

MASSACHUSETTS WATER RESOURCES AUTHORITY

Board of Directors Report

on

Key Indicators of MWRA Performance

Third Quarter FY2025

Q1	Q2	Q3	Q4



Frederick A. Laskey, Executive Director
David Coppes, Chief Operating Officer
May 21, 2025

Board of Directors Report on Key Indicators of MWRA Performance

3rd Quarter – FY25

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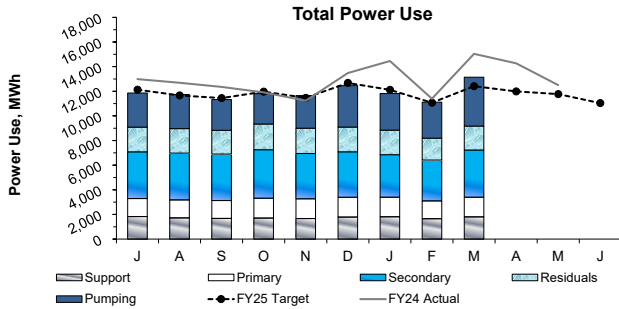
This quarterly report is prepared by MWRA staff to track a variety of performance measures for routine review by the Board of Directors. The content and format of this report is expected to develop as time passes. Information is reported on a preliminary basis as appropriate and available for internal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

Frederick A. Laskey, Executive Director
David Coppes, Chief Operating Officer
May 21, 2025

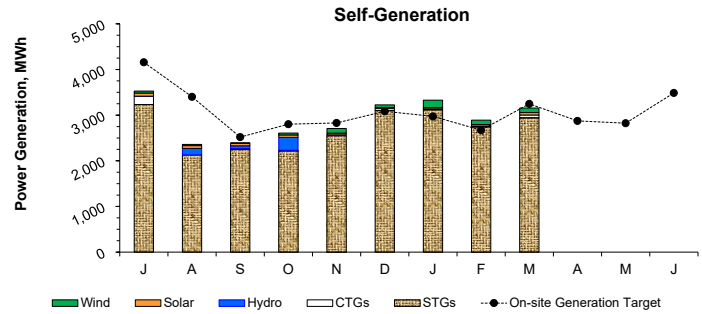
OPERATIONS AND MAINTENANCE

Deer Island Operations

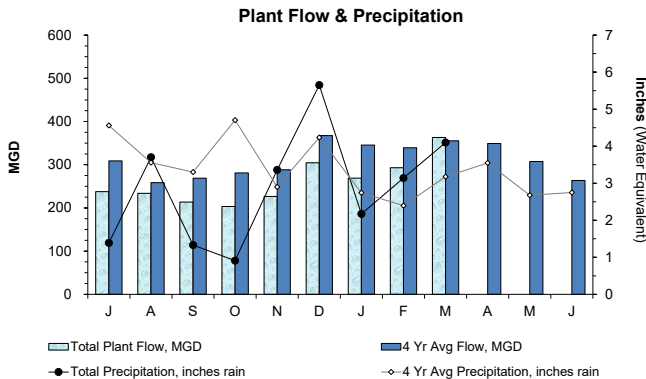
3rd Quarter - FY25



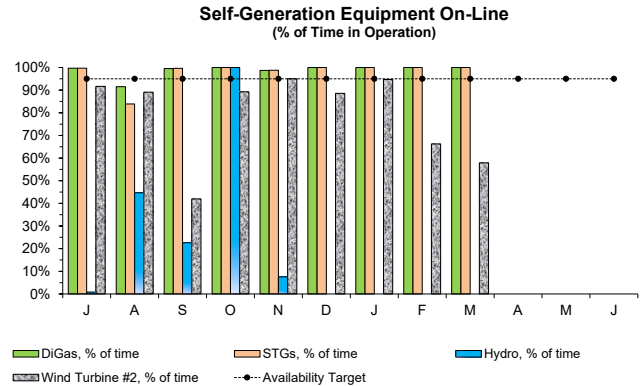
Total power usage in the 3rd Quarter was similar to budgetary estimates (+1.3%) even though plant flow was 11.1% lower than the historical (4 year average) estimate used to generate the electricity model, as plant flows have been much lower-than-expected for nearly every month of FY25-to-date due to a lengthy period of severe drought. Power used for raw wastewater pumping was 7.9% below target due to the lower plant flows, including 18.3% lower-than-expected power usage for the pumping of the South System flows which were 12.9% below target. However, power used in the other major treatment processes (such as for secondary biological treatment with the higher cryogenic oxygen production demand) were up to 7.8% above their respective targets as a result of the lower-than-expected plant flows.



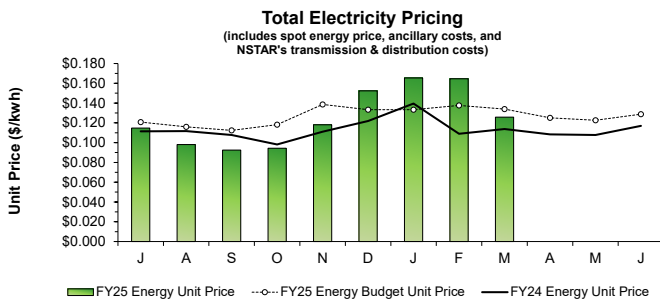
Power generated on-site during the 3rd Quarter was 5.4% above target as STGs generation was 29.5% above budgetary estimates due to supplemental fuel oil usage for boiler operation during periods of lower or unstable digester gas production, thus allowing for much greater generation by the main STG. CTEs generation was much lower than budgeted as the units were only operated for a total of 6.15 hours this quarter for compliance emissions testing and for maintenance/checkout. The Hydro Turbines were not operated due to ongoing wicket gate rehabilitation and other repairs. Solar Panel generation was 18.2% below target due partly to a failed grid inverter on the Residuals Odor Control Facility solar array. Meanwhile, Wind Turbine generation was 46.7% above target due to lengthy periods of generation at maximum capacity as a result of very high winds this quarter.



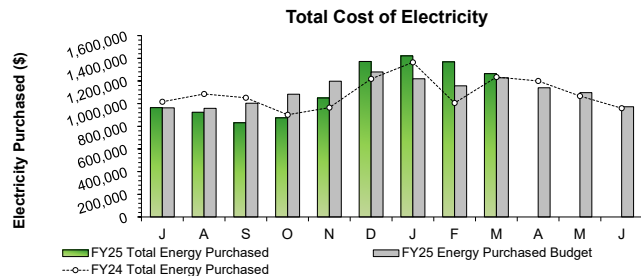
Total Plant Flow for the 3rd Quarter was 11.1% below target with the budgeted 4 year average plant flow (308.3 MGD actual vs 346.7 MGD expected) even though precipitation was 13.2% higher than target this quarter (9.41 inches actual vs. 8.32 inches expected). Plant flows had been well below target following 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. Average dry weather plant flows continue to remain well below target levels as the region is still experiencing abnormally dry conditions.



The DiGas System and STGs availability both exceeded the 95% availability target in the 3rd Quarter, while the Hydro Turbines remain unavailable for the entire 3rd quarter as both turbines are undergoing wicket gate rehabilitation and other repairs. Wind Turbine availability was 72.9% this quarter as Turbine #2 experienced several mechanical issues and was at times unable to operate due to turbulent winds blowing through the digesters causing the turbine to trip. Wind Turbine #1 is awaiting re-installation and is not included in the FY25 tracking of turbine availability.



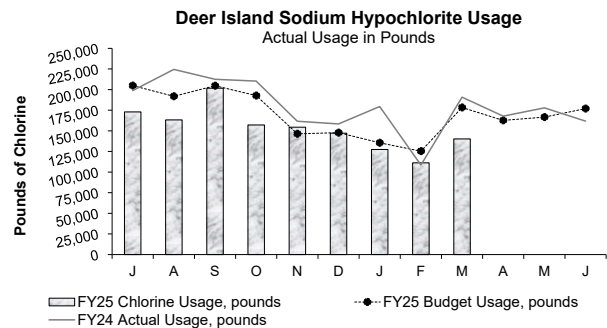
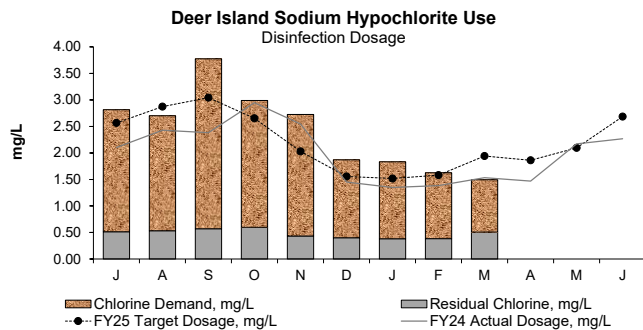
Under the current energy supply contract, a block portion of DI's energy is a fixed rate and the variable load above the block is purchased in real time. The Total Energy Unit Prices for December 2024 through March 2025 are estimated pending receipt of the Direct Energy invoices. Overall, the average unit prices are estimated to be 2.2% lower than the budgetary estimate through March. 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 \$18,340 (0.2%) lower than budgeted through March. The Total Cost of Electricity depicted for December 2024 through March 2025 are estimated pending receipt of the Direct Energy invoices. The Total Cost of Electricity is estimated to be slightly lower than budgeted as the estimated Total Energy Unit Price is 2.2% lower than target while the Total Volume of Electricity Purchased was 2.1% above target.

Deer Island Operations

3rd Quarter - FY25



The disinfection dosing rate in the 3rd Quarter was similar to budgetary estimates (-1.8%) even as plant flow was 11.1% lower-than-expected. Sodium hypochlorite usage in pounds of chlorine was 13.7% lower-than-target due to the lower plant flows. DITP maintained an average disinfection chlorine residual of 0.42 mg/L in the 3rd Quarter with an average dosing rate of 1.65 mg/L as chlorine demand was 1.23 mg/L. On March 14, 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.

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
Total	8	8	0	99.7%	29.37

99.9% of all flows were treated at full secondary during the 3rd Quarter as there were six (6) separate secondary blending events in February and March, all due to high plant flows from heavy precipitation, as well as snowmelt. These blending events resulted in 15.37 hours of blending and a total of 33.13 MGal of primary-only treated effluent blended with secondary effluent. The Maximum Secondary Capacity during the entire quarter was 700 MGD.

Secondary permit limits were met at all times during the 3rd Quarter.

Deer Island Operations & Maintenance Report

Environmental/Pumping:

The plant achieved an instantaneous peak flow rate in the 3rd Quarter of 873.5 MGD on March 16, during a storm event that brought 1.78 inches of precipitation to the metropolitan Boston area. The Total Plant Flow was 11.1% below the 4 year average plant flow target for the quarter even though precipitation was 13.2% higher than target this quarter (9.41 inches actual vs. 8.32 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. Average dry weather plant flows continue to remain below target levels as the region is still experiencing abnormally dry conditions.

Due to the sustained below average flows, new monthly low flow records were set for the month of January for both the Total Plant Influent Flow and the North System Influent Flow. The table below summarizes these January flow statistics with the new low flow records displayed in the highlighted boxes.

January Low Plant Flow Records

	Previous January Low Flow Record (since plant startup July 1998)	New January Low Flow Record (set 2025)	Current All-Time Monthly Low Flow Record (since plant startup July 1998)
Total Plant Influent Flow	292.79 MGD (2022)	268.94 MGD	201.73 MGD (August 2022)
North System Influent Flow	186.75 MGD (2022)	170.54 MGD	137.78 MGD (October 2024)
South System Influent Flow	95.61 MGD (2002)	No new record set 98.41 MGD	62.28 MGD (Sept. 2016)
Precipitation	1.01 inches (2004)	No new record set (2.17 inches)	0.00 inches (June 1999)

Earthquake:

A magnitude 3.8 earthquake occurred on the morning of January 27, centered approximately 7 miles southeast of York Harbor, Maine, and struck at a depth of about 8 miles according to the U.S. Geological Survey. This earthquake was felt all across New England and as far away as Pennsylvania. Additionally, aftershocks with magnitudes of 2.0 occurred on both January 29 and February 2, in almost the exact same location. No deformities nor issues were found in the treatment plant after the DITP staff completed inspections of the structures and equipment following the report of the earthquake.

Deer Island Operations

3rd Quarter - FY25

Deer Island Operations & Maintenance Report (continued)

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. On March 14, the disinfection basin effluent total residual chlorine target for dry weather flow conditions 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. In the 3rd Quarter, DITP maintained an average disinfection chlorine residual of 0.42 mg/L with an average dosing rate of 1.65 mg/L as chlorine demand was 1.23 mg/L (with the adjusted higher target starting March 14). 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 indicator bacteria limits in the proposed new NPDES permit.

Primary and Secondary Treatments:

The contractor completed the first several phases of the Clarifier Rehabilitation Project (Contract #7395) with the rehabilitation of the Primary Batteries A, B, C and D Influent and Effluent Channels, completing all scheduled work in these channels. The rehabilitation work under this contract includes putting primary influent gates in place, installing new aeration header systems, completing the installation of lower aeration systems, Linabond repair work in the clarifiers, installing drains between Batteries A and B, replacing effluent gates, completing hatch and grating modifications, and expansion joint repairs, in addition to other work. The contractor is currently 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 currently working in the Secondary A3, B3, and B4 clarifiers. There are 18 secondary clarifiers in each battery, totaling 54 clarifiers. DITP plans to maintain a secondary process limit of 700 MGD, which is the capacity of 50 clarifiers in operation.

Secondary Treatment:

Maintenance staff repaired a leak in the Secondary Battery C waste sludge line on January 22 by replacing a spool piece that had developed a small leak. Secondary sludge wasting for Battery C was suspended at 3:00AM, the waste sludge line drained, and flushed by 7:00AM to allow staff to begin the repairs. The repairs were completed before noon and sludge wasting was allowed to resume.

Residuals Treatment:

Sludge feed to the four (4) Module #2 digesters and Module #3 Digesters #1, #2, and #3 was temporarily suspended, one at a time, for several days each from December through February, to allow the contractor to perform routine scheduled maintenance on each of the digester's sludge overflow line. This maintenance is performed on only one (1) digester at a time and continues until this maintenance is completed for all eight (8) online digesters. Similar work will be performed for Module #3 Digester #4 in the spring. This routine preventative maintenance was last performed in May 2023.

Energy and Thermal Power Plant:

Overall, total power generated on-site accounted for 26.0% of Deer Island's total power use in the 3rd Quarter. Renewable power generated on-site (by Solar, Wind, STGs, and Hydro Turbines) accounted for 25.7% of Deer Island's total electrical power use for the quarter.

Regulatory:

Based on the DITP's performance in 2024, Deer Island is qualified to receive NACWA's (National Association of Clean Water Agencies) Platinum Award for Peak Performance which recognizes member agency facilities for outstanding compliance of their National Pollutant Discharge Elimination System (NPDES) permit limits. The Platinum award is given to agencies in recognition of 100% compliance with NPDES permits over a consecutive five year period. Deer Island is qualified for a Platinum18 Award for having operated with no permit violations for 18 consecutive years.

Clinton Operations & Maintenance Report

Dewatering Building:

Maintenance completed oil drum reclamation and cleanup of the Dewatering Building. New mirrors were installed over the sludge presses by the operations and maintenance staff. The M&O and Facilities Specialist greased all three (3) belt filter press feed pumps and both belt filter presses. The wash box seals on the #2 belt filter press were replaced and the belts were pressure washed. Digester feed pump #1 had the oil changed and was greased by the M&Os. Maintenance staff replaced a broken drive belt on the air handling unit in the basement of the Dewatering Building. Operations staff removed a blockage from the Gravity Thickener #1 beach plate. The Facility Specialist cleaned and prepared the Maintenance shop stairs for concrete repair.

Chemical Building:

The contractor installed the conduit and wire runs to allow the Chemical Building's gas alarms to report to SCADA when in alarm. Operations staff rebuilt the two (2) PRF polymer pumps located in the Chemical Building in preparation for the upcoming PRF operating season. Maintenance staff cleaned the excess build up in the Soda Ash mixing tank and replaced the Soda Ash mixing motor and impeller. Staff also repaired and restored flow to Soda Ash line B, jetted Soda Ash line A, and replaced the gaskets on the #2 Soda Ash pump. Operations staff completed the quarterly PM on the Sodium Hypochlorite pumps, and the M&O changed the oil, air filters and greased both disinfection blowers.

Aeration Basins:

Operations staff cleaned the pH and Dissolved Oxygen probes.

Phosphorus Reduction Facility (PRF) Building:

Operations staff cleaned and changed the reagents in both CL17 chlorine analyzers. The Facilities Specialist entered the disc filter #2 sump area to clean the level probes for low level readings but was unable to resolve the level reading issue. The contractor was later able to diagnose and repair the faulty wiring on low level probe resolving the low level reading issue. Maintenance staff along with a Chelsea crane crew installed the PRF train #1 rapid mixer. Operations staff placed the PRF back online and completed standard checks on the laboratory equipment in preparation of the seasonal low level effluent phosphorus discharge permit limit starting in April.

Headworks Building:

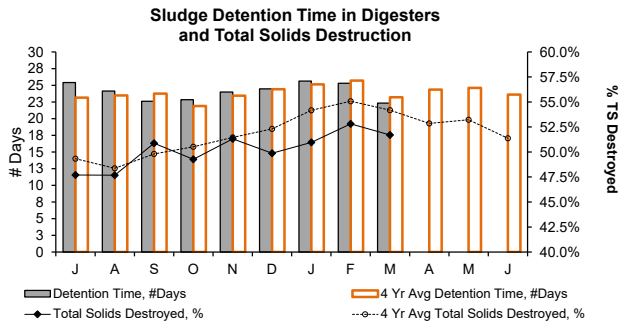
The M&O and the Facilities Specialist cleaned and greased the upper and lower pin rack, cleaned the upper Grit room, and greased the Grit Classifier and Belt. They also pumped the water out of the septage holding tank. The contractor ordered replacement parts for the Grit building garage door and the M&O and Facility Specialist repaired the door's manual opener pending arrival of the parts needed to repair the electric door opener. The M&O greased the lower bearings on the Influent screw pumps.

Digester Building:

Maintenance staff checked and greased the equipment for the Digester's Floating Cover Ovivo mixer. Operations and Maintenance staff assisted the Deer Island vactor crew with cleanup of foam from the top of the Floating Digester Cover. The electrical contractor repaired the broken ultrasonic level sensor on the roof of the digester cover and installed conduit and wire runs to allow the Digester building's gas alarms to report to SCADA when in alarm. Operations & Deer Island Engineering staff discussed the Digester valving issues in regards to possible process changes during the upcoming Fixed Digester Cover roof repair. Two (2) sludge/foam samples were taken from Floating Digester Cover for lab analysis. The contractor measured the gas piping on the roof of the Floating Digester Cover for possible insulation installation. A contractor removed sludge/foam from the Floating Digester Cover and transported the material to the landfill. The Facilities Specialist pressure washed the digester roof, catwalk, and railings, to remove the remaining sludge and foam on the roof and cleaned the vactor truck.

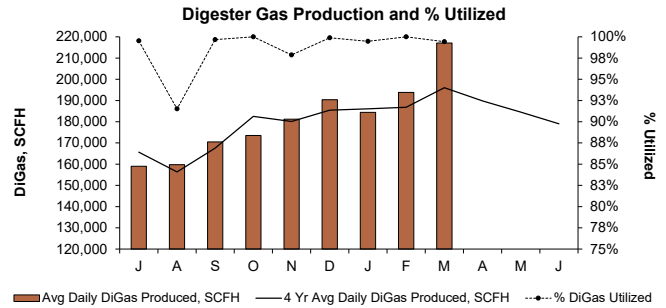
Deer Island Operations & Residuals

3rd Quarter - FY25



Total solids (TS) destruction following anaerobic sludge digestion averaged 51.8% during the 3rd Quarter, 4.9% below the 4 year average. Sludge detention time in the digesters was 24.4 days, with an average of 7.9 digesters in service, similar to the 4 year average of 24.7 days detention time.

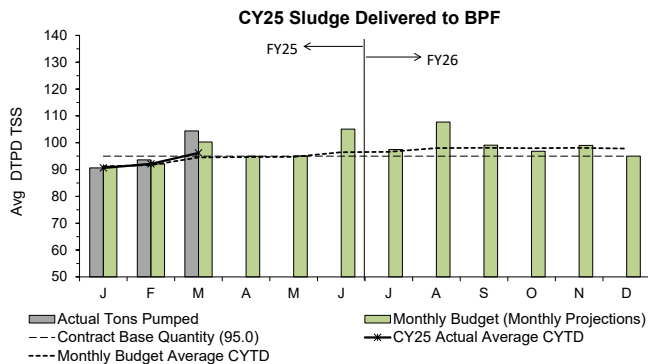
Total solids (TS) destruction is dependent on sludge detention time which is determined by primary and secondary solids production, plant flow, and the number of active digesters in operation. Solids destruction is also significantly impacted by changes in the number of digesters and the resulting shifting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



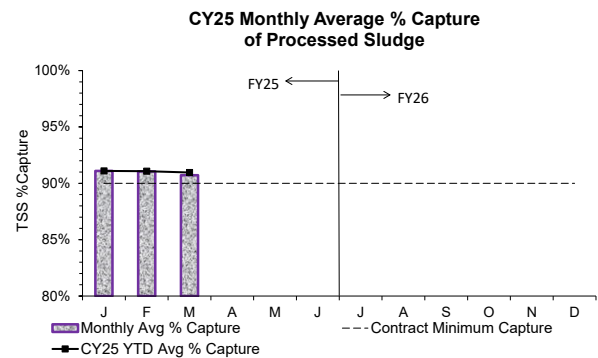
The Avg Daily DiGas Production in the 3rd Quarter was 4.6% above target with the 4 Year Avg Daily DiGas Production driven by an 18.6% higher-than-expected primary sludge production in March, which was the first month in FY25 with the average plant flow exceeding the 4 year historical average. 99.6% of the Digas produced this quarter was utilized at the Thermal Power Plant.

Residuals Pellet Plant

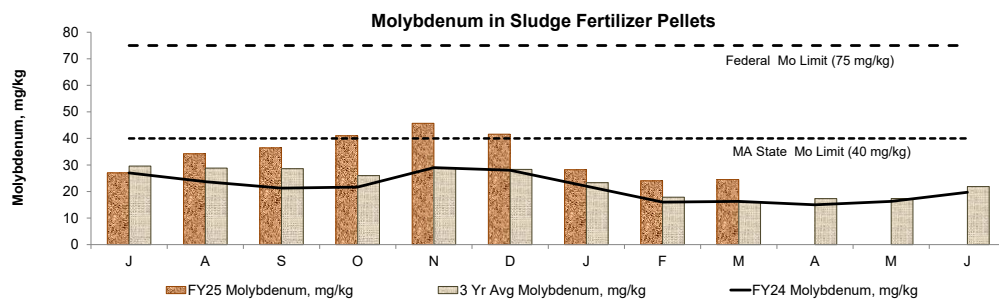
New England Fertilizer Company (NEFCO), a wholly-owned, indirect subsidiary of Synagro Technologies, Inc., operates the MWRA Biosolids Processing Facility (BPF) in Quincy under contract. MWRA pays a fixed monthly amount for the calendar year to process up to 95.0 DTPD/TSS as an annual average (for the 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 3rd Quarter was 96.2 TSS Dry Tons Per Day (DTPD), 1.8% above target with the FY25 budget of 94.5 TSS DTPD for the same period. The slightly higher amount of sludge sent to the BPF this quarter can be partially attributed to higher overall sludge production at DITP in March.



The contract requires NEFCO to capture at least 90.0% of the solids delivered to the Biosolids Processing Facility. The average capture for the 3rd Quarter was 90.96%.



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 3rd Quarter. For Mo, the preliminary level in the MWRA sludge fertilizer pellets for the 3rd Quarter averaged 25.6 mg/kg, 34% above the 3 year average, 36% below the MA State Limit, and 66% below the Federal Limit. The 24.5 mg/kg average Mo for March is a preliminary figure pending final approval of reportable Mo results from the laboratory.

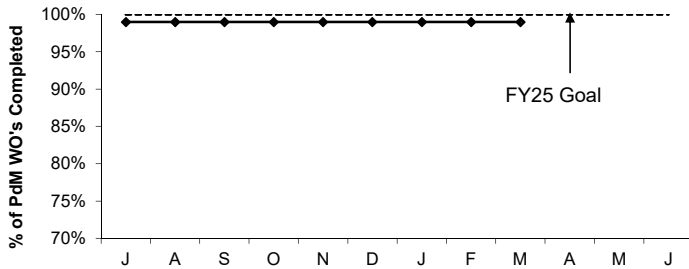
Deer Island Maintenance

3rd Quarter - FY25

Productivity Initiatives

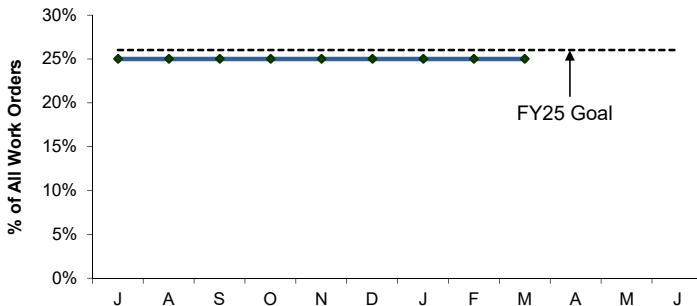
Productivity initiatives include increasing predictive maintenance compliance and increasing PdM work orders. Accomplishing these initiatives should result in a decrease in overall maintenance backlog.

Predictive Maintenance Compliance



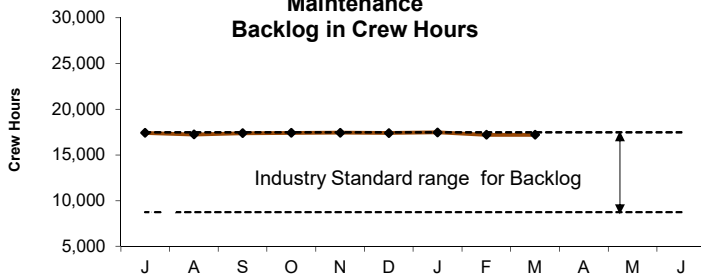
Deer Island's FY25 predictive maintenance goal is 100%. DITP completed 99% of all PdM work orders this quarter. DITP is continuing with an aggressive predictive maintenance program. Deer Island is slightly below our goal this quarter.

Predictive Maintenance



Deer Island's increased FY25 predictive maintenance goal is 26% of all work orders to be predictive. 25% of all work orders were predictive maintenance this quarter. The industry is moving toward increasing predictive maintenance work to reduce downtime and better predict when repairs are needed.

Maintenance Backlog in Crew Hours



DITP's maintenance backlog at Deer Island is 17,188 hours this quarter. DITP is below the industry average for backlog. The industry Standard for maintenance backlog with 97 staff (currently planned staffing levels) is between 8,730 hours and 17,460 hours. Backlog is affected by (7) Vacancies; (1) Electrician, (1) HVAC Technician and (5) I&C Staff. Management continues to monitor backlog and to ensure all critical systems and equipment are available.

Proactive Initiatives

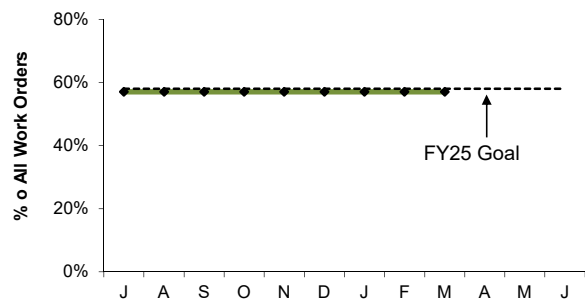
Proactive initiatives include completing 100% of all preventative maintenance tasks and increasing preventative maintenance kitting. These tasks should result in lower maintenance costs.

Preventive Maintenance Compliance



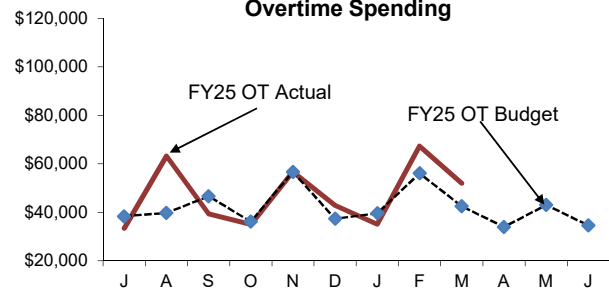
Deer Island's FY25 preventative maintenance goal is 100% completion of all work orders from Operations and Maintenance. DITP completed 99% of all PM work orders this quarter. Deer Island was slightly below our goal, but within Best in Class Target.

Maintenance Kitting



Deer Island's increased FY25 maintenance kitting goal is 58% of all work orders to be kitted. 57% of all work orders were kitted this quarter. Kitting is staging of parts or material necessary to complete maintenance work. This has resulted in more wrench time and increased productivity.

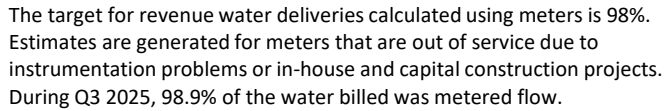
Overtime Spending



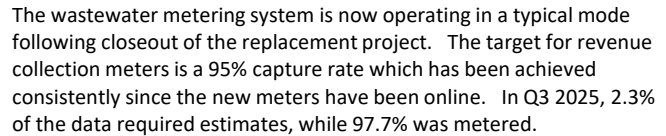
Maintenance overtime was over budget by \$16K this quarter and \$32k over for the year. Management continues to monitor backlog and to ensure all critical equipment and systems are available. This quarter's overtime was predominately used for Storm Coverage/High Flows, Pump and Grinder Clogging Issues, Instrumentation Corrective Maintenance, Primary Clarifier Tank Work, North Main RWW Pump #6 coupling Air Line Vent fabrication, and Grit Conveyor #6 Belt Replacement.

3rd Quarter - FY25

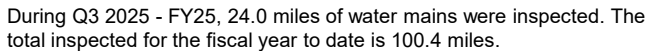
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WATER DISTRIBUTION SYSTEM PIPELINES	
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During Q3 2025 - FY25 5 leak were detected, and 6 were repaired. Refer to FY25 Leak Report below for details. Also, community service ranging from individual leak location to surveys were conducted for Brookline, Medford, Revere, Newton, Somerville, Waltham and Saugus.

Date Detected	Location of Leaks	Repaired
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[illegible]

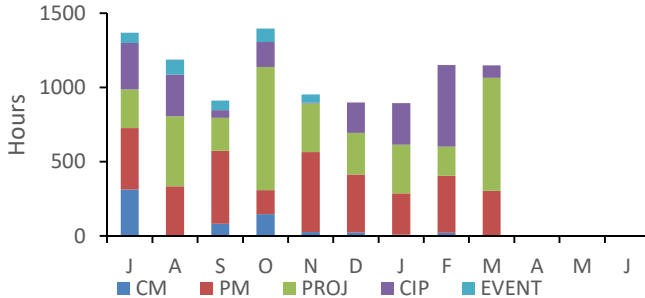
Water Distribution System Valves

3rd Quarter - FY25

Background

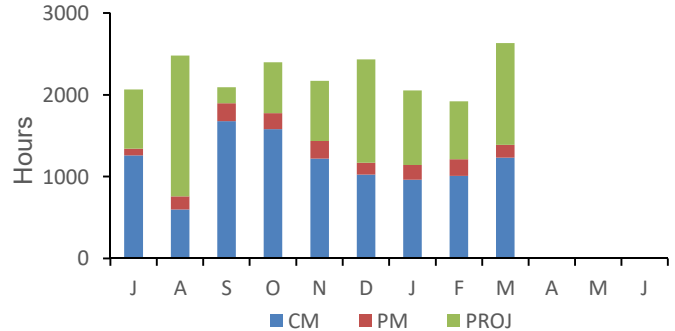
Valves are exercised, rehabilitated, or replaced in order to improve their operating condition. This work occurs year round. Valve replacements occur in roadway locations during the normal construction season, and in off-road locations during the winter season. Valve exercising can occur year round but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

Water Valve Labor Hours



During 3rd Quarter of FY25 there was a total of 3,195 hours worked. Percentage breakdown; Corrective Maintenance 1%, Preventative Maintenance 30%, Project 40%, Capital Improvement Project 29%, Event - Wtr Fountain 0%

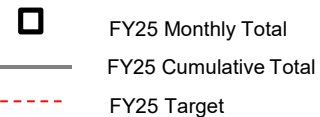
Water Pipeline Labor Hours



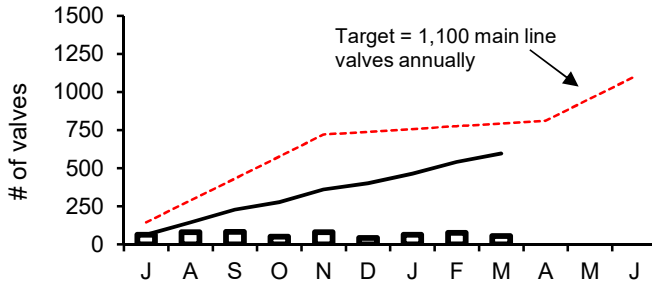
During 3rd Quarter of FY25 there was a total of 6,607 hours worked. Percentage breakdown; Corrective Maintenance 48%, Preventative Maintenance 8%, Project 43%

Type of Valve	Inventory #	Operable Percentage	
		FY25 to Date	FY25 Targets
Main Line Valves	2,255	97.5%	95%
Blow-Off Valves	1,755	98.8%	95%
Air Release Valves	1,548	96.7%	95%
Control Valves	49	100.0%	95%

Key to Symbols:

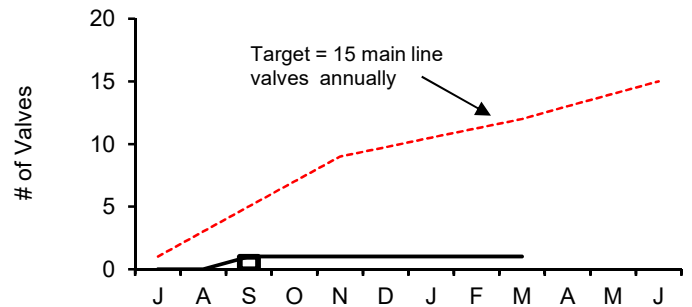


Main Line Valves Exercised



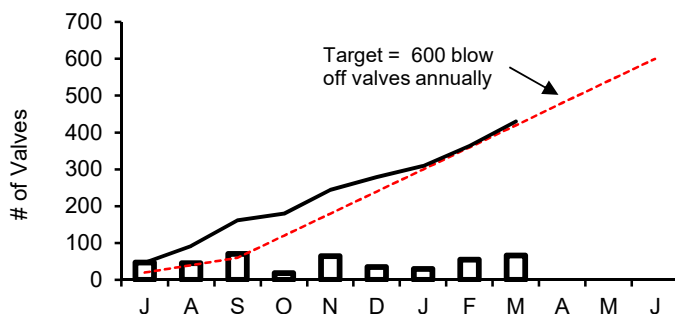
During 3rd Quarter of FY25, 195 main line valves were exercised. The total exercised for the fiscal year to date is 596.

Main Line Valves Replaced



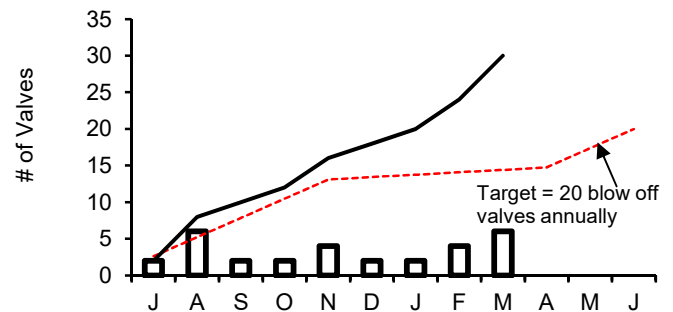
During 3rd Quarter of FY25, there was 0 main line valves replaced. The total replaced for the fiscal year to date is 1.

Blow-Off Valves Exercised



During 3rd Quarter of FY25, 151 blow off valves were exercised. The total exercised for the fiscal year to date is 430.

Blow-Off Valves Replaced



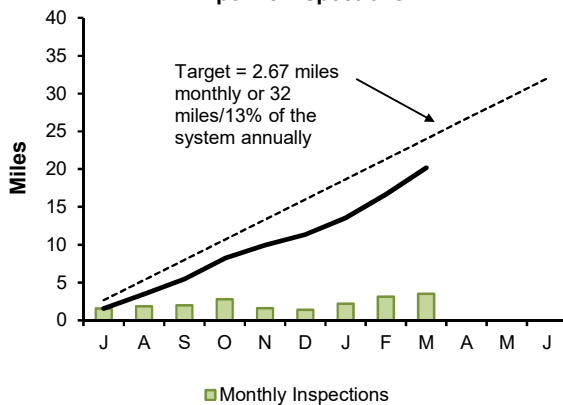
During 3rd Quarter of FY25, there were 12 blow off valves replaced. The total replaced for the fiscal year to date is 30.

Wastewater Pipeline and Structure Inspections and Maintenance

3rd Quarter - FY25

Inspections

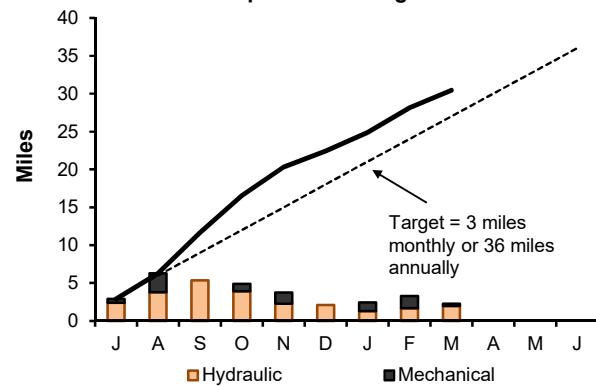
Pipeline Inspections



Staff internally inspected 8.83 miles of MWRA sewer pipe during this quarter. The year to date total is 20.17 miles. No Community Assistance was provided.

Maintenance

Pipeline Cleaning



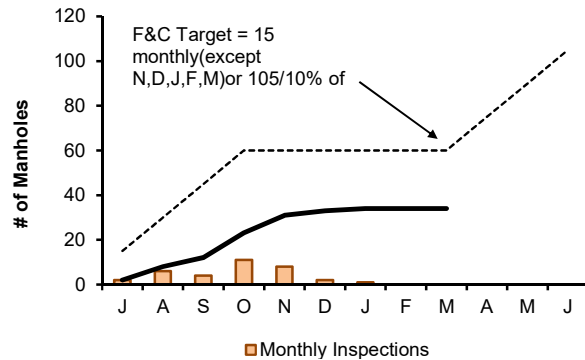
Staff cleaned 8 miles of MWRA sewer pipe this quarter, and removed 17.85 yards of grit. The year to date total is 30.45 miles. Community Assistance was provided to Medford and Somerville.

Structure Inspections



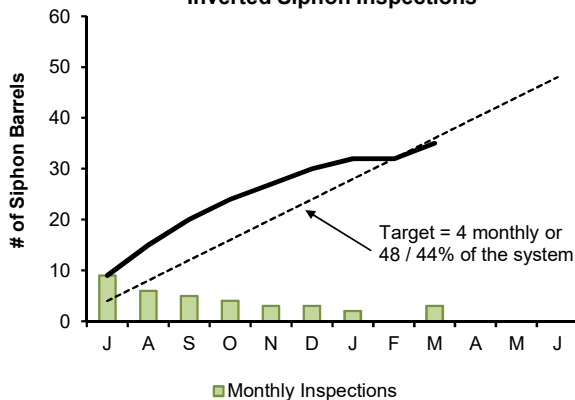
Staff inspected the 36 CSO structures and performed 183 other additional manhole/structure inspections during this quarter. The year to date total is 511 inspections.

Manhole Rehabilitation



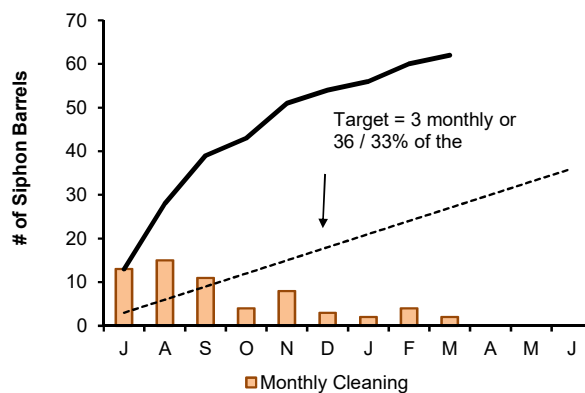
Staff replaced 1 frame and cover replacement this quarter. The year to date total is 34.

Inverted Siphon Inspections



Staff inspected 5 siphon barrels this quarter. The year total is 35 inspections.

Inverted Siphon Cleaning

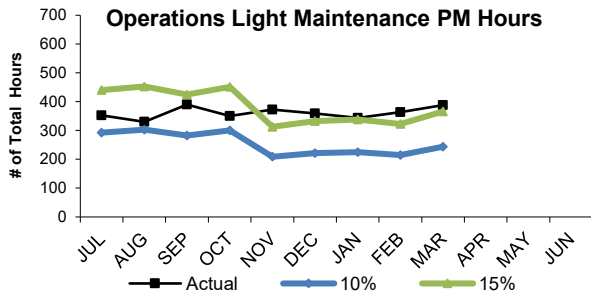


Staff cleaned 8 siphon barrels this quarter. Year to date is 62 barrels cleaned.

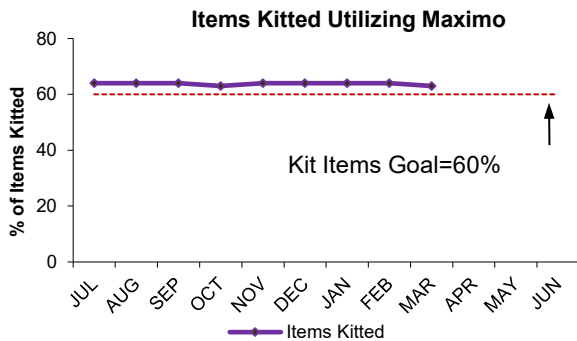
Field Operations' Metropolitan Equipment & Facility Maintenance

3rd Quarter - FY25

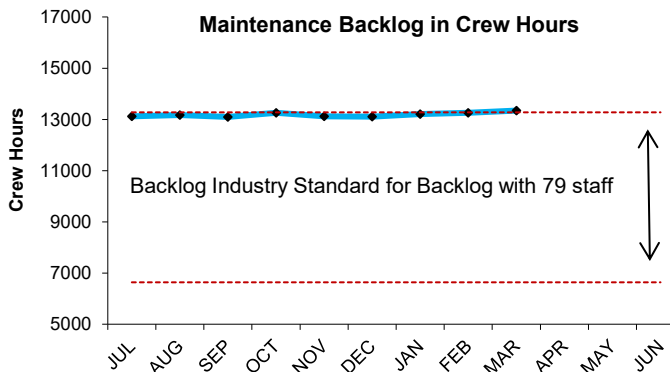
Several maintenance and productivity initiatives are in progress. The goal for the Overall PM completion and the Operator PM completion is 100%. The Operator PM and kitting initiatives frees up maintenance staff to perform corrective maintenance and project work, thus reducing maintenance spending. Backlog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



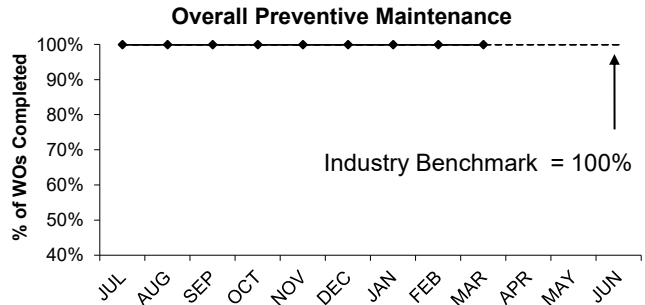
Operations staff averaged 365 hours per month of preventive maintenance during the 3rd Quarter of FY25, an average of 16% of the total PM hours for the 3rd Quarter, which is above the industry benchmark of 10% to 15%.



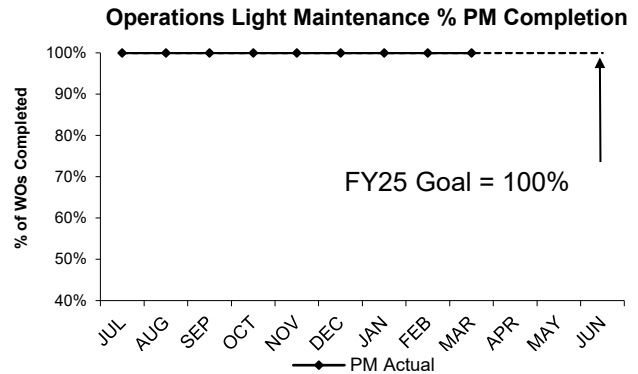
Operations' FY25 maintenance kitting goal has been set at 60% of all work orders to be kitted. Kitting is the staging of parts or material necessary to complete maintenance work. In the 3rd Quarter of FY25, 63% of all applicable work orders were kitted. This resulted in more wrench time and increased productivity.



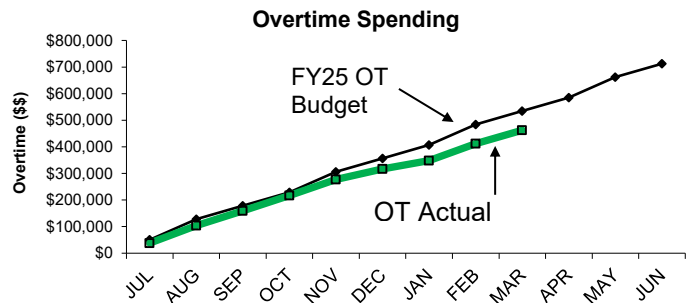
The 3rd Quarter of FY25 backlog average is 13,266 hours. Which is within the industry benchmark of 6,636 to 13,275 hours. The current backlog is due to vacancies and several large maintenance projects.



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 3rd Quarter of FY25.



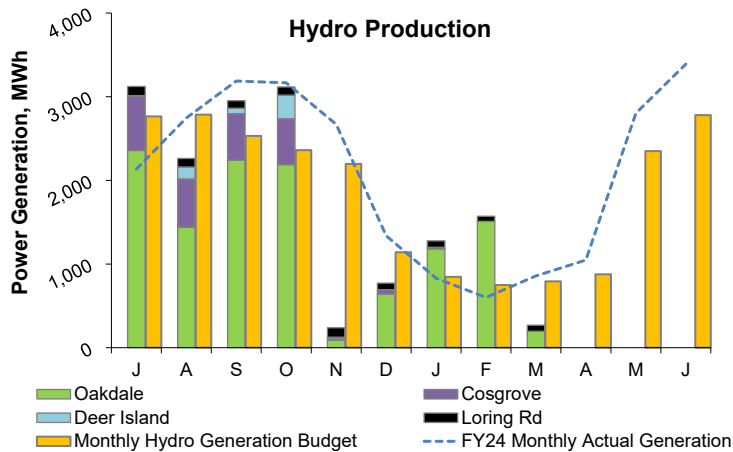
Wastewater Operations complete light maintenance PM's which frees up maintenance staff to perform corrective maintenance. Operations' FY25 PM goal is completion of 100% of all PM work orders assigned. Operations completed 100% of PM work orders in the 3rd Quarter of FY25.



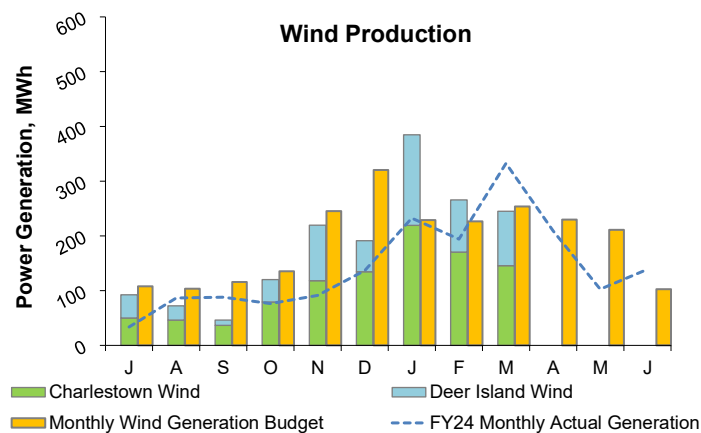
Maintenance overtime was \$10,997 under budget on average, per month, for the 3rd Quarter of FY25. Overtime is used for critical maintenance repairs and wet weather events. The overtime budget through the 3rd Quarter of FY25 is \$534,345. Overtime spending was \$462,438 which is \$71,907 under budget for the fiscal year.

Renewable Electricity Generation: Savings and Revenue

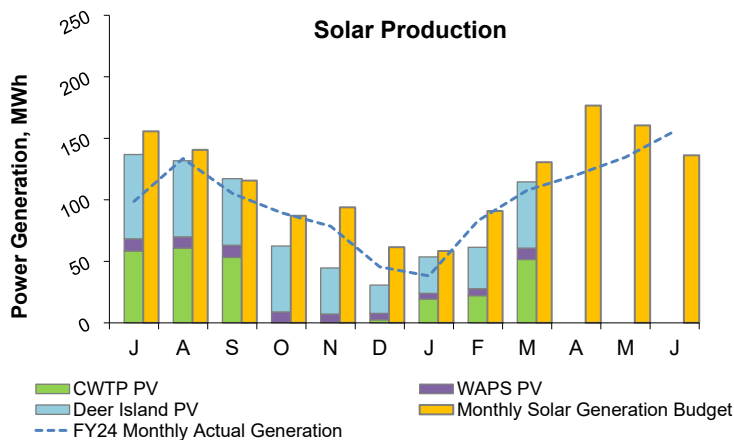
3rd Quarter - FY25



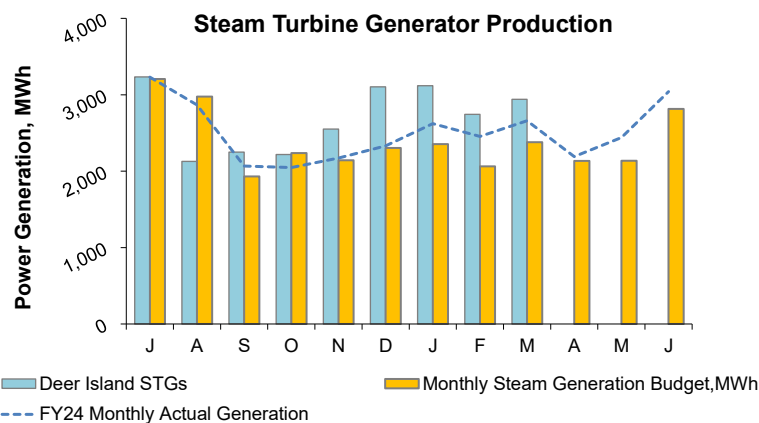
In Quarter 3, renewable energy produced from hydroelectric turbines totaled 3,211 MWh, 34% above budget. Deer Island hydroturbines were unavailable for the entire 3rd quarter as both undergo wicket gate rehabilitation and other repairs. Cosgrove was offline for most of December due to rehab work at the Wachusett Dam Lower Gatehouse, and will remain offline through June. Output from Oakdale was over target because of continued transfers between Quabbin



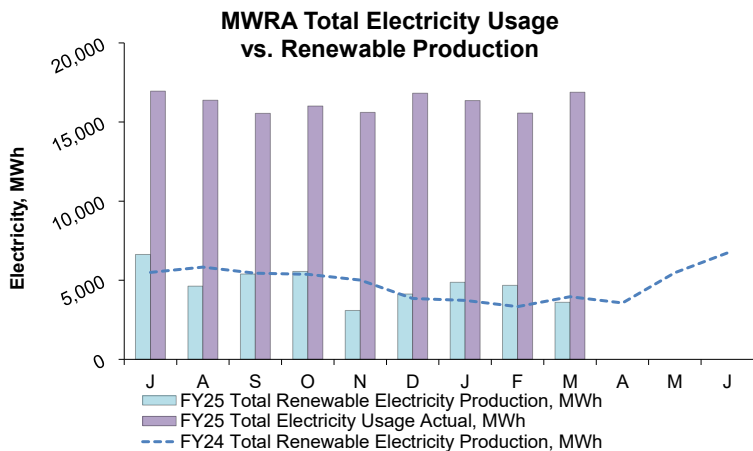
In Quarter 3, wind turbine production totaled 895 MWh, 26% above budget. Deer Island Turbine #1 has been out of service since April 2022, and was heavily damaged following a braking failure on May 29, 2023. Despite only having one turbine in service, wind turbine production at Deer Island was 47% above target due to high winds during the quarter.



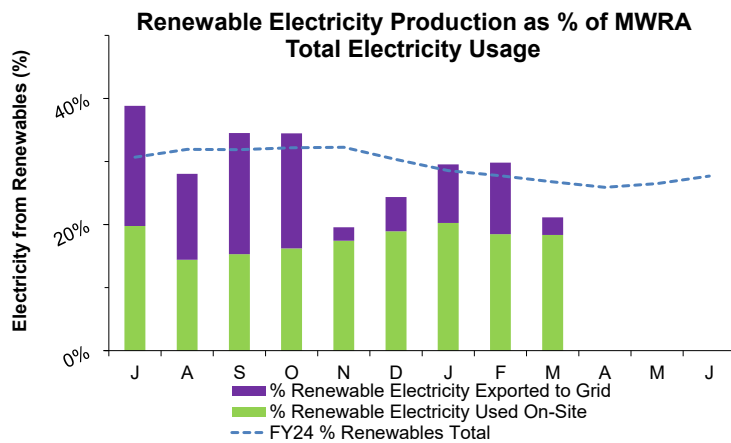
In Quarter 3, energy production from all solar PV systems totaled 138 MWh; 43% below budget¹. The Deer Island Residuals Odor Control roof mounted array has been offline since September 2022 due to a failed inverter. The system will remain offline pending full replacement. The Carroll Water Treatment Plant PV system has been offline since Sept 21st due to a failed



In Quarter 3, the renewable energy produced from Deer Island's steam turbine generators totaled 8,802 MWh; 30% above budget¹. Boiler operations were supplemented with fuel oil during periods of low or unstable digester gas production, greatly increasing overall STG output.



In Quarter 3, total renewable electricity production was 13,138 MWh, 29% above budget. This was primarily the result of higher-than-budgeted output from the Oakdale Hydroturbine and supplemental fuel oil use at Deer Island boilers increasing STG output in January and February. 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.

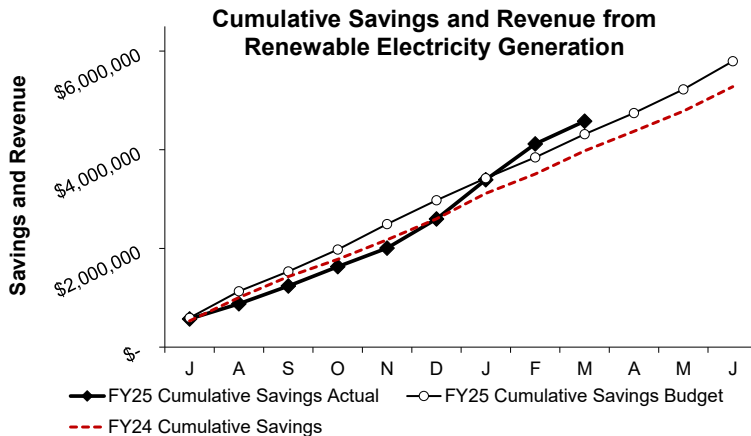
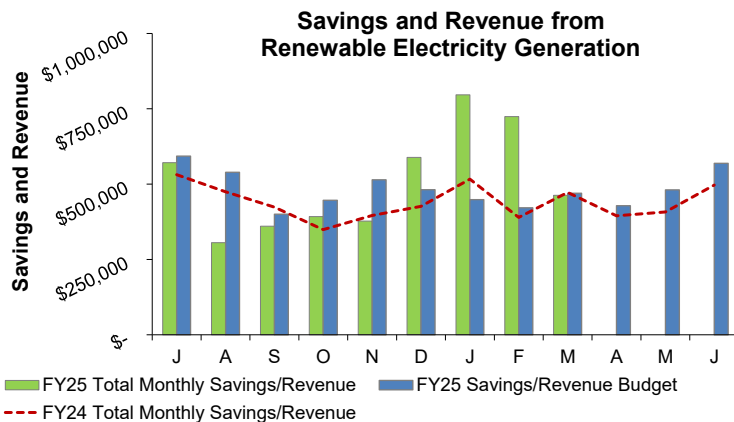


All renewable electricity generated on DI is used on-site (this accounts for more than 50% of MWRA renewable generation). Almost all renewable electricity

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

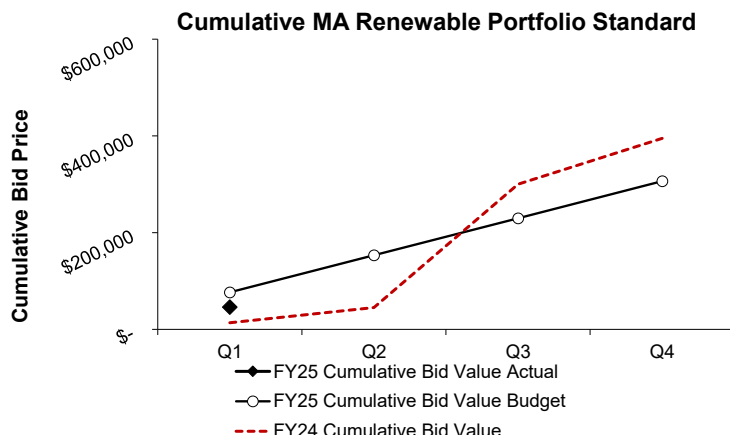
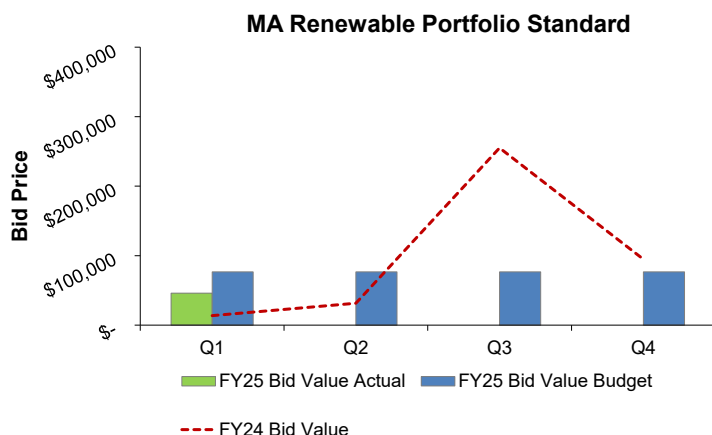
Renewable Electricity Generation: Savings and Revenue

3rd Quarter - FY25



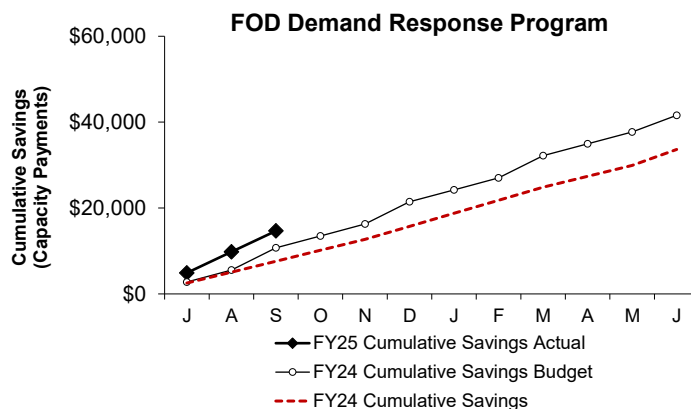
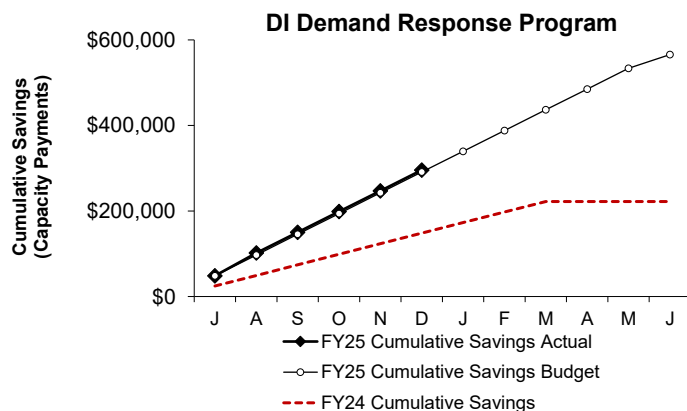
Savings and revenue from renewable sources is estimated at \$1,983,622 in Quarter 3, 48% above budget. Cumulative savings and revenue for the FY has climbed to 6% above budget. However, total savings and revenue depends heavily on electricity pricing at Deer Island, which is estimated from December through March. Savings are over estimated for January and February due to supplementary fuel oil use in the Deer Island boilers increasing STG output to above normal levels.

Savings and revenue¹ from all renewable energy sources include wind turbines, hydroelectric generators, solar panels, and steam turbines (DI). This includes savings and revenue due to electricity generation (does not include avoided fuel costs and RPS 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 1st Quarter² of FY25 from MWRA's renewable energy assets; 1,412 Q4 FY24 Class I Renewable Energy Certificates (RECs) were sold for a total value of \$46,033 RPS revenue; which was 40% below budget³ for the Quarter. No Class II RECs are sold during Q1 and are instead banked for future sale. 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.

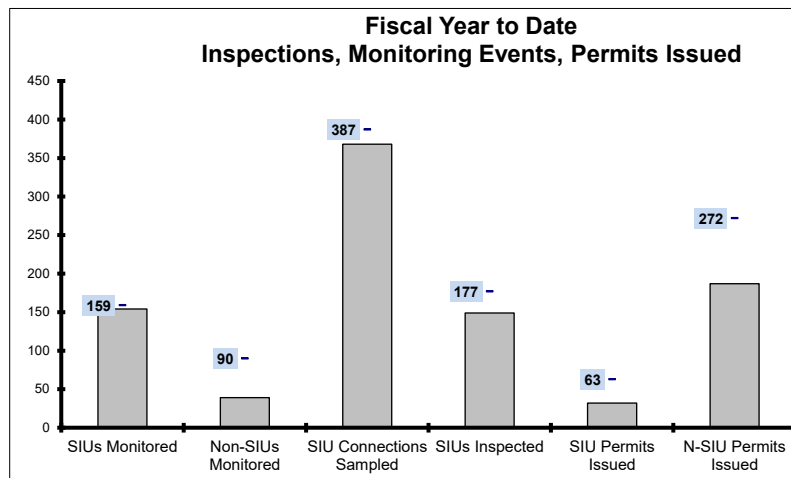


No capacity payments have been received in FY25. Currently Deer Island, Loring Rd, Brutsch Hydro, and JCWTP participate in the ISO-New England Demand Response Programs. By agreeing to reduce demand and operate the facility generators to help reduce the ISO New England grid demand during periods of high 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 \$14,663 through September 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

3rd Quarter - FY25



EPA Required SIU Monitoring Events
for FY25: 159
YTD : **154**

Required Non-SIU Monitoring Events
for FY25: 90
YTD : **39**

SIU Connections to be Sampled
For FY25: 387
YTD: **368**

EPA Required SIU Inspections
for FY25: 177
YTD: **149**

SIU Permits due to Expire
In FY25: 63
YTD: **32**

Non-SIU Permits due to Expire
in FY25: 272
YTD: **187**

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	1	0	0	3	3	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	5	11	1	0	0	1	6	12
Feb	5	15	1	2	0	5	6	22
Mar	4	22	0	0	0	1	4	23
Apr	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0
Jun	0	0	0	0	0	0	0	0
% YTD	91%	77%	9%	3%	0%	21%	32	190

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 third quarter of the MWRA fiscal year, FY25.

In this quarter, 73 permits issued.

There were 16 SIUs, of which 14 were issued on time.

There were 57 non-SIUs of which 48 were issued on time, with 9 late beyond 180 days.

All of the SIU permits were issued within the 120-day timeframe.

In FY24, there have been 31 completely new permits issued: 7-LFLP, 5-02 N-SIUs, 10-Dental, 1-DEW, 1 One-Time

For the Clinton Sewer Service area, there was 0 SIU permits issued during the FY24 fiscal year.

TRAC completed 41 first time SIU monitoring events and 7 first time NSIU monitoring events.

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

SIU - Significant Industrial User

DEW - Category 12 Temporary Construction Site Dewatering Permit

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

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

Dental - Category D1 Dental Group Permit

G2 - Category G2 Group Permit for Food Processing

One- Time - One Time Discharge Permit

Field Operations Highlights

3rd Quarter – FY25

METRO WATER OPERATIONS AND MAINTENANCE

Valve Program:

- Valve operations to support in-house work including: Blow Off Replacement on Section 22, 90, 59, 9 A Line, 31; and leak repair on Sections 97A, Walnut Street Line, WASM15, and 37. CIP Contractors were supported by isolation and dewatering of portions of Section 29 and 89 (Contract 7117), Section 101 (Contract 7457), Section 23, 24 & 47 (Contract 6392) and W14 & W16 (Contract 7563). Other work included the disinfection of the Fells Storage Tank and mainline valve exercising of 15 water main sections.

Water Pipeline Program

- Staff completed Blow-Off replacements in Quincy (Section 22), Belmont (Section 59), Medford (Shaft 9 A Line), Boston (Section 31) and Hyde Park (Section 90). Additional work included leak repairs on Section 97A (16-inch main) in East Boston, Brighton (WASM 15) and Walnut Street Line (36-inch main). Leak detection was performed on over 24 miles of MWRA water main and assistance was provided to 8 customer communities.

SCADA

Water System Work

- Continued technical support for JCWTP PLC replacement project; configured and hardened SCADA Operating system; continued work on network management improvements in the JCWTP water system; Continued support for the Wachusett Lower Gate House Project and Steel Tank Project; installed new Verizon circuit between Blue Hill and Chestnut Hill Emergency Pump Station; 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; installed new communication circuit at New Neponset and DeLauri Pump Stations.

ENVIRONMENTAL QUALITY-WATER

- Algae: On January 23 and February 25, staff met with NYDEP to discuss MWRA's algae monitoring program and explore treatment options for mitigating Chrysosphaerella algae. On March 18 and March 25, DCR resumed routine algae sampling of Wachusett and Quabbin reservoirs, respectively. MWRA algae monitoring season for 2025 will resume in May.
- Regulatory Sampling: Sampling staff collected Q1 samples for EPA's Unregulated Contaminant monitoring Rule 5 (UCMR5). On January 13, staff conducted potability sampling associated with the CWTP Tank B overflow weir for half-plant operations. Samples were absent for total coliform and E. coli, and Train B was subsequently reactivated on January 14. On January 30, staff performed NPDES sampling as part of CWTP half plant operations. Geothermal NPDES sampling resumed on March 10 following ice-out conditions in the reservoir. On January 24, staff met with MassDEP and EPA to provide a water quality update for 2024. On March 30, sampling staff conducted potability sampling associated with the CWTP Tank A overflow weir. Samples were absent for total coliform and E.coli, resulting in full-plant activation.
- Internal Support: CWTP lead pipe-rig study sampling was performed on January 9, February 20, and March 6. On January 17, clearance samples collected at the dewatering line for Cell #3 of the Norumbega Tank were all clear. On January 22, staff performed clearance sampling at four locations at the Fells Tank, and the cell was subsequently reactivated. On February 26 and 27, staff collected water quality samples at five locations for a Legionella research study with Georgia Tech. On March 12, staff conducted clearance sampling at four sites on Section 14 and 15 in Brighton, results were typical and the pipeline was reactivated.
- Contaminant Monitoring System (CMS): This quarter, staff responded to 15 CMS alarms at 10 monitoring locations following routine response protocols during each event. Alarms occurred at Arlington, Blue Hills, Chelsea, CWTP finished water tap, Fells, Mobile trailer deployed at

Field Operations Highlights

3rd Quarter – FY25

Norumbega, Nash Hill, Route 12 Shed, Turkey Hill, and Walnut Hill. Alarms occurred at Blue Hills, Fells, Route 12 Shed, Turkey Hill, Walnut Hill, and Nash Hill due to failed sensors or prior routine maintenance at the site. All failed sensors were replaced. On January 13, the alarm on the mobile trailer deployed at Norumbega tank was caused by air bubbles entrained in the inlet of the pump. On February 9, an alarm occurred at CWTP finished tap water caused by turbid water going through the CMS panel. The incident was isolated to the panel and no turbidity increase was observed in the raw water. On March 25, staff provided comments to the project consultants on the design and technical specifications for construction of a new intake at Route 12 shed. The first quarterly inspection of the Route 12 shed intake is expected to occur in April.

- Wachusett & Quabbin Buoys: All water quality-profiling buoys were off the reservoir for the winter season. A fixed depth buoy continued to monitor water quality in Wachusett's Quinapoxet Basin. On January 17, staff coordinated with Mass State Police to perform a site inspection of the fixed depth buoy due to ice-over conditions that resulted in submersion of the buoy and a break in the anchor line. On February 20, a newly procured water quality boat was delivered to Chelsea. Registration for the new boat was completed in March.
- Data Management Group (<http://wqdmgdev.mwra.net/>): Staff submitted monthly DEP and DPH reports on schedule. Total coliform Rule (TCR) data for Chicopee were updated in dmgs databases. The CWTP SCADA cutover project continued this quarter and staff continued to meet weekly with Operations staff, and consultants to review the project progress.
- Permitting/Environmental Compliance: In January, staff conducted new hire chemical training at CWTP. Fire Department permits were submitted and posted at CWTP and MMF. Staff assisted the Environmental & Regulatory Affairs department with Tier 2 submissions for Western Operations facilities. Annual NPDES Pollution prevention meeting was also held.

- Chemical Contract Management: Fire Department permits were posted at CWTP and MMF. In March, staff began preparing chemical bid estimates for the following bulk chemicals, Sodium Hypochlorite, Sodium Bisulfite, Carbon Dioxide, Aqua Ammonia.

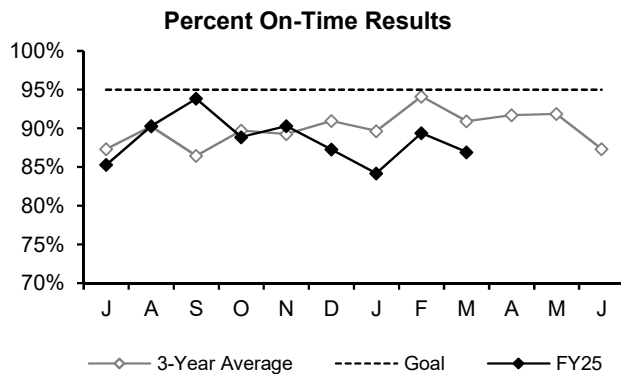
ENVIRONMENTAL QUALITY- WASTEWATER

- Ambient Monitoring: Review and synthesis of 2024 data continues. The first two Massachusetts Bay surveys of 2025 occurred in February and March. Staff prepared for the annual technical workshop with the monitoring consultants to discuss preliminary 2024 results.
- Harbor/CSO Receiving Water Monitoring: Biweekly harbor and river monitoring continues. ENQUAL and DLS Indigo staff held a planning meeting to discuss the 2025 monitoring season.
- Permitting and Compliance Reporting: In the 3rd Quarter, there were twelve notification/web posting about CSOs and blending. Posted 16 compliance documents to MWRA's website. Review is ongoing of other draft permits and EPA regulations that have comment periods ending in early 2025.
- Coordination with other MWRA Departments: Assisted Engineering & Construction by participating in community CSO coordination meetings and review of reports, and meeting with watershed associations. Completed transition for custody of Planning views from ENQUAL to Planning and with MIS to migrate Webi reports to use new data source. Provided feedback to Engineering from usability testing on Badger Remote Monitoring application.
- Cooperation with other agencies: Staff attended Gulf of Maine HAB Symposium to remain informed of harmful algal bloom management challenges in the Gulf of Maine. Staff also continued to discuss with the MassBays National Estuary Program a planned symposium on Massachusetts Bay/Gulf of Maine environmental monitoring. Provided 2024 Massachusetts Bay data to MIT Sea Grant for research on applying data mining and visualization techniques to environmental data.

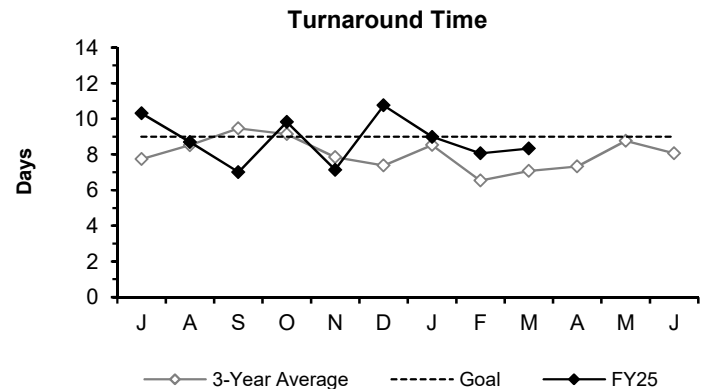
Laboratory Services

3rd Quarter - FY25

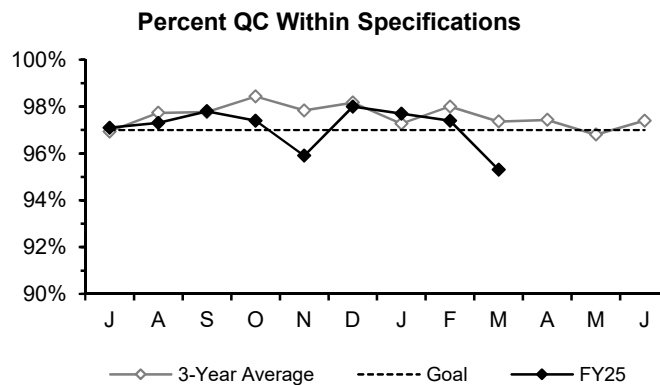
Laboratory Services supports the laboratory sampling, testing, and consulting needs of various client groups primarily in the Operations Division. This includes drinking water transmission and treatment, wastewater collection and treatment, wastewater residuals management, industrial-pretreatment monitoring,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



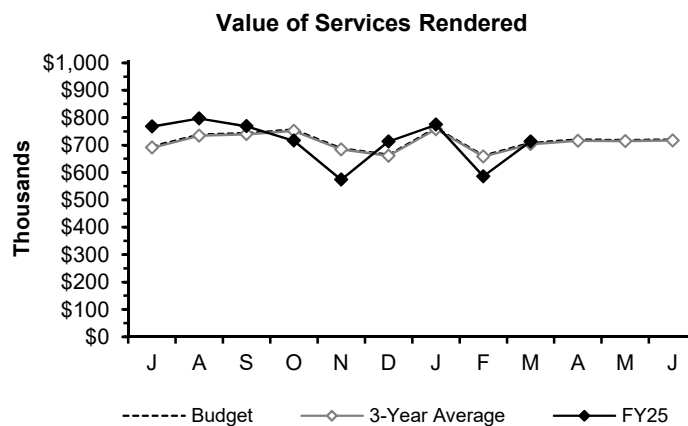
The Percent On-Time measurement assesses performance against internal client due dates. These due dates are shorter than the compliance reporting requirements to allow for internal review of the data.



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.



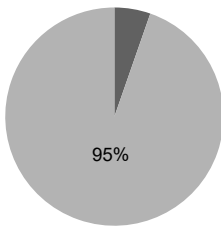
Value of Services Rendered models the true cost of the lab work performed, including fringe benefits that are not a part of the Laboratory Services budget.

School Lead Program: During the 3rd quarter of FY25, MWRA's lab completed 818 tests from 24 schools and childcare facilities in 13 communities. Since 2016, MWRA's Laboratory has conducted over 44,700 tests from 675 schools and daycares in 48 communities. We have also completed 1084 home lead tests under the DPH sampling program and 2218 lead tests in response to resident requests since 2017.

CONSTRUCTION PROGRAMS

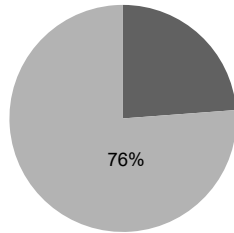
Engineering & Construction Projects In Construction 3rd Quarter – FY25

Cost



■ Amount Remaining
■ Billed to Date

Time



■ Time Remaining
■ Time Expended

Carroll Water Treatment Plant SCADA Improvements

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

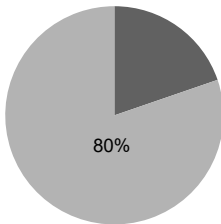
Contract Amount: \$13,681,336.62

Contract Duration: 1,675 Days

Notice to Proceed: 1-Sep-21

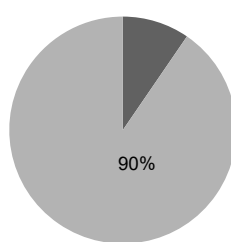
Contract Completion: 3-Apr-26

Cost



■ Amount Remaining
■ Billed to Date

Time



■ Time Remaining
■ Time Expended

Section 89 Replacement Pipeline

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

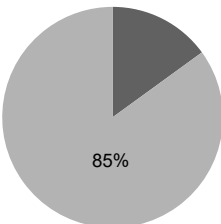
Contract Amount: \$36,573,441.60

Contract Duration: 1,475 Days

Notice to Proceed: 5-Aug-21

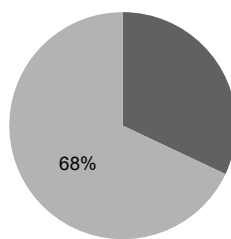
Contract Completion: 19-Aug-25

Cost



■ Amount Remaining
■ Billed to Date

Time



■ Time Remaining
■ Time Expended

Intermediate High Pipeline Improvements CP2

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

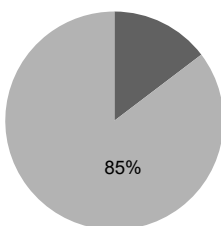
Contract Amount: \$21,152,424.94

Contract Duration: 912 Days

Notice to Proceed: 20-Jul-23

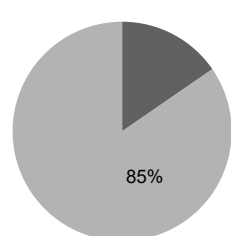
Contract Completion: 17-Jan-26

Cost



■ Amount Remaining
■ Billed to Date

Time



■ Time Remaining
■ Time Expended

Construction of Water Mains – Section 101

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

Contract Amount: \$35,881,736.35

Contract Duration: 1175 Days

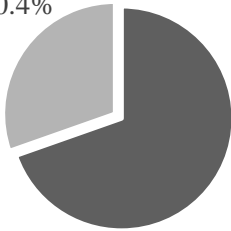
Notice to Proceed: 12-Jul-22

Contract Completion: 29-Sep-25

Deer Island Wastewater Treatment Plant Projects In Construction 3rd Quarter – FY25

Cost

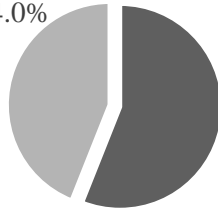
30.4%



- Amount Remaining
- Billed to Date

Time

44.0%



- Time Remaining
- Time Expended

7395 - Clarifier Rehabilitation Phase 2

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

Contract Amount: \$289,595,007

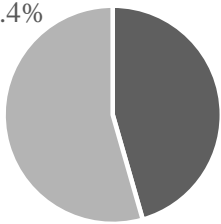
Contract Duration: 1710 Days

Notice to Proceed: 10-Mar-23

Contract Completion: 14-Nov-27

Cost

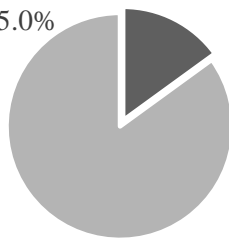
54.4%



- Amount Remaining
- Billed to Date

Time

85.0%



- Time Remaining
- Time Expended

7734 - Deer Island Treatment Plant Roofing

Replacement at Various Buildings

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

Contract Amount: \$8,879,303.15

Contract Duration: 540 Days

Notice to Proceed: 28-Dec-2023

Contract Completion: 20-Jun-2025

CSO CONTROL PROGRAM

3rd 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 April 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 2025.*

- *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 June 30, 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 advancing towards the 90% design.*

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 late spring/early summer 2025.
- Completed & Upcoming Studies:
 - o Alewife PS Optimization (submitted 4/27/2021)
 - o Somerville Marginal CSO Reduction Study (submitted 12/27/2021)
 - o Alewife Brook & Charles River System Optimization (submitted 12/28/2022)
 - o MWRA CSO Variances Optimization Measures Report (submitted 1/31/2023)
 - o Odor control feasibility study (due 6/1/2025)
 - o Real-time notification study (due 8/31/2025)
 - o Floatables control study (due 10/1/2025)

CIP Expenditures

3rd Quarter – FY25

FY25 Capital Improvement Program Expenditure Variances through March by Program - (\$ in thousands)				
Program	FY25 Budget Through March	FY25 Actual Through March	Variance Amount	Variance Percent
Wastewater	\$124,642	\$73,641	(\$51,001)	-41%
Waterworks	\$77,231	\$52,509	(\$24,722)	-32%
Business and Operations Support	\$15,783	\$6,800	(\$8,983)	-57%
Total	\$217,656	\$132,950	(\$84,706)	-39%

Wastewater:

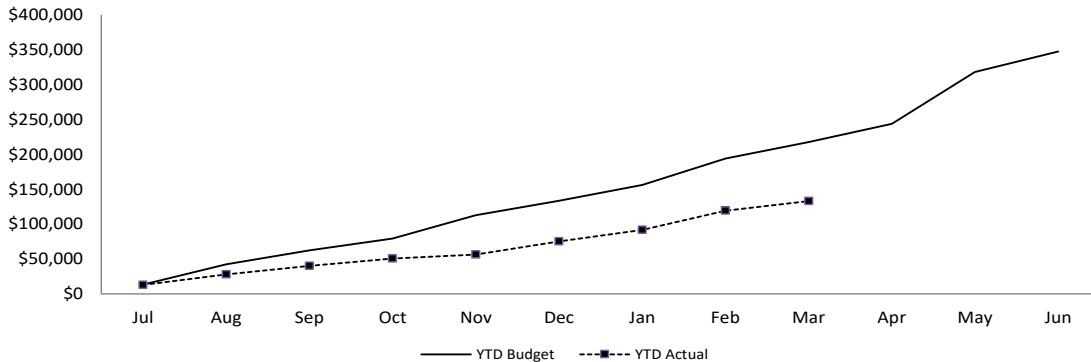
- Spending was less than planned in Wastewater primarily due to less than anticipated distributions for the I/I Local Financial Assistance program, later than anticipated awards for the Clinton Digester Cover Replacement and Hayes Pump Station Rehab contracts, delays in DITP Roofing Replacement due to long lead time for receiving materials, and schedule change for the Siphon Structure Rehab.
- 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.

Water:

- Spending was less than planned in Waterworks primarily due to updated schedule for the Walnut Hill Steel Water Tank Painting and Improvements contract, lower than projected spending for Metropolitan Water Tunnel Program Administration, Legal & Public Outreach and Program Support Services, contract awards later than anticipated for the Metropolitan Water Tunnel Program Final Design/ESDC and Section 75A and 47 Extension CP-1, less than anticipated contractor progress for Section 89/29 Replacement, lower than projected task order work for CWTP Technical Assistance, less than planned consultant work for the WASM 3 MEPA/Design/CA/RI contract, and 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.
- This less than planned spending was partially offset by contractor progress for Waltham Section 101 Pipeline Construction, Section 24 & 25 Construction CP-2, and FY24 planned work performed in FY25 for Northern Extra High CP-1 Improvements.

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 3/29/25	\$101.8 billion
Unused capacity under the debt cap:	\$2.5 billion
Estimated date for exhausting construction fund without new borrowing:	Apr 2025
Estimated date for debt cap increase to support new borrowing:	Not anticipated at this time
Commercial paper/Revolving loan outstanding:	\$ 92 million
Commercial paper capacity / Revolving Loan	\$ 158 million
Budgeted FY25 Cash Flow Expectancy*:	\$245 million

DRINKING WATER QUALITY AND SUPPLY

Source Water – Microbial Results and UV Absorbance

3rd Quarter – FY25

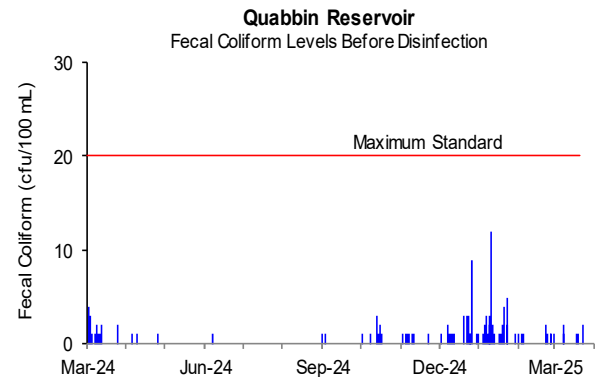
Source Water – Microbial Results

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. Brusch 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.**

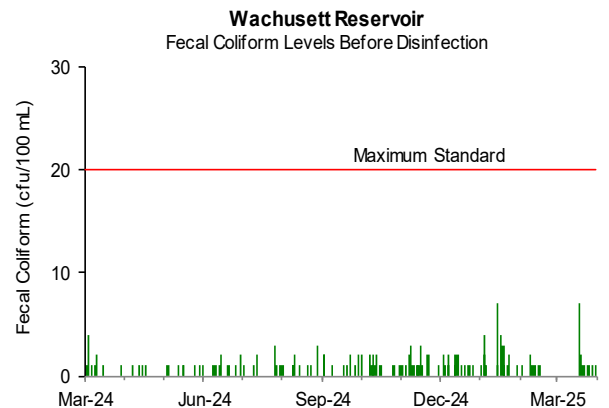


Sample Site: Wachusett Reservoir

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.**

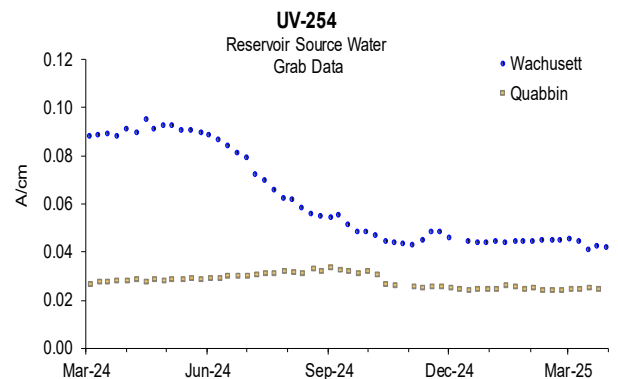


Source Water – UV Absorbance

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 0.024 A/cm for the quarter.

Wachusett Reservoir UV-254 levels averaged 0.044 A/cm for the quarter.



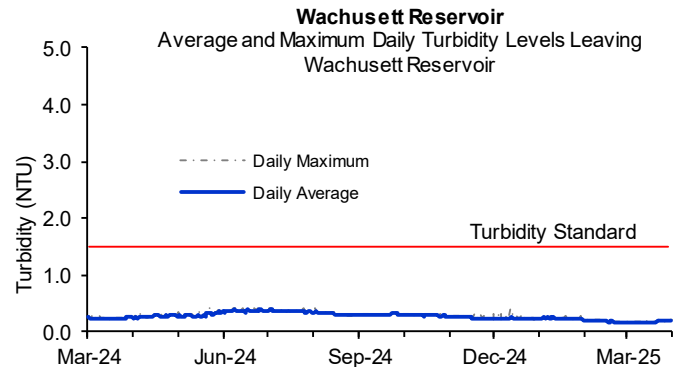
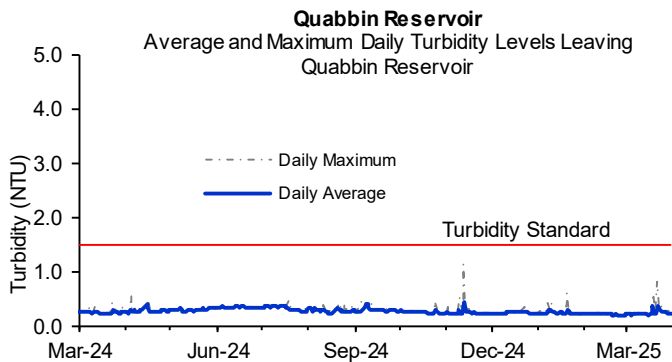
Source Water – Turbidity

3rd 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.

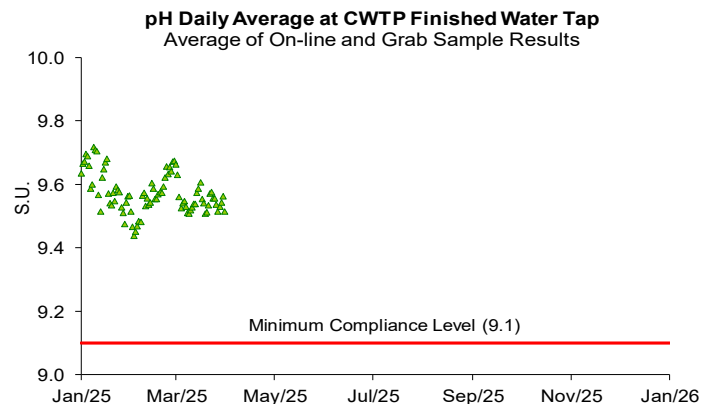
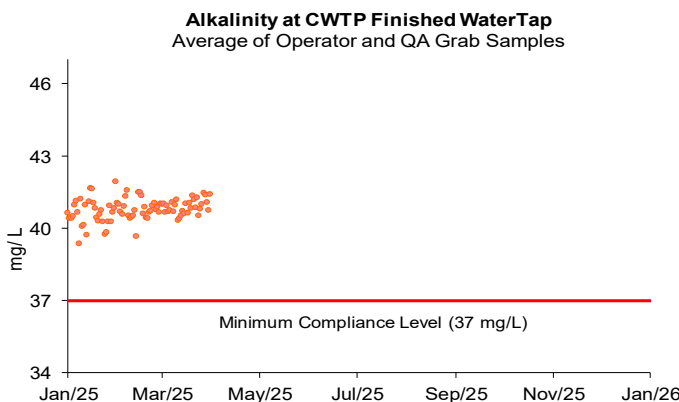


Treated Water – pH and Alkalinity Compliance

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 March. Distribution system sample pH ranged from 9.6 to 9.7 and alkalinity ranged from 41 to 43 mg/L. No sample results were below DEP limits for this quarter.



Treated Water – Disinfection Effectiveness

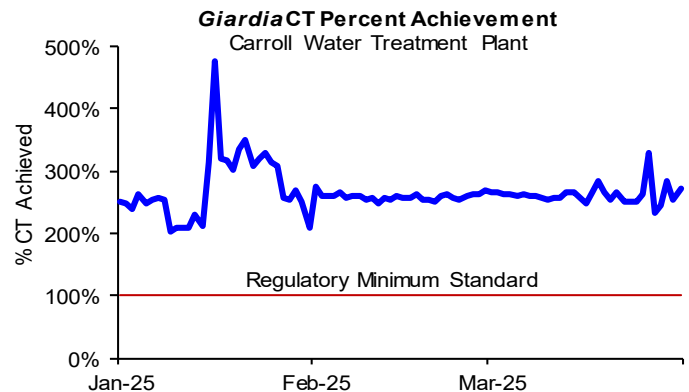
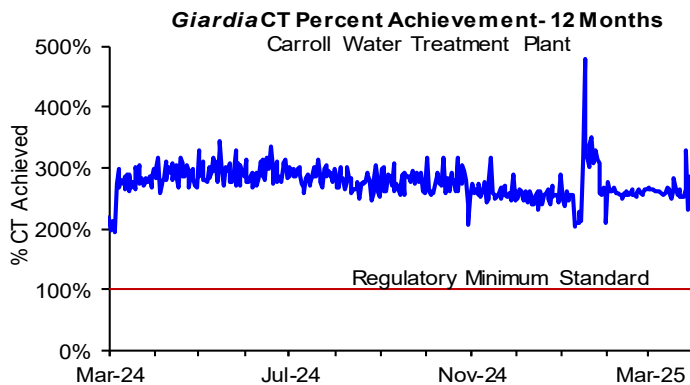
3rd Quarter – FY25

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.

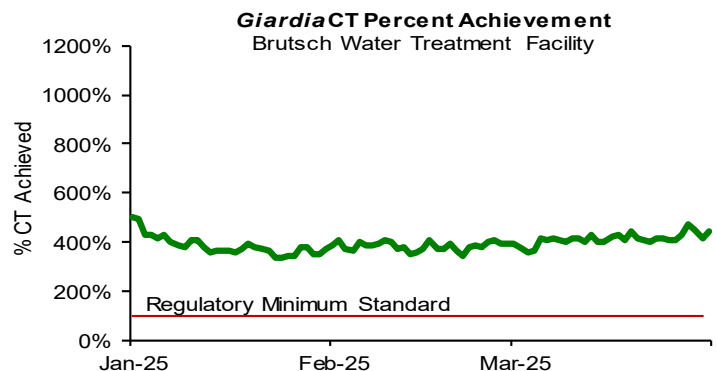
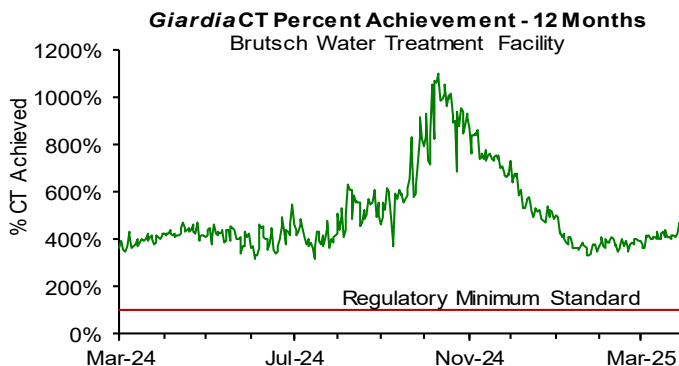
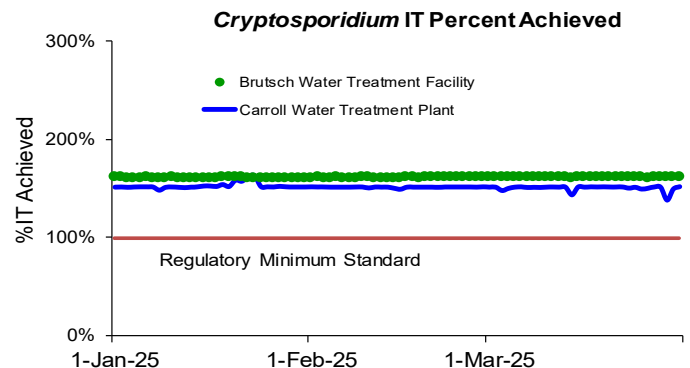
Wachusett Reservoir – MetroWest/Metro Boston Supply:

- The chlorine dose at the CWTP varied between 2.80 and 3.15 mg/L for the quarter.
- Ozone dose at the CWTP varied between 1.2 to 1.6 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 1.30 to 1.45 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%.



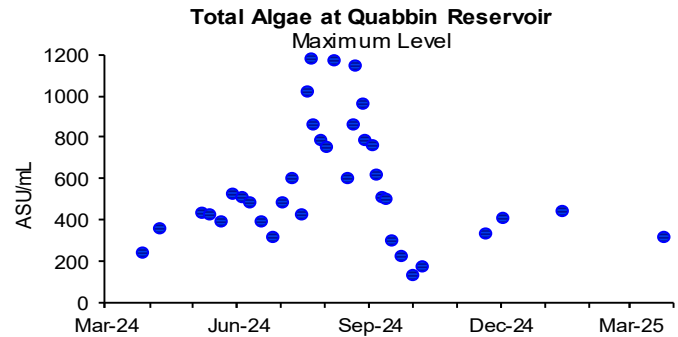
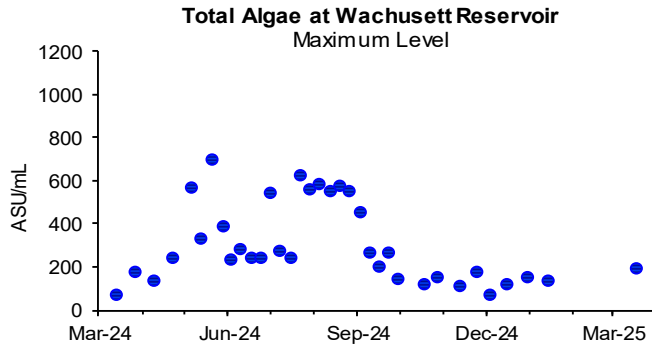
Source Water - Algae

3rd 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 3rd quarter, there were no complaints which may be related to algae reported from the local water departments. There were no samples collected from January 14 until mid-March due to significant ice cover on the reservoirs that prevented safe algae sampling.

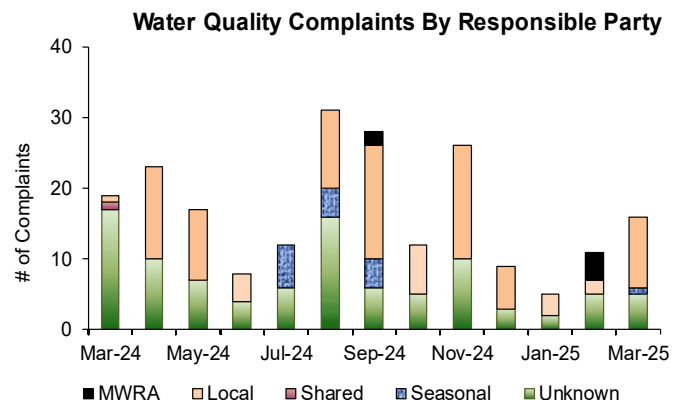
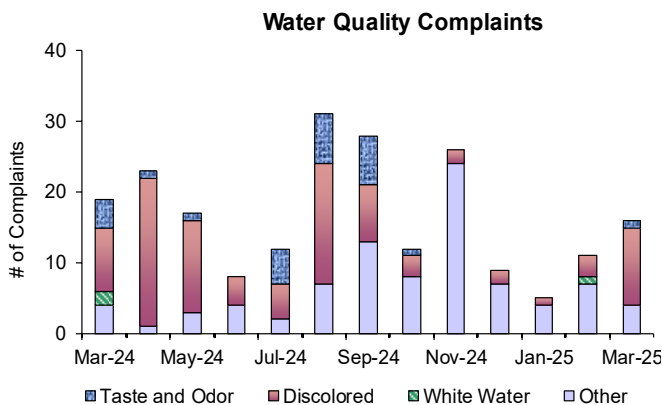


Drinking Water Quality Customer Complaints: Taste, Odor, or Appearance

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 32 complaints during the quarter compared to 31 complaints from 3rd Quarter of FY24. Of these complaints, 15 were for "discolored water", 1 was for "taste and odor", 1 was for "white water", and 15 were for "other". Of these complaints, 15 were local community issues, 4 were an MWRA issue, 1 was seasonal in nature, and 12 were unknown in origin.



Bacteria & Chlorine Residual Results for Communities in MWRA Testing Program

3rd 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.

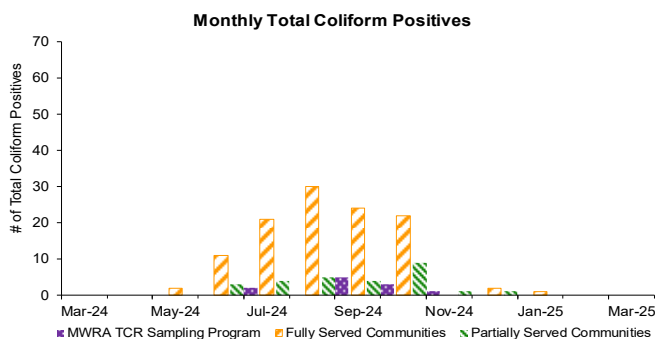
A disinfectant residual is intended to maintain the sanitary integrity of the water; MWRA considers a residual of 0.2 mg/L a minimum target level at all points in the distribution system.

Highlights

In the third quarter, one of the 6,500 fully and partially served samples (0.02%) tested positive for total coliform. None of the 2029 Shared Community/MWRA samples tested positive for total coliform. None of the 399 CVA/MWRA community samples tested positive for total coliform. 0.1% of the Fully Served community quarterly samples had chlorine residuals lower than 0.2 mg/L.

NOTES:

- 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.
- The number of samples collected depends on the population served and the number of repeat samples required.
- These communities are partially supplied, and may mix their chlorinated supply with MWRA chloraminated supply.
- Part of the Chicopee Valley Aqueduct System. Free chlorine system.



		Total Coliform		E.coli	# Assessment
		# Samples (b)	# (%) Positive	Positive	Required
MWRA	a	MWRA Locations	338	0 (0%)	0
		Shared Community/MWRA sites	1691	0 (0%)	0
		Total: MWRA	2029	0 (0%)	0
Fully Served	c	ARLINGTON	169	0 (0%)	0
		BELMONT	104	0 (0%)	0
		BOSTON	765	0 (0%)	0
		BROOKLINE	219	0 (0%)	0
		CHELSEA	169	0 (0%)	0
		DEER ISLAND	52	0 (0%)	0
		EVERETT	169	0 (0%)	0
		FRAMINGHAM	273	0 (0%)	0
		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	215	0 (0%)	0
		MELROSE	108	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	219	1 (0.46%)	No
		SAUGUS	96	0 (0%)	0
		SOMERVILLE	252	0 (0%)	0
		SOUTHBOROUGH	30	0 (0%)	0
		STONEHAM	91	0 (0%)	0
		SWAMPSCOTT	57	0 (0%)	0
		WALTHAM	214	0 (0%)	0
		WATERTOWN	143	0 (0%)	0
		WESTON	45	0 (0%)	0
		WINTHROP	66	0 (0%)	0
		Total: Fully Served	5259	1 (0.02%)	
Partially Served	c	BEDFORD	57	0 (0%)	0
		BURLINGTON	128	0 (0%)	0
		CANTON	90	0 (0%)	0
		HANSCOM AFB	30	0 (0%)	0
		NEEDHAM	123	0 (0%)	0
		PEABODY	200	0 (0%)	0
		WAKEFIELD	140	0 (0%)	0
		WELLESLEY	104	0 (0%)	0
		WILMINGTON	87	0 (0%)	0
		WINCHESTER	87	0 (0%)	0
		WOBURN	195	0 (0%)	0
		Total: Partially Served	1241	0 (0%)	
		Total: Fully and Partially Served	6500	1 (0.02%)	
CVA	d	MWRA CVA Locations	99	0 (0%)	0
		CHICOPEE	195	0 (0%)	0
		SOUTH HADLEY FD1	60	0 (0%)	0
		WILBRAHAM	45	0 (0%)	0
		Total: CVA	399	0 (0%)	

Chlorine Residuals in Fully Served Communities

	2024											2025		
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Jan	Feb	Mar
% <0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
% <0.2	0.1	0.1	0.1	0.2	0.4	0.2	0.2	0.4	0.7	0.4		0.2	0.0	0.0
% <0.5	0.6	1.0	0.8	1.2	1.8	2.0	1.5	2.0	2.5	2.2		1.5	0.8	0.7
% <1.0	2.6	2.9	3.1	5.2	5.8	7.3	5.6	7.6	7.3	5.2		2.7	1.8	1.5
% ≥1.0	97.4	97.1	96.6	94.5	93.5	91.8	93.9	92.0	92.7	94.8		97.3	98.2	98.5

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

3rd Quarter – FY25

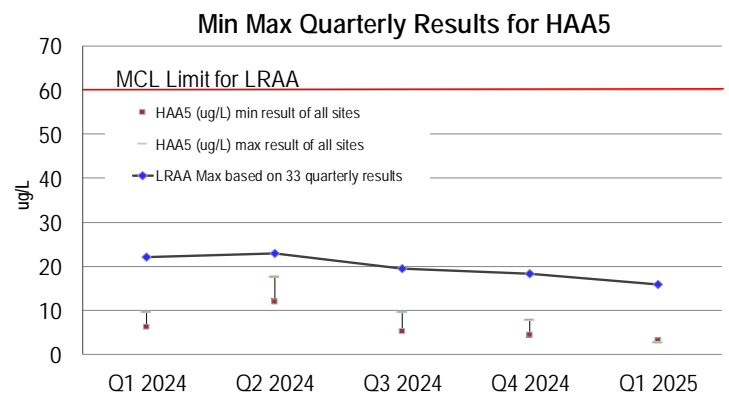
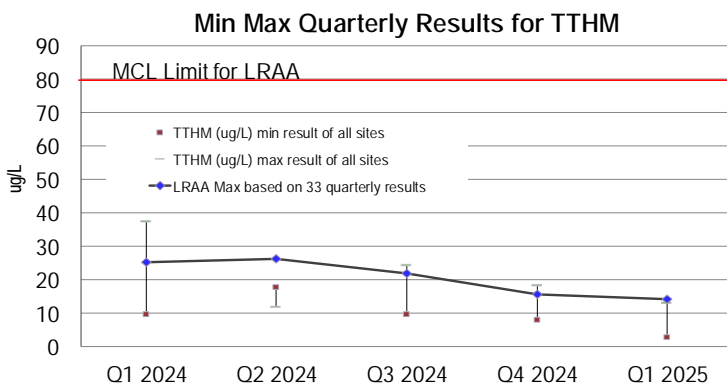
Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s) are by-products of disinfection treatment with chlorine. They are of concern due to their potential adverse health effects at high levels. EPA's locational running annual average (LRAA) standard, using the most recent four quarterly results,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

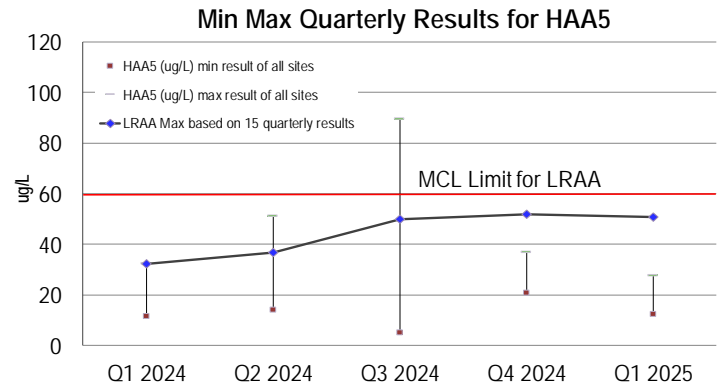
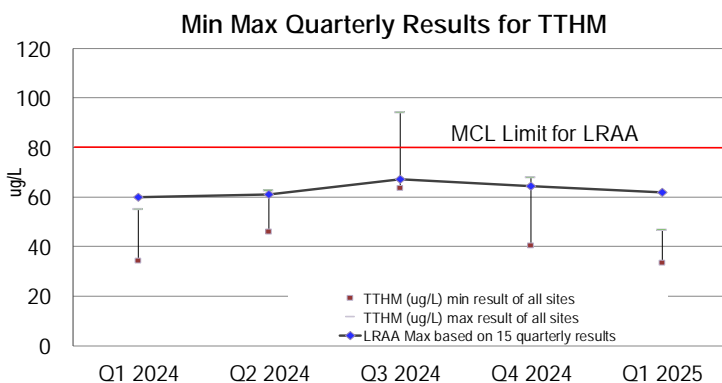
MWRA's TTHM and HAA5 sampling program includes sampling at 33 MetroWest and Metro Boston communities sites. Partially served and CVA communities are responsible for their own compliance monitoring and are regulated individually.

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 = 14.1 µg/L; HAA5s = 15.8 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

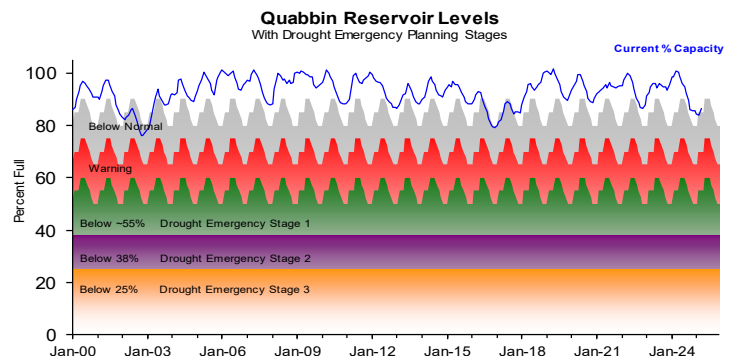
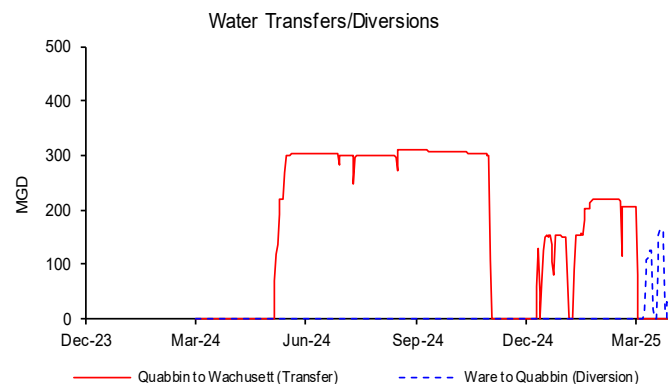
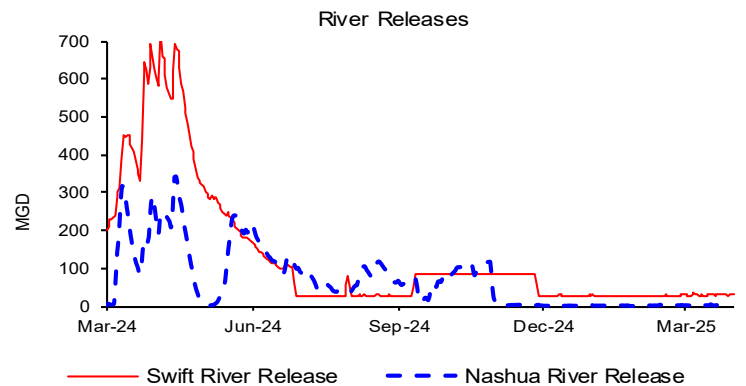
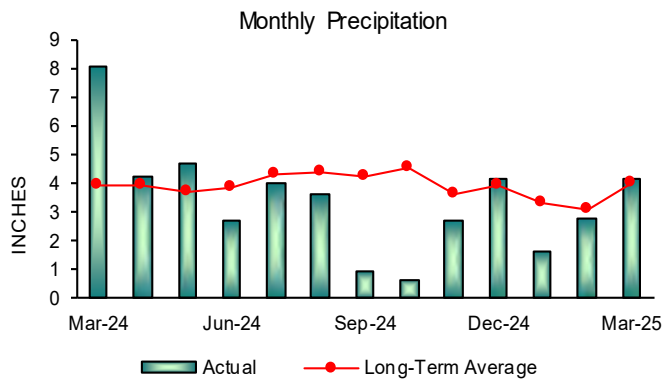
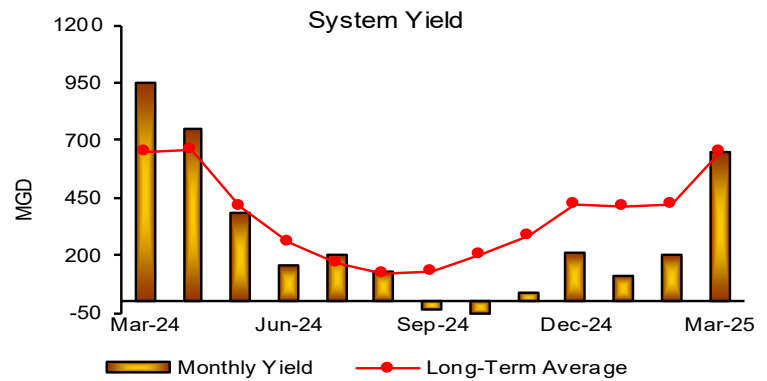
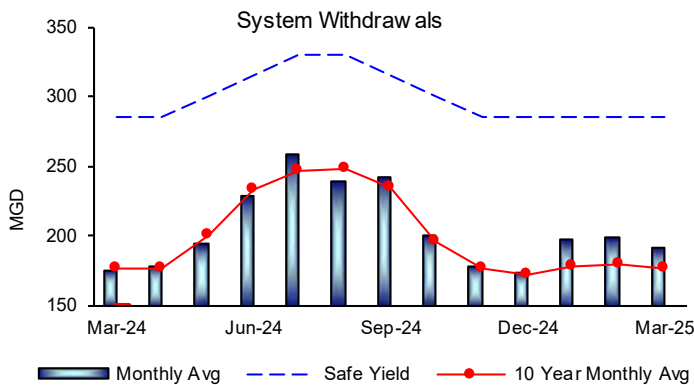
3rd Quarter – FY25

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 86.7% as of March 31, 2025; a 1.2 % increase for the quarter, which represents a gain of more than 4.8 billion gallons of storage and an increase in elevation of 0.65'. After being in normal operating range for all of 2024, the reservoir dipped briefly into below normal for several weeks in February and March as it was refilling. This was due to the drought plan triggers rising in larger increments than the reservoir refilled. System withdrawal, precipitation and yield were below their long term quarterly averages.



WASTEWATER QUALITY

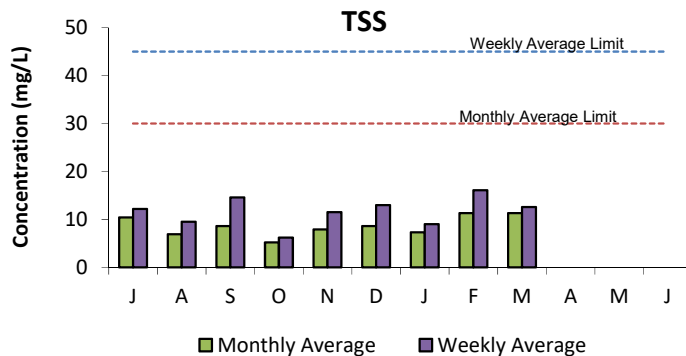
NPDES Permit Compliance: Deer Island Treatment Plant

3rd Quarter - FY25

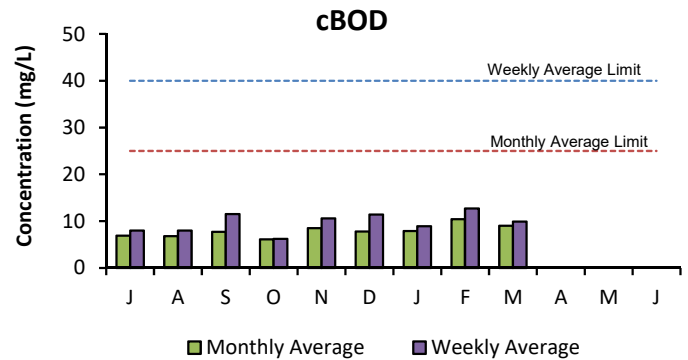
NPDES Permit Limits

<i>Effluent Characteristics</i>	<i>Units</i>	<i>Limits</i>	<i>January</i>	<i>February</i>	<i>March</i>	<i>3rd Quarter Violations</i>	<i>FY25 YTD Violations</i>
Dry Day Flow (365 Day Average):	MGD	436	264.0	259.7	257.4	0	0
cBOD: Monthly Average	mg/L	25	7.9	10.4	9.0	0	0
Weekly Average	mg/L	40	8.9	12.7	9.9	0	0
TSS: Monthly Average	mg/L	30	7.3	11.3	11.3	0	0
Weekly Average	mg/L	45	9.0	16.1	12.6	0	0
TCR: Monthly Average	ug/L	456	0.0	0.0	0.0	0	0
Daily Maximum	ug/L	631	0.0	0.0	0.0	0	0
Fecal Coliform: Daily Geometric Mean	col/100mL	14000	10	30	21	0	0
Weekly Geometric Mean	col/100mL	14000	6	7	7	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	6.5-6.9	6.4-6.8	6.5-7	0	0
PCB, Aroclors: Monthly Average	ug/L	0.000045	UNDETECTED			0	0
Acute Toxicity: Inland Silverside	%	≥50	>100	>100	>100	0	0
Mysid Shrimp	%	≥50	>100	>100	>100	0	0
Chronic Toxicity: Inland Silverside	%	≥1.5	50	50	50	0	0
Sea Urchin	%	≥1.5	100	100	100	0	0

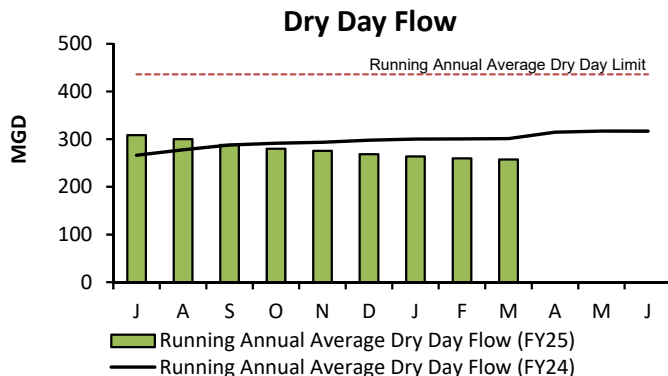
There have been no permit violations in FY25 to date at the Deer Island Treatment Plant (DITP).



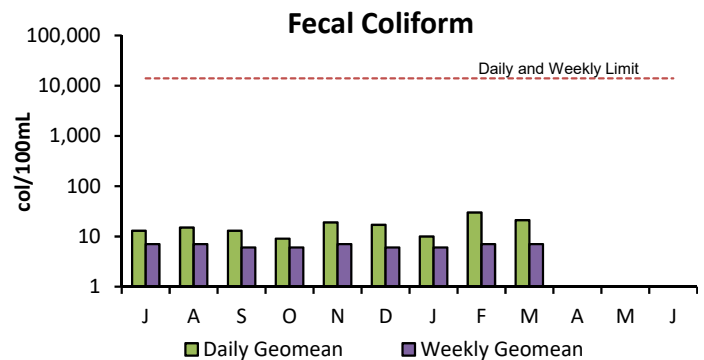
Total Suspended Solids (TSS) in the effluent is a measure of the amount of solids that remain suspended after treatment. All TSS measurements for the 3rd Quarter were within permit limits.



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 3rd 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 3rd 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 3rd Quarter, all permit conditions for fecal coliform were met.

NPDES Permit Compliance: Clinton Wastewater Treatment Plant

3rd Quarter - FY25

Effluent Characteristics		Units	Permit Limits	January	February	March	3rd Quarter Violations	FY25 YTD Violations
Dissolved Oxygen	Daily Minimum	mg/L	6	11.3	11.6	10.4	0	0
BOD	Monthly Average Load	lb/d	500	40.0	44.0	24.0	0	0
	Weekly Average Load	lb/d	500	49.0	49.0	51.0	0	0
	Monthly Average	mg/L	20	2.8	3.0	1.2	0	0
	Weekly Average	mg/L	20	3.4	3.2	2.8	0	0
BOD % removal	Monthly Average Minimum	%	85	98.9	98.4	99.3	0	0
pH	Monthly Minimum	S.U.	6.5	7.18	7.11	7.03	0	0
	Monthly Maximum	S.U.	8.3	7.69	7.45	7.50	0	1
TSS	Monthly Average Load	lb/d	500	56.0	87.0	75.0	0	0
	Weekly Average Load	lb/d	500	58.0	95.0	125.0	0	0
	Monthly Average	mg/L	20	3.9	5.8	3.6	0	0
	Weekly Average	mg/L	20	3.7	6.2	8.0	0	0
TSS % removal	Monthly Average Minimum	%	85	98.2	97.4	98.0	0	0
Total Ammonia Nitrogen November 1st - March 31st	Monthly Average	mg/L	6.6	0.02	<0.1	0.45	0	0
	Daily Maximum	mg/L	35	0.04	<0.1	0.73	0	0
Total Phosphorus November 1st - March 31st	Monthly Average	lb/d	25.1	4.5	4.1	3.1	0	0
	Monthly Average	mg/L	1	0.30	0.34	0.15	0	0
Copper	Monthly Average	ug/L	11.6	9.50	10.6	9.49	0	1
	Daily Maximum	ug/L	14	9.85	10.6	9.49	0	1
Flow	12 -month Rolling Average	MGD	3.01	2.56	2.27	2.30	0	4
TCR	Monthly Average	ug/L	20	<20	<20	<20	0	0
	Daily Maximum	ug/L	30.4	<20	<20	<20	0	0
E. Coli	Monthly Geometric Mean	cfu/100mL	126	5.0	5.0	5.0	0	0
	Daily Maximum	cfu/100mL	409	7.0	5.0	5.0	0	0
Acute Toxicity ¹	Monthly Average Minimum	%	100	>100	N/A	N/A	0	0
Chronic Toxicity ¹	Monthly Average Minimum	%	62.5	100	N/A	N/A	0	0

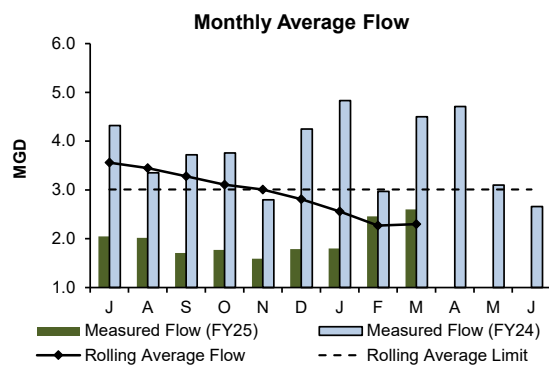
There have been seven permit violations in FY25 at the Clinton Treatment Plant.

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

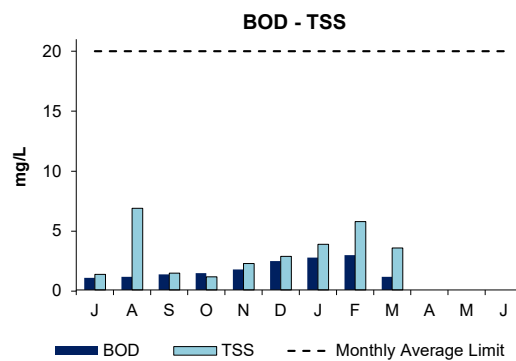
2nd Quarter: There were three permit violations in the second quarter, one for 12 month rolling-average flow; one each for copper monthly average and daily maximum.

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

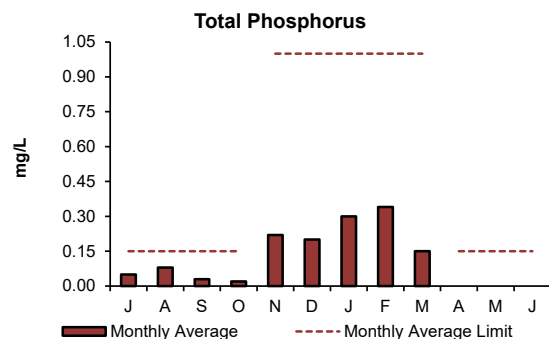
¹ Toxicity testing at the Clinton Treatment Plant is conducted on a quarterly basis.



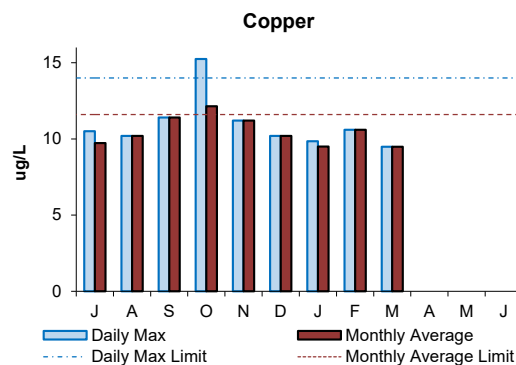
The graph depicts the rolling annual average monthly flow, measured in million gallons per day, exiting the plant. The 12-month rolling average flows during the 3rd Quarter were above the permit limit.



Monthly average concentrations of BOD and TSS were below permit limits in the 3rd 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 3rd Quarter's monthly average concentrations for total phosphorus were below permit limits.



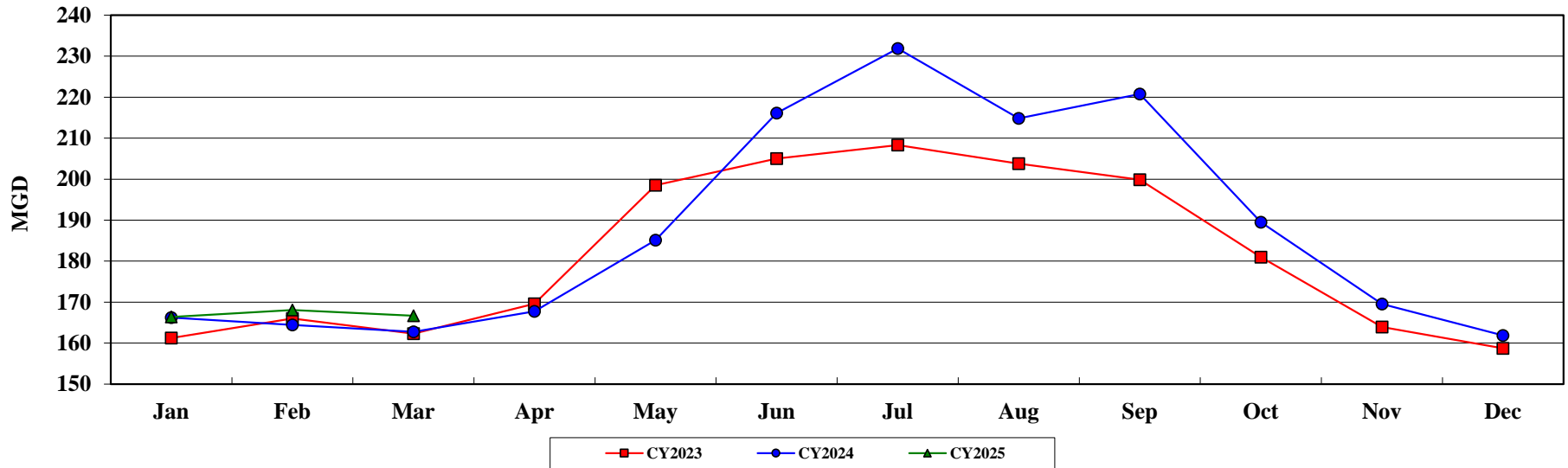
Daily maximum and monthly average concentrations of copper were below permit limits in the 3rd Quarter. Permit daily and monthly limits are 14.0 ug/L and 11.6 ug/L respectively.

COMMUNITY FLOWS AND PROGRAMS

Customer Water Use

3rd Quarter - FY25

MWRA Water Supplied: All Revenue Customers



Water Use (million gallons per day)

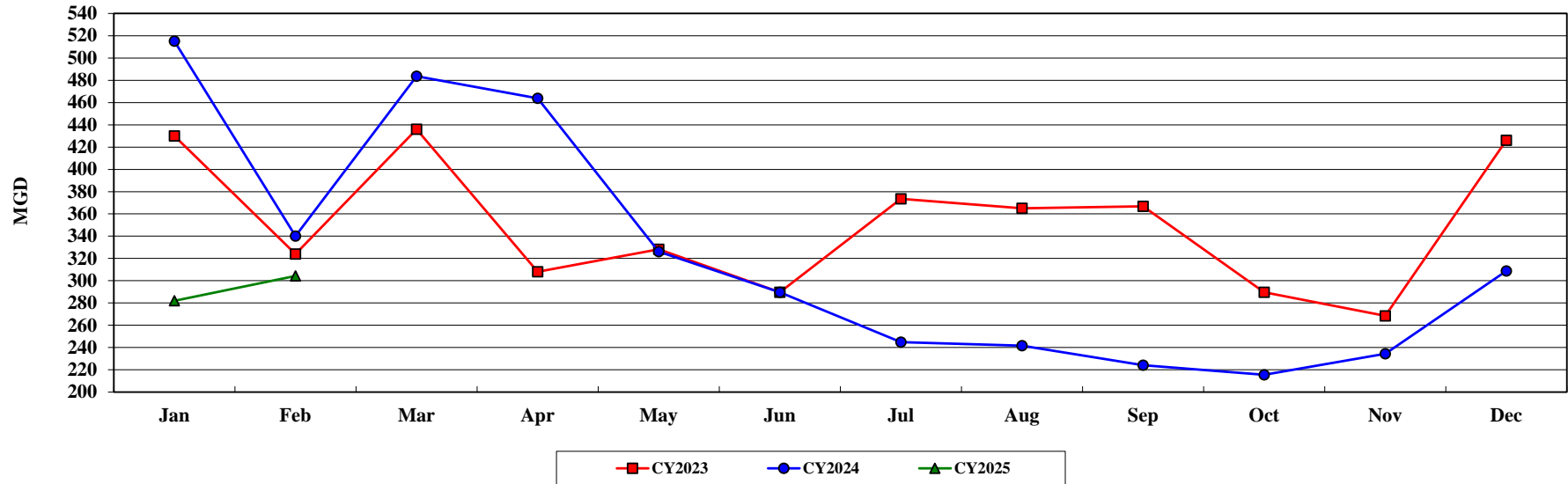
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Average	Annual Average
CY2023	161.272	165.989	162.292	169.594	198.499	205.042	208.304	203.762	199.844	180.948	163.937	158.736	163.091	181.612
CY2024	166.216	164.428	162.771	167.755	185.117	216.090	231.863	214.851	220.742	189.490	169.526	161.886	164.472	187.622
CY2025	166.378	168.077	166.674										167.009	484.864

The March 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 165.2 mgd in the 3rd quarter (Jan-Mar 2025) of FY2025. This is a decrease of 1.1 mgd or 0.7% compared to the 3rd quarter of FY2024.

Community Sewer Flow YTD - FY25

MWRA Metro-System Sewer Flow



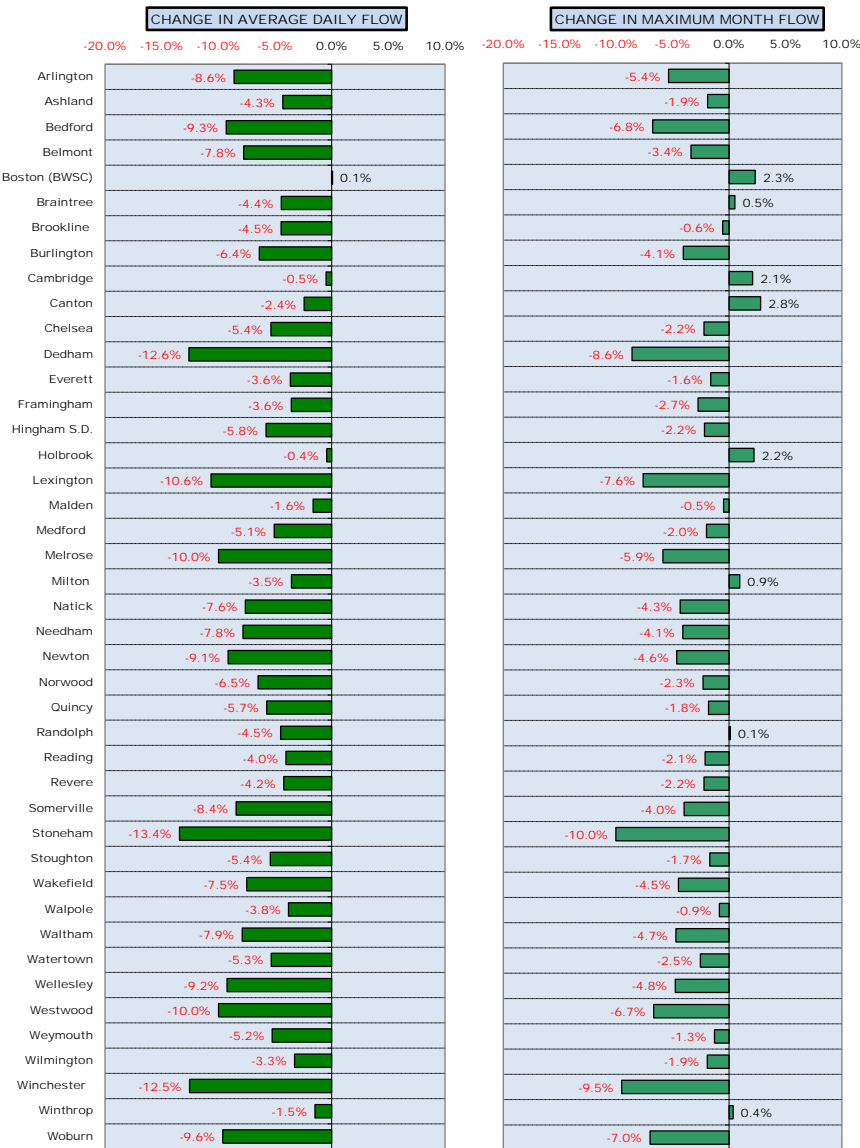
Sewer Flow (million gallons per day)														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Average	Annual Average
CY2023	430.060	323.980	435.990	308.110	328.160	289.710	373.540	365.130	366.840	289.680	268.470	426.070	379.717	351.159
CY2024	515.140	340.120	483.590	463.770	326.090	289.640	244.870	241.730	224.160	215.540	234.450	308.770	430.547	324.130
CY2025	281.960	304.280											292.553	305.725

The 2025 2-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.

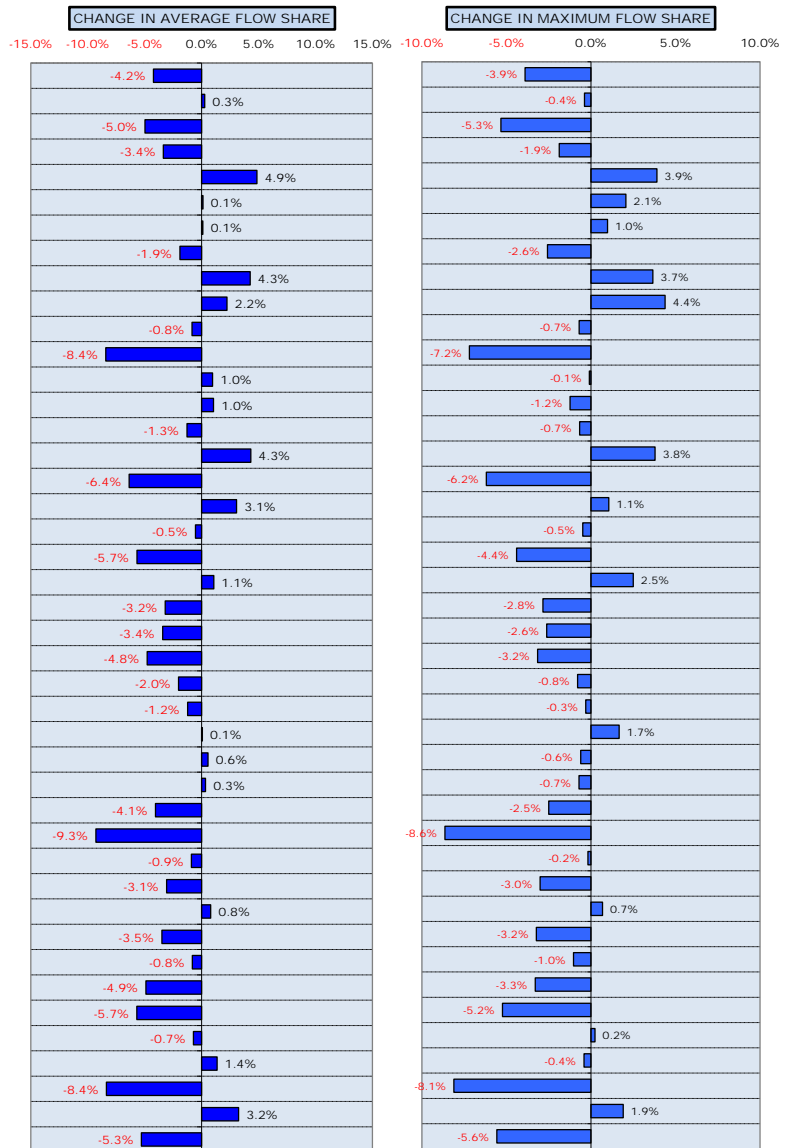
MWRA customer sewer flow averaged 292.7 mgd in the first two months of CY2025. This is a decrease of 139.3 mgd or 32.2% compared to the first two months of CY2024.

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

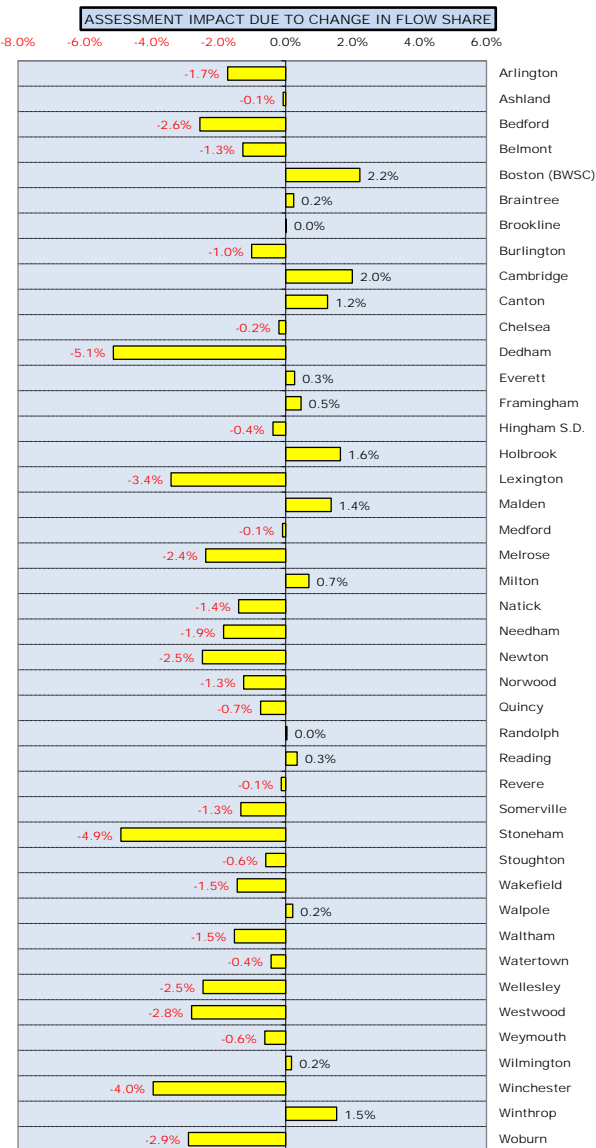
The flow components of FY2027 sewer assessments will be calculated using a 3-year average of CY2023 to CY2025 wastewater flows compared to FY2026 assessments that will use a 3-year average of CY2022 to CY2024 wastewater flows.



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



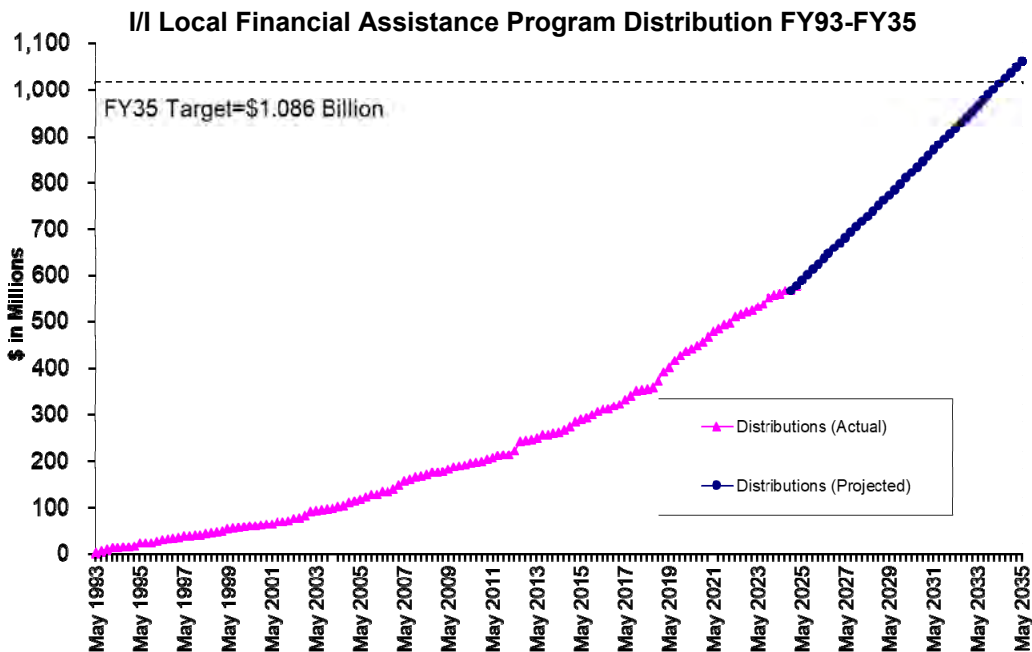
¹ MWRA uses a 3-year flow average to calculate sewer assessments. Three-year averaging smoothes the impact of year-to-year changes in community flow share, but does not eliminate the long-term impact of changes in each community's relative contribution to the total flow.
² Based on actual flows through February 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

3rd Quarter – FY25

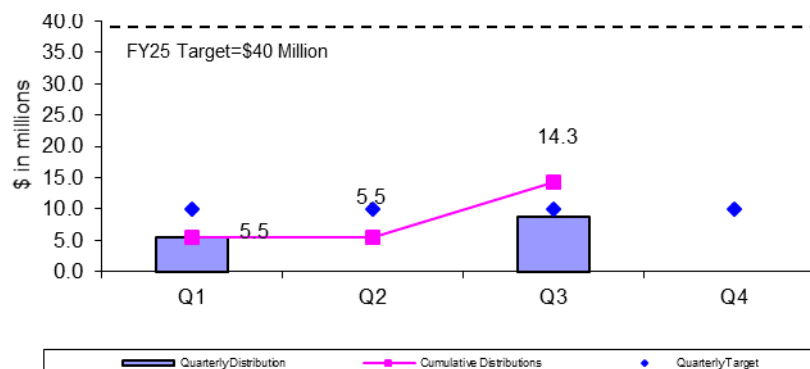
Infiltration/Inflow Local Financial Assistance Program

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



During the 3rd Quarter of FY25, \$8.8 million in I/I Local Financial Assistance Program distributions were made to fund projects in Arlington, Braintree, Brookline, Reading, Walpole, Watertown, Weymouth and Winchester. Total grant/loan distribution to date for FY25 is \$14.3 million. From FY93 through the 3rd Quarter of FY25, all 43 member sewer communities have participated in the program and \$574 million has been distributed to fund 696 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



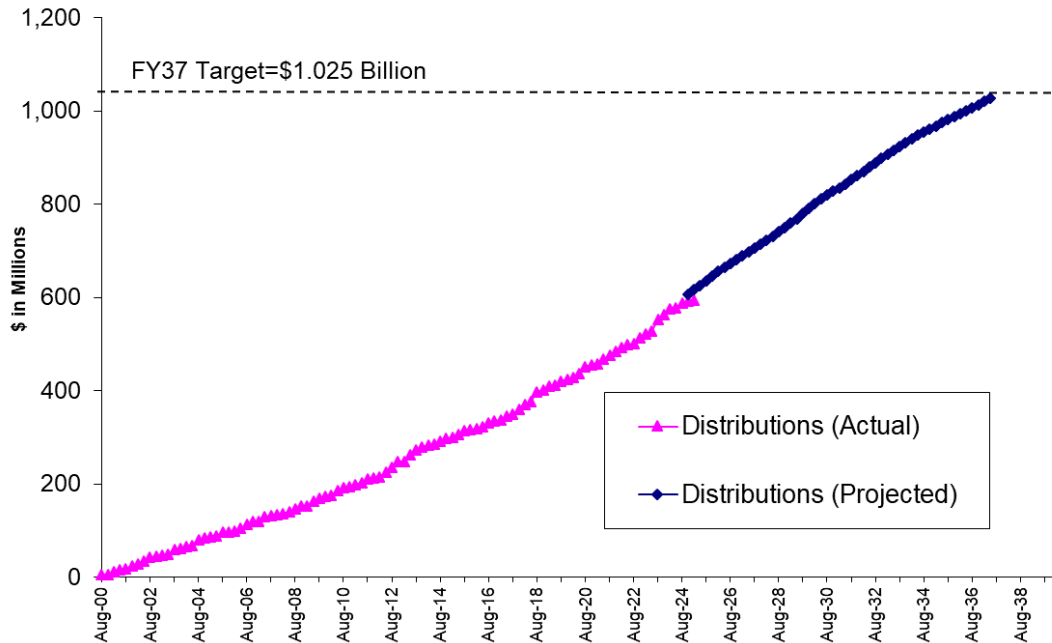
Community Support Programs

3rd Quarter – FY25

Local Water System Assistance Program

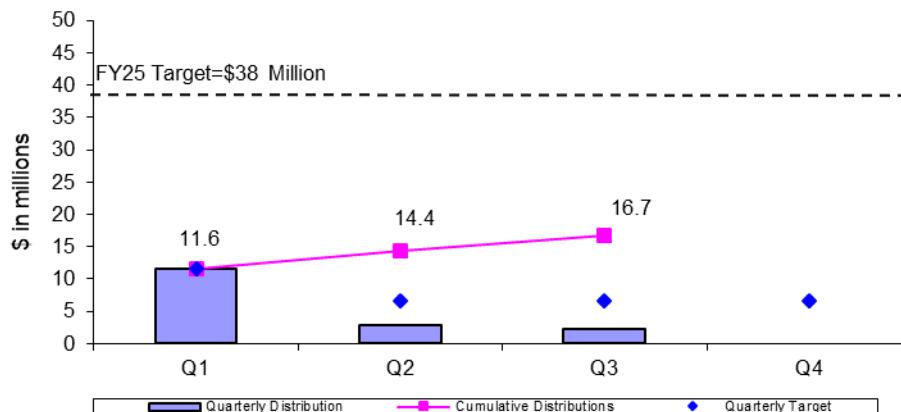
MWRA's Local Water System Assistance Programs (LWSAP) provides \$1.025 billion in interest-free loans (an average of about \$24 million per year from FY01 through FY35) to member water communities to perform water main rehabilitation projects within their locally-owned water distribution systems. There 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 3rd Quarter of FY25, \$2.3 million in interest-free loans was distributed to fund local water projects in Belmont, Saugus and Watertown. Total loan distribution to date for FY25 is \$16.7 million. From FY01 through the 3rd Quarter of FY25, \$593 million has been distributed to fund 542 local water system rehabilitation projects in 43 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

3rd 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 addition of a 25% grant for communities who commit to fully fund the replacement of the portion of lead service lines located on private property.

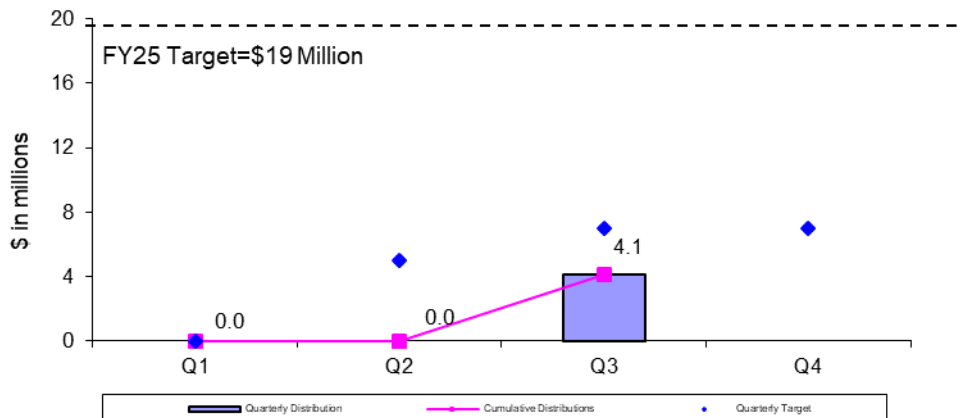
The Lead Service Line Replacement Loan Program is also referenced as the Lead Replacement Program or LRP. Each community can develop its own program, tailored to their local circumstances. MWRA's goal in providing financial assistance to member communities is to help communities remove lead from their 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	\$5.5M
Lexington	\$3.9M
Malden	\$0.5M
Marlborough	\$5.0M
Melrose	\$1.0M
Needham	\$1.0M
Newton	\$4.0M
Quincy	\$3.0M
Reading	\$1.5M
Revere	\$1.5M
Somerville	\$2.5M
Watertown	\$1.8M
Weston	\$0.2M
Winchester	\$2.8M
Winthrop	\$5.6M
Total	\$47.9M

During the 3rd Quarter of FY25, \$4.1 million in Lead Replacement Program grants and loans were distributed to fund local water projects in Brookline, Chelsea, Watertown and Winthrop. Chelsea and Winthrop were the first two grant recipients under the revised program. Total loan distribution to date for FY25 is \$4.1 million. From FY17 through the 3rd Quarter of FY25, \$47.9 million has been distributed to fund 53 lead replacement projects in 18 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

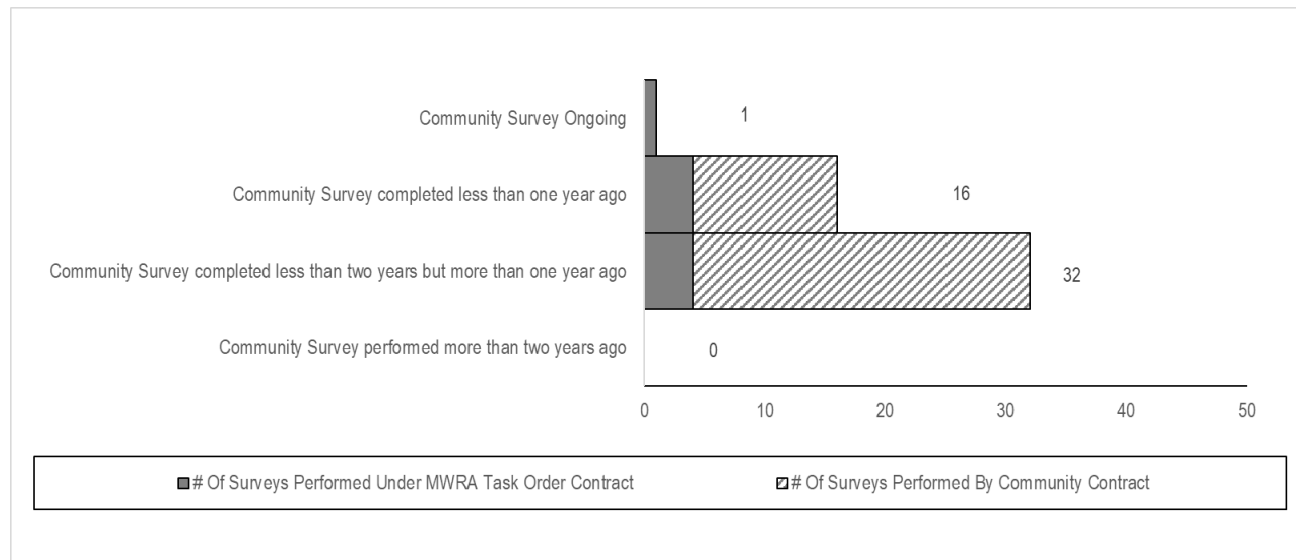


Community Support Programs

3rd 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 2nd 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		<u>23,227</u>
Low-Flow Fixtures (showerheads and faucet aerators)	10,000	1,352	700	616		<u>2,668</u>
Toilet Leak Detection Dye Tablets	-----	2,517	524	665		<u>3,706</u>

BUSINESS SERVICES

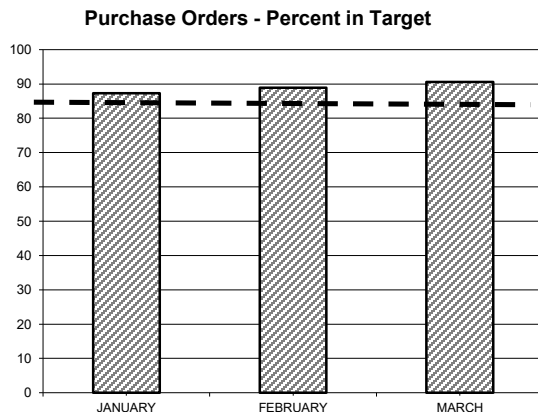
Procurement: Purchasing and Contracts

3rd 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 4.00 days vs. 4.14 days in Qtr 3 FY24. Processed 33% (3 of 9) of contracts within target timeframes; Average Processing Time was 183 days vs. 145 days in Qtr 3 FY24.

Purchasing



	No.	TARGET	PERCENT IN TARGET
\$0 - \$500	501	3 DAYS	87.6%
\$500 - \$2K	626	7 DAYS	98.2%
\$2K - \$5K	311	10 DAYS	98.7%
\$5K - \$10K	210	25 DAYS	100.0%
\$10K - \$25K	10	30 DAYS	95.2%
\$25K - \$50K	19	60 DAYS	94.7%
Over \$50K	33	90 DAYS	100.0%

The Purchasing Unit processed 1805 purchase orders, 19 less than the 1824 processed in Qtr 3 of FY24 for a total value of \$12,673,650 versus a dollar value of \$12,290,457 in Qtr 3 of FY24.

The purchase order processing target was met for all categories.

Contracts, Change Orders and Amendments

Procurement executed nine contracts with a value of \$34,354,220 and eighteen amendments with a value of \$7,233,181. Six contracts were not executed within the target timeframes. One contract was delayed due to revisions to specifications and coordination with the City of Newton regarding their input and review. Additionally, this contract's secondary contract was delayed as a result. Another contract was delayed due to staff summary requirements. The fourth contract was delayed to allow for alignment with the EPA issuing its final NPDES permit. Because the local limits should be established close in time to the permit application, the best approach was to extend the procurement and award time. A fifth contract was delayed due to delays associated with selection committee scheduling and availability. The final contract was delayed due to bidding issues with filed sub bids resulting in the need to re-bid subsequently causing further delays.

Staff reviewed 32 proposed change orders and 31 draft change orders.

Thirty change orders were executed during the period. The dollar value of all non-credit change orders during Q3 FY25 was \$2,624,483 and the value of credit change orders was (\$2,623,670).

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

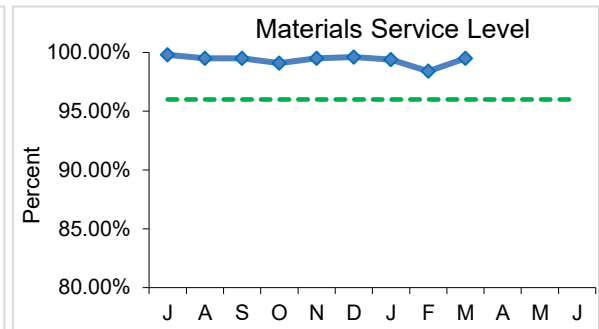
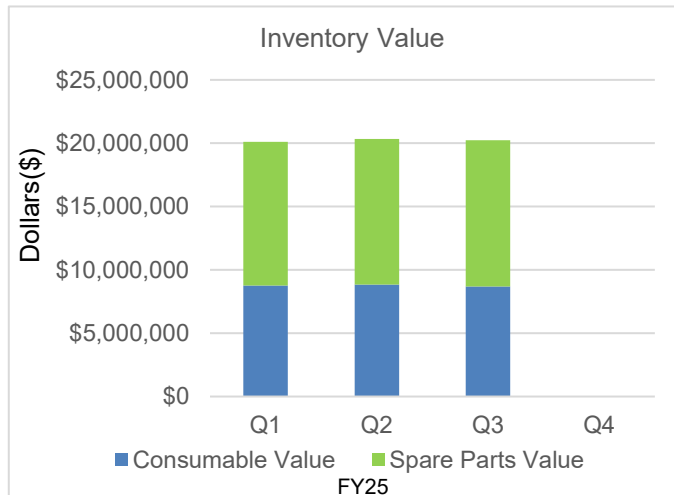
Materials Management

3rd 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:

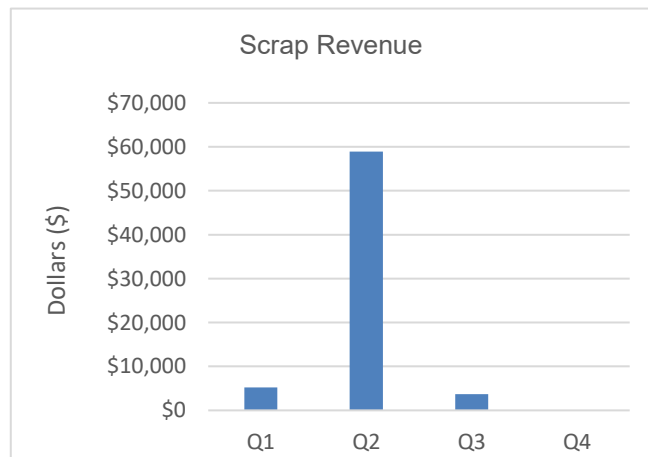
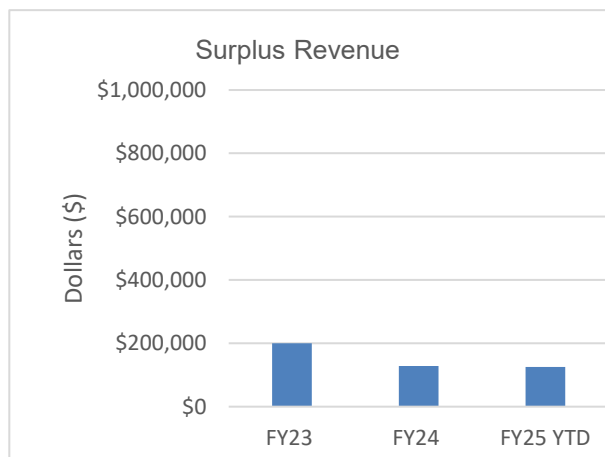
- Maintaining optimum levels of consumables inventory (office supplies, electrical, safety, etc.) and spare parts inventory (critical items such as actuators, motors, muffin monsters, etc.) necessary to support MWRA Operations and Maintenance. Typically spare parts carry longer lead times.
- Adding new 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 7836 (99.1%) of the 7,911 items requested in Q3 from the inventory locations for a total dollar value of \$2,110,093.

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

3rd Quarter – FY25

Project Updates

Infrastructure & Security

SD-WAN: Final circuit scheduled for installation on Deer Island in April. Working with Managed Security Services Provider to reconfigure firewalls to utilize redundant paths.

CUCM VOIP Upgrade: Held kickoff meeting in February. Upgrade scheduled for mid-April with cutover scheduled for late April.

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 and Deer Island. Installation of new camera for Quabbin expected in April. Working with website vendor to integrate onto mwra.com. Expected completion in April.

O365 Migration: Domain name reclaimed for tenant and rework completed to begin mailbox migrations again. Office upgrades have started for Pilot group along with mailbox migrations to M365. Project team working to recreated SharePoint area for Tunnel Dept. Staff working with Microsoft on advanced permissions configurations.

AutoCAD Desktop Virtualization: Most users have been transitioned to the virtual environment.

Deer Island Cabling Upgrades: Ethernet cabling for Admin/Lab 3 & 4 underway. DITP auxiliary buildings scope being procured. Staff continue to work to identify pathways for fiber cabling upgrades.

AWIA/Security: Completed AWIA re-certification process. Scoping underway for additional network assessments, the implementation of technology to monitor east/west traffic, and wired network access controls.

Application Delivery Controller: Implementation completed.

VMHosts Hardware Refresh: All the physical servers supporting the virtualized environments need a hardware refresh. Hardware and software procurements underway.

Library, Record Center, & Training

MIS Training: In Q3, 10 online IT lessons were taken (40 YTD), by 7 employees (53 YTD).

Library: Completed 20 research requests and provided access to 6 new books/reports, 13 articles, and 1 new standard (outside subscription). The MWRA Library Portal supported 969 user searches (an increase over last quarter) on topics including construction contracts, odor control, and reservoir history, inter-basin transfers, operation and maintenance manuals, and pump stations.

Record Center (RC): Handled 239 total boxes. The RC Manager attended 3 virtual RCB meetings. 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 8M permits.

Applications

ECM/Electronic Document Management: Staff Summary processes went into production in March, and vendor is working to resolve some outstanding email issues. Contract Requisition processes fully tested by MIS and ready for User Acceptance Testing. Final configuration being completed by the vendor for the Policy workflow. Internal work continues on migration of the remaining InfoStar data into ECM in the hopes of formally retiring InfoStar at the end of this project.

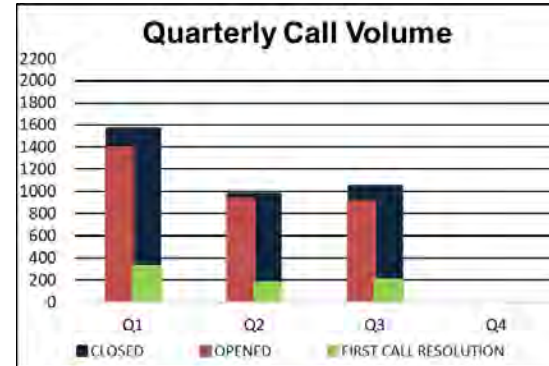
Infor Upgrade/Migration: MIS development staff are progressing with project tasks, including creating reports, integrations, and configurations for MWRA end users. Systems Integration Testing is set to finish in April, followed by User Acceptance Testing and Training. Integration work continues for MWRA Custom applications and Maximo Asset Management with Infor Lawson (CloudSuite). Collaborations with the vendor (MHC) focus on configuring and testing the MHC Northstar application. TRAC invoice and customer integrations are undergoing testing. End Users opted to stay with the ApplicantPro Talent Acquisition application over CloudSuite's version. Remaining tasks involve development, testing, training, and implementation activities.

Maximo/Lawson Interface: MIS staff collaborated with IBM Support to resolve Directory Services (LDAP) and WebSphere issues, reconfiguring the server cluster to remove two problematic UIs. They addressed user query issues and are working with the Infor CloudSuite vendor (RPI) on Maximo integrations, focusing on the Work Order API. MIS hired a consultant system administrator to optimize the application and servers and assist with Maximo-CloudSuite integration. Meetings were held with Operations users to prioritize Maximo-related issues. Additionally, the 1080 interface was updated to handle serial number field lengths and new component values.

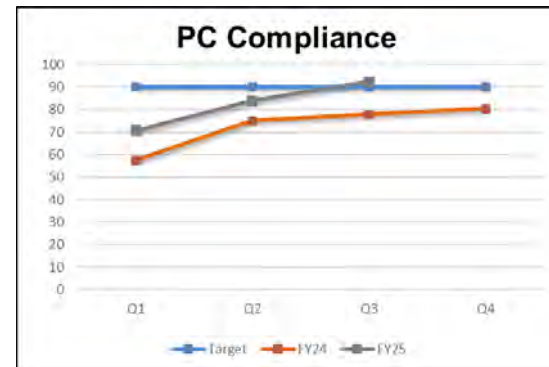
PI ProcessBook Upgrade (dataParc): The dataParc implementation project continued through February. The design phase and infrastructure setup are complete, with servers built and software installed. Migration of DITP and FOD ProcessBook displays to dataParc is in progress. Next steps include testing, training, and implementation.

Numbers & Statistics

Summary of calls managed by the Helpline.



Percentage of user endpoints in compliance with system updates. These numbers are a direct reflection of accessibility to these systems. Daytime patching began in January for mobile devices.



LEGAL MATTERS

3rd Quarter - FY25

PROJECT ASSISTANCE

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

- **8(m) Permits and License Agreements:** Reviewed seventy (70) 8(m) permits, including any related MEPA Section 61 Findings. Drafted two (2) notices of non-compliance for 8(m) permits. Finalized Direct Connection Permit 24-10-205DC - proposed 8-inch PVC gravity sanitary line to connect into MWRA System at Station 113+59 of MWRA Section 52 in Arlington.
- **Real Property:** Finalized MOA between MWRA, the City of Lynn, and a developer with respect to certain easements and underground stormwater storage units on a parcel of land in Lynn, orders of taking, easement plans, and grants of easements for 10 permanent easements and four temporary easements in Lynn and Revere, which are needed for Contract 7454 - Section 56 Water Pipeline Replacement Project and prepared documentation for notices of taking, check issuance, and payment letters. Reviewed and finalized easement plans and grant of easements from MBTA for two permanent water easements needed for MWRA Contract No. 7722 – Northern Extra High Pressure Zone Improvements Sections 45 & 63 CP2 (Arlington and Lexington). Reviewed Hultman Aqueduct Taking in area of Rte. 30 and Indian Pond Road in Natick. Reviewed various property interests for Metropolitan Water Tunnel Program (MWTP), updated acreage, revised property maps, prepared summaries and advanced title exam services. Drafted notice of offer letters for temporary easements needed for Contract 7216, Interceptor Renewal No. 7 Malden-Melrose (Sections 41/42/49/54/65). Reviewed MWRA property rights for water Section 101 meter chamber and meter cabinet off Lexington Street in Waltham. Reviewed proposed easements for Contract 6543 WASM3 CP2. Reviewed renewed revocable wireless permit agreement for Fells Tower. Reviewed proposed extension of easement durations for MWRA Contract 6224/6225 - Siphon and Junction Structure Rehabilitation Project.
- **Environmental:** Reviewed proposed pending updates to MassDEP Chapter 91 Regulations (310 CMR 9.00). Prepared final drafts of Memoranda of Agreement with the Town of Winthrop and the City of Quincy. Reviewed EPA Draft Biosolids PFAS Risk Assessment and attended EPA webinar regarding same. Worked on comments regarding: (1) the preliminary designation of certain stormwater discharges from commercial, industrial, and institutional properties with one acre or more of impervious surface in the Charles, Neponset, and Mystic River watersheds in Massachusetts for regulation under the Clean Water Act's National Pollutant Discharge Elimination System permitting program; and (2) a draft NPDES General Permit for the same activities and waterbodies. Assisted with comments regarding Draft Regulations for Disposition or Change in Use of Article 97 Interests (301 C.M.R. 52.00) and Draft NPDES New Hampshire Medium Wastewater Treatment Facility General Permit (NHG590000) and the accompanying Fact Sheet. Reviewed U.S. Supreme Court decision, *City & Cnty. of San Francisco, California v. Env't Prot. Agency*. for potential NPDES impacts to the Authority. Assisted in the preparation of a Status Report to the Court in the Boston Harbor Case.

- **Energy:** Prepared and filed MWRA comments regarding the Harbor Electric Energy Company's proposed 2025 Capacity and Support Charge filing (D.P.U. 24-175). Reviewed President Executive Order Declaring National Energy Emergency. Assisted Tunnel Redundancy Program regarding power line extension(s) with Eversource for electric distribution service at tunnel boring machine locations/projects. Finalized Letter of Intent regarding possible solar PV rooftop/canopy installation on Deer Island and other Authority facilities. Provided assistance regarding the 2025 Capacity and Support Charge. Assisted with issues concerning new Combined Heat and Power facility on Deer Island.
- **Miscellaneous:** Reviewed procurement documents for Contract No. OP-489 Heat Pump Installation at Chelsea facility and Chelsea lease terms; responded to staff questions. Further reviewed draft regulations for Open Space Act and discussed provisions with staff for anticipated MWTP property acquisitions. Reviewed Core Storage Shed lease and supplemental documents and responded to staff questions. Reviewed terms of construction contract and various documents concerning construction dispute, drafted terms for resolution along with change orders; and provided guidance on claim withdrawal process. Reviewed various agencies contract terms for construction claims and dispute resolution processes, along with releases for periodic and final payments. Provided guidance to Wastewater and Waterworks staff concerning record drawings and tracking closeout information. Updated Public Records Request Policy (ADM.19). Prepared documents for 2025 legal intern program. Completed review and selection process for recommendation of Contract A644 award. Worked with staff to prepare scope of work for E&C and MWTP for acquisition of property interests needed to support future construction projects. Finalized notice letters to property owners concerning boring work for the MWTP. Prepared bar chart with tasks/information for acquisition of property interests in furtherance of MWTP. Reviewed documents for submission to Records Conservation Board for disposition.
- **Public Records Requests:** During the 3rd Quarter FY 2025, MWRA received and responded to two hundred (200) public records requests.

LITIGATION/TRAC

New Lawsuits:

- There was five new matters in 3rd Quarter FY 2025.

Joann, Inc., et al.; District of Delaware, Ch. 11, Case No. 25-10068 (CTG). On January 30, 2025, law division received a notice of Ch. 11 Bankruptcy. MWRA does not have a claim against this debtor.

Anagenex, Inc.(ABC), LLC. On March 12, 2025, Law Division received a Notice of Assignment for the Benefit of Creditors. MWRA does not presently have a claim, but potentially could have an administrative claim in the future.

Azzur Group Holdings LLC. et al. District of Delaware, 25-10342(KBO). On March 12, 2025, Law Division received a Notice of Ch. 11 Bankruptcy. MWRA will not be filing a proof of claim in this case, however, if one of the debtors continues to operate, TRAC will be invoicing for the new annual permit fee in late 2025.

Tarveda Therapeutics, Inc., a Delaware Corp., Court of Chancery in State of Delaware, C. A. No. 2022-0317-CDW. On March 19, 2025, Law Division received this bankruptcy matter. MWRA does not have a claim against this debtor.

Massachusetts Natural Fertilizer Co., et al. v. MWRA et al. Worcester County C.A. 2585CV439C. On March 28, 2025, The Newark Group, Inc. , Otter Farm, Inc. and Massachusetts Natural Fertilizer Co., Inc. filed this action against MWRA and others regarding PFAS contamination at Mass Natural's composting facility in Westminister, MA. Plaintiffs seek to collect costs of remediation from the defendants pursuant to Mass. Gen. L. c. 21E.

New Claims:

- There are no new claims.

Significant Developments:

Perry Fiberglass Products, Inc. v. MWRA, Suffolk Superior Court C.A. No.2484CV02841. On December 11, MWRA served a Motion Dismiss on Plaintiff, Perry Fiberglass. Perry's Opposition to MWRA's Motion to Dismiss was served on January 6. The court scheduled a hearing on the Motion to Dismiss in May 2025.

Barletta Heavy Division, Inc. v. MWRA, Suffolk Superior Court C.A No. 2484CV02185. Depositions conducted of third party witnesses in March of 2025. The court scheduled a Status Conference for July 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. Final judgment is anticipated in the next few months.

Closed Cases:

- Seven cases closed in 3rd Quarter FY 2025.

In re: Yellow Corporation, et al; U.S.B.C. (Delaware) Case 23:11069-CTG. On September 7, 2023, the Law Division received a Notice of Ch. 11 bankruptcy and Notice of Deadlines for filing Proofs of Claim. TRAC, Procurement and Finance searched their records and MWRA has no claim against any of the debtor entities

In re: Zymergen, Inc., et al.; USBC (Delaware) Case No. 23-11661-KBO. On Nov 6, 2023, Law Division received a Notice of Chapter 11 bankruptcy. TRAC, Procurement and Finance searched their records and MWRA has no claim against any of the debtor entities.

In re: Rite Aid Corp. et al., USBC (New Jersey) Case No. 23-18993. On December 1, 2023, Law Division received a Notice of a Chapter 11 bankruptcy. TRAC, Procurement and Finance searched their records and MWRA has no claim against any of the debtor entities.

Mozynski, Azurde; USBC, District of Mass, Case No. 24-41210. On December 30, 2024, Law division received a Notice of Chapter 13 Bankruptcy. TRAC, Procurement and Finance searched their records and MWRA has no claim against any of the debtor entities.

Gritstone Bio, LLC; District of Delaware, Chapter 11, Case No. 24-12305 (KBO). Law Division received a Ch. 11 Notice of Proposed Sale on November 26, 2024. The debtor is a TRAC permittee. There is a de minimis claim that MWRA will not pursue.

Joann, Inc., et al.; District of Delaware, Ch. 11, Case No. 25-10068 (CTG). On January 30, 2025, Law Division received a Ch. 11 bankruptcy matter. TRAC, Procurement and Finance searched their records and MWRA has no claim against any of the debtor entities.

Tarveda Therapeutics, Inc., a Delaware Court of Chancery in State of Delaware, C. A. No. 2022-0317-CDW. On March 19, 2025, Law Division received notice of this bankruptcy matter. MWRA does not have a claim in this matter.

Closed Claims:

- There are no Closed Claims to report.

Subpoenas:

- During the 3rd Quarter FY 2025, one new subpoena was received, and one subpoena closed. There is one pending subpoena.

SUMMARY OF PENDING LITIGATION MATTERS

TYPE OF CASE/MATTER	As of March 2025
Construction/Contract/Bid Protest	5
Tort/Labor/Employment	1
Environmental/Regulatory/Other	3
Eminent Domain/Real Estate	0
TOTAL	9
Other Litigation matters (restraining orders, etc.) - Class Action suits	4
TOTAL – all pending lawsuits	13
Claims not in suit	0
Bankruptcy	4
Wage Garnishment	1
TRAC/Adjudicatory Appeals	2
Subpoenas	1
TOTAL – ALL LITIGATION MATTERS	21

TRAC/MISC. ADMIN. APPEALS

Appeals Pending:

- There are two pending TRAC appeals in 3rd Quarter FY 2025:

1058 Beacon Street, Newton, MA; MWRA Docket No. 22-01

Tri-Town Regional Water District; MWRA Docket No. 23-03

Settlement by Agreement of Parties

There are no Settlements by Agreement of Parties in 3rd Quarter FY 2025.

Stipulation of Dismissal

No Stipulations of Dismissal in 3rd Quarter FY 2025.

Notice of Dismissal Fine paid in full

No Notices of Dismissal, Fines Paid in Full in 3rd Quarter FY 2025.

Tentative

No Decisions were issued in 3rd Quarter FY 2025.

Final Decisions

No Final Decisions were issued in 3rd Quarter FY 2025.

LABOR AND EMPLOYMENT

New Matters

- A terminated employee filed an appeal of the Department of Unemployment Assistance's determination of the former employee's disqualification for unemployment benefits.
- A union filed a request for arbitration alleging MWRA violated the collective bargaining agreement when it issued an employee a 5-day suspension for conduct that violated the Code of Conduct, Non-Discrimination Policy and Harassment Prevention Policy.
- A former employee filed a charge of discrimination at the MCAD on the basis of sex, disability, sexual orientation, race and color.

Significant Developments

- An employee filed an appeal of the MCAD's favorable decision to the MWRA, finding a lack of probable cause and dismissing the employee's charge of discrimination based upon sexual orientation, gender identity and retaliation.

Matters Concluded

- The MWRA successfully mediated and settled charges of discrimination and retaliation filed by a former employee.
- The Department of Unemployment Assistance modified its prior determination after hearing to reflect that a former employee is eligible for unemployment benefits thereby ruling against the MWRA and awarding the former employee unemployment benefits.
- The MWRA settled a grievance that a Union filed on behalf of a former employee asserting that the MWRA issued unjust discipline.
- A Union withdrew a grievance and request for arbitration, asserting that Union members were denied overtime opportunities.
- The MWRA settled an arbitration matter and 45 related grievances concerning reclassification issues.
- The MWRA settled four related grievances alleging that the Authority violated the collective bargaining agreement concerning the promotion of one of its members.

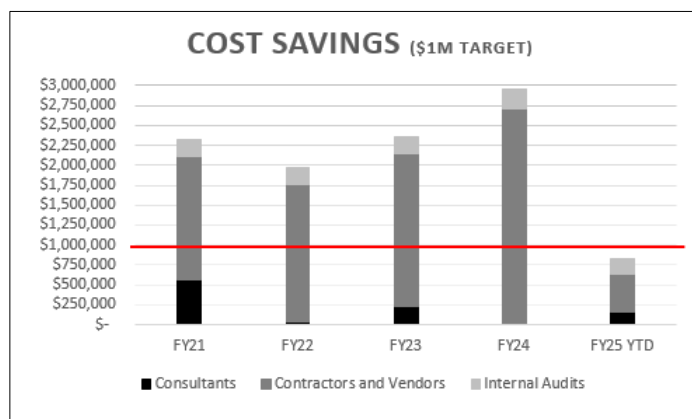
Internal Audit And Contract Audit Activities

3rd 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	\$164,860
Contractors and Vendors	\$473,392
Internal Audits	\$186,261
Total	\$824,513



Highlights

During the 3rd quarter FY25, a review of MWRA Inflow/Infiltration (I/I) Local Financial Assistance Program was completed. Our recommendation included a process of coordinating with relevant banking institutions to ensure timely delivery of escrow statements.

In addition, IA completed 2 incurred cost audits, 2 labor burden reviews, and 2 consultant preliminary reviews. There are 6 incurred cost audits, 1 labor burden review, and 1 consultant review in process. IA also issued 38 indirect cost rate letters to consultants following a review of their consultant disclosure statements.

A review of Needham Core Shed lease for 2023 was finalized and 2024 is being finalized.

Internal Audit also supported updates related to 2 existing policies.

Status of Recommendations

During FY25, 7 recommendations were closed.

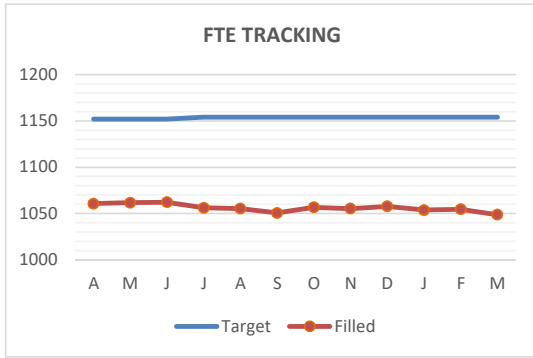
IA follows-up on open recommendations on a continuous basis. All open recommendations have target dates for implementation and are generally targeted to be closed within 12 months of the audit report issue date.

Report Title (issue date)	Audit Recommendations		
	Open	Closed	Total
Accounts Payable Process (3/14/2024)	2	4	6
MWRA Payroll (3/19/2024)	1	2	3
MIS Asset Management (6/28/2024)	1	6	7
Infiltration/Inflow Program Review (3/13/2025)	<u>1</u>	<u>0</u>	<u>1</u>
Total Recommendations	5	12	17

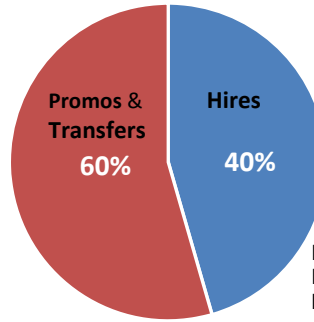
OTHER MANAGEMENT

Workforce Management

3rd Quarter - FY25



Position Filled by Hires/Promos & Transfer for YTD



	<u>Pr/Trns</u>	<u>Hires</u>	<u>Total</u>
FY23	133 (59%)	91 (41%)	224
FY24	117 (56%)	93 (44%)	210
FY25	94 (60%)	62 (40%)	156

FY25 Budget for FTE's = 1154

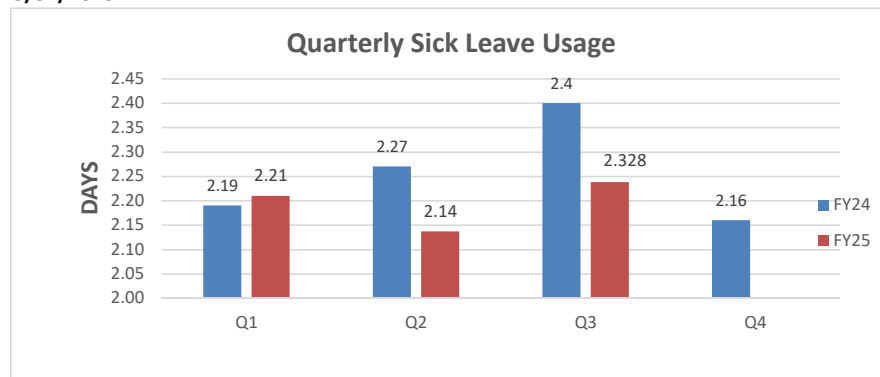
FTE's as of March = 1048.7

Tunnel Redundancy as of March 2025 = 8

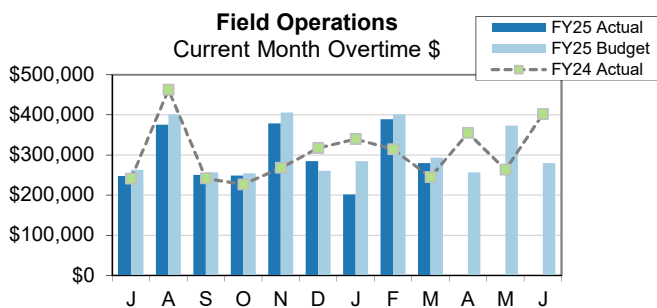
POSITION CHANGE by FY

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	4	3
FY25*	62	83	11	49	20	4	2

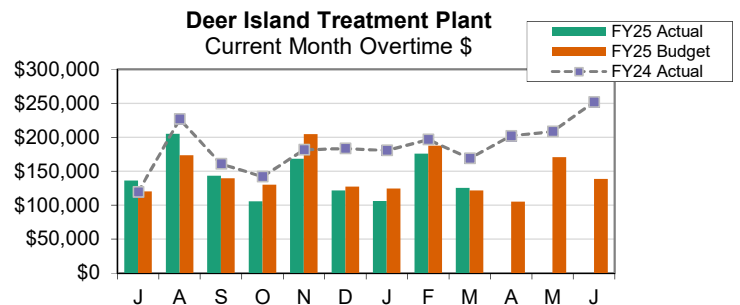
* as of 3/31/2025



Average quarterly sick leave for the 3rd Quarter of FY25 has decreased compared to the 3rd Quarter of FY24 (2.328 from 2.40)



Total Overtime for Field Operations for March was \$279k, which is \$14k or 5% under budget. March emergency events totaled \$84k, or 40% under budget; less than \$1k in snow events, while there was \$60k in rain response OT; other emergency maintenance response totaled \$23k. Total Planned OT was \$97k, which was on budget for the month. Operator Coverage was \$78k, which was 65% over budget for the month, due to vacancies. Maintenance deadline project OT was \$9k for the month. Planned Training OT was \$10k for the month, primarily

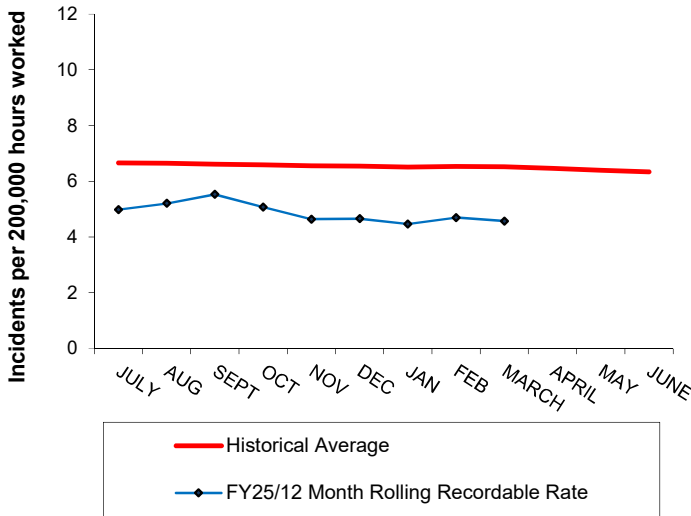


Deer Island's total overtime expenditure in March 2025 was 125k, which was \$4k or 3.2% above the budget. In March 2025, Deer Island experienced lower than anticipated Shift Coverage of (\$10.5k) - driven by Wastewater Ops (\$10k); Planned/Unplanned of \$14k; and Storm Coverage of (\$100). YTD Deer Island's overtime spending is \$1.3M, which is (\$41k) or (3.1%) under budget due to (\$76k) Storm Coverage & (\$108k) Shift Coverage offset by Planned/Unplanned of \$142k - driven by \$67k Maintenance, \$21k Process Control, \$46k Thermal, & \$20k Wastewater Ops .

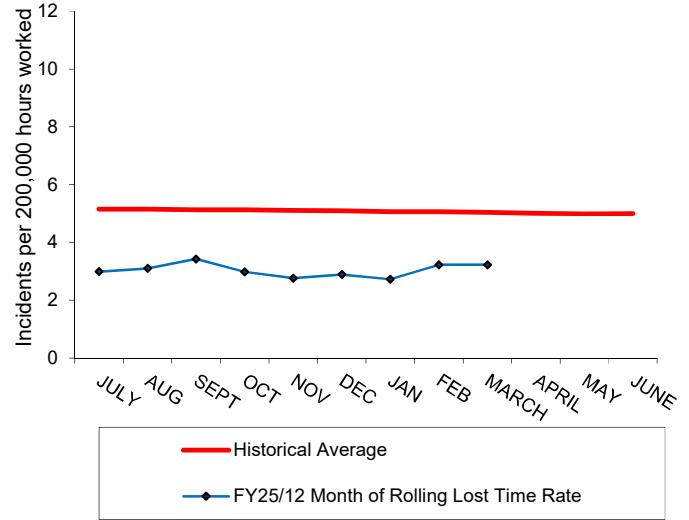
Workplace Safety

3rd Quarter - FY25

Recordable Injury & Illness Rates



Lost Time Injury & Illness Rates

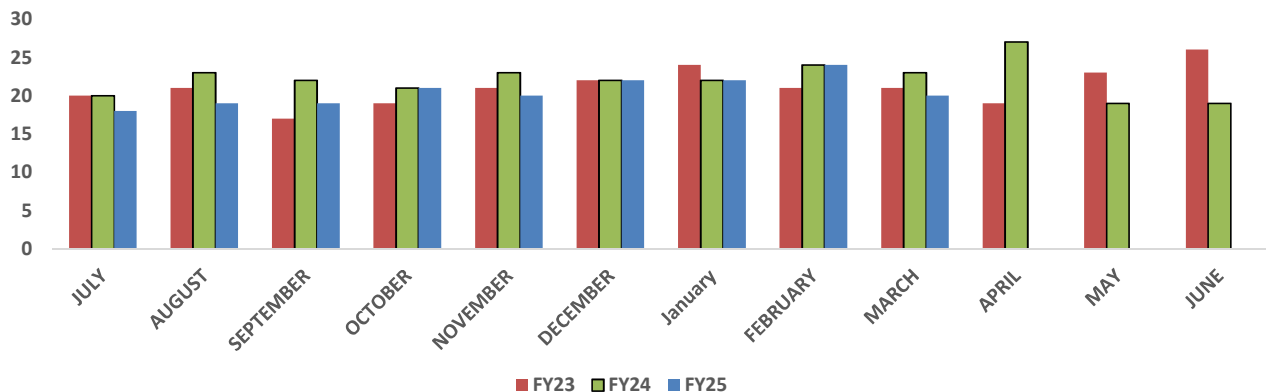


- 1 "Recordable" incidents are all work-related injuries and illnesses which result in death, loss of consciousness, restriction of work or motion, transfer to another job, or require medical treatment beyond first aid. Each month this rate is calculated using the previous 12 months of injury data.
-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

WORKERS COMPENSATION HIGHLIGHTS

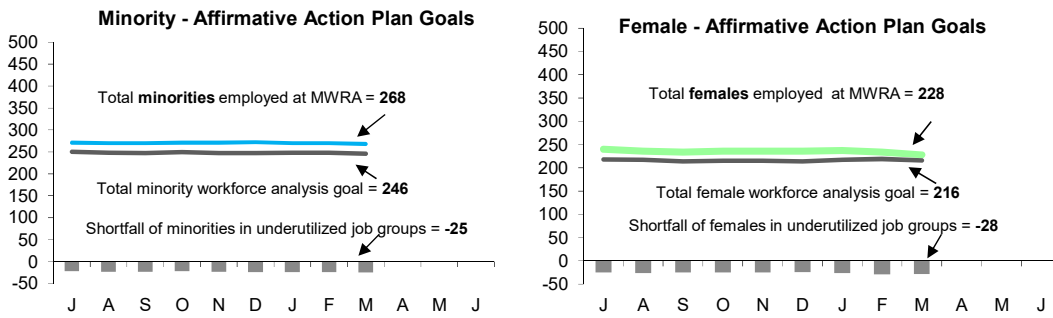
		3rd Quarter Info as of 03.31.25		
		New	Closed	Open Claims
Lost Time		1	6	22
Medical Only		2	5	104
Report Only		7	11	
		QYTD		FYTD
Regular Duty Returns		4		9
Light Duty Returns		0		1
Indemnity payments as of March 2025 included in open claims listed				20

INDEMNITY CLAIMS



MWRA Job Group Representation

3rd Quarter - FY25



Highlights:

At the end of Q3 FY25, 6 job groups or a total of 25 positions are underutilized by minorities as compared to 5 job groups for a total of 23 positions at the end of Q3 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 25 positions at the end of Q3 FY24. During Q3, 0 minorities and 3 females were hired. During this same period 3 minorities and 1 female were terminated.

Underutilized Job Groups - Workforce Representation

Job Group	Employees as of 3/31/2025	Minorities as of 3/31/2025	Achievement Level	Minority Over or Underutilized	Females As of 3/31/2025	Achievement Level	Female Over or Underutilized
Administrator A	23	4	1	3	10	1	9
Administrator B	26	5	5	0	8	7	1
Clerical A	19	9	4	5	14	14	0
Clerical B	22	4	5	-1	4	6	-2
Engineer A	78	16	20	-4	16	21	-5
Engineer B	53	18	15	3	17	10	7
Craft A	114	16	23	-7	0	6	-6
Craft B	126	25	25	0	0	7	-7
Laborer	53	12	14	-2	3	2	1
Management A	84	18	20	-2	31	22	9
Management B	38	12	6	6	6	7	-1
Operator A	61	4	13	-9	4	6	-2
Operator B	66	23	12	11	4	4	0
Professional A	28	8	8	0	14	12	2
Professional B	170	55	53	2	71	65	6
Para Professional	44	17	9	8	19	14	5
Technical A	50	19	12	7	6	11	-5
Technical B	6	3	1	2	1	1	0
Total	1061	268	246	47/-25	228	216	40/-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
Clerical B	Warehouse Materials Handler	1	Int.	1	0	PROMO = WM
Engineer A	Sr Civil Engineer	1	Int./Ext.	1	0	PROMO = WM
Engineer A	Sr Engineer	1	Ext.	1	0	PROMO = WF
Craft A	Unit Supervisor	2	Int.	2	0	PROMO = 2WM
Craft A	Trades Foreman	2	Int./Ext.	1	0	PROMO=WM NH=WM
Craft A	M & O Specialist - Wastewater	2	Int./Ext.	1	0	PROMO=WM NH=WM
Craft A	General Foreman	1	Int.	1	0	PROMO = WM
Craft A	Valve Maintenance Foreman	1	Int./Ext.	1	0	PROMO = WM
Craft A	OMC Laborer in Training	1	Ext.	0	0	NH = WM
Craft B	Facilities Specialist I	1	Int.	1	0	PROMO = WM
Craft B	Junior Instrument Technician	1	Int.	1	0	PROMO = HM
Craft B	Plumber/Pipefitter	1	Int./Ext.	0	0	NH = WM
Craft B	Equipment Repair Specialist	1	Ext.	0	0	NH = WM
Craft B	Master Welder I	1	Int./Ext.	0	0	NH = WM
Craft B	Heavy Equipment Operator I	1	Int./Ext.	0	0	NH = WM
Laborers	Supervisor, Equipment Maint	1	Int./Ext.	1	0	PROMO= WM
Laborers	OMC Laborer	2	Ext.	0	0	NH= 2WM
Laborers	Building/Grounds Worker	1	Ext.	0	0	NH= WM
Management A	Program Manager	5	Int./Ext.	5	0	PROMO = 2WM, 3WF
Management B	Facilities Manager	2	Int.	2	0	PROMO = WM, BM
Management B	Operations Supervisor	1	Int.	1	0	PROMO = WM
Management B	Accounting Manager	1	Int./Ext.	1	0	PROMO = HF
Technical A	Sr Instrument Technician	2	Int.	2	0	PROMO = WM, BM
Management B	Sup Water/WW Mechanical Maint	1	Int.	1	0	PROMO= WM

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

3rd Quarter – FY25

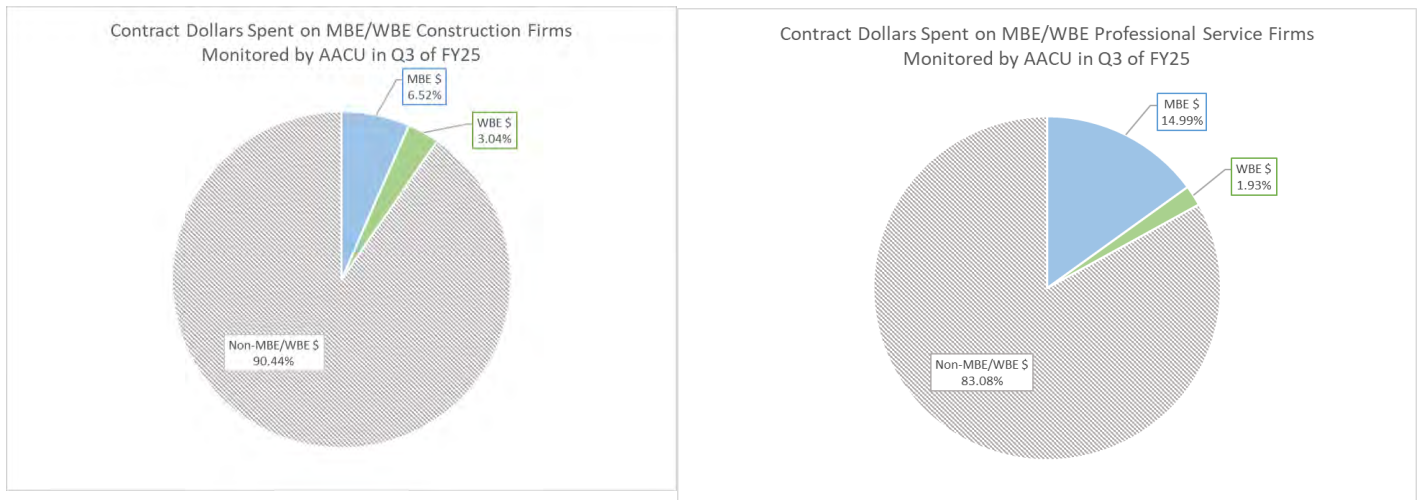
MWRA's goals for construction and professional services expenditures for minority owned business enterprises (MBE) and women owned business enterprises (WBE) is based upon a 2002 Availability Study.* The goals are as follows:

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 the calendar year of 2025.*



In accordance with the Affirmative Action Plan (AAP) for calendar year 2025, MWRA is reporting expenditures starting from Qtr 3 of FY25 in the format consistent with the approved AAP. MWRA is monitoring 12 construction contracts and 28 professional services contracts. In this quarter, MWRA spent approximately 6.52% (approximately \$2.1 million) of all construction payments to MBE firms, and 3.04% (approximately \$987k) on WBE firms. In Qtr 3 of FY25, MWRA spent approximately 14.99% (approximately \$1.6 million) of all professional services payments to MBE firms, and 1.93% (approximately \$200k) on WBE firms. In Qtr 3 of FY25, MWRA spent approximately \$26,417 to MBE or WBE vendors for goods and services.

MWRA FY25 CEB Expenses

3rd Quarter – FY25

As of March 2025, total expenses are \$622.8 million, \$15.9 million or 2.5% lower than budget, and total revenue is \$677.0 million, \$2.4 million or 0.4% over the estimate, for a net variance of \$18.3 million.

Expenses –

Direct Expenses are \$219.7 million, \$13.5 million or 5.8% under budget.

- **Wages & Salaries** were \$12.4 million under budget or 12.6%. Regular pay is \$13.0 million under budget, largely due to lower head count. YTD through March, the average Full Time Equivalent (FTE) positions were 1,065 or 103 below the 1,168 FTE's budgeted.
- **Ongoing Maintenance** expense was \$3.9 million over budget or 12.0% due to higher than anticipated project spending as Plant & Machine Services were \$3.4 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.
- **Professional Services** expense was \$2.0 million under budget or 24.0% primarily due to later than anticipated services for Other Professional Services of \$785k and less than anticipated spending for Engineering and Computer System Consultant of \$349k and \$302k, respectively.
- **Other Services** expense was \$1.8 million under budget or 7.0% primarily due to lower Sludge Pelletization and lower Grit and Screenings expense of \$1.1 million and \$388k, respectively, both due to lower quantities.
- **Fringe Benefits** expenses are \$618k under budget or 3.0%, primarily due to lower spending for Health Insurance of \$536k, reflecting the lower than budgeted head count. As of March FTEs were 103 below budget.
- **Workers Compensation** expense was \$455k under budget or 29.2% due to higher Medical Payments and Compensation Payments of \$237k and \$171k, respectively.

Indirect Expenses were \$57.2 million, \$2.3 million or 3.9% below budget driven by lower than Watershed Reimbursement of \$2.5 million.

Capital Finance Expenses totaled \$345.9 million, matching budget after the transfer of \$3.0 million to the Defeasance account. The transfer reflects lower variable rate debt expense due to lower than budget interest expense of \$3.0 million as a result of lower than anticipated interest rates.

Revenue and Income –

Total Revenue and Income is \$677.0 million, \$2.4 million or 0.4% over the estimate. The favorable variance was driven by Investment Income of \$21.4 million, \$1.5 million over the estimate due to higher than budgeted average balances and interest rates in addition to Other Revenue which was \$717k over budget.

	Mar 2025 Year-to-Date			
	Period 9 YTD Budget	Period 9 YTD Actual	Period 9 YTD Variance	%
EXPENSES				
WAGES AND SALARIES	\$ 98,073,319	\$ 85,710,211	\$ (12,363,108)	-12.6%
OVERTIME	4,646,356	4,218,619	(427,737)	-9.2%
FRINGE BENEFITS	20,529,121	19,910,648	(618,473)	-3.0%
WORKERS' COMPENSATION	1,555,076	2,009,768	454,692	29.2%
CHEMICALS	14,541,101	14,149,063	(392,038)	-2.7%
ENERGY AND UTILITIES	23,324,398	23,437,255	112,857	0.5%
MAINTENANCE	32,729,475	36,658,936	3,929,461	12.0%
TRAINING AND MEETINGS	443,255	302,927	(140,328)	-31.7%
PROFESSIONAL SERVICES	8,163,028	6,206,456	(1,956,572)	-24.0%
OTHER MATERIALS	4,066,385	3,689,469	(376,916)	-9.3%
OTHER SERVICES	25,210,415	23,453,445	(1,756,970)	-7.0%
TOTAL DIRECT EXPENSES	\$ 233,281,929	\$ 219,746,797	\$ (13,535,135)	-5.8%
INSURANCE	\$ 3,353,284	\$ 3,503,900	\$ 150,616	4.5%
WATERSHED/PILOT	25,671,336	23,130,867	(2,540,469)	-9.9%
HEEC PAYMENT	6,455,414	6,510,376	54,962	0.9%
MITIGATION	1,367,673	1,367,673	-	0.0%
ADDITIONS TO RESERVES	1,429,709	1,429,709	-	0.0%
RETIREMENT FUND	21,264,519	21,264,519	-	0.0%
POST EMPLOYEE BENEFITS	-	-	-	---
TOTAL INDIRECT EXPENSES	\$ 59,541,935	\$ 57,207,043	\$ (2,334,891)	-3.9%
STATE REVOLVING FUND	\$ 62,762,151	\$ 62,762,151	\$ -	0.0%
SENIOR DEBT	232,138,812	232,138,812	-	0.0%
DEBT SERVICE ASSISTANCE	-	-	-	---
CURRENT REVENUE/CAPITAL	-	-	-	---
SUBORDINATE MWRA DEBT	48,559,629	48,559,629	-	0.0%
LOCAL WATER PIPELINE CP	-	-	-	---
CAPITAL LEASE	2,412,795	2,412,795	-	0.0%
VARIABLE DEBT	-	(3,020,198)	(3,020,198)	---
DEFEASANCE ACCOUNT	-	3,020,198	3,020,198	---
DEBT PREPAYMENT	-	-	-	---
TOTAL CAPITAL FINANCE EXPENSE	\$ 345,873,387	\$ 345,873,387	\$ -	0.0%
TOTAL EXPENSES	\$ 638,697,251	\$ 622,827,227	\$ (15,870,026)	-2.5%
REVENUE & INCOME				
RATE REVENUE	\$ 641,616,000	\$ 641,616,000	\$ -	0.0%
OTHER USER CHARGES	7,977,758	8,124,078	146,320	1.8%
OTHER REVENUE	5,226,188	5,943,445	717,257	13.7%
RATE STABILIZATION	-	-	-	---
INVESTMENT INCOME	19,838,891	21,361,279	1,522,388	7.7%
TOTAL REVENUE & INCOME	\$ 674,658,837	\$ 677,044,802	\$ 2,385,965	0.4%

Cost of Debt

3rd 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 (\$2.76 billion)	3.25%
Variable Debt (\$334.8 million)	3.61%
SRF Debt (\$749.36 million)	1.82%

Weighted Average Debt Cost (\$3.84 billion) 3.00%

Most Recent Senior Fixed Debt Issue April 2024

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

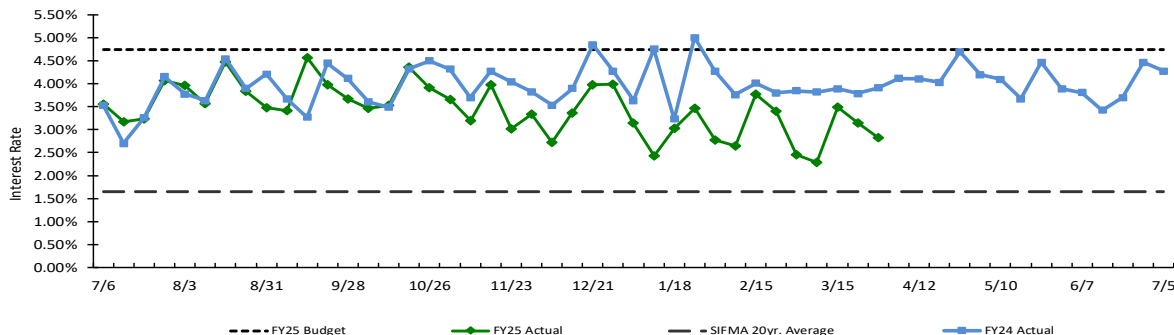


Bond Deal	1998AB	2000A	2000D	2002B	2002J	2003D	2004A	2004B	2005A	2006AB	2007AB	2009AB	2010AB	2011B
Rate	5.04%	6.11%	5.03%	5.23%	4.71%	4.64%	5.05%	4.17%	4.22%	4.61%	4.34%	4.32%	4.14%	4.45%
Avg Life	24.4 yrs	26.3 yrs	9.8 yrs	19.9 yrs	19.6 yrs	18.4 yrs	19.6 yrs	13.5 yrs	18.4 yrs	25.9 yrs	24.4 yrs	15.4 yrs	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	18.8 yrs	11.2 yrs	11.7 yrs	11.9 yrs	9.73 yrs	15.6 yrs	12.2 yrs	10.45 yrs	11.77 yrs

Weekly Average Variable Interest Rates vs. Budget

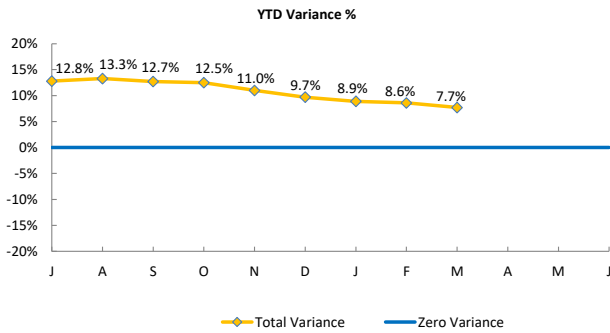
MWRA currently has eight variable rate debt issues with \$334.8 million outstanding, excluding commercial paper. Variable rate debt has been less expensive than fixed rate debt in recent years as short-term rates have remained lower than long-term rates on MWRA debt issues. In March, the Securities Industry and Financial Markets Association rate ranged from a high of 3.62% to a low of 1.86% 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

3rd Quarter – FY25

- YTD variance is 7.7%, \$1.5 million, over budget primarily due to higher than budgeted average balances.

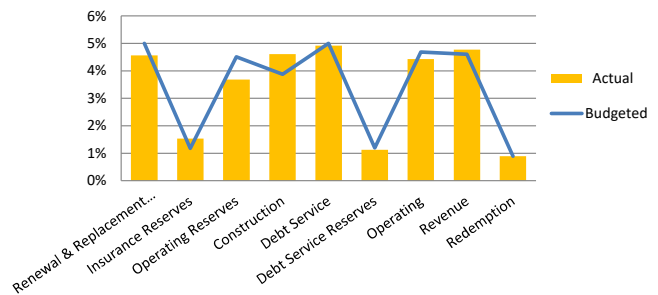


	(\$'000)			
	BALANCES IMPACT	RATES IMPACT	TOTAL	%
Renewal & Replacement Reserves	\$7	-\$33	-\$27	-7.2%
Insurance Reserves	\$0	\$37	\$37	30.4%
Operating Reserves	\$26	-\$356	-\$331	-17.0%
Construction	\$538	\$760	\$1,298	41.5%
Debt Service	\$105	-\$106	-\$1	0.0%
Debt Service Reserves	\$33	-\$93	-\$60	-4.0%
Operating	\$197	\$70	\$267	9.3%
Revenue	\$202	\$136	\$338	10.0%
Redemption	\$0	\$1	\$1	0.4%
Total Variance	\$1,107	\$415	\$1,522	7.7%

**YTD Average Balances
Budgeted vs. Actual**

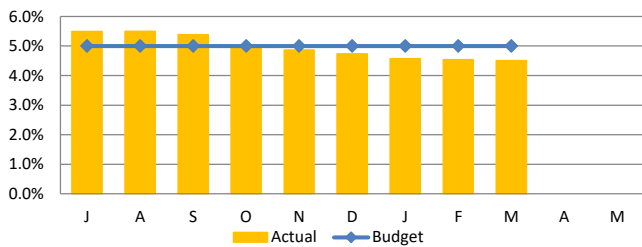


**YTD Average Interest Rate
Budgeted vs. Actual**

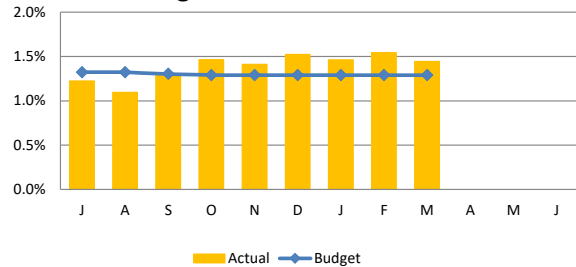


Monthly

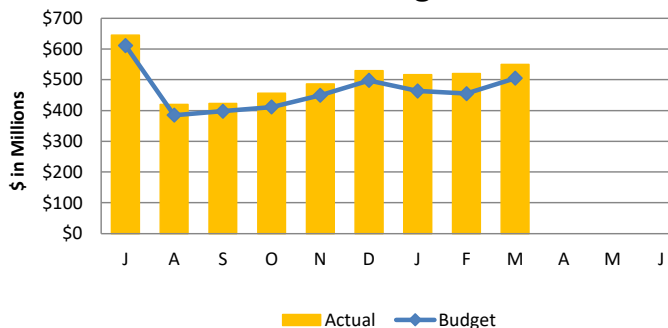
Short -Term Interest Rates



Long -Term Interest Rates



Short-Term Average Balances



Long-Term Average Balances

