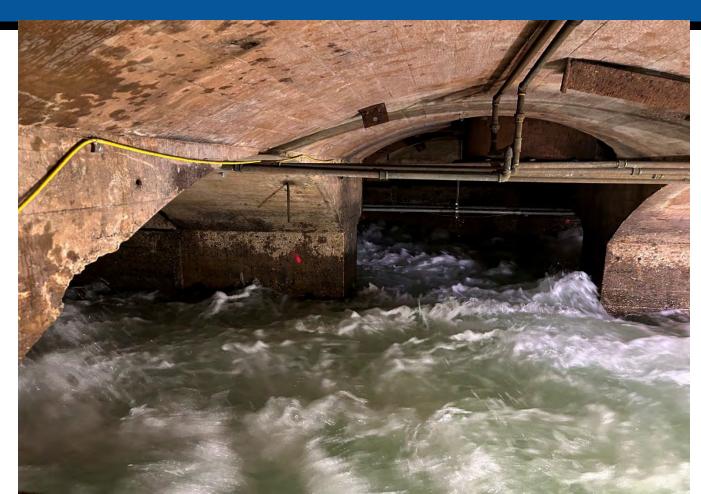


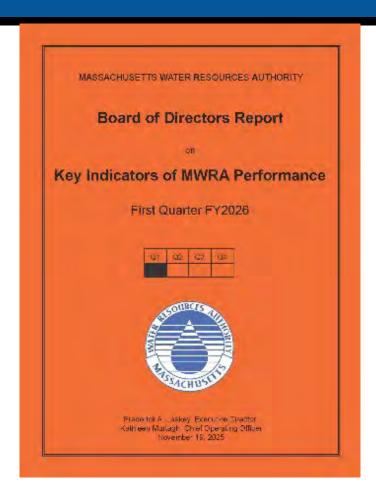
Wachusett Reservoir Lower Gatehouse Valve Testing





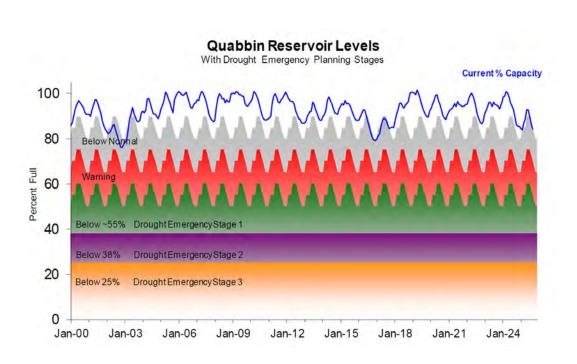


Massachusetts Water Resources Authority





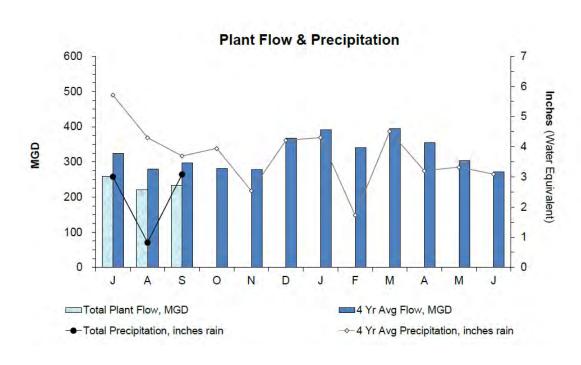
Drought Conditions Return to Service Area



- Volume in the Quabbin
 Reservoir decreased to 84.3%
 of capacity as of September
 30, a decrease of 8.7% or 35
 billion gallons since the end of
 FY25.
- Quabbin was within normal operating range for the months of Jul –Sep and remains in normal operating range presently



Wastewater Flows at Deer Island Below Average



 Precipitation at Deer Island during Q1 was 49.5% below the 4-year average (6.9 in vs. 13.7 expected)

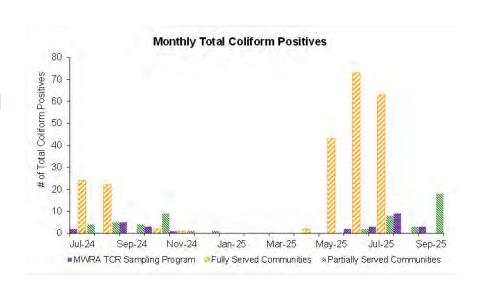
 Flows through the plant were 20.8% below 4-year average (238 MGD vs. 300 MGD expected)



Total Coliform Positives in Distribution Systems

- Q1 saw an increase in total coliform positives compared to Q1 FY25.
- 3% of samples from fully and partially supplied communities, 0.5% from shared community/MWRA samples, and 3.3% of CVA community samples tested positive (vs. 1.3%, 0.4%, and 0% in Q1 FY25)

No regulatory violations or public health concerns in member communities

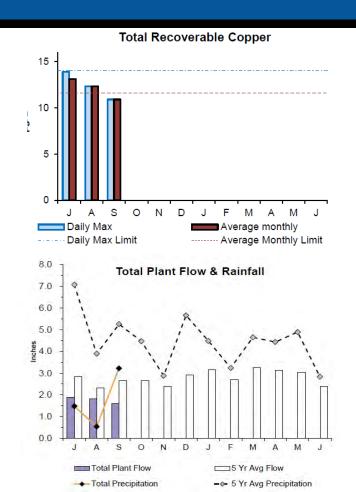




Clinton WWTP Copper Concentrations

 NPDES permit violations for average monthly recoverable copper in July and August at the Clinton Wastewater Treatment Plant

 Copper exceedances are usually seen during months of low precipitation when flow from homes is less diluted by inflow and infiltration.





Massachusetts Water Resources Authority

Presentation to

MWRA Board of Directors

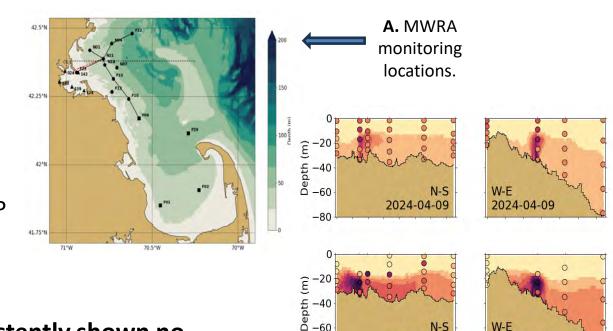
Modeling Massachusetts Bay Water Quality Contract OP-499

November 19, 2025



OP-499 Modeling Massachusetts Bay

- The Bays Eutrophication Model (BEM) is a coupled hydrodynamic and water quality model of Massachusetts Bay.
- Annual model runs are required by the current DITP NPDES permit.



Model results have consistently shown no environmental impact from the outfall.

B. Dissolved Inorganic Nitrogen along North-South and West-East transects.

2024-05-14

2024-05-14



OP-499 Procurement Results

Contractor	Bid Amount
Four Peaks Environmental Science and Data Solutions, LLC	\$190,509.84
Staff Estimate	\$212,800.00
Deltares USA, Inc.	\$263,025.61

- Contract duration is 48 months from 2025-2029. The contract will model 2025–2028 water quality conditions as required by the NPDES Permit.
- Staff recommends the award to <u>Four Peaks Environmental</u> <u>Science and Data Solutions, LLC</u>.



Massachusetts Water Resources Authority

Presentation to

MWRA Board Of Directors

Boiler and Water Heater Service Contract OP-463, Change Order 2

November 19, 2025



Contract Scope

- Contract OP-463 provides:
 - Annual preventative maintenance
 - Non-emergency and emergency repair services
 - Equipment serviced includes 43 boilers and 14 water heaters
- Contractor: American Refrigeration Company, LLC



Ward Street Headworks - Replace 3 sections of Boiler #1







Caruso Pump Station - Re-Gasket Boiler, Valve, and Flue









Columbus Park Headworks – Boiler Feed System and Boiler Sections











Contract Summary

	Amount	Time	Date
Original Contract	\$607,650	1,095 Days	10/22/23
Change Order 1*	\$100,000	0 Days	10/20/25
Change Order 2	\$248,000	<u>0 Days</u>	Pending
Total of Change Orders	\$348,000	0 Days	
Adjusted Contract	\$955,650	1,095 Days	

^{*}Approved under delegated Authority



Massachusetts Water Resources Authority

Presentation to

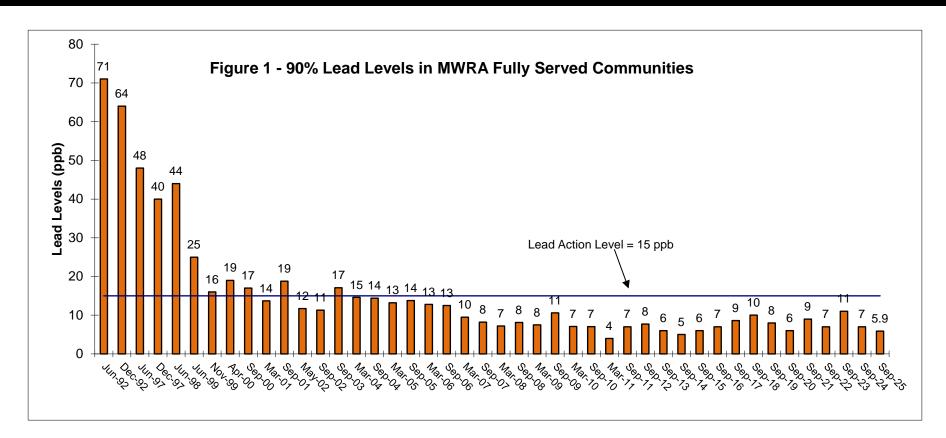
MWRA Board of Directors

Lead and Copper Rule Compliance Update Fall 2025

November 19, 2025



2025 Lead Results - 90th Percentile = 5.9 ppb





Fall 2025 Sampling Round

- Only 18 of 594 samples were over the Action Level
 - 16 of the 18 were at sites with lead service lines
 - (In past 10 years -- over 90% of elevated samples were LSL)
- Three communities were individually over the Action Level
 - Required to do the 24-hour Public Notice
 - Will Mail Public Education brochure
 - Continuing lead service line replacement
 - Will sample twice in 2026

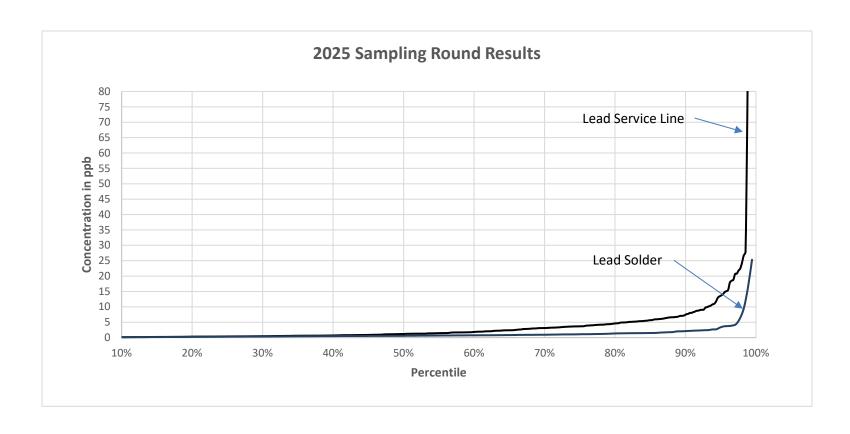


Distribution System and Site Assessment

- Communities did outreach to each sampler with elevated results
 - Results provided within 3 days of notice
 - Request to investigate and sample at each home
 - LSL replaced in a number of cases
- MWRA evaluated distribution system water quality near all
 - All were typical and met MWRA OWQP limits



Comparison of lead solder and LSL sites





90th Percentile Results Significantly Lower for Non-LSL Sites

Year	2018	2019	2020	2021	2022	2023	2024	2025
90th Percentile Full System	10	8	6	9	7	11	7	6
90th Percentile Just LSL	12	11	8	13	9	14	8	7
90th Percentile Just Lead Solder	3	3	2	3	2	3	2	2

Red shows results over new Action Level of 10 ppb (effective 10/27) Five bottle sampling will tend to increase reported lead levels



Initial Service Line Inventory Findings

- 524,810 total service lines reported by MWRA communities
- Lead Service Lines = 14,078 (2.7%)
- Galvanized Requiring Replacement = 2,856 (0.5%)
- Unknowns = 75,050 total (14%)
 - But many are in communities that do not expect to find lead
- Communities about to do the annual mailings to all LSL, GRR and Unknowns



MWRA Lead Loan Program

- Launched in 2016 \$100 Million, 10 year interest-free loans
- Must replace ALL lead pipe within a service line
 - BOTH public and private portions
- Added \$100 Million in 2024, with 25% grant if the community funds the private side
- \$64.9 Million distributed to 21 communities since 2016
- MWRA goal replace all LSL by end of 2032
- MWRA's Lead Loan program has funded more than:
 - 9,500 LSL replacements
 - 1,579 lead gooseneck replacements
 - 4,131 unknown identifications

