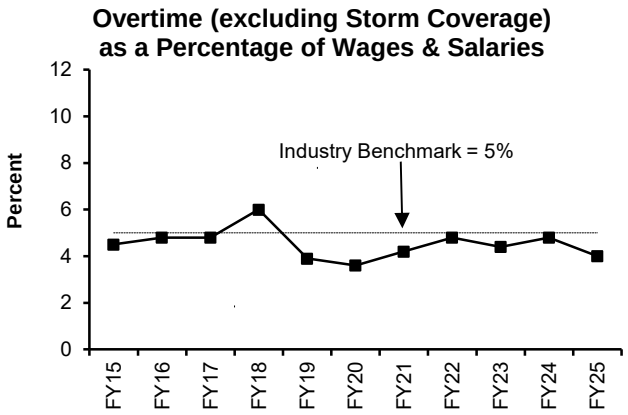
Industry benchmark for Equipment Availability is 97%. Deer Island has exceeded this benchmark over for the last ten years. In FY25 the availability was 99%. The high percentage in Equipment Availability during FY25 is due to redundancy of equipment and effective/efficient maintenance practices.

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.

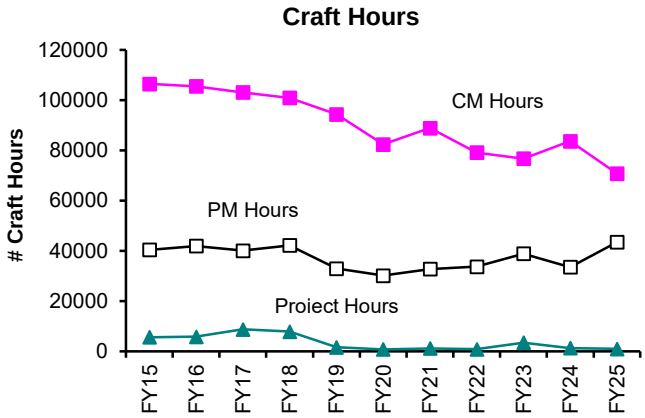
Deer Island Yearly Maintenance Metrics

FY25

Overall Maintenance Program Measures (cont.)



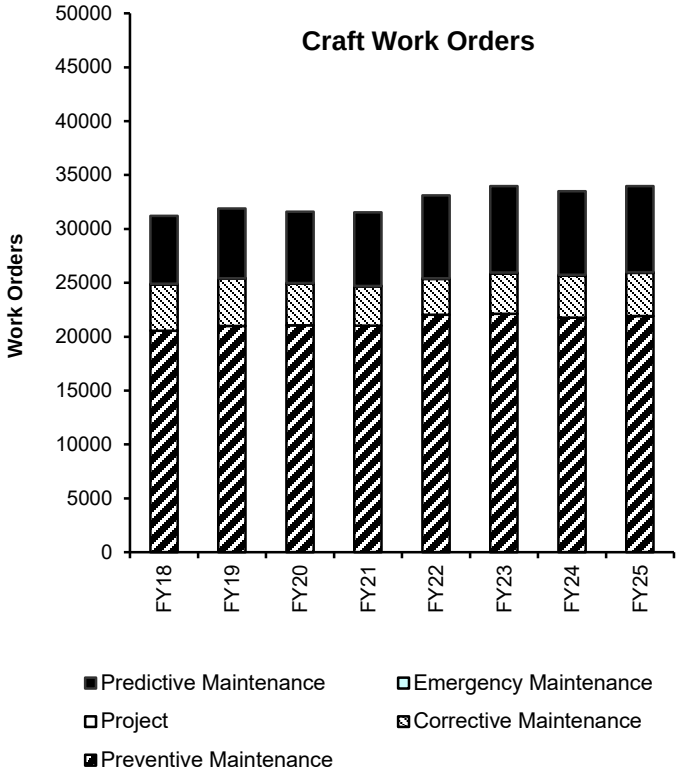
Management continues its effort to keep overtime below the industry benchmark. DITP maintenance overtime was 4.0% for FY25. Management has taken steps to reduce overtime spending by limiting overtime to repair critical equipment and systems only. DITP has been under the Industry Benchmark every year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



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.

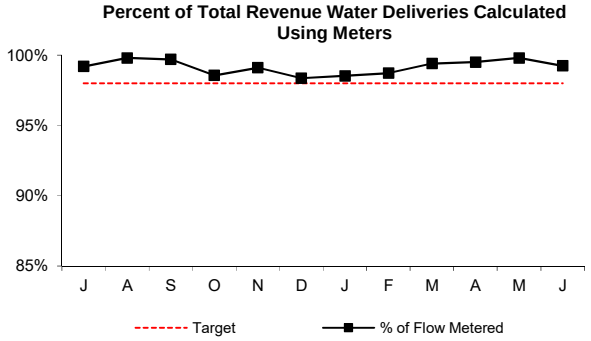


During FY25, the overall number of work orders slightly increased from the previous year. The Work Coordination department is continuously modifying PM, PdM, and CM Job Plans to ensure maintenance is being performed efficiently and effectively, while ensuring reliability and availability of DITP's Assets.

Operations Division Metering & Reliability

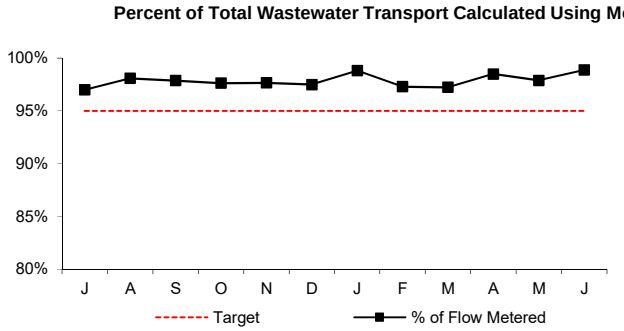
4th Quarter - FY25

WATER METERS



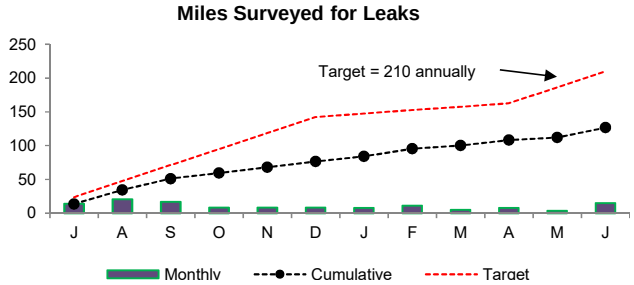
The target for revenue water deliveries calculated using meters is 98%. Estimates are generated for meters that are out of service due to instrumentation problems or in-house and capital construction projects. During Apr-Jun 2025, 99.5% of the water billed was metered flow.

WASTEWATER METERS



The wastewater metering system is now operating in a typical mode following closeout of the replacement project. The target for revenue collection meters is a 95% capture rate which has been achieved consistently since the new meters have been online. During Apr-Jun 2025, 1.6 % of the data required estimates, while 98.4 % was metered.

WATER DISTRIBUTION SYSTEM PIPELINES



During 4th Quarter FY25, 26.26 miles of water mains were inspected. The total inspected for the fiscal year to date is 126.62 miles. We have been unable to meet the Annual Target due to staffing issues.

Leak Backlog Summary													
Month	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	Totals
Leaks Detected	1	2	2	2	2	2	1	1	3	0	0	1	17
Leaks Repaired	0	2	3	2	2	1	1	2	3	0	0	1	17
Backlog	1	1	0	0	0	1	0	0	0	0	0	0	n/a

During 4th Quarter 2025 - FY25 1 leak was detected, and 1 was repaired. Refer to FY25 Leak Report below for details. Also, community service ranging from individual leak location to surveys were conducted for Medford, Somerville and Boston.

4th Quarter - FY25

Date Detected	Location of Leaks	Repaired
08/20/24	Morton St @ Wellington Hill Rd Mattapan	08/21/24
08/29/24	Felton St @ Water St Waltham	08/30/24
09/18/24	Second St @ Carter St Chelsea	09/18/24
07/31/24	Broadway @ Richardson Lynn	09/30/24
09/26/24	Bryant St @ Shute St Everett	09/30/24
10/21/24	40 Lynn Fells Pkwy Saugus	10/23/24
10/17/24	Mt Vernon Ave @ Shaft 9 Somerville	11/05/24
11/07/24	Common St @ Washington St Belmont	12/03/24
11/08/24	Benninton St @ Walley St East Boston	11/08/24
12/12/24	Felton @ Water St Waltham	12/14/24
01/13/25	Washington St @ Ingleside Ave Chelsea	02/04/25
02/12/25	Congress Ave near Highland Ave Chelsea MA	02/22/25
12/18/25	Leo Birmingham Pkwy @ Market St Allston	02/21/25
03/03/25	Washington St @ Brookline Ave Brookline	03/05/25
03/03/25	Bennington St @ Revere City Line Boston	03/14/25
03/12/25	South St Court Medford	03/31/25
06/09/25	Park Circle Tank	06/25/25

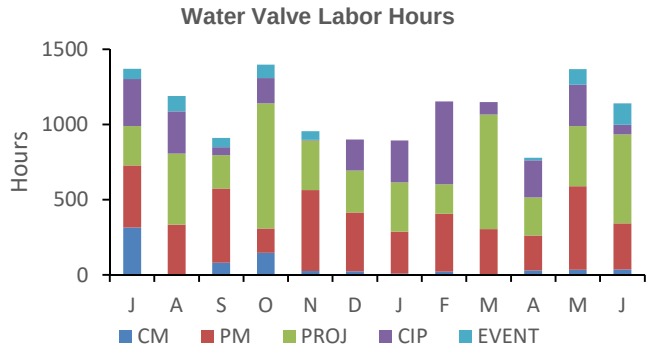
Date Detected	Location of Leaks/Unrepaired
12/04/16	710 Ashland St Lynn

Water Distribution System Valves

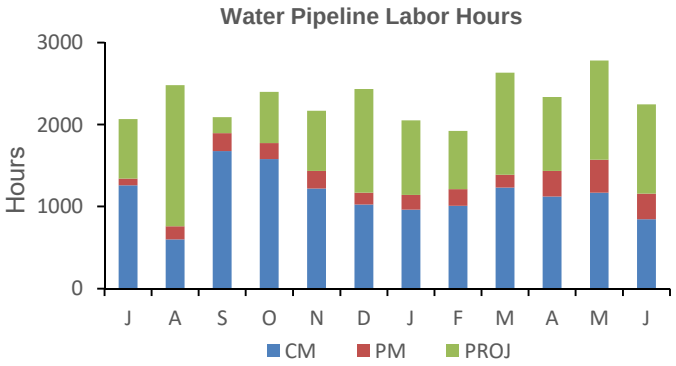
4th Quarter - FY25

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.

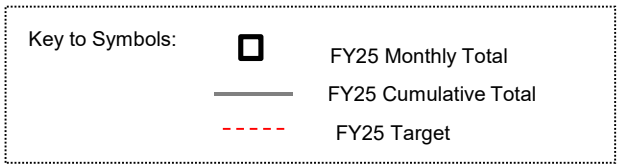


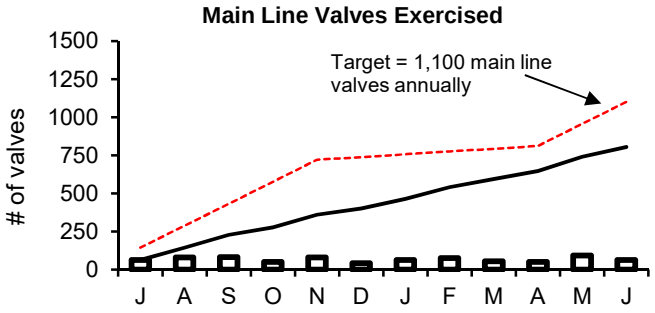
During 4th Quarter of FY25 there was a total of 3,285 hours worked. Percentage breakdown; Corrective Maintenance 3%, Preventative Maintenance 33%, Project 38%, Capital Improvement Project 18%, Event - Wtr Fountain 8%



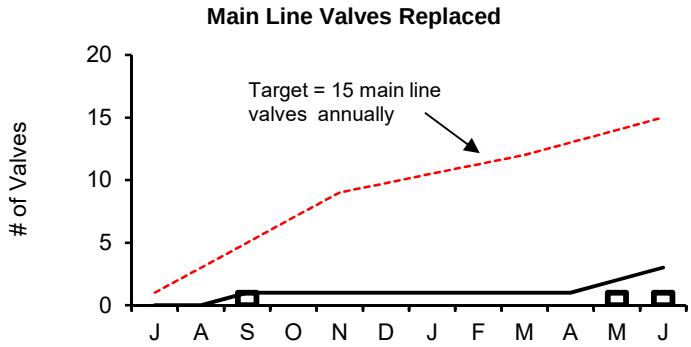
During 4th Quarter of FY25 there was a total of 7,366 hours worked. Percentage breakdown; Corrective Maintenance 43%, Preventative Maintenance 14%, Project 43%

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%

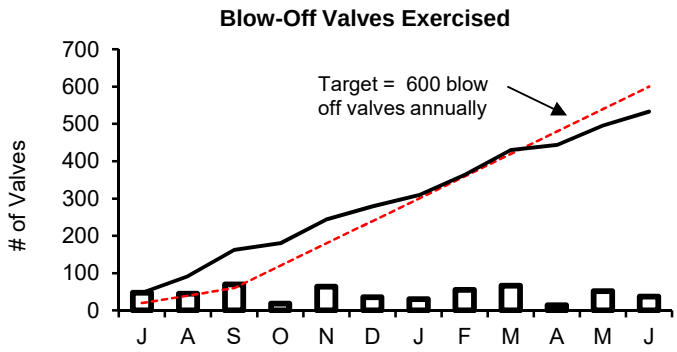




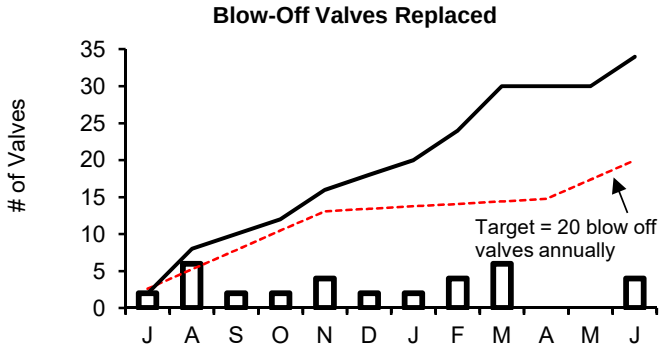
During 4th Quarter of FY25, 209 main line valves were exercised. The total exercised for the fiscal year to date is 805.



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



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



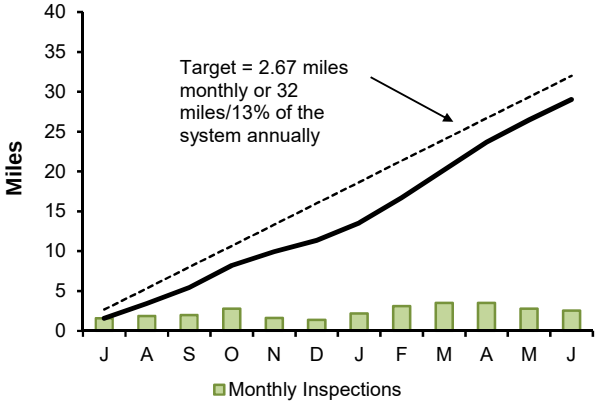
During 4th Quarter of FY25, there were 4 blow off valves replaced. The total replaced for the fiscal year to date is 34.

Wastewater Pipeline and Structure Inspections and Maintenance

June 2025 - FY25

Inspections

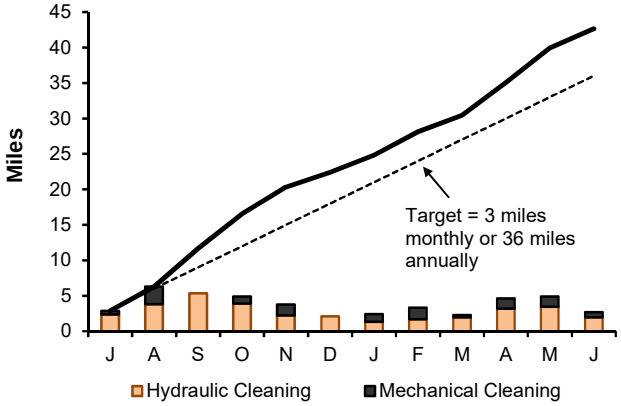
Pipeline Inspections



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.

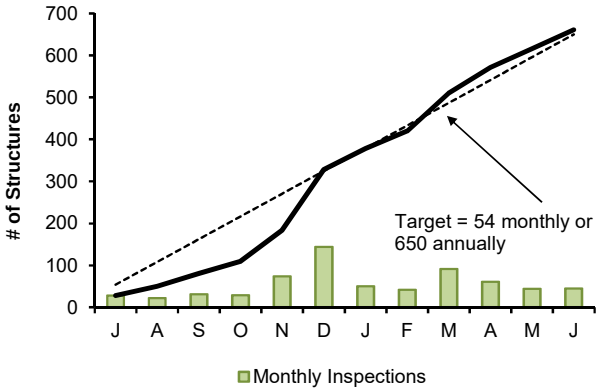
Maintenance

Pipeline Cleaning



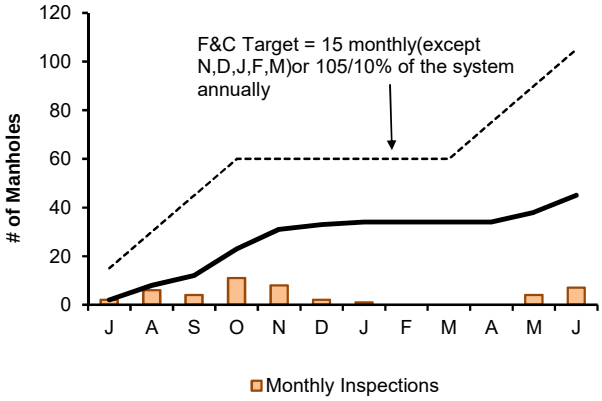
Staff cleaned 2.67 miles of MWRA sewer pipe, and removed 4.50 yards of grit. The year to date total is 42.63 miles of pipe cleaned. No Community Assistance was provided this month.

Structure Inspections



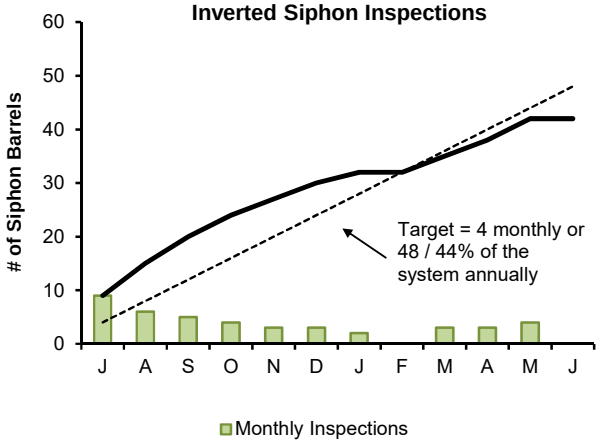
Staff inspected the 12 CSO structures and performed other additional 45 manhole/structure inspections during this month. The year to date total is 661 inspections.

Manhole Rehabilitation



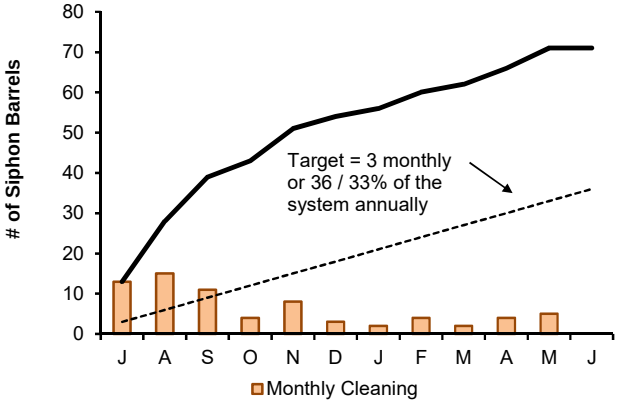
Staff replaced 7 frames and covers this month.The year to date total is 45.

Inverted Siphon Inspections



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

Inverted Siphon Cleaning

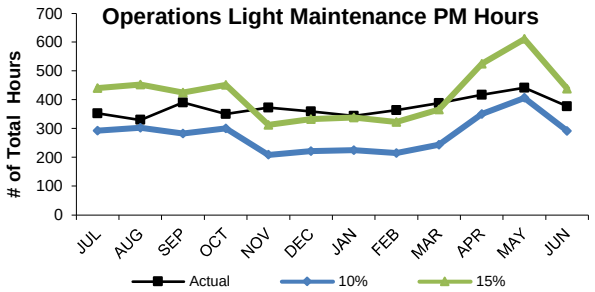


Staff cleaned 0 siphon barrels this month. The year total is 71 barrels cleaned.

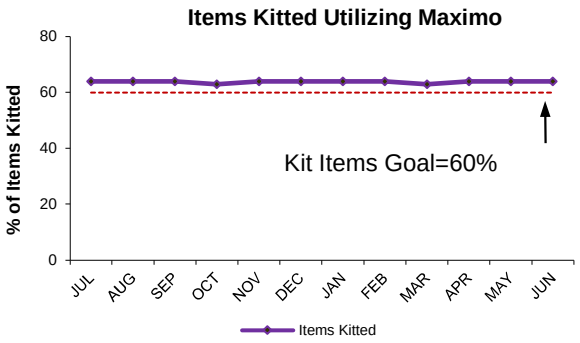
Field Operations' Metropolitan Equipment & Facility Maintenance

4th Quarter - FY25

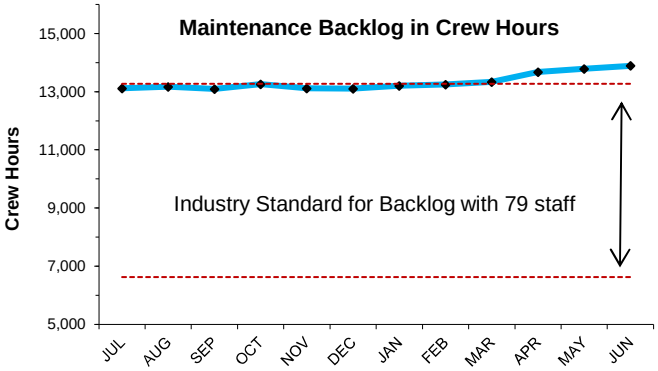
Several maintenance and productivity initiatives are in progress. The goal for the Overall PM completion and the Operator PM completion is 100%. The Operator PM and kitting initiatives frees up maintenance staff to perform corrective maintenance and project work, thus reducing maintenance spending. Backlog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



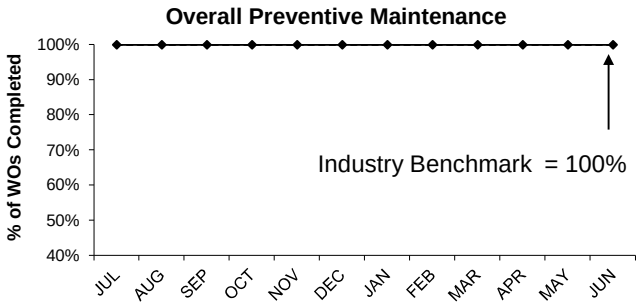
Operations staff averaged 412 hours per month of preventive maintenance during the 4th Quarter of FY25, an average of 12% of the total PM hours for the 4th Quarter, which is within the industry benchmark of 10% to 15%.



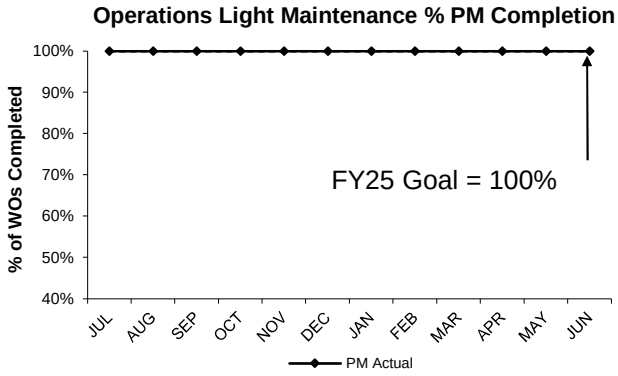
Operations' FY25 maintenance kitting goal has been set at 60% of all work orders to be kitted. Kitting is the staging of parts or material neccesary to complete maintenance work. In the 4th Quarter of FY25, 64% of all applicable work orders were kitted. This resulted in more wrench time and increased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



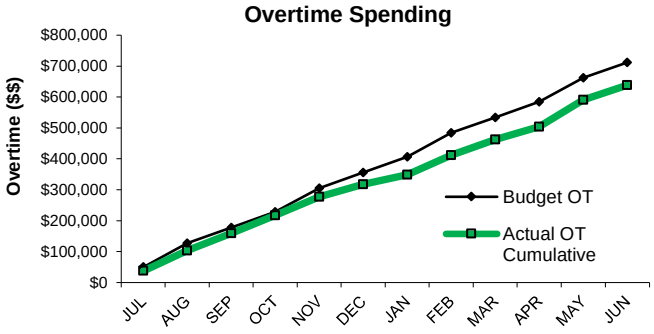
The 4th Quarter of FY25 backlog average is 13,790 hours. Which is above the industry benchmark of 6,636 to 13,275 hours.The current backlog is due to vacancies and several large maintenance projects.



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.



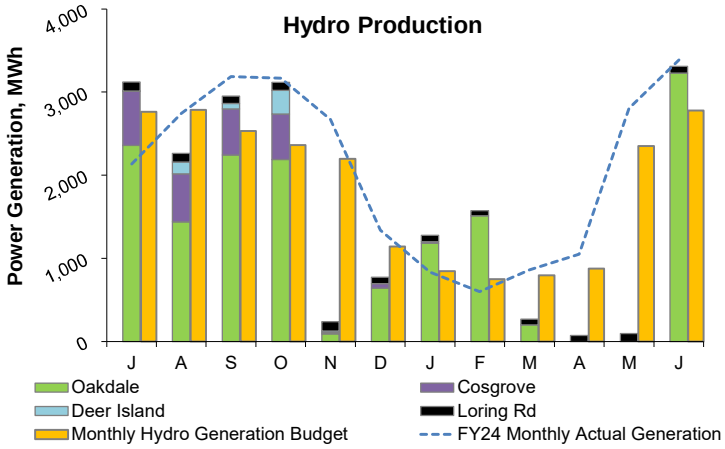
Wastewater Operations complete light maintenance PM's which frees up maintenance staff to perform corrective maintenance. Operations' FY25 PM goal is completion of 100% of all PM work orders assigned. Operations completed 100% of PM work orders in the 4th Quarter of FY25.



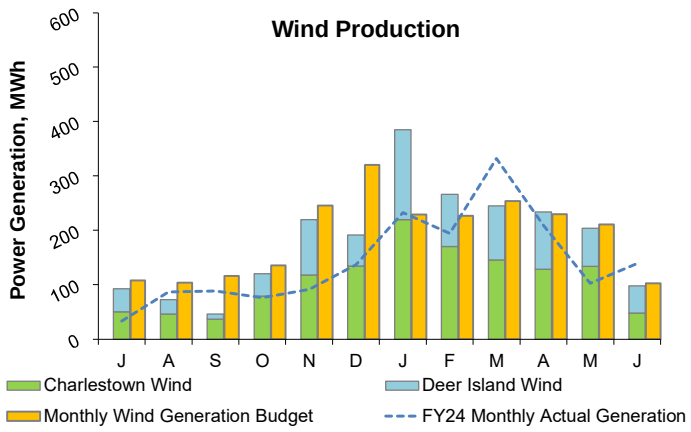
Maintenance overtime was $580 under budget on average, per month, for the 4th Quarter of FY25. Overtime is used for critical maintenance repairs and wet weather events. The overtime budget through the 4th Quarter of FY25 is $712,460 Overtime spending was $638,815 which is $73,645 under budget for the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

Renewable Electricity Generation: Savings and Revenue

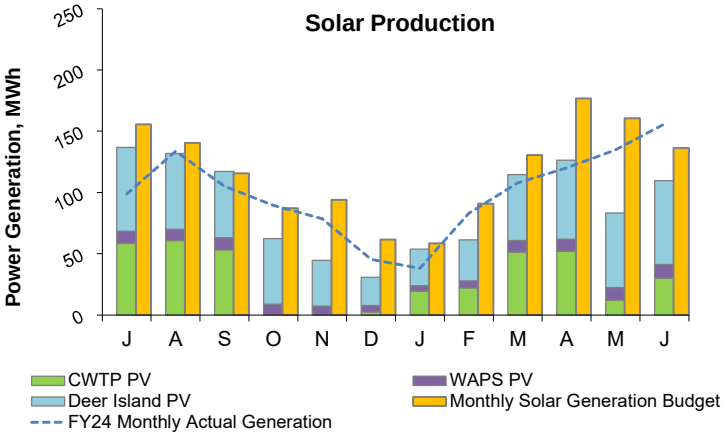
4th Quarter - FY25



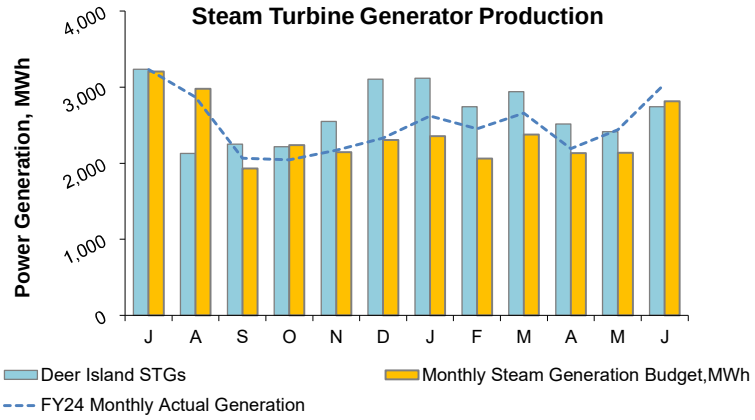
In Quarter 4, renewable energy produced from hydroelectric turbines totaled 3,575 MWh, 40% below budget. Deer Island hydroturbines were unavailable for the entire 4th quarter as both undergo wicket gate rehabilitation and other repairs. Cosgrove was offline due to rehab work at the Wachusett Dam Lower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



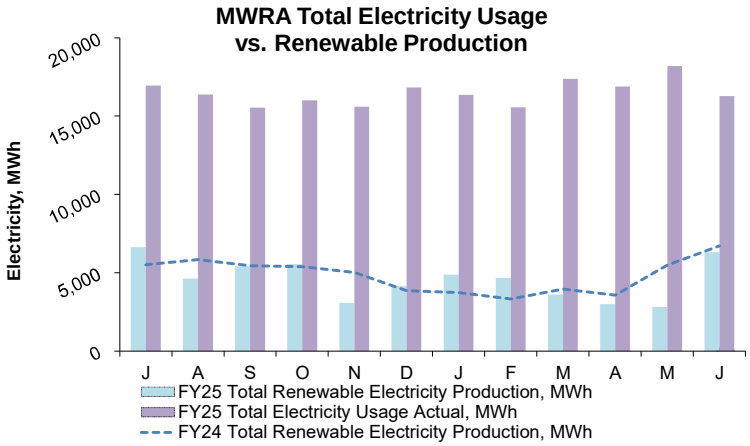
In Quarter 4, wind turbine production totaled 535 MWh, 1% below budget. Deer Island Turbine #1 has been out of service since April 2022 and is scheduled for replacement by 2027.

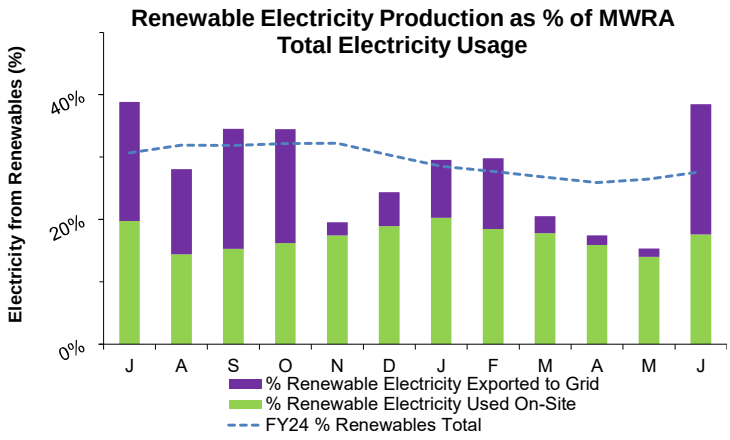


In Quarter 4, energy production from all solar PV systems totaled 319 MWh; 43% below budget[1]. The Deer Island Residuals Odor Control roof mounted array has been offline since September 2022 due to a failed inverter. The system will remain offline pending full replacement. Ongoing inverter issues at 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 budget[1].





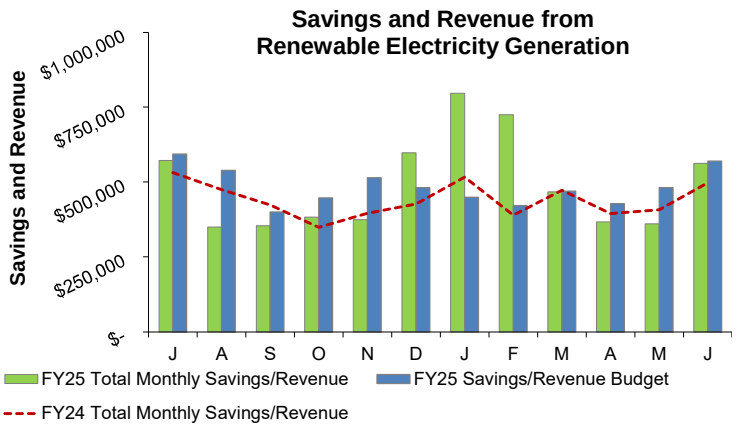
In Quarter 4, total renewable electricity production was 12,102 MWh, 14% below budget. The MWRA total electricity usage is the sum of all electricity purchased for Deer Island and FOD plus electricity produced and used on-site at these facilities. Approximately 99% of FOD electrical accounts are accounted 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.

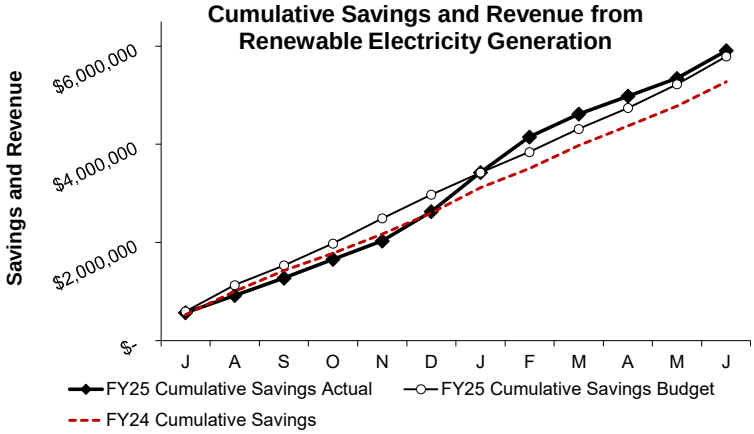
All renewable electricity generated on DI is used on-site (this accounts for more than 50% of MWRA renewable generation). Almost all renewable electricity generated off-DI is exported to the grid.

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

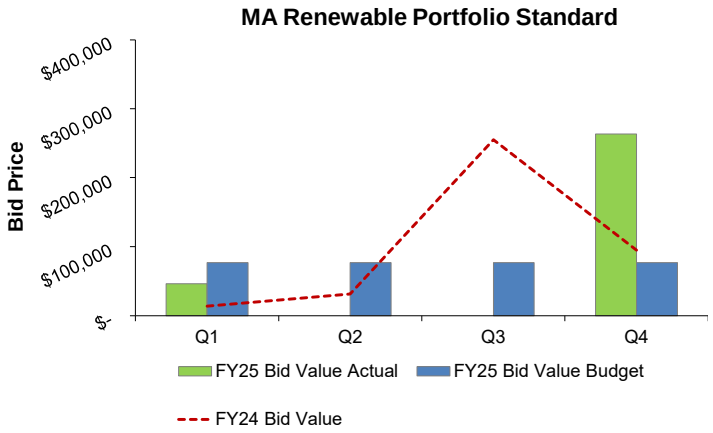
4th Quarter - FY25

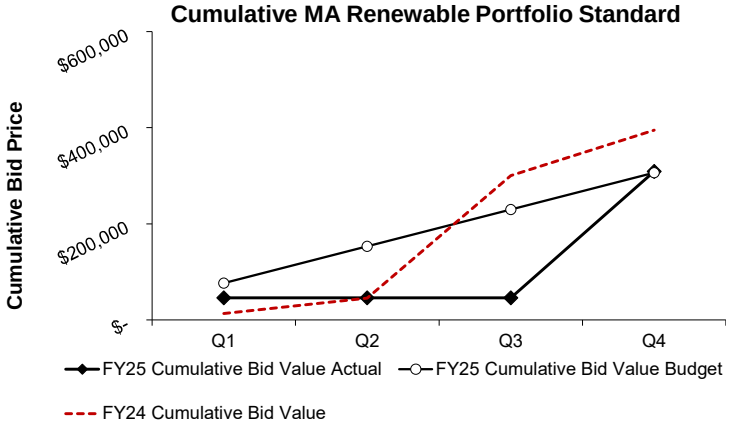




Savings and revenue from renewable sources is estimated at $1,289,323 in Quarter 4, 13% below budget. Cumulative savings and revenue for the FY has climbed to 2% above budget. However, total savings and revenue depends heavily on electricity pricing at Deer Island, which is estimated from December through 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.

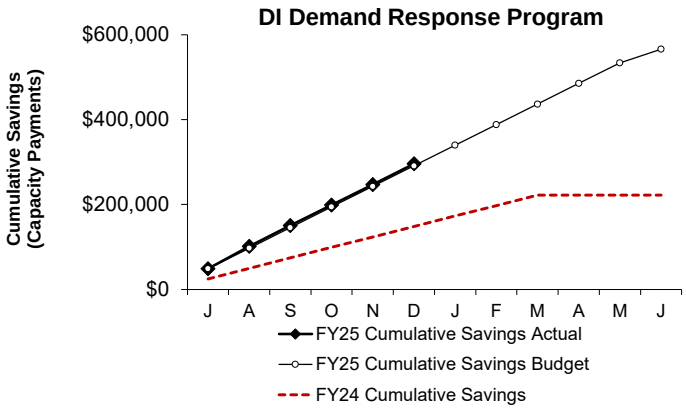
Savings and revenue[1] from all renewable energy sources include wind turbines, hydroelectric generators, solar panels, and steam turbines (DI). This includes savings and revenue due to electricity generation (does not include avoided fuel costs and RPS RECs). The use of DITP digester gas as a fuel source 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).

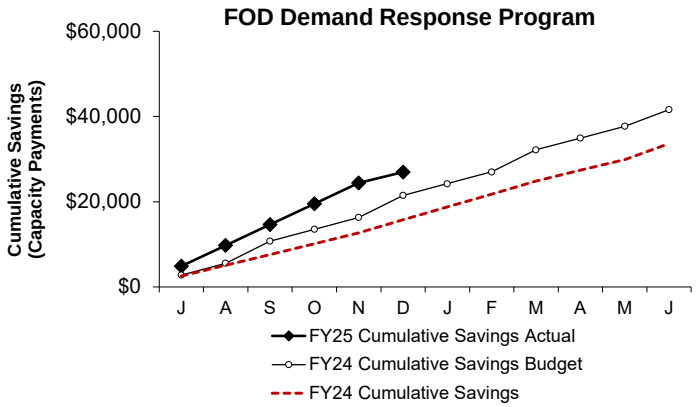




Bids were awarded during the 4th Quarter[2] of FY25 from MWRA's renewable energy assets; No Class I Renewable Energy Certificates (RECs) were sold. 13,488 Class II RECs were sold from previous quarters and sold for a value of $269,387, which was 244% above budget for the Quarter.[3] REC values reflect 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.



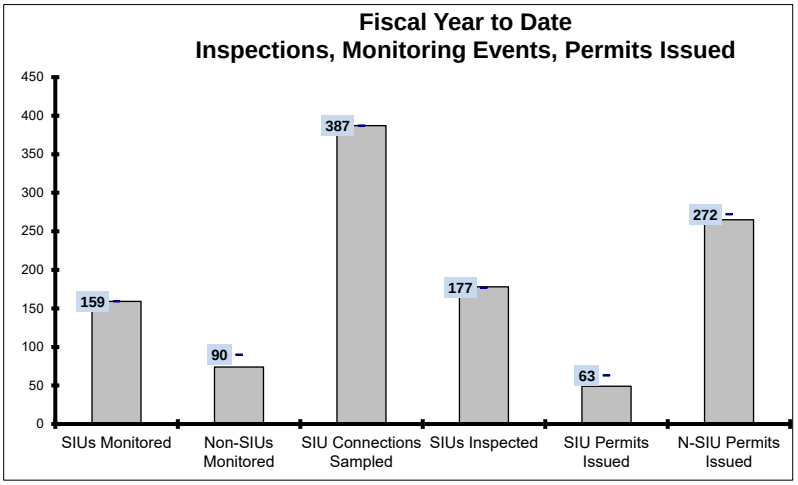


Currently Deer Island, Loring Rd, Brutsch Hydro, and JCWTP participate in the ISO-New England Demand Response Programs. By agreeing to reduce demand and operate the facility generators to help reduce the ISO New England grid demand during periods of high energy demand, MWRA receives monthly Capacity 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, Brutsch 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								
	0 to 120		121 to 180		181 or more		Permits Issued	
	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

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 Chrysosphaerella 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::lysers that were subsequently replaced at each site. In April, staff met with the

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 dmg 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.

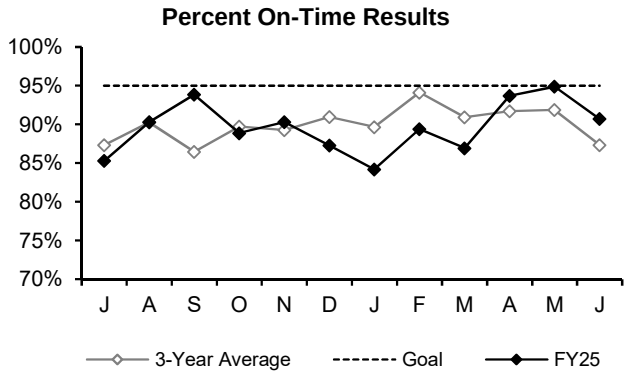
- Coordination with other MWRA Departments: Assisted Engineering & Construction by participating in community CSO coordination meetings and review of reports. Worked with Deer Island Process Control to analyze Deer Island effluent nitrogen data in response to the 2024 total nitrogen Contingency Plan 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.

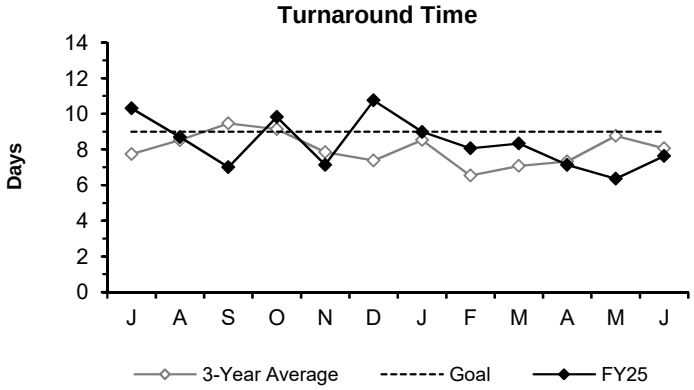
Laboratory Services

4th Quarter - FY25

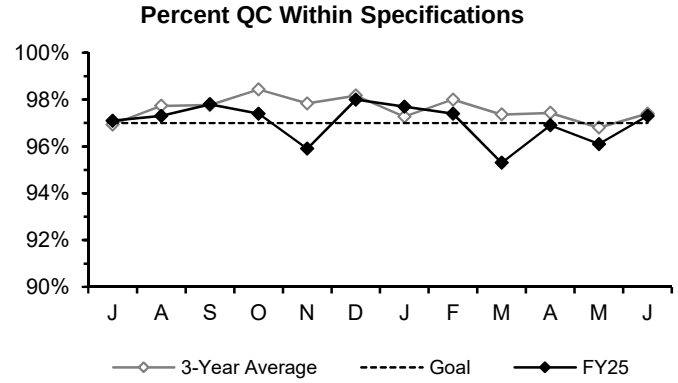
Laboratory Services supports the laboratory sampling, testing, and consulting needs of various client groups primarily in the Operations Division. This includes drinking water transmission and treatment, wastewater collection and treatment, wastewater residuals management, industrial-pretreatment monitoring,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



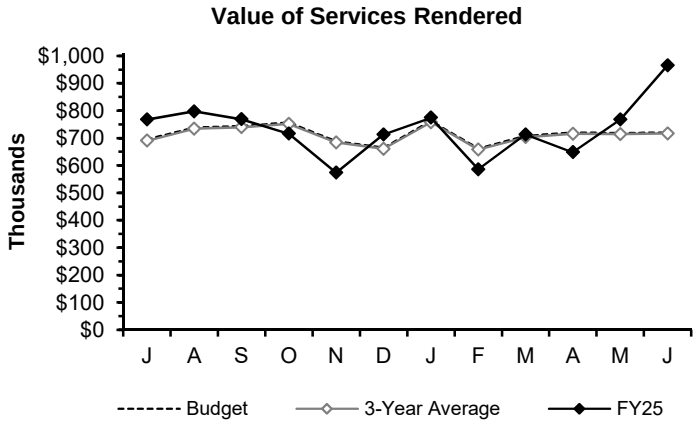
The Percent On-Time measurement assesses performance against internal client due dates. These due dates are shorter than the compliance reporting requirements to allow for internal review of the data.



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



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



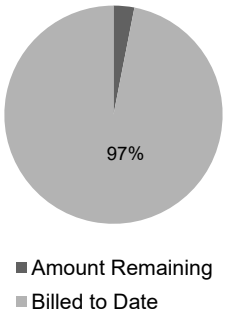
Value of Services Rendered models the true cost of the lab work performed, including fringe benefits that are not a part of the Laboratory Services budget.

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.

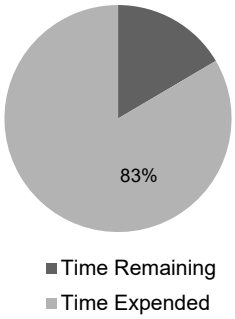
CONSTRUCTION PROGRAMS

Engineering & Construction
Projects In Construction
4th Quarter – FY25

Cost



Time



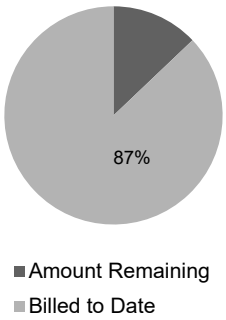
Carroll Water Treatment Plant SCADA Improvements

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.

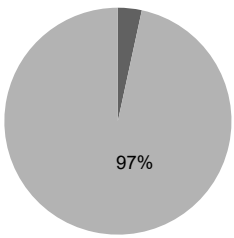
Contract Amount: $13,808,614.75 *Contract Duration:* 1,675 Days

Notice to Proceed: 1-Sep-21 *Contract Completion:* 3-Apr-26

Cost



Time



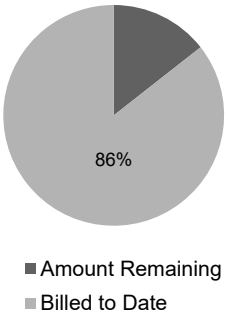
Section 89 Replacement Pipeline

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.

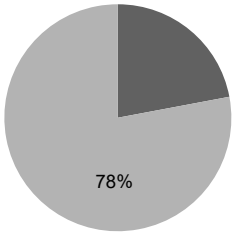
Contract Amount: $36,573,441.60 *Contract Duration:* 1,475 Days

Notice to Proceed: 5-Aug-21 *Contract Completion:* 19-Aug-25

Cost



Time



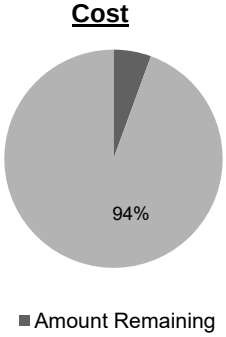
Intermediate High Pipeline Improvements CP2

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.

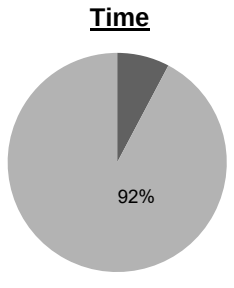
Contract Amount: $21,946,845.02 *Contract Duration:* 912 Days

Notice to Proceed: 20-Jul-23 *Contract Completion: 17*-Jan-26

Cost



Time



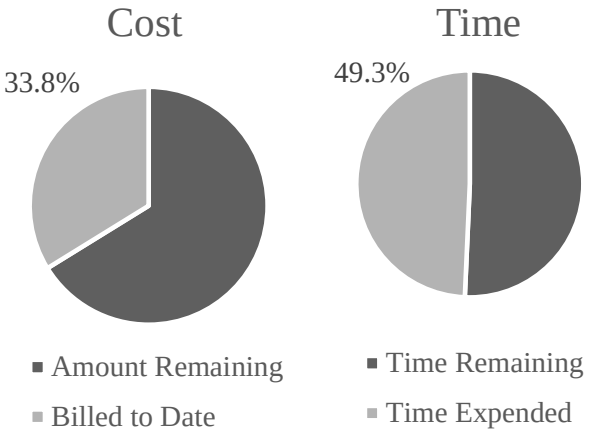
Construction of Water Mains – Section 101

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

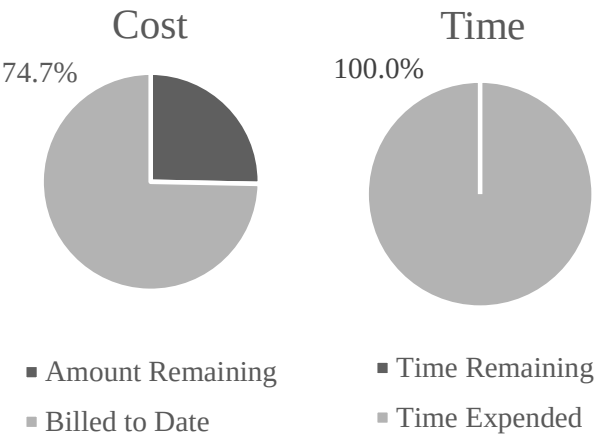


7395 - Clarifier Rehabilitation Phase 2

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



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:
  - Alewife PS Optimization (submitted 4/27/2021)
  - Somerville Marginal CSO Reduction Study (submitted 12/27/2021)
  - Alewife Brook & Charles River System Optimization (submitted 12/28/2022)
  - MWRA CSO Variances Optimization Measures Report (submitted 1/31/2023)
  - Odor control feasibility study complete and submitted 6/2/2025
  - Real-time notification study (due 8/31/2025)
  - 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:

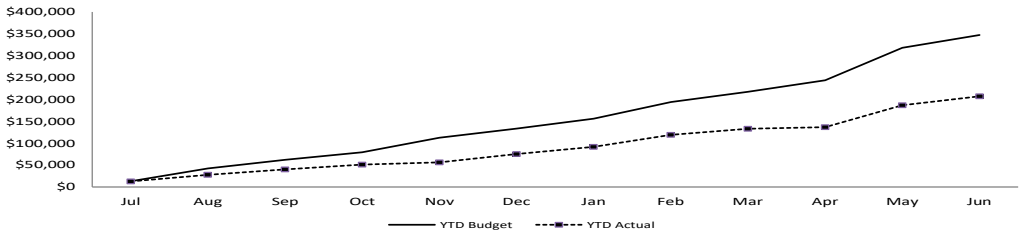
- Spending was less than planned in Wastewater primarily due to less than anticipated distributions for the I/I Local Financial Assistance program, schedule changes for the Siphon Structure Rehab, Caruso, DeLauri & Framingham Fuel Tank Replacements, Ward St. & Columbus Park Headworks Design/CA, Interceptor 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: Commercial paper capacity / Revolving Loan	$ 139.5 million $ 58 million
Budgeted FY25 Cash Flow Expectancy*:	$245 million

DRINKING WATER QUALITY AND SUPPLY

Source Water – Microbial Results and UV Absorbance

4th Quarter – FY25

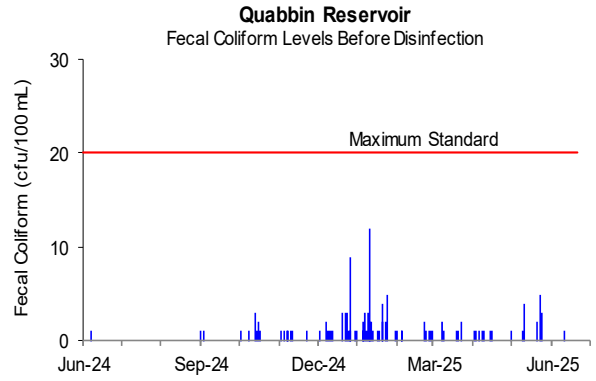
Source Water – Microbial Results

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.**

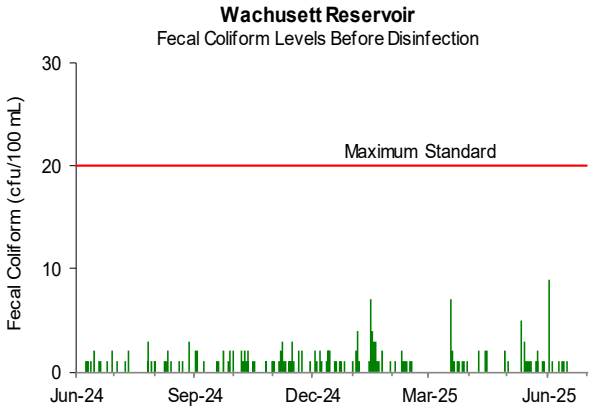


Sample Site: Wachusett Reservoir

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.**

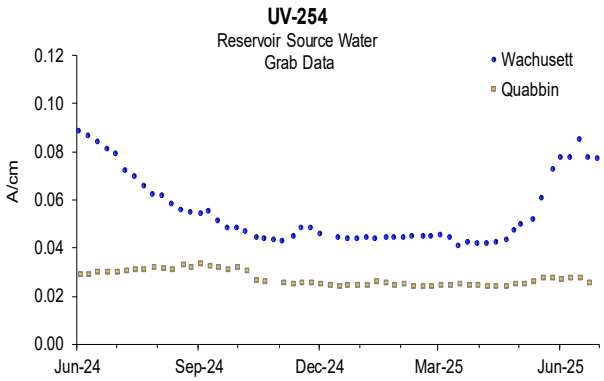


Source Water – UV Absorbance

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.



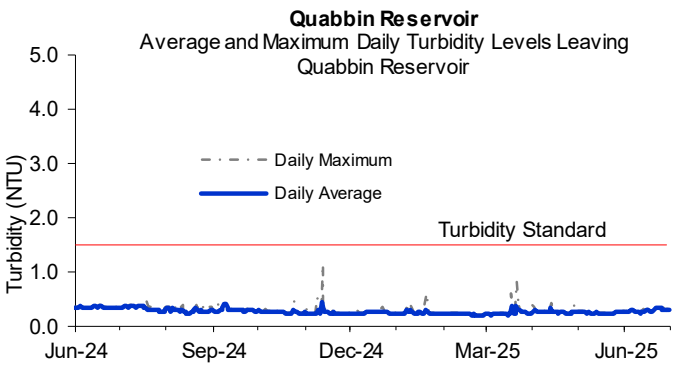
Source Water – Turbidity

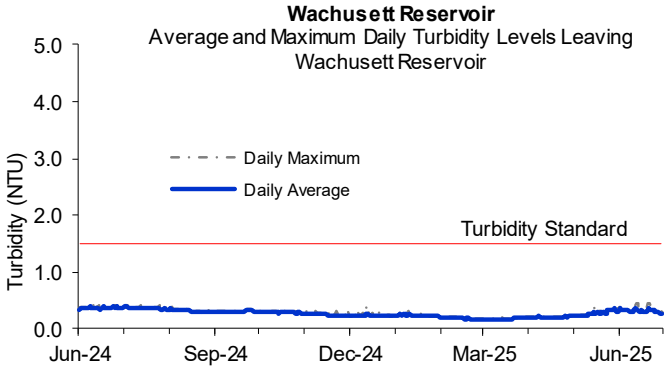
4th Quarter – FY25

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.



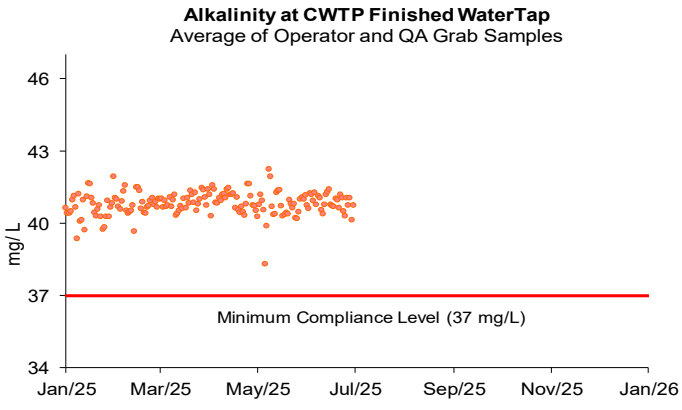


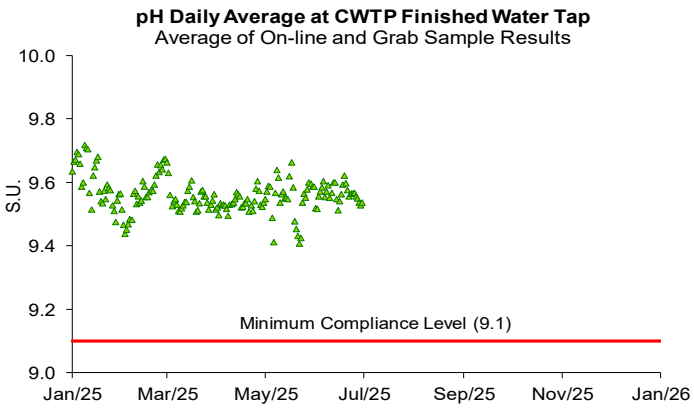
Treated Water – pH and Alkalinity Compliance

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

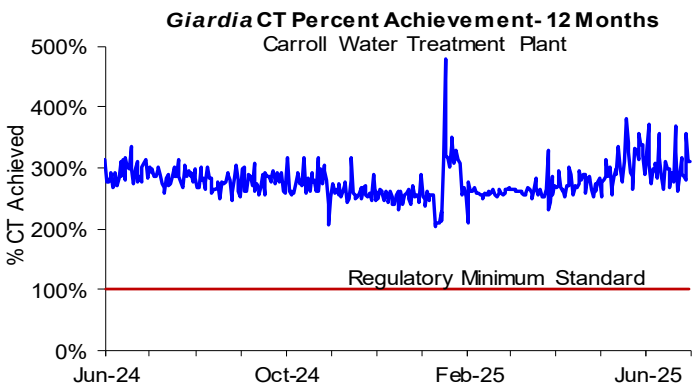
4th Quarter – FY25

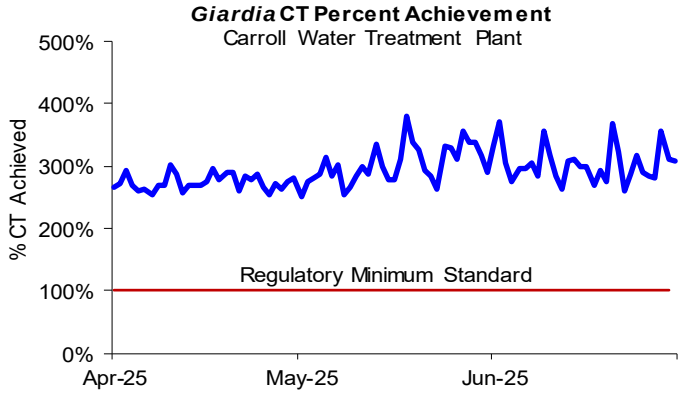
At the Carroll Water Treatment Plant (CWTP), MWRA meets the required 99.9% (3-log) inactivation of *Giardia* using ozone (reported as CT: concentration of disinfectant x contact time) and the required 99% (2-log) inactivation of *Cryptosporidium* using UV (reported as IT: intensity of UV x time). MWRA 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:

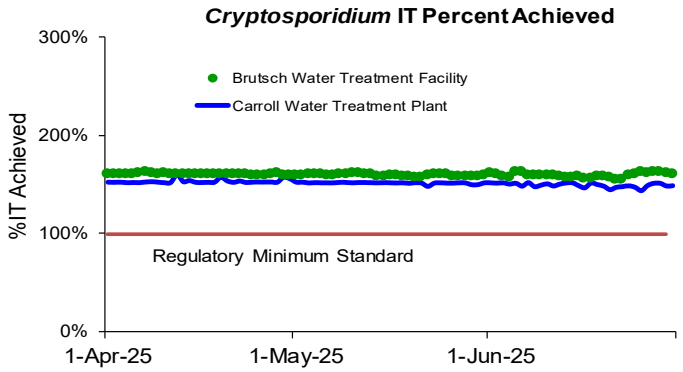
- The chlorine dose at the CWTP varied between 2.80 and 4.35 mg/L for the quarter.
- Ozone dose at the CWTP varied between 1.1 to 3.2 mg/L for the quarter.
- *Giardia* CT was maintained above 100% at all times the plant was providing water into the distribution system this quarter, as well as every day 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.

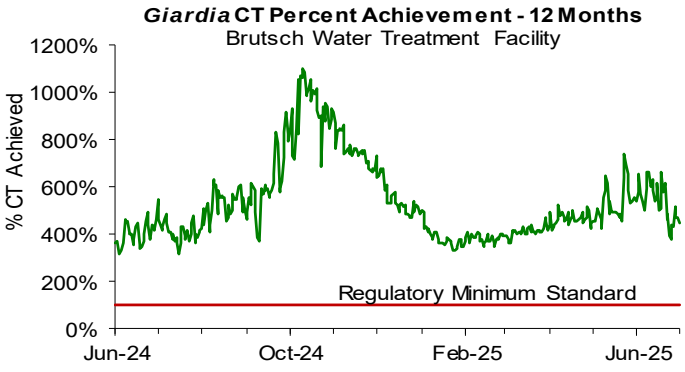


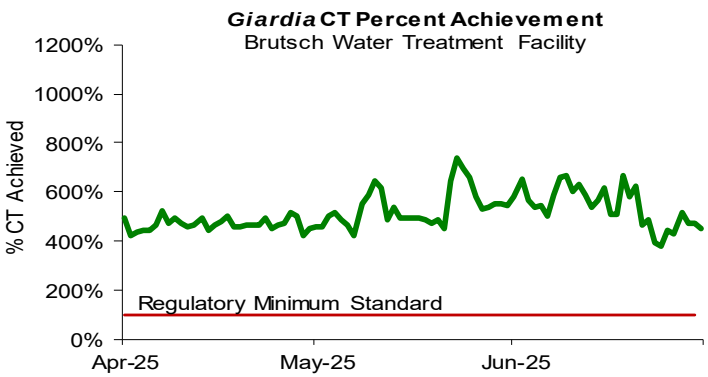


Quabbin Reservoir (CVA Supply) at: Brutsch Water Treatment Facility

- 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%.







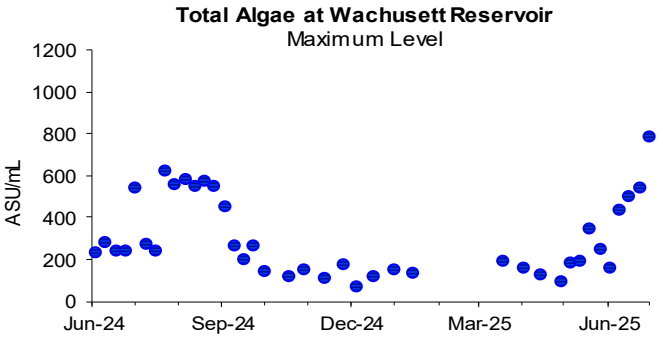
Source Water - Algae

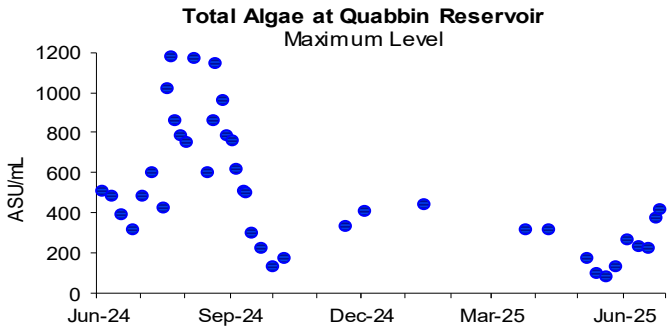
4th Quarter – FY25

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.





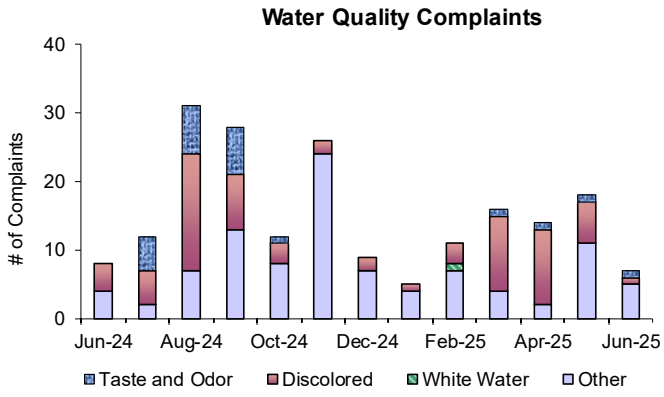
Drinking Water Quality Customer Complaints: Taste, Odor, or Appearance

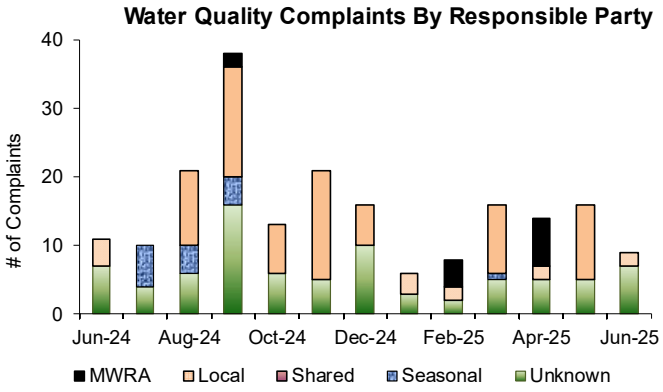
MWRA collects information on water quality complaints that typically fall into four categories: 1) discoloration due to MWRA or local pipeline work; 2) taste and odor due to algae blooms in reservoirs or chlorine in the water; 3) white water caused by changes in pressure or temperature that traps air 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.

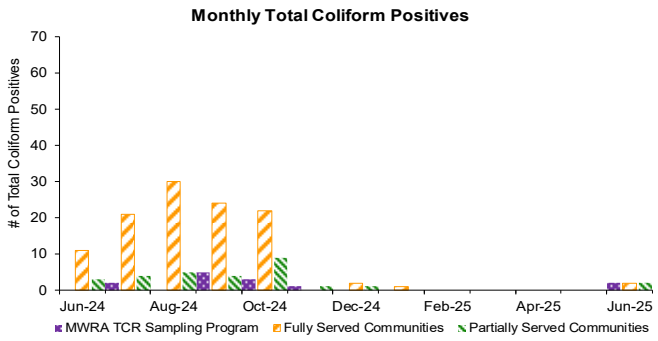
NOTES:

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 # Samples (b)	Total Coliform # (%) Positive	*E.coli* # Positive	Assessment Required
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	c	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	d	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

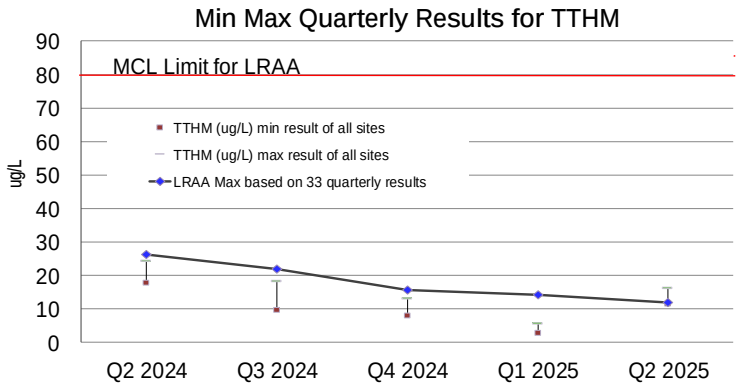
Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s) are by-products of disinfection treatment with chlorine. They are of concern due to their potential adverse health effects at high levels. EPA's locational running annual average (LRAA) standard, using the most recent four quarterly results, 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.

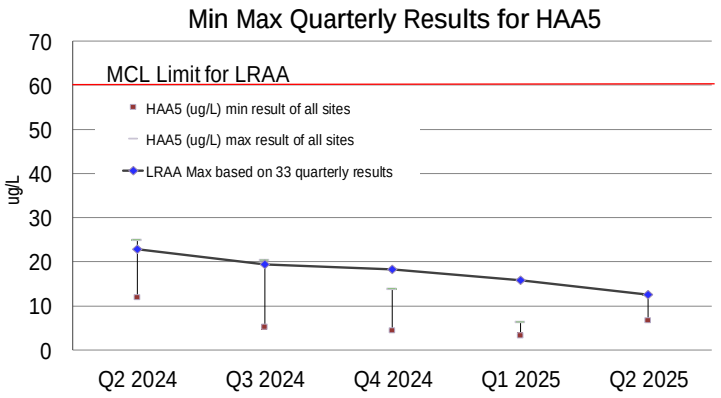
Bromate is tested monthly as required for water systems, like CWTP, that treat with ozone. EPA's RAA Maximum Contaminant Level (MCL) standard for bromate is 10 µg/L. The current RAA for Bromate at the CWTP finished water tap is 0.0 µg/L.

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.

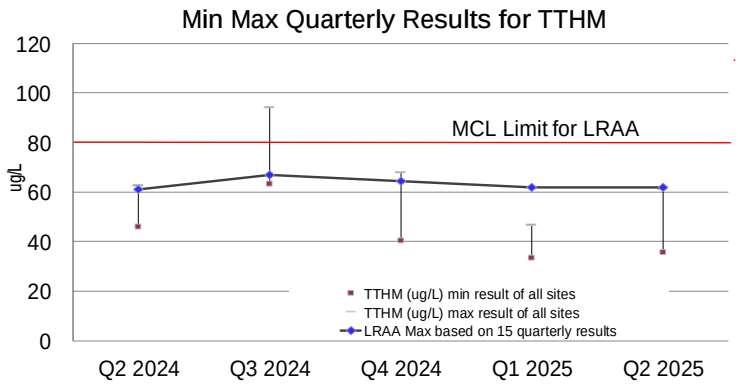
The LRAA for TTHMs and HAA5s for MWRA's Compliance Program (represented as the line in the top two graphs below) remains below current standards. The Max LRAA in the quarter for TTHMs = 11.9 µg/L; HAA5s = 12.5 µg/L. No LRAA exceedances or violations occurred this quarter for MetroBoston and for any of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

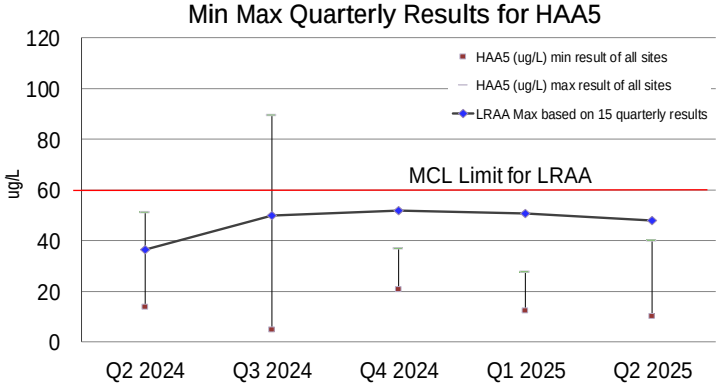
MetroBoston Disinfection By-Products





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





Water Supply and Source Water Management

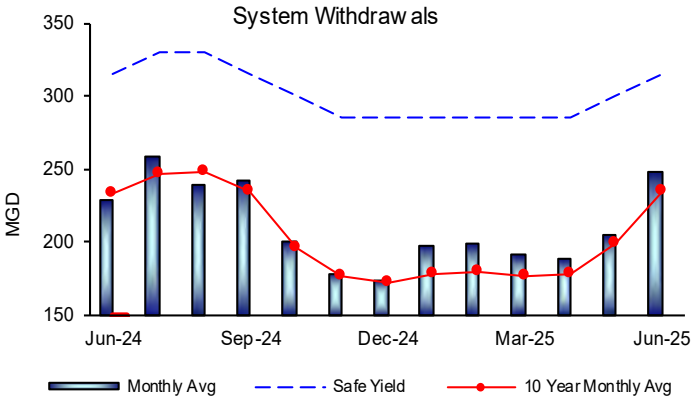
4th Quarter – FY25

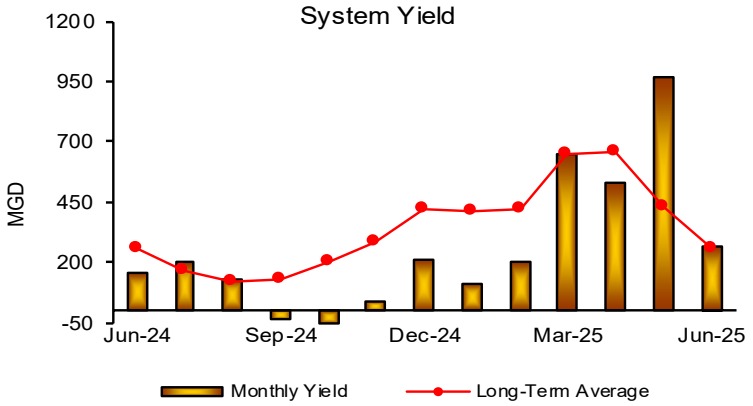
Background

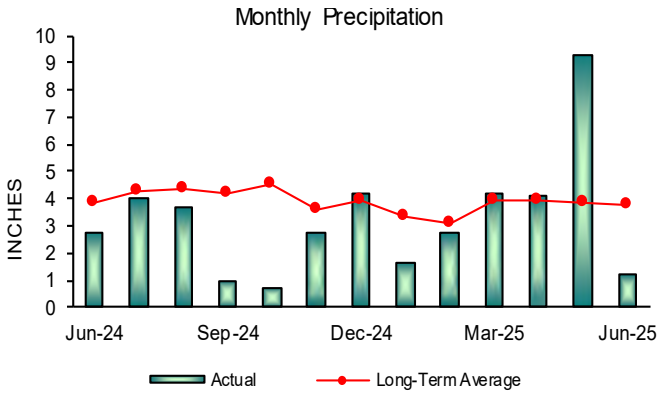
A reliable supply of water in MWRA's reservoirs depends on adequate precipitation during the year and seasonal hydrologic inputs from watersheds that surround the reservoirs. Demand for water typically increases with higher summer temperatures and then decreases as temperatures decline. Quabbin Reservoir 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.

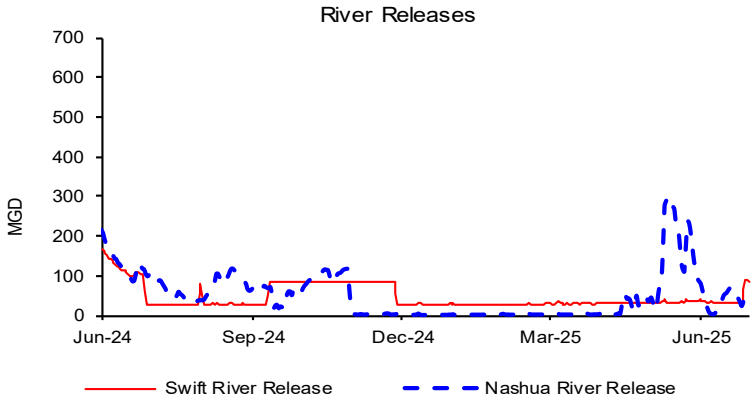
Outcome

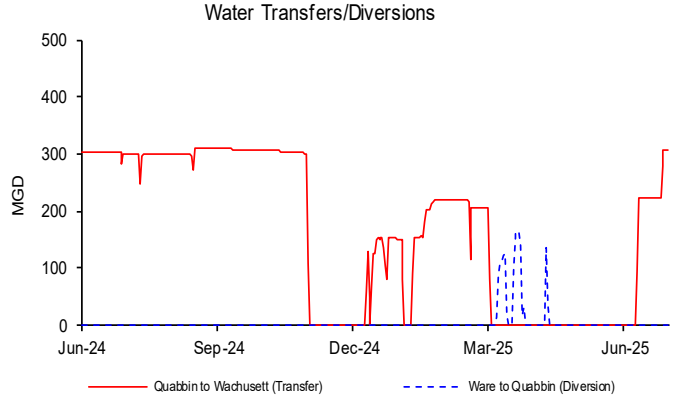
The volume of the Quabbin Reservoir was at 93.0% as of June 30, 2025; a 9.3 % increase for the quarter, which represents a gain of more than 38.4 billion gallons of storage and an increase in elevation of 5.12'. System withdrawal was below its long term quarterly average. Precipitation and Yield were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

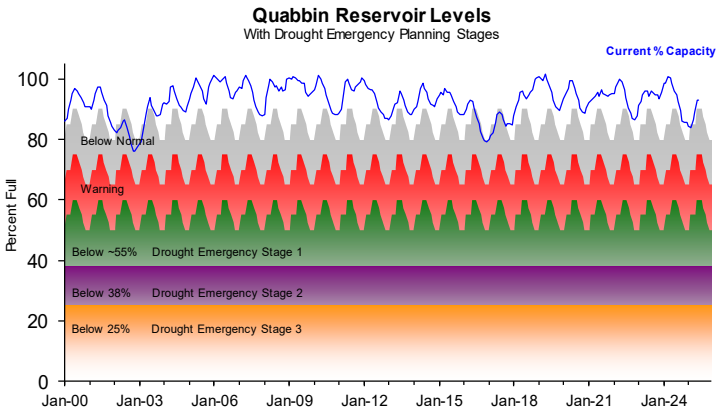












WASTEWATER QUALITY

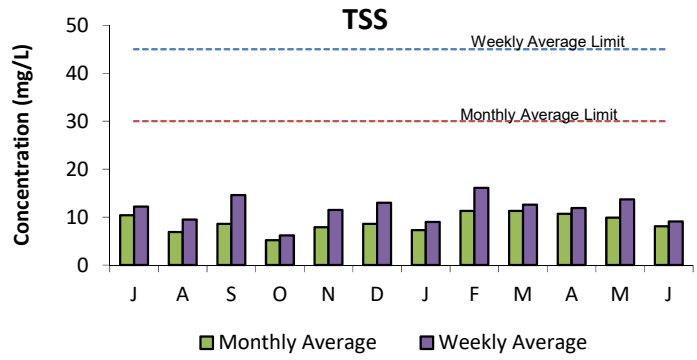
NPDES Permit Compliance: Deer Island Treatment Plant

4th Quarter - FY25

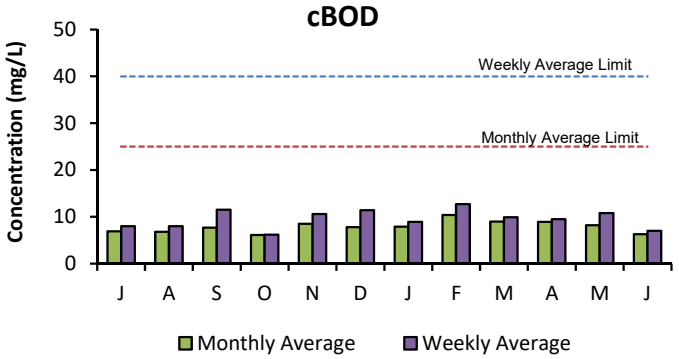
NPDES Permit Limits

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

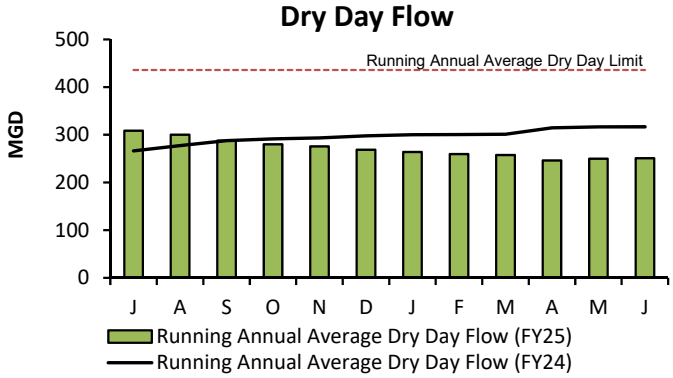
Due to a control failure at the contract lab, the April 2025 chronic inland silverside (*Menidia beryllina*) test was determined to be invalid and therefore was terminated. The June 2025, acute toxicity test for inland silverside resulted in an LC50 of 42.6% and was below the effluent limit of ≥50%. 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.



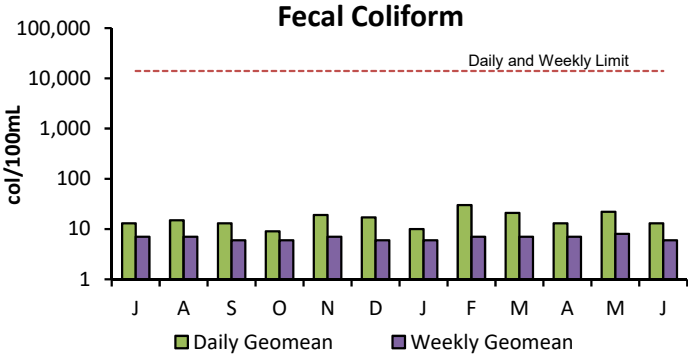
Total Suspended Solids (TSS) in the effluent is a measure of the amount of solids that remain suspended after treatment. All TSS measurements for the 4th Quarter were within permit limits.



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.

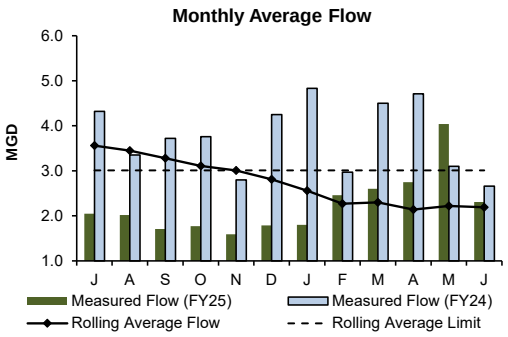
NPDES Permit Compliance: Clinton Wastewater Treatment Plant

4th Quarter - FY25

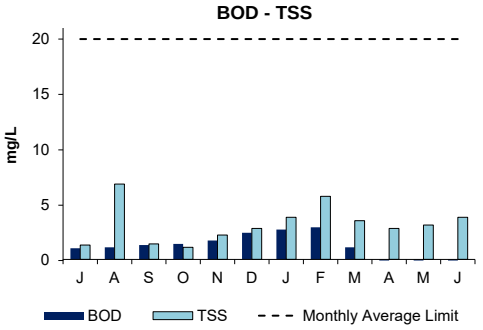
Effluent Characteristics		Units	Permit Limits	April	May	June	4th Quarter Violations	FY25 YTD Violations
Dissolved Oxygen	Daily Minimum	mg/L	6	9.1	8.6	8.1	0	0
BOD	Monthly Average Load	lb/d	500	<39	<59	<31	0	0
	Weekly Average Load	lb/d	500	<49	<73	<35	0	0
	Monthly Average	mg/L	20	<1.7	<1.8	<1.6	0	0
	Weekly Average	mg/L	20	<1.9	<2.1	<1.8	0	0
BOD % removal	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
TCR	Monthly Average	ug/L	20	0.13	<20	0.13	0	0
	Daily Maximum	ug/L	30.4	4.0	<20	4.0	0	0
E. Coli	Monthly Geometric Mean	cfu/100mL	126	5.0	5.0	5.0	0	0
	Daily Maximum	cfu/100mL	409	21.0	7.0	7.0	0	0
Acute Toxicity[1]	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.

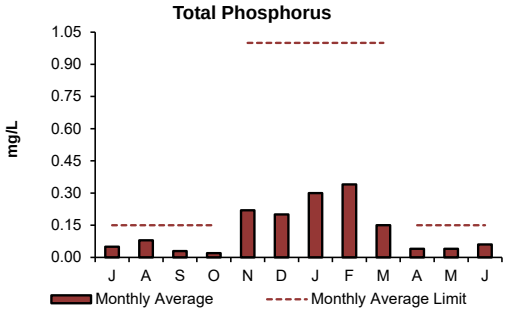
[1] Toxicity testing at the Clinton Treatment Plant is conducted on a quarterly basis.



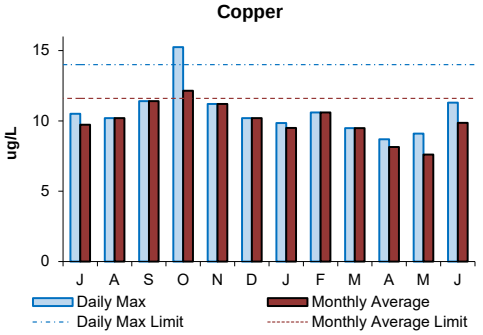
The graph depicts the rolling annual average monthly flow, measured in million gallons per day, exiting the plant.
The 12-month rolling average flows during the 4th Quarter were above the permit limit.



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.

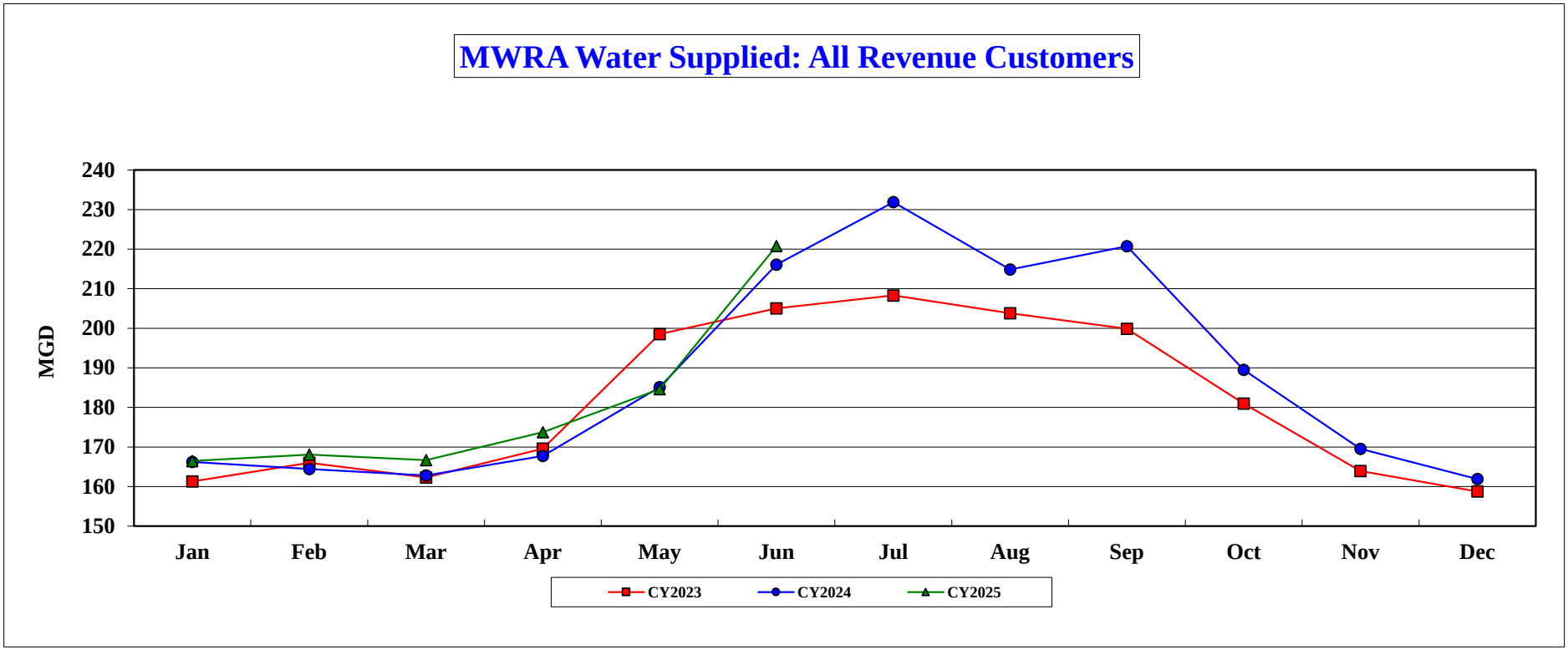


Daily maximum and monthly average concentrations of copper were below permit limits in the 4th Quarter. Permit daily and monthly limits are 14.0 ug/L and 11.6 ug/L respectively.

COMMUNITY FLOWS AND PROGRAMS

Customer Water Use

4th Quarter - FY25



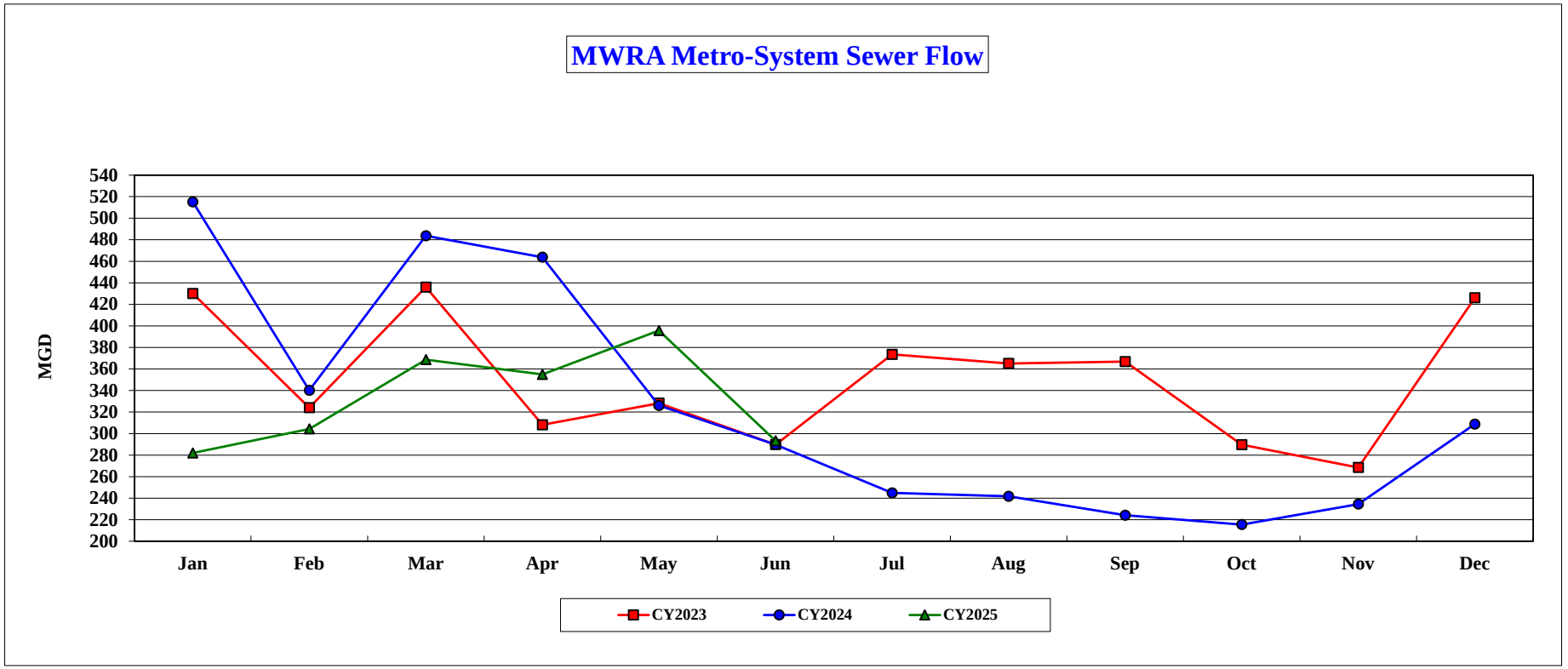
	Water Use (million gallons per day)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Average	Annual Average
CY2023	161.272	165.989	162.292	169.594	198.499	205.042	208.304	203.762	199.844	180.948	163.937	158.736	177.186	181.612
CY2024	166.216	164.428	162.771	167.755	185.117	216.090	231.863	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



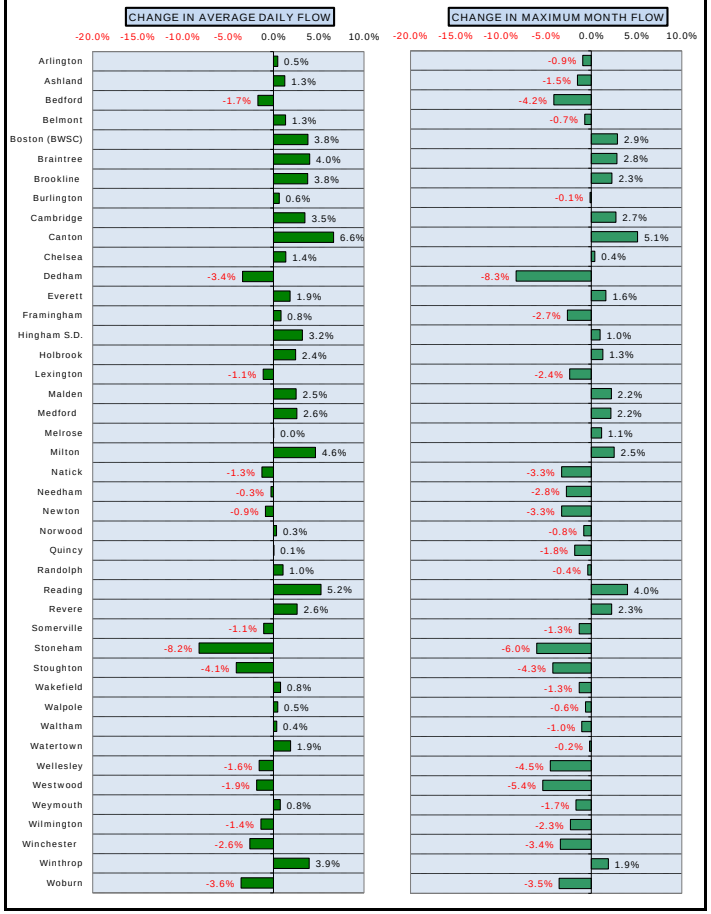
	Sewer Flow (million gallons per day)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Average	Annual Average
CY2023	430.060	323.980	435.990	308.110	328.160	289.710	373.540	365.130	366.840	289.680	268.470	426.070	353.738	351.159
CY2024	515.140	340.120	483.590	463.770	326.090	289.640	244.870	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.

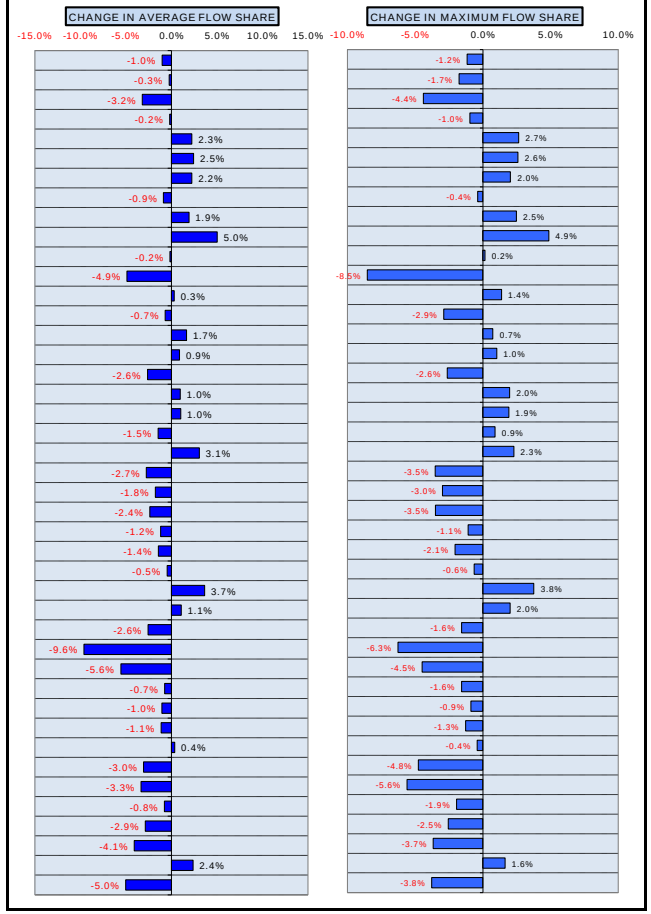
MWRA customer sewer flow averaged 333.7 mgd in the first six months of CY2025. This is a decrease of 70.3 mgd or 17.4% compared to the first six months of CY2024.

How CY2023-25 Community Wastewater Flows Could Effect FY2027 Sewer Assessments [1,2,3]

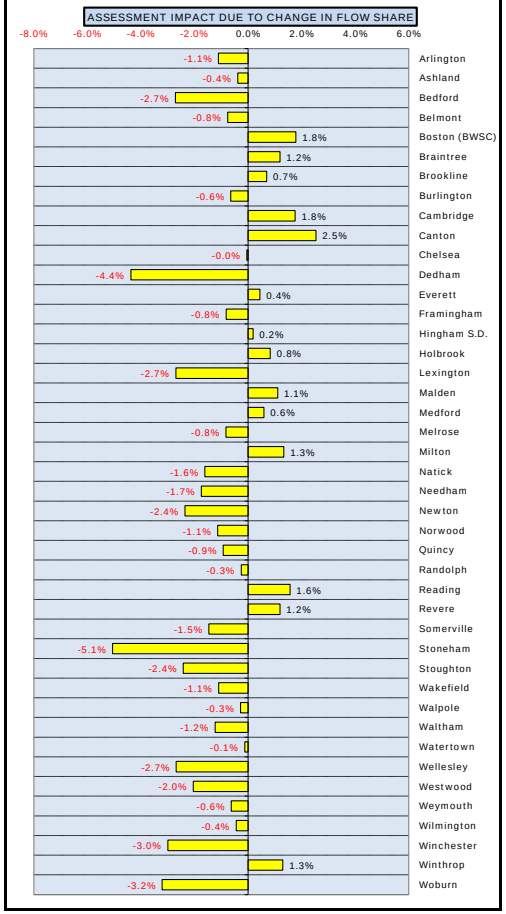
The flow components of FY2027 sewer assessments will be calculated using a 3-year average of CY2023 to CY2025 wastewater flows compared to FY2026 assessments that will use a 3-year average of CY2022 to CY2024 wastewater flows.



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.

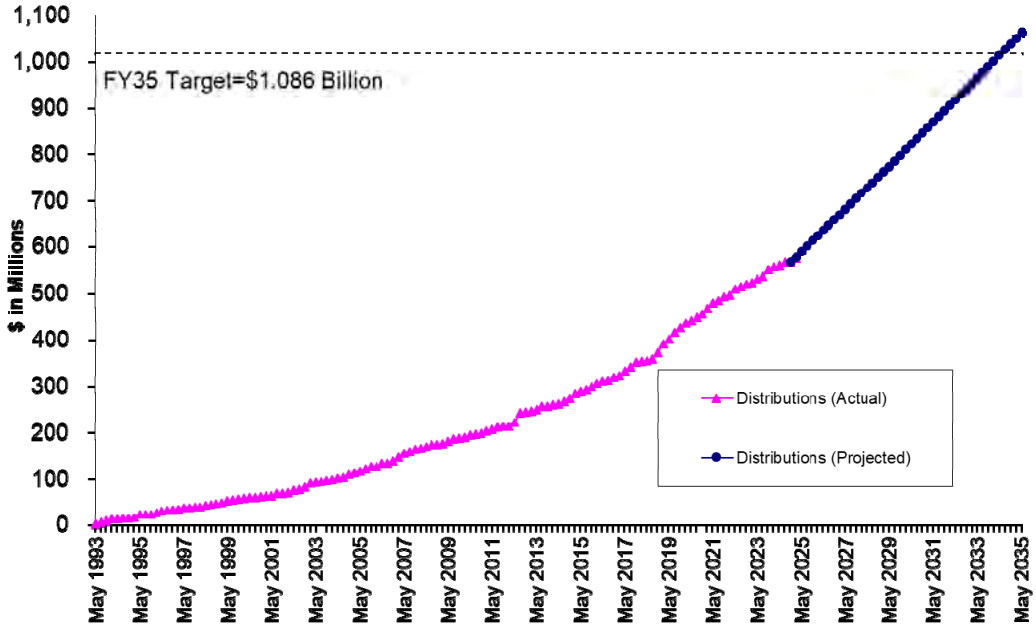
Community Support Programs

4th Quarter – FY25

Infiltration/Inflow Local Financial Assistance Program

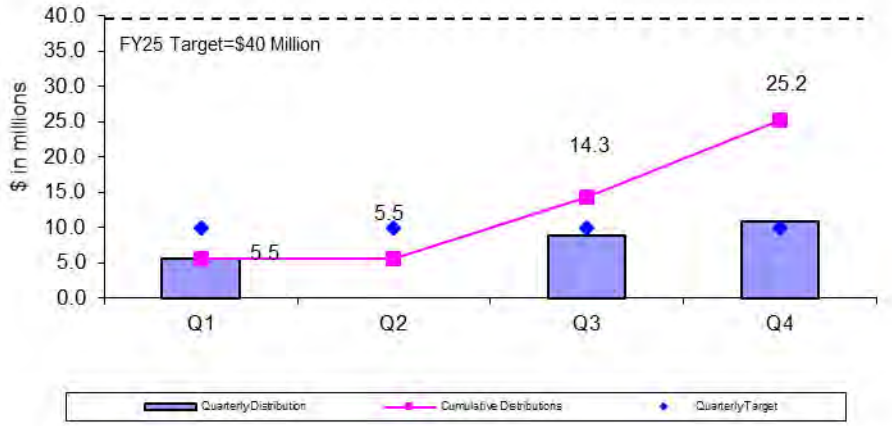
MWRA's Infiltration/Inflow (I/I) Local Financial Assistance Program provides $1085.75 million in grants and interest-free loans (average of about $22 million per year from FY93 through FY35) to member sewer communities to perform I/I reduction and sewer system rehabilitation projects within their locally-owned 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 distribution 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



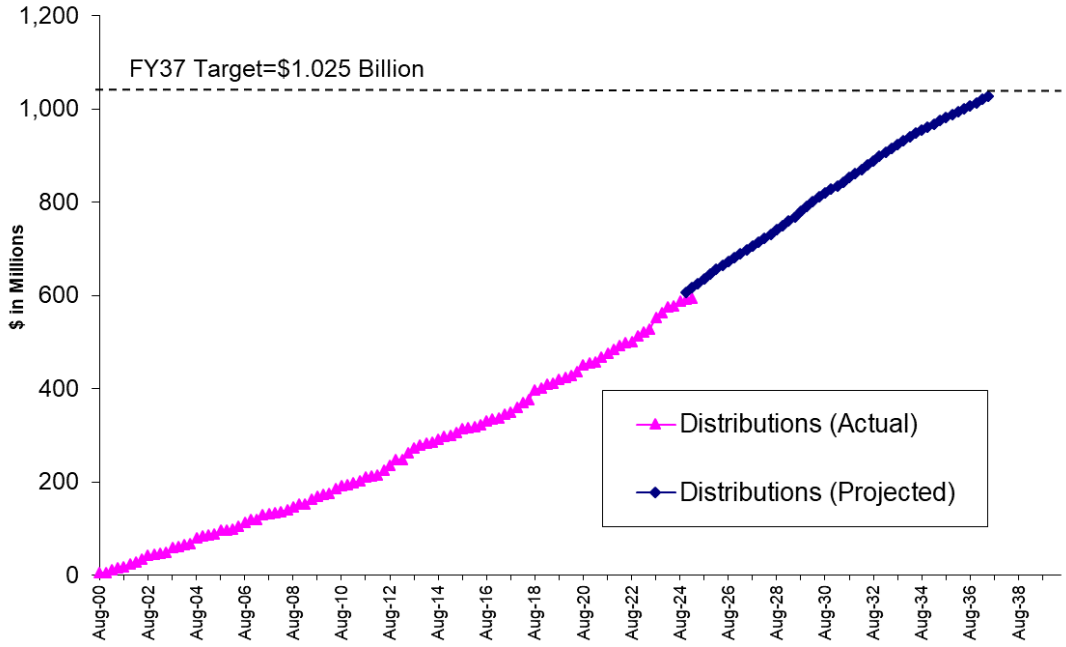
Community Support Programs

4th Quarter – FY25

Local Water System Assistance Program

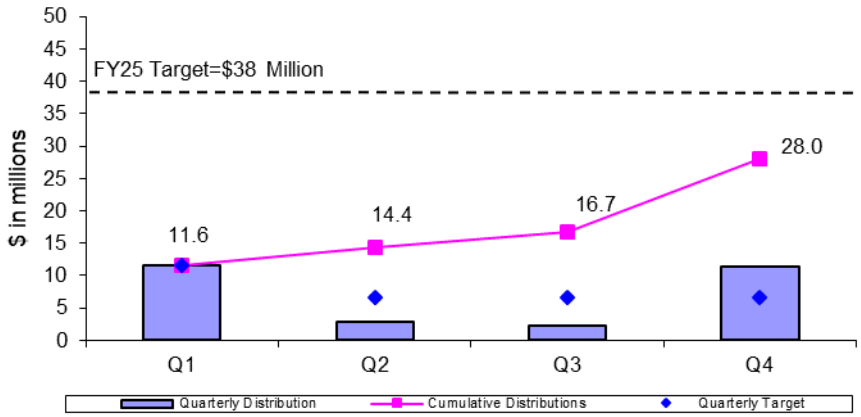
MWRA's Local Water System Assistance Programs (LWSAP) provides $1.025 billion in interest-free loans (an average of about $24 million per year from FY01 through FY35) to member water communities to perform water main rehabilitation projects within their locally-owned water distribution systems. There 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.

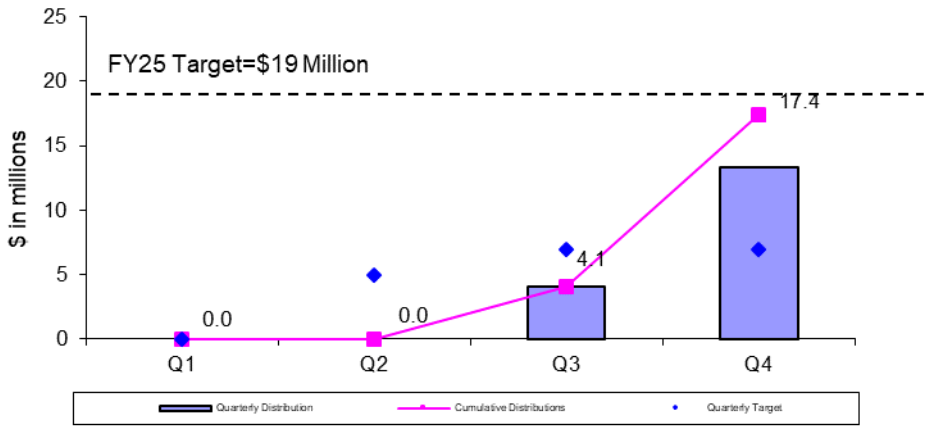
The Lead Service Line Replacement Loan Program is also referenced as the Lead Replacement Program or LRP. Each community can develop its own program, tailored to their local circumstances. MWRA's goal in providing financial assistance to member communities is to help communities remove lead from their 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

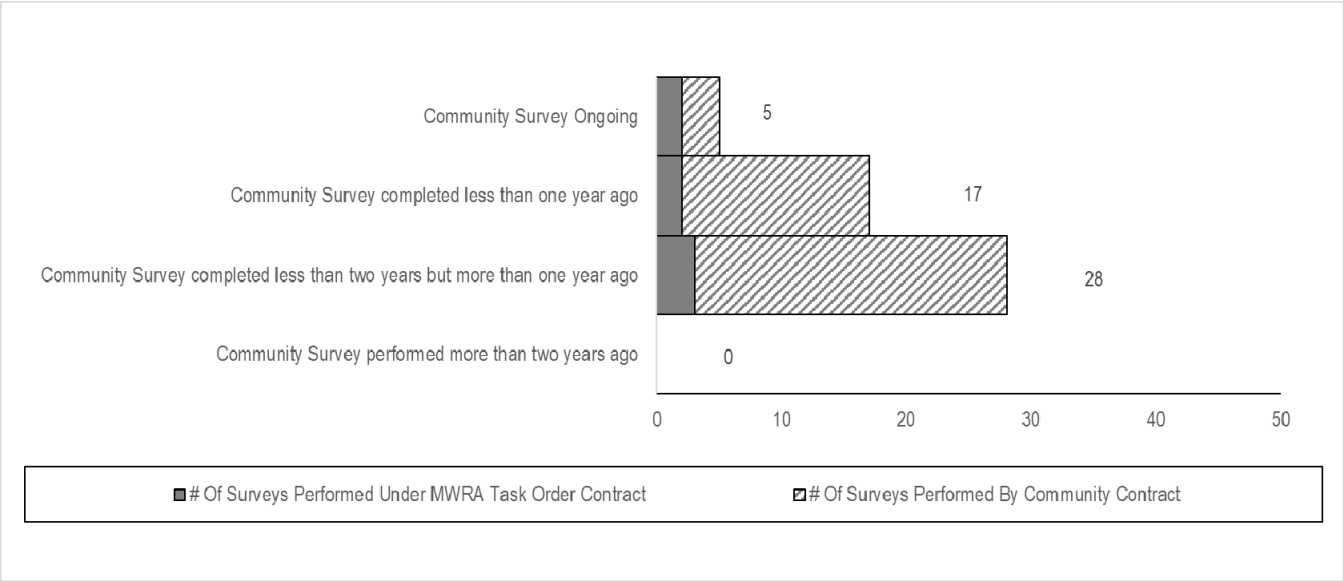


Community Support Programs

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	**23,651**
Low-Flow Fixtures (showerheads and faucet aerators)	10,000	1,352	700	616	1,958	**4,626**
Toilet Leak Detection Dye Tablets	------	2,517	524	665	7,107	**10,813**

BUSINESS SERVICES

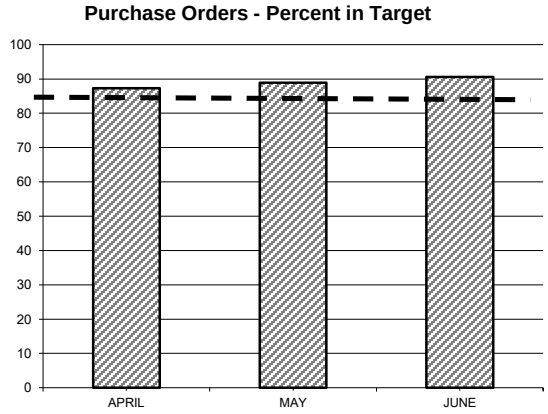
Procurement: Purchasing and Contracts

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



	No.	TARGET	PERCENT IN TARGET
$0 - $500	429	3 DAYS	85.0%
$500 - $2K	640	7 DAYS	97.8%
$2K - $5K	309	10 DAYS	99.3%
$5K - $10K	211	25 DAYS	99.5%
$10K - $25K	84	30 DAYS	97,6%
$25K - $50K	24	60 DAYS	95.8%
Over $50K	50	90 DAYS	94.0%

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.

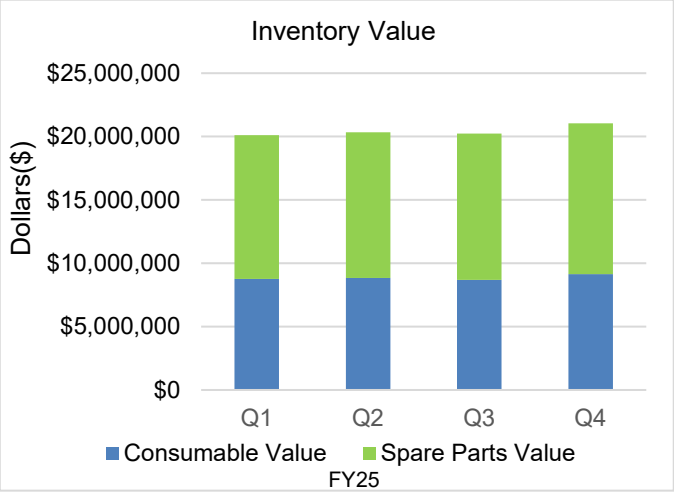
Materials Management

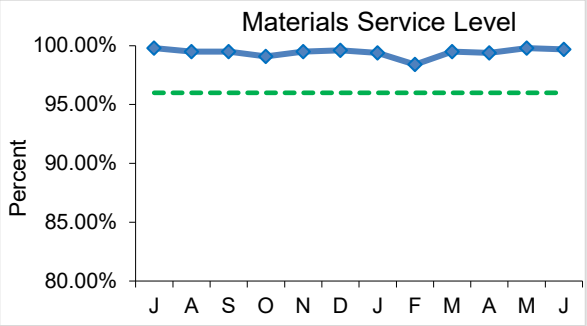
4th Quarter - FY25

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.

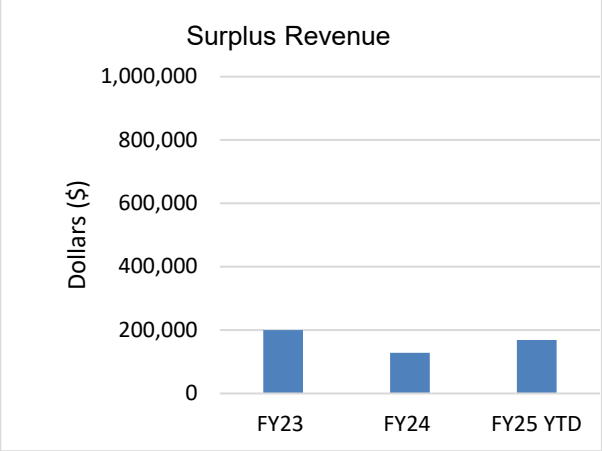


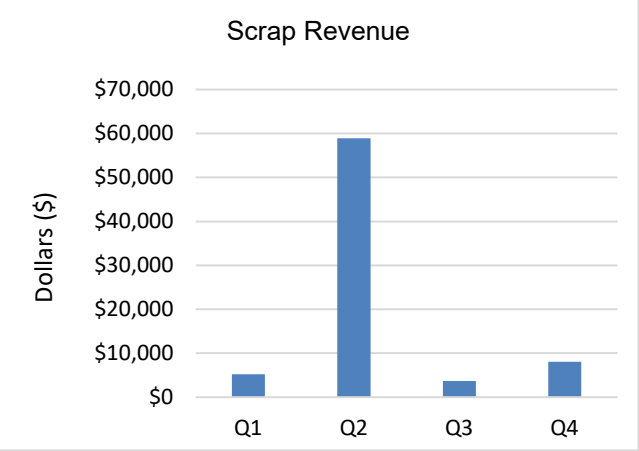


The service level is the percentage of stock requests filled. The goal is to maintain a service level of 96%. Staff issued 8,209 (99.7%) of the 8,179 items requested in Q4 from the inventory locations for a total dollar value of $1,731,148.

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.

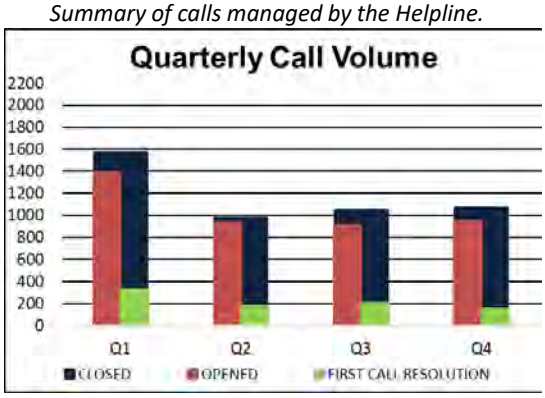
Infor Upgrade/Migration: MIS staff continue development on assigned ERP tasks, with RICE components nearly complete. APIs for Maximo Asset Management integration have been developed and entered testing. Security access now tailored to departmental needs. Cloud data replication for on-premise custom apps 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.

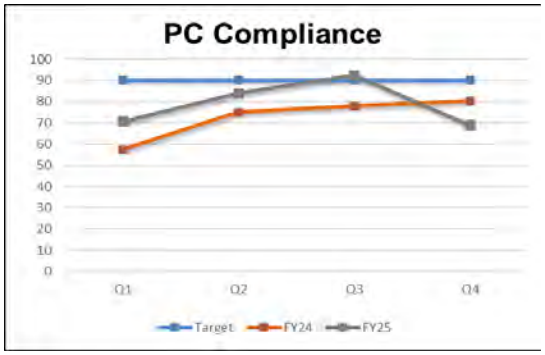
PI ProcessBook Upgrade (dataParc): dataParc selected to replace ProcessBook; implementation ongoing through June. Display groupings for DITP, Chelsea, and Transport being designed. Display migration status: Transport complete, DITP in progress, FOD up next. Secondary/tertiary links being fixed; manual 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.

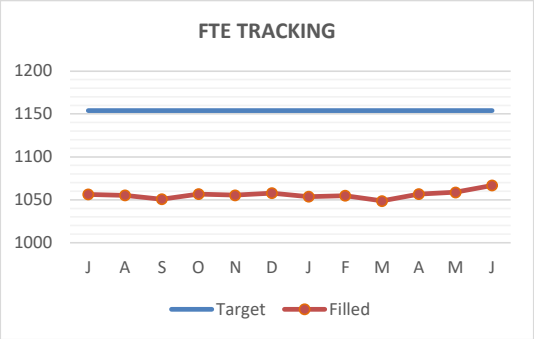
IA follows-up on open recommendations on a continuous basis. All open recommendations have target dates for implementation and are generally targeted to be closed within 12 months of the audit report issue date.

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**

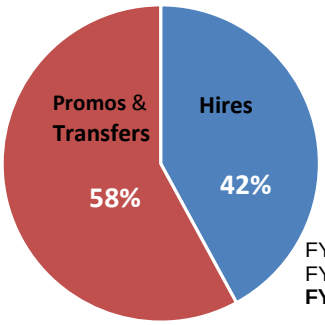
OTHER MANAGEMENT

Workforce Management

4th Quarter - FY25



Position Filled by Hires/Promos & Transfer for YTD

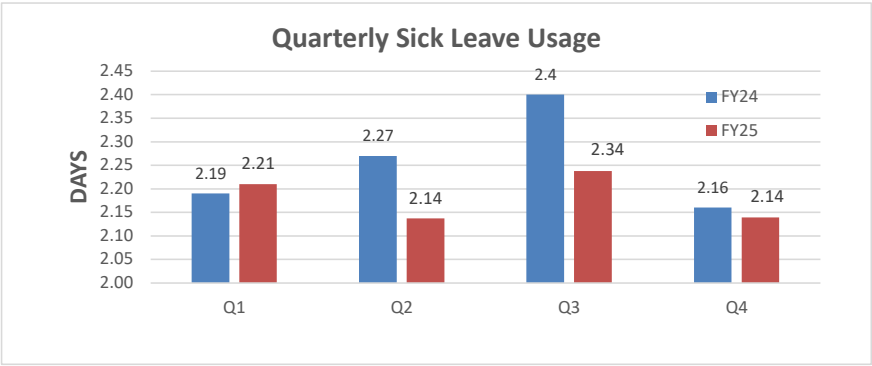


	Pr/Trns	Hires	Total
FY23	133 (59%)	91(41%)	224
FY24	117 (56%)	93 (44%)	210
FY25	124 (58%)	90(42%)	214

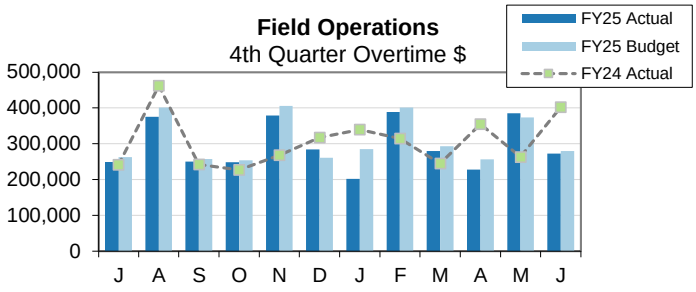
FY25 Budget for FTE's = 1154
FTE's as of June = 1066.7
Tunnel Redundancy as of June 2025 = 8

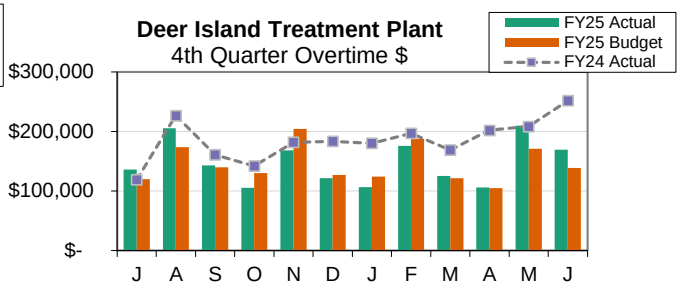
POSITION CHANGE by FY

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)



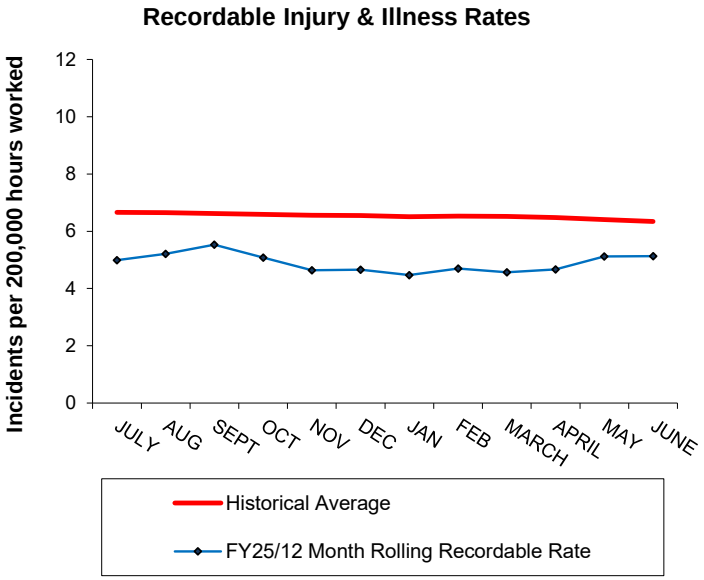


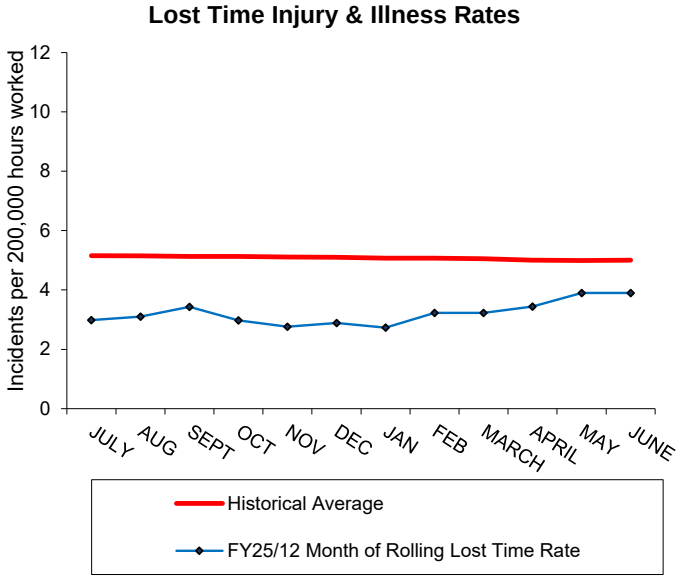
Total Overtime for Field Operations for Fourth Quarter (Q4) (FY25) was $885k, which is $24k or 3% under budget. Fewer than anticipated emergency events contributed to lower spending in Q4. Rain events totaled $43k, or 33% of Emergency for FOD in Q4.Total Planned Scheduled Maintenance was $97k, which 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





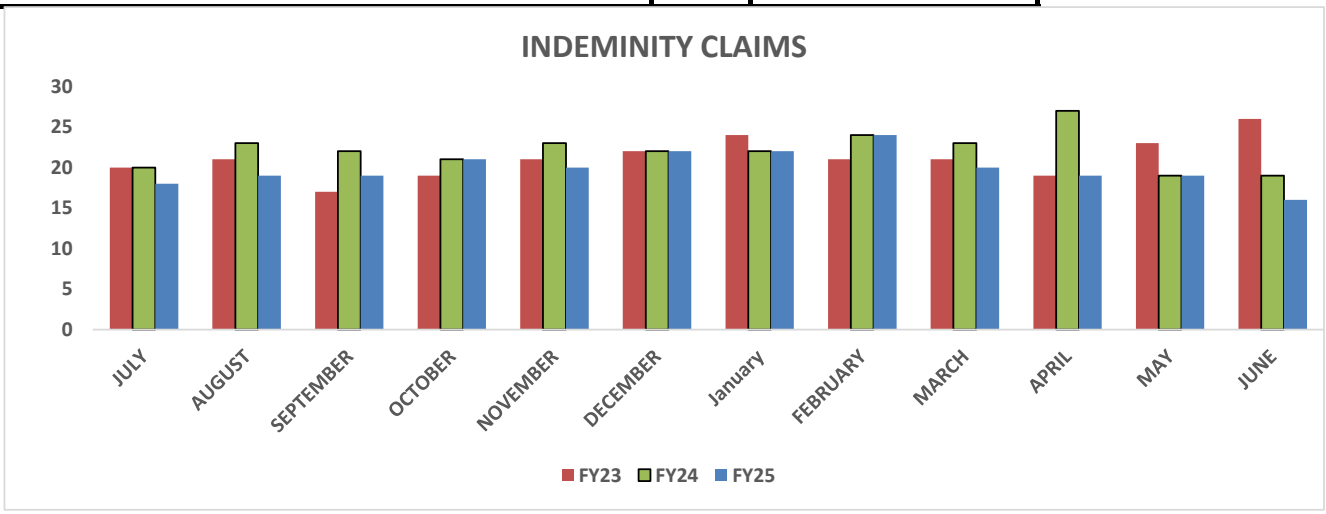
1 "Recordable" incidents are all work-related injuries and illnesses which result in death, loss of consciousness, restriction of work or motion, transfer to another job, or require medical treatment beyond first aid. Each month this rate is calculated using the previous 12 months of injury data.

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

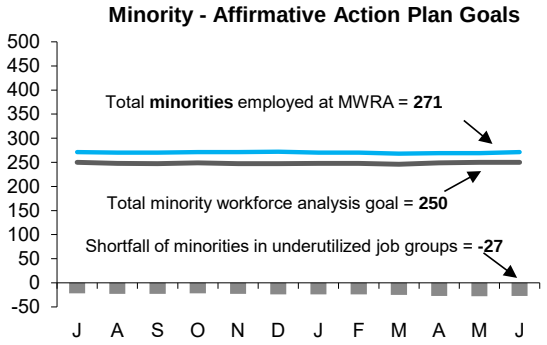
WORKERS COMPENSATION HIGHLIGHTS

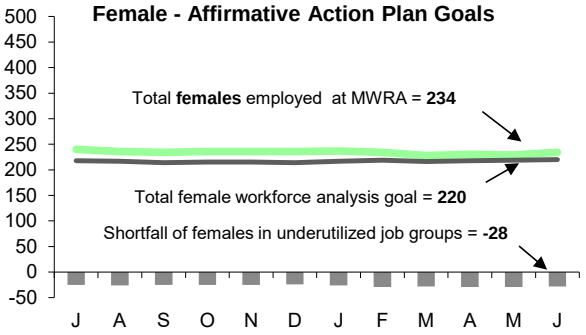
	4th Quarter Info as of 6.30.25		
	New	Closed	Open Claims
Lost Time	1	6	14
Medical Only	4	7	116
Report Only	6	6	
	QYTD		FYTD
Regular Duty Returns	6		15
Light Duty Returns	0		1
Indeminity payments as of June 2025included in open claims listed			16



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	1	Int./Ext.	1	0	PROMO= WM

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

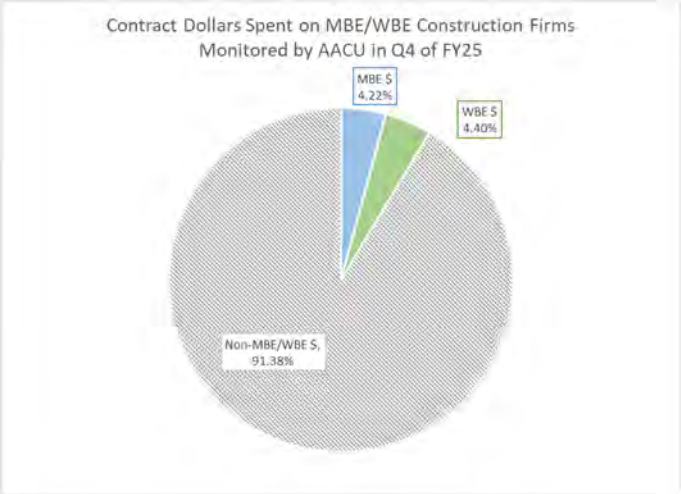
4th Quarter – FY25

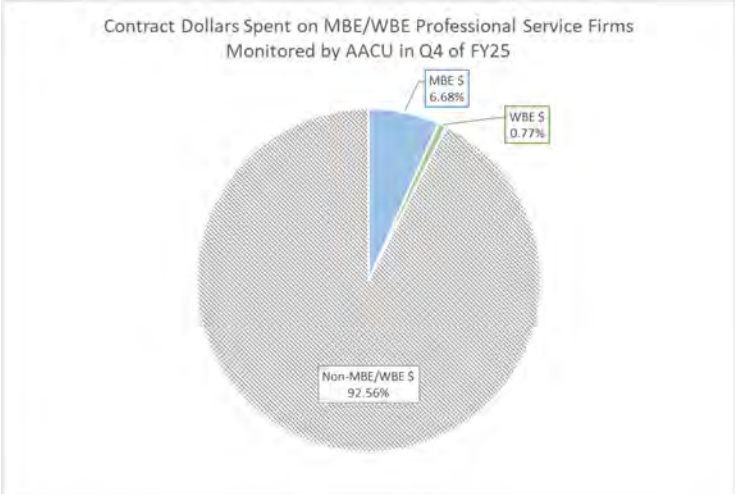
MWRA's goals for construction and professional services expenditures for Minority-Owned Business Enterprises (MBE) and Women-Owned Business Enterprises (WBE) is based upon an Availability Study completed in 2002.* The goals are as follows:

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

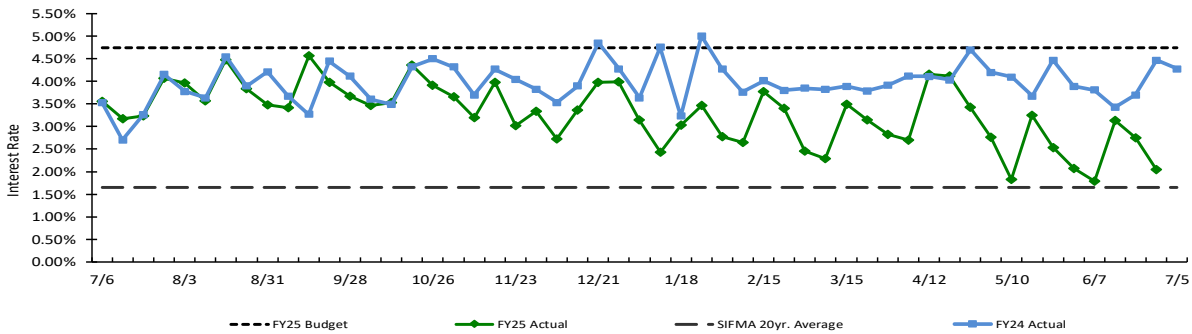
2024 Series B and C ($445.5 million)	3.68%

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	18.8yrs	11.2 yrs	11.7yrs	11.9yrs	9.73 yrs.	15.6 yrs	12.2 yrs	10.45 yrs	11.77 yrs

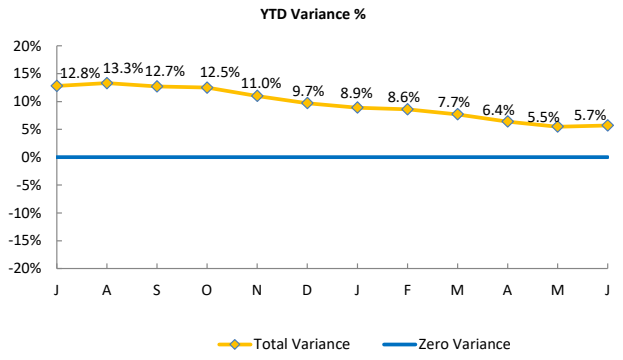
Weekly Average Variable Interest Rates vs. Budget

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.

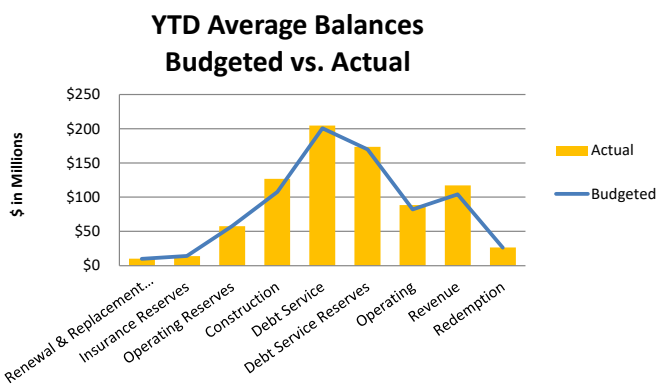


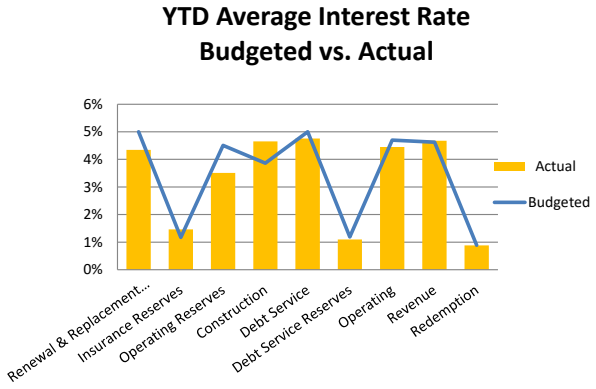
Investment Income
4th Quarter – FY25

➢ 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%





Monthly