



# MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island  
33 Tafts Avenue  
Boston, MA 02128

**Frederick A. Laskey**  
Executive Director

*Chair:* J. Foti  
*Vice-Chair:* P. Flanagan  
*Committee Members:*  
A. Pappastergion  
L. Taverna  
J. Walsh  
P. Walsh  
M. White-Hammond

## **ADMINISTRATION, FINANCE & AUDIT COMMITTEE MEETING**

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

Date: Wednesday, June 26, 2024  
Time: 10:00am  
Location: Deer Island Reception/Training Building, 1st Floor  
33 Tafts Avenue – Favaloro Meeting Room  
Boston, MA 02128

A photo ID will be required for entry.

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

### **Webex meeting link (Registration required):**

<https://mwra.webex.com/weblink/register/rd8e53ef2bd8abb5820fd658867c9774b>

Meeting Number: 2349 352 1994      Password: 6282024

## **AGENDA**

### **A. Information**

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

### **B. Approvals**

1. Final FY2025 Capital Improvement Program (CIP)
2. Final FY2025 Current Expense Budget (CEB)
3. Final FY2025 Water and Sewer Assessments
4. Defeasance of Future Debt Service
5. Surplus Water Easement of the Abandoned Mystic Water Mains

### **C. Contract Amendments/Change Orders**

1. Maximo Lawson Interface Enhancements: Starboard Consulting, LLC, Contract 7649, Amendment #4

**MASSACHUSETTS WATER RESOURCES AUTHORITY**  
Meeting of the Administration, Finance and Audit Committee  
of the MWRA the Board of Directors  
March 13, 2024

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A meeting of the Administration, Finance and Audit Committee of the Massachusetts Water Resources Authority (“MWRA”) Board of Directors was held on March 13, 2024 at MWRA’s Administration Facility in Chelsea, and via remote participation.

Committee Chair Foti presided at the MWRA Administration Building in Chelsea. Board Members Pappastergion, Peña, Taverna, Jack Walsh, Patrick Walsh and White-Hammond also participated at the Chelsea Administration Facility. Board Members Vitale and Wolowicz participated remotely. Board Member Flanagan was absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Special Assistant for Affirmative Action Patterson Riley; Tunnel Program Director Kathy Murtagh; Director of Procurement Douglas Rice; MIS Director Paula Weadick; Asset Management Analyst Michael Curtis; Chief of Staff Katie Ronan; Associate General Counsels Angela Atchue, Kimberley McMahan and Kristen Schuler Scammon; and, Assistant Secretary Kristin MacDougall participated at MWRA’s Chelsea Administration Facility.

Vandana Rao, Executive Office of Environmental Affairs (“EEA”), and Matt Romero, MWRA Advisory Board (“Advisory Board”), participated at MWRA’s Chelsea Administration Facility.

#### CALL TO ORDER

Committee Chair Foti called the meeting to order at 11:51am.

#### INFORMATION

##### Delegated Authority Report – February 2024

Mr. Foti asked if there was any discussion or questions from the Board with respect to the Delegated Authority Report for February 2024, as presented in the March 13, 2024 Staff Summary AF&A A.1, and filed with the records of this meeting. Hearing none, he asked if staff would like to offer any comments.

Douglas Rice, MWRA Director of Procurement, noted that the explanation for report Item C7: *Nut Island Headworks Odor Control Facility and HVAC Improvements*, should indicate that Change order 16 is comprised of 70 items related to mechanical, electrical, HVAC, instrumentation, demolition and life safety changes necessary to complete the work. (ref. AF&A A.1)

##### FY24 Financial Update and Summary through February 2024

Thomas Durkin, MWRA Finance Director, discussed financial results and variance highlights for

FY2024 through February 2024 as presented in the March 13, 2024 Staff Summary AF&A A.2 and filed with the records of this meeting.

Hearing no discussion or questions from the Board, Chair Foti moved to Contract Amendments /Change Orders. (ref. AF&A A.2)

#### CONTRACT AMENDMENTS/CHANGE ORDERS

##### Enterprise Content Management System Purchase and Implementation, Cadence Solutions Inc., Contract 7438, Amendment 2

Paula Weadick, MWRA MIS Director, discussed the reasons, scope and terms of a proposed amendment with time extension to a contract for the purchase and implementation of an Enterprise Content Management System, as presented in the March 13, 2024 Staff Summary AF&A A.2 and filed with the records of this meeting.

There was discussion about the timeline for migrating records into the content management system, and the potential to use a similar system at other public agencies.

There was also brief, general discussion about the recent Utility Contractors' Association of New England "UCANE" annual dinner meeting and trade show.

Hearing no further discussion or questions from the Board, Chair Foti moved to Adjournment. (ref. AF&A B.1/V C.3)

#### ADJOURNMENT

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

A roll call vote was taken in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
J. Walsh		
P. Wash		
White-Hammond		
Wolowicz		

The meeting adjourned at 11:57am.

LIST OF DOCUMENTS AND EXHIBITS USED

- March 13, 2024 Staff Summary – Delegated Authority Report – February 2024 (ref. AF&A A.1)
- March 13, 2024 Staff Summary – FY24 Financial Update and Summary through February 2024 (ref. AF&A A.2)
- March 13, 2024 Staff Summary – Amendment 2 to Contract 7438 for the Enterprise Content Management System Purchase and Implementation, Cadence Solutions Inc., Contract 7438 (ref. AF&A B.1/V C.3)

## STAFF SUMMARY

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Delegated Authority Report – May 2024



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**COMMITTEE:** Administration, Finance & Audit

INFORMATION  
 VOTE



Michele S. Gillen  
Director, Administration

Barbara Aylward, Administrator A & F  
Karen Smith, Administrative Systems Coor.  
Preparer/Title



Douglas J. Rice  
Director of Procurement

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### RECOMMENDATION:

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

This report is broken down into three sections:

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

### DISCUSSION:

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

Construction Contract Awards:

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

Change Orders:

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

Professional Service Contract Awards:

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

Non-Professional Service Contract Awards:

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

Purchase or Lease of Equipment, Materials or Supplies:

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

Amendments:

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

Amendments to the Position Control Register:

Amendments which result only in a change in cost center.

**BUDGET/FISCAL IMPACT:**

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

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

No.	Date of Award	Title and Explanation	Contract	Amend/CO	Company	Value
C-1	05/02/24	<b>CHE008 Pipe Replacement Project</b> Final balancing change order to decrease the following bid items: Test and dispose of GroupII-1 contaminated soils, Police details, Price adjustments for diesel fuel, gasoline, liquid asphalt and Portland cement contained in cast-in-place concrete, Accelerate construction on Eastern Avenue by working days and weekends.	7915	6	D’Alessandro Corporation	(\$44,041.82)
C-2	05/02/24	<b>Sudbury Dam Spillway Masonry and Gatehouse Repairs</b> Award of a contract to the lowest responsive bidder for the Sudbury Dam Masonry and Gatehouse Repairs for a term of 180 calendar days.	7615A	Award	Ardent Group, Inc.	\$1,955,000.00
C-3	05/10/24	<b>Clarifier Rehabilitation, Phase II</b> Perform metal repair work and replace Nappe Breakers; Install piping and valves, fittings and supports; Install conduit fittings; Extend contract term by 90 calendar days from August 16, 2027 to November 14, 2027.	7395	1	Walsh Construction Company II, LLC	\$235,317.12
C-4	05/21/24	<b>Electrical Testing and Technical Services – Metropolitan Boston</b> Final balancing change order to decrease the following bid items: Delete the requirement to provide switchgear maintenance services at various facilities.	OP-409	2	Infra-Red Building and Power Services, Inc.	(\$73,343.03)
C-5	05/28/24	<b>Security Equipment Maintenance and Repair Services</b> Final balancing change order to decrease the following bid items: Emergency on- call services, Integration and programming services, Scheduled information technology system, Emergency and Non- emergency on-call technology system operation, maintenance, Spare parts and replacement parts.	EXE-043	3	Viscom Systems, Inc.	(\$766,644.49)
C-6	05/31/24	<b>Nut Island Headworks Odor Control and HVAC Improvements</b> Remove or relocate existing utilities, equipment, systems or structural elements, temporarily or permanently to complete the installation of the new odor control system; Furnish and install nine new flow switches with conduit and wire back to the new SCADA control panel located in the Pump and Blower room, Furnish and install a ¾-inch conduit with a three-conductor cable from the local control panel to the actuator at each of the four modulating dampers; Furnish and install barometric dampers with associated stainless steel fittings for the breeching on the three boilers; Furnish and install nine NEMA 7 rated enclosures in lieu of nine NEMA 4X enclosures.	7548	17	Walsh Construction Company II, LLC	\$497,306.07

**Purchasing Delegated Authority Items May 1-31, 2024**

No.	Date of Award	Title and Explanation	Company	Value
P-1	04/29/2024	<p><b>Aquatic Invasive Macrophyte Survey Update at MWRA/DCR Source Reservoirs and WQ Sampling and Monitoring at Emergency Reservoirs</b></p> <p>Aquatic macrophyte surveys track aquatic plant communities, including invasive and established non-native plants using prior baseline surveys, providing important information on the overall aquatic environment. This contract is for the surveying of Quabbin, Wachusett, Sudbury, Foss, Norumbega, Weston, Chestnut Hill and Fells reservoirs, as well as Ware River and Spot Pond.</p>	TRC Environmental Corporation	\$79,000.00
P-2	04/29/2024	<p><b>Purchase Order for the Supply and Delivery of 300,000 Gallons of Ultra-Low Sulfur #2 Diesel Fuel</b></p> <p>The Deer Island Treatment Plant uses ultra-low sulfur #2 diesel fuel in the Thermal Power Plant. This order will replenish stock used on Deer Island over the past year.</p>	Dennis K. Burke, Inc	\$812,214.00
P-3	05/03/2024	<p><b>Purchase Order for Three Reconditioned Circuit Breakers for the Deer Island Treatment Plant</b></p> <p>This purchase is for three circuit breakers to replenish current warehouse inventory. Staff have determined that refurbished circuit breakers have proven to be equally operational as new ones. This purchase order is for materials only.</p>	Yale Electric East, LLC	\$25,500.00
P-4	05/06/2024	<p><b>One-Year Purchase Order Contract for Mobile Massachusetts State Vehicle Inspections</b></p> <p>Fleet Services is responsible for maintaining approximately 537 vehicles and pieces of equipment that require annual inspections. Any vehicle or equipment specifically designed for road travel must meet all Massachusetts state required safety protocols, including annual vehicle safety and emissions inspections. Contracting with a mobile state vehicle inspection provider allows staff to schedule on-site safety and emissions inspections, thereby eliminating the need for operators and drivers to locate a station and saving time associated with the inspection procedure.</p>	Baystate Mobile Inspections	\$56,875.00
P-5	05/06/2024	<p><b>Purchase Order Contract for One Year Subscription Renewal and Platinum Support of 1200 Proofpoint Enterprise Subscriptions – State Contract ITS75</b></p> <p>In 2020, MWRA purchased 1200 Proofpoint P1 Plus Enterprise subscriptions to provide email and web security. MWRA also purchased Proofpoint Cyber Security training subscriptions. This procurement renews these two subscriptions with a single bundle providing the same features, functionality, and protections as the singular products previously purchased.</p>	Insight Public Sector, Inc.	\$78,708.36



No.	Date of Award	Title and Explanation	Company	Value
P-6	05/07/2024	<p><b>Three-Year Purchase Order Contract to Provide Preventative and Corrective Maintenance for one Shimadzu Gas Chromatograph/Mass Spectrometer (GC/MS) for the Department of Laboratory Services' Mobile Laboratory</b></p> <p>The Department of Laboratory Services (DLS) has one Shimadzu GC/MS at its Central Laboratory on Deer Island. This instrument is housed in the Mobile Laboratory and was initially purchased in 2016. This contract covers parts, labor, and travel time necessary to perform needed repairs of equipment, as well as once-a-year annual preventative maintenance service and as-needed customer support service.</p>	Electronic Risks Consultants, Inc.	\$27,000.00
P-7	05/07/2024	<p><b>Three-Year Purchase Order Contract to Provide the Routine and Corrective Maintenance of Two Mercury Analyzers</b></p> <p>The Department of Laboratory Services performs the analysis of Mercury in drinking water, ground water, surface water, wastewater, and fertilizer pellets. In order to conduct these analyses, samples are prepared and digested in a water bath, and then analyzed on one of two instruments: the Leeman Hydra II or the Teledyne Quick Trace M800. This maintenance contract provides for routine and corrective maintenance necessary to maintain the continuous operation of these instruments.</p>	The Remi Group, LLC	\$27,581.99
P-8	05/08/2024	<p><b>Two-Year Purchase Order Contract for Monthly Ozone Generator Maintenance at the Deer Island Treatment Plant</b></p> <p>The cooling towers in the Maintenance / Warehouse Building at the Deer Island Treatment Plant are used to cool condenser water used by the mechanical cooling system for the Administration Laboratory, Maintenance/Warehouse, and Reception/Training building campus' air conditioning systems. To maximize asset reliability, a factory-authorized representative performs preventative maintenance functions and replaces desiccant towers, filters and gaskets at the original equipment manufacturer (OEM) recommended intervals.</p>	Fin-Tek Corporation	\$35,865.66
P-9	05/08/2024	<p><b>One-Year Purchase Order Contract for the Supply and Delivery of Sub Base Gravel Borrow (State Mix)</b></p> <p>This contract will supply the material and deliver it to MWRA's Chelsea Facility on an as-needed basis. Based on past usage, staff estimate that approximately 1,500 tons of State Mix will be needed over the next year. This amount is not a firm commitment to the vendor; MWRA will pay only for product that is delivered.</p>	Mario Susi & Son, Inc.	\$35,910.00

No.	Date of Award	Title and Explanation	Company	Value
P-10	05/07/2024	<p><b>Sole Source Purchase Order One Muffin Monster Grinder for the Alewife Pump Station</b>            MWRA has been purchasing “Muffin Monster” sewage grinders for more than 23 years for use in its wastewater treatment plants and pumping stations. This purchase will provide a spare in the event of a failure.</p>	JWC Environmental, LLC	<b>\$36,484.00</b>
P-11	05/09/2024	<p><b>Purchase Order for Six 14-inch Influent Sluice Gates for the Deer Island Treatment Plant</b>            There are forty-eight primary clarifiers on Deer Island that remove floatable scum and settleable solids, or sludge. Each clarifier has a set of eight 14-inch-diameter influent sluice gates that isolate the flow of raw wastewater from the primary influent channel into each clarifier. This purchase is for six spare 14-inch influent slide gate disc, frame assemblies for warehouse stock.</p>	Atlantic Fluid technology, Inc	<b>\$43,836.00</b>
P-12	05/08/2024	<p><b>Purchase Order for Sixteen-Week Rental of one 100 Ton Chiller Rental for the Administration Campus Buildings at the Deer Island Treatment Plant</b>            The Deer Island Treatment Plant requires the rental of one 100-ton chiller for twelve weeks to supplement two functioning chillers. The chilled water plant’s chillers were installed in 1993 and are maintained by MWRA HVAC staff and Daikin, the chiller manufacturer and local service center. Recently, chiller # 3 had a failure in the condenser bundle. MWRA HVAC staff and Daikin staff determined that the condenser bundle failure was beyond repair and that chiller # 3 requires replacement.</p>	United Rentals, Inc.	<b>\$51,441.30</b>
P-13	04/29/2024	<p><b>Purchase Order Contract for the Survey and Removal of Swollen Bladderwort at Quabbin Reservoir and Pottapaug Pond</b>            Pottapaug Pond is a regulating pond east of Quabbin Reservoir. For the 2024 season, MWRA requires a contractor to survey the prior locations when the swollen bladderwort plants first emerge in the spring (late April/early May) to sufficiently identify location, density and distribution of the plants. This will be followed by physical removal of the plants.</p>	TRC Environmental Corporation	<b>\$116,600.00</b>
P-14	03/27/2024	<p><b>Purchase Order Contract to Provide Diver Assisted Suction Harvesting of Invasive Aquatic Plants at Wachusett Reservoir Lower Basins and Coves</b>            As in the 2023 season, the focus of this contract is for continuation of a large-scale basin-wide removal of primarily Variable Leaf Milfoil in the Quinapoxet Basin, through which the Quabbin transfer passes. A second DASH boat and full crew of divers and surface tenders will be dedicated to work the entire Quinapoxet Basin over one full pass, including the immediate upstream Quinapoxet River area, from July through November.</p>	AE Commercial Diving Services, Inc.	<b>\$388,500.00</b>

No.	Date of Award	Title and Explanation	Company	Value
P-15	04/29/2024	<p><b>One-Year Purchase Order Contract for the Supply and Delivery of Sodium Hypochlorite</b>            MWRA uses sodium hypochlorite at 15% solution at the John J. Carroll Water Treatment Plant in combination with aqua ammonia, to form monochloramines for secondary disinfection. Staff estimate that approximately 1,950,000 gallons will be required during this one-year contract period.</p>	Univar USA, Inc.	<b>\$3,253,530.14</b>
P-16	04/26/2024	<p><b>Sole Source Purchase Order to Provide Three Years of Rockwell Automation Licenses and Support</b>            This contract will consolidate all the supported software licenses into one three-year service agreement in order to update the software to the current version and purchase new licenses to interface with newer Allen Bradley PLCs. In addition, this procurement will also assist in improving MWRA's cybersecurity posture by upgrading the PLCs to the latest software version and provide a streamlined path for security patch and software updates. This three-year agreement with Rockwell Automation will improve staff's ability to maintain the Deer Island Treatment Plant's control systems at optimum performance.</p>	<b>Northeast Electrical Distributors, Inc</b>	<b>\$123,718.20</b>
P-17	04/29/2024	<p><b>Sole Source Purchase Order for 400 Cross and Longitudinal Collector Flights</b>            Cross and longitudinal collector flights in the primary and secondary clarifiers at Deer Island are lightweight fiberglass "paddles" that extend across each clarifier that push floatable materials towards tip tubes located at the top of each clarifier. This purchase order will replace 400 cross and longitudinal collector flights to replenish the current warehouse inventory.</p>	<b>Evoqua Water Technologies, LLC</b>	<b>\$134,170.00</b>
P-18	05/07/2024	<p><b>Purchase Order for the Removal and Disposal of Hazardous Waste Material ACV Environmental Services, Inc.</b>            MWRA has a leak on a Boylston Street line that is a 40-inch water main. While excavating to repair the leak, the pipeline crew encountered soil that has been sampled and determined to be below the reportable limits for the Massachusetts Department of Environmental Protection (DEP). The subsequent groundwater water sample, however, tested above the reportable limit for lead. This purchase will provide for the removal and disposal of the additional contaminated groundwater over a fourteen-day period. MWRA will pay only for services received.</p>	<b>ACV Environmental Services, Inc</b>	<b>\$134,180.50</b>
P-19	04/29/2024	<p><b>Purchase Order for Two Gas Chromatography Systems</b>            The Department of Laboratory Services performs the analysis of pesticides and polychlorinated biphenyls in wastewater as part of MWRA's NPDES permit and the Toxic Reduction and Control monitoring program, and in groundwater as part of the landfill-</p>	<b>Agilent Technologies, Inc</b>	<b>\$152,583.57</b>

No.	Date of Award	Title and Explanation	Company	Value
		<p>monitoring program. These tests are performed following EPA Method 608.3, using a gas chromatography instrument equipped with a halide-sensitive micro-electron capture detector. These instruments will replace two Agilent Technologies GC-ECD systems purchased in 1999 and 2002.</p>		
P-20	05/20/2024	<p><b>Purchase Order for a Three-Year Software Subscription of Cisco UC-Variphony Insight State Contract ITT72</b></p> <p>The current Cisco Unified Messaging System maximum log retention capability is two million phone logs, which equates to approximately two months of call history. The Variphony Insight reporting solution will provide a more intuitive user interface for call reporting, the ability to retain logs for up to twelve months and integration with the MWRA's existing phone system.</p>	ePlus Technology, Inc	<b>\$30,171.00</b>
P-21	05/17/2024	<p><b>Purchase of Twenty 4G Routers, Installation Services and One Year Maintenance and Support for Twenty MWRA locations - State Contract ITT72</b></p> <p>The Contaminant Warning System (CWS) network utilizes a private Verizon network circuits for connectivity between sites. The routers associated with these circuits have reached end of life and are need to be replaced to maintain support. This procurement is for a hardware refresh to replace the 20 existing routers across the CWS network.</p>	Verizon Business Network Services, LLC	<b>\$53,430.00</b>
P-22	05/17/2024	<p><b>One-Year Sole Source Purchase Order for Maintenance, Technical Assistance and Support of the ARC Geographic Information System</b></p> <p>The MWRA uses Environmental Systems Research Institute (ESRI) Geographic Information System (GIS) software for the geospatial needs of the Operations Division. The annual maintenance covers patches and HelpLine support for Desktop and Web Server core packages as well as additional productivity extensions such as: Spatial Analyst, Network Analyst, 3D Analyst.</p>	Environmental Systems Research Institute, Inc.	<b>\$72,405.00</b>
P-23	05/23/2024	<p><b>Sole Source Purchase Order for One-Year of Support for the Fleet Data System</b></p> <p>In 2019, the MWRA replaced a legacy fuel management system with a solution from Fleet Data Systems. The Fleet Data Systems (FDS) provides central tracking, reporting, and control of all fuel usage for Chelsea and Deer Island. FDS is integrated with the Veeder-Root tank monitoring system and automates reporting for these sites. Maintenance and support are required to continue support from the vendor for issues, patches and bug fixes.</p>	Fleet Data Systems, LLC	<b>\$45,495.00</b>

No.	Date of Award	Title and Explanation	Company	Value
P-24	05/15/2024	<p><b>One-Year Purchase Order Contract for the Supply and Delivery of Sodium Bisulfite</b></p> <p>Sodium bisulfite is used at the John J. Carroll Water Treatment Plant to remove residual ozone from the water following primary disinfection. Sodium bisulfite is also used at the Clinton Wastewater Treatment Plant to eliminate chlorine residual after disinfection of wastewater. MWRA will pay only for product delivered to each location.</p>	JCI Jones Chemicals, Inc	<b>\$177,320.00</b>
P-25	05/13/2024	<p><b>One-Year Purchase Order Contract for the Supply and Delivery of Sodium Hypochlorite</b></p> <p>MWRA uses 15% solution sodium hypochlorite, a combination of chlorine and caustic soda, throughout its wastewater system for disinfection and odor control. This purchase order contract will include the following locations: Clinton Wastewater Treatment Plant, Cottage Farm, Prison Point, Somerville Marginal, Ward Street, Columbus Park, Nut Island Headwork's, Chelsea Creek Headwork's, and Union Park CSO. Under this contract, the supplier is required to deliver sodium hypochlorite to each location on an as-needed basis.</p>	<b>Borden &amp; Remington Corporation</b>	<b>\$412,625.80</b>

## STAFF SUMMARY



**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** FY24 Financial Update and Summary through May 2024


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**COMMITTEE:** Administration, Finance & Audit

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

INFORMATION

VOTE



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Thomas J. Durkin  
Director, Finance

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### RECOMMENDATION:

For information only. This staff summary provides the financial results and variance highlights for Fiscal Year 2024 through May 2024, comparing actual spending to the budget, and includes a projection to June 30, 2024.

### DISCUSSION:

MWRA is continuing the practice of setting aside favorable Capital Finance variances into the Defeasance Account with the intention of recommending Board approval to use these funds to defease debt and provide rate relief in future years. Targeted defeasances are a critical component of the Authority's multi-year rate management strategy. As such, in May the year-to-date debt related savings of \$9.9 million was transferred to the Defeasance Account. This variance is primarily due to lower than budgeted variable interest expense, swap termination savings, and lower SRF spending due to timing.

The total Year-to-Date variance for the FY24 CEB is \$36.7 million, due to lower direct expenses of \$25.3 million, indirect expenses of \$1.7 million, and higher revenue of \$9.7 million. The year-end favorable variance is projected at \$51.7 million, of which \$16.1 million is related to debt service. Beyond debt service savings, staff project a favorable variance of approximately \$35.6 million at year-end of which \$25.8 million would be from lower direct expenses, \$1.9 million from lower indirect expenses, and \$7.9 million from greater than budgeted revenues.

### FY24 Current Expense Budget

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

- Lower Direct Expenses of \$25.3 million or 9.0% under budget. Spending was lower for Wages & Salaries, Other Services, Chemicals, Professional Services, Fringe Benefits, and Training & Meetings. Spending was higher than budget for Utilities, Other Materials, Workers' Compensation, Overtime, and Maintenance.

- Lower Indirect Expenses of \$1.7 million or 2.7% under budget due primarily to lower Watershed Reimbursement and PILOT, partially offset by higher spending on HEEC and Insurance.
- Debt Service expenses were on budget after the transfer of \$9.9 million to the defeasance account.
- Revenue was \$9.7 million or 1.2% over budget largely driven by higher Investment Income of \$8.1 million due to higher than budgeted interest rates and higher average balances.

**FY24 Budget and FY24 Actual Variance by Expenditure Category  
(in millions)**

	FY24 Budget	FY24 Actual	\$ Variance	% Variance
Direct Expenses	\$282.6	\$257.2	-\$25.3	-9.0%
Indirect Expenses	\$63.1	\$61.4	-\$1.7	-2.7%
Capital Financing	\$419.2	\$419.2	\$0.0	0.0%
<b>Total</b>	<b>\$764.9</b>	<b>\$737.9</b>	<b>-\$27.0</b>	<b>-3.5%</b>

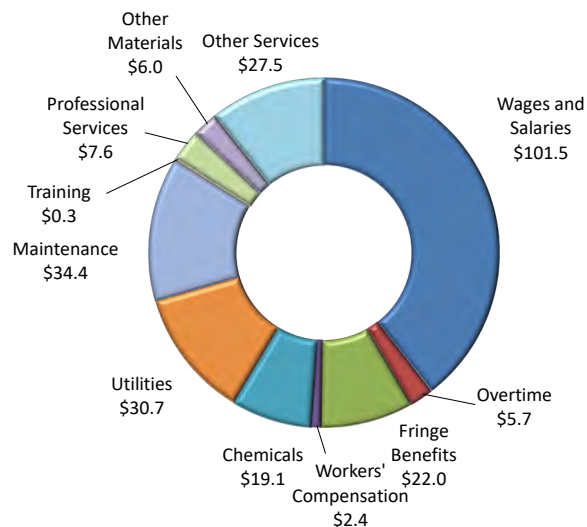
*Totals may not add due to rounding*

*Please refer to Attachment 1 for a more detailed comparison by line item of the budget variances for FY24.*

**Direct Expenses**

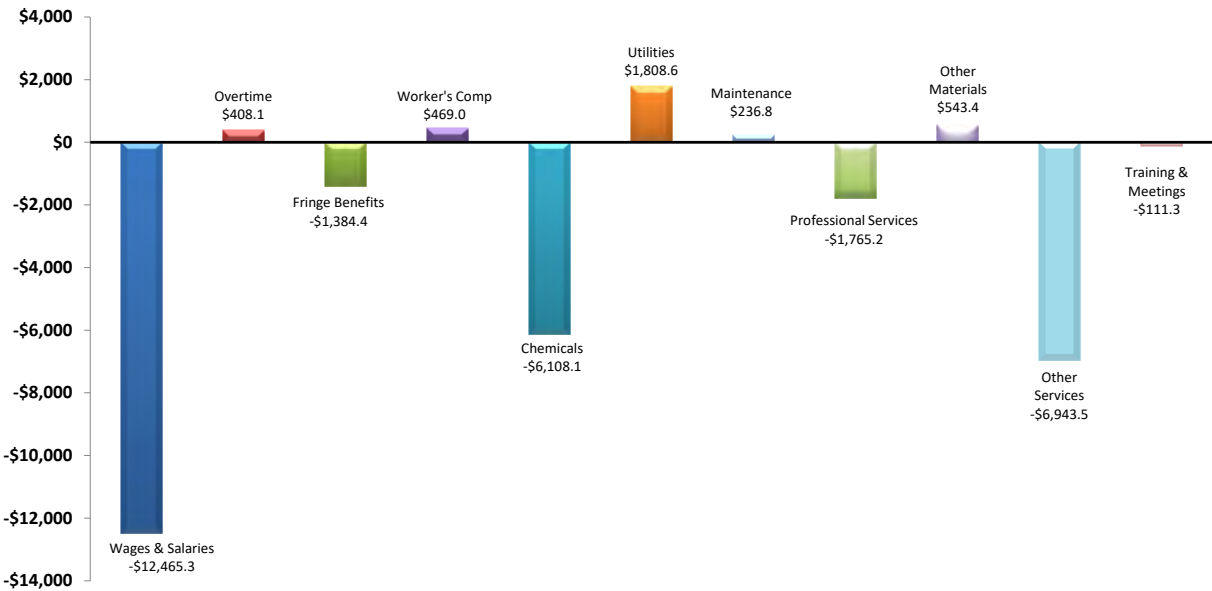
FY24 Direct Expenses through May totaled \$257.2 million, which was \$25.3 million or 9.0% less than budgeted.

**FY24 Direct Expenses  
(in millions)**



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

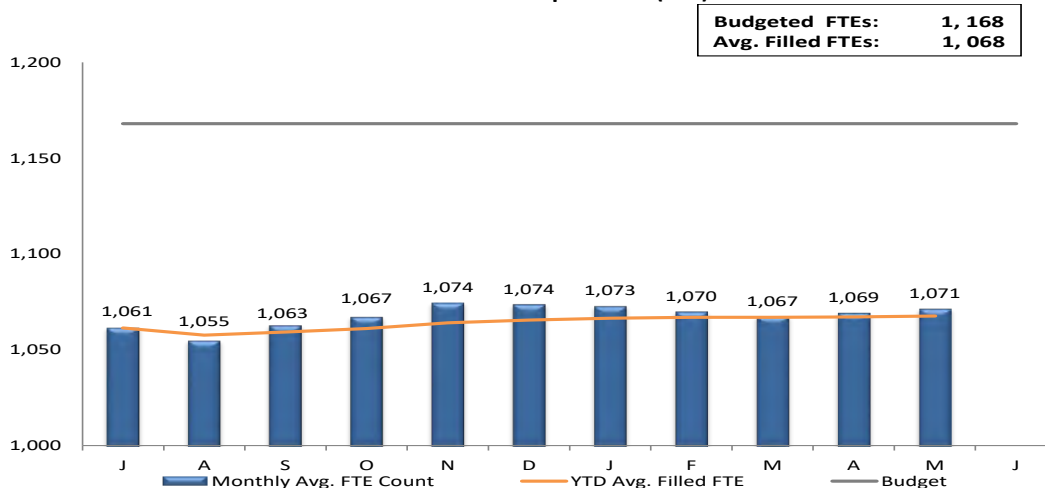
**FY24 Direct Expense Variance  
(in thousands)**



### Wages and Salaries

Wages and Salaries were under budget by \$12.5 million or 10.9%. Through May, there were 100 fewer average FTEs (1,068 versus 1,168 budget) or 8.6% and lower average salaries for new hires versus retirees. The timing of backfilling vacant positions also contributed to Regular Pay being under budget.

**FY24 MWRA Full Time Equivalent (FTE) Trend**





## **Other Services**

Other Services were lower than budget by \$6.9 million or 20.2% driven by Sludge Pelletization of \$5.2 million primarily due to no spending on landfill costs related to potential PFAS regulation changes that were budgeted in the second half of FY24 and inflation savings in the contract, lower Telecommunications costs of \$933,000 due to less than anticipated costs, and lower Grit & Screenings Removal of \$322,000 due to lower quantities.

## **Chemicals**

Chemicals were lower than budget by \$6.1 million or 24.2%. Lower than budget spending on Sodium Hypochlorite of \$3.2 million was driven by Water Operations of \$1.9 million and Wastewater Operations of \$188,000 primarily due to contract pricing, and DITP of \$1.1 million due to lower pricing for the new contract, which is offset by additional usage for disinfection due to higher flows earlier in the fiscal year. Lower Ferric Chloride of \$1.4 million is primarily due to lower pricing. Lower Carbon Dioxide of \$643,000 was primarily due to lower volume, lower contract price, and lower dose required to meet target residual levels in finished water. Lower Aqua Ammonia of \$356,000 was due to lower price and lower flows. Lower Sodium Bisulfite of \$258,000 was primarily driven by Water Operations of \$138,000 due to lower dose and volume due to lower flows, lower price and volume at Clinton Wastewater Treatment Plant of \$59,000, and lower volume at DITP of \$39,000 due to lower quantities to dechlorinate the effluent. DITP flows are 14.1% greater than the budget and the CWTP flows are 2.6% less than the budget through April. It is important to note that Chemical variances are also based on deliveries which in general reflect the usage patterns. However, the timing of deliveries is an important factor.

## **Utilities**

Utilities were greater than budget by \$1.8 million or 6.3%. Overspending in Electricity of \$2.2 million primarily at DITP of \$1.5 million was driven by higher demand usage due to the many rain events and new pass through cost associated with the Mystic Power Station and winter reliability pass through cost. Electricity in Field Operations was greater than budget by \$729,000 primarily due to higher use as a result of the many rain events for pumping and fan use for odor control. Underspending in Diesel Fuel of \$444,000 primarily in field Operations was due to less than projected cost of diesel.

## **Professional Services**

Professional Services were less than budget by \$1.8 million or 18.8% driven by lower Other Services of \$722,000 due to timing of services including the Disparity Study, Legal Services of \$420,000, and Lab & Testing Analysis of \$244,000 all due to the timing of spending through May.

## **Fringe Benefits**

Fringe Benefit spending was lower than budget by \$1.4 million or 5.9%. Spending was lower than budget for Health Insurance of \$1.4 million, due to fewer than budgeted participants in health insurance plans, increased contribution by external new hires vs. lower employer contribution rates of staff retiring, and the shift from family to individual plans which are less expensive.

## **Other Materials**

Other Materials were greater than budget by \$543,000 or 9.9% driven by Computer Hardware of \$891,000 primarily due to additional purchases for printers, audiovisual equipment and equipment kiosks. Higher Vehicle Purchases of \$250,000 due to timing of purchases, and Health/Safety of \$171,000 due to additional safety materials purchases than originally planned through May. These were partially offset by lower than budgeted spending for Other Materials of \$451,000 primarily due to timing of spending related to Phase 3 of the Office Consolidation to Chelsea and DITP through May and Equipment/Furniture of \$385,000 due to timing of purchases including the Operations Control Center (OCC) furniture and other miscellaneous items.

## **Worker's Compensation**

Worker's Compensation expenses were greater than budget by \$469,000 or 23.9%. The higher than budgeted expenses were due to Compensation Payments of \$371,000 and Medical Payments of \$136,000, partially offset by lower Administrative Expenses of \$38,000. Due to uncertainties of when spending will happen, the budget is spread evenly throughout the year.

## **Overtime**

Overtime expenses were greater than budget by \$408,000 or 7.7%. Greater than budget spending at Deer Island of \$632,000 was due to shift coverage, partially offset by lower Field Operations of \$72,000 due to less scheduled overtime due to vacancies and Engineering and Construction of \$53,000 due to less than anticipated needs. Year-to-date rainfall was a major contributor for the increased overtime.

## **Maintenance**

Maintenance was greater than budget by \$237,000 or 0.7%. Maintenance Materials were higher than budget by \$779,000 driven by Plant & Machinery Materials of \$1.4 million due to timing of spending and higher costs for glass lined pipe/fittings, seals, grinder cartridges, rotating assemblies for pump, and end caps and tubes for the residual heat exchangers, and Warehouse Inventory of \$860,000 due to need for spare parts as well as purchasing of materials early due to supply chain delays. These are partially offset by lower Special Equipment Materials of \$963,000 due to later than anticipated purchase of hatch covers at Loring Road and at the Fells Covered Storage, Electrical Materials of \$338,000 and Computer Materials of \$172,000, both due to less than anticipated purchases through May. Maintenance Services were lower than budget by \$542,000. Lower Electrical Services of \$1.1 million due to the timing of work including JCWTP Ozone generator PLC replacement, JCWTP emergency generator emissions monitoring PLC repair, and JCWTP Switchgear PLC Replacement. Lower Building & Grounds Services of \$954,000 is due to less than anticipated spending through May including a delay of the Deer Island Treatment Plant door replacement project. These are partially offset by higher Plant & Machinery Services of \$1.7 million primarily due to the earlier purchase of parts related to the Combustion Turbine Generator (CTG) control system upgrade.

## Training & Meetings

Training & Meetings was lower than budget by \$111,000 or 27.2% due to less than anticipated spending.

## Indirect Expenses

Indirect Expenses totaled \$61.4 million, which is \$1.7 million or 2.7% lower than budget. The variance is largely driven by lower Watershed Reimbursements and PILOT, partially offset by higher spending on HEEC and Insurance.

Based on FY24 operating activity only, the Watershed Division is \$1.7 million or 9.2% under budget. Lower spending on Wages and Salaries, Maintenance, and Fringe Benefits are driving the variance. When factoring in the FY23 balance forward of \$157,000 which was a credit towards FY24, Watershed Reimbursement is \$1.9 million or 10.0% below budget through May.

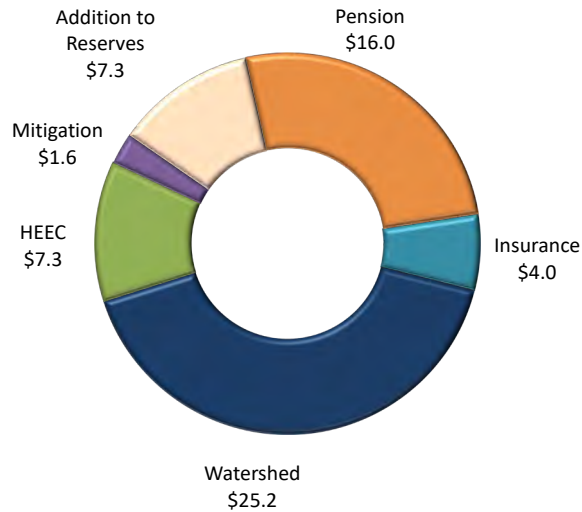
### FY24 Watershed Protection Variance (in millions)

\$ in millions	YTD Budget	YTD Actual	YTD \$ Variance	YTD % Variance
Operating Expenses	19.5	17.6	-1.9	-9.9%
Operating Revenues - Offset	0.9	0.7	-0.2	-24.6%
<b>FY24 Operating Totals</b>	<b>18.6</b>	<b>16.9</b>	<b>-1.7</b>	<b>-9.2%</b>
DCR Balance Forward (FY23 year-end accrual true-up)	0.0	-0.2	-0.2	
<b>FY24 Adjusted Operating Totals</b>	<b>18.6</b>	<b>16.8</b>	<b>-1.9</b>	<b>-10.0%</b>
PILOT	8.9	8.5	-0.4	-4.6%
<b>Total Watershed Reimbursement</b>	<b>27.5</b>	<b>25.2</b>	<b>-2.3</b>	<b>-8.3%</b>

*Totals may not add due to rounding*

MWRA reimburses the Commonwealth of Massachusetts Department of Conservation (DCR) and Recreation - Division of Water Supply Protection – Office of Watershed Management for expenses. The reimbursements are presented for payment monthly in arrears. Accruals are being made monthly based on estimates provided by DCR and trued-up monthly based on the monthly invoice. MWRA’s budget is based on the annual Fiscal Year Work Plan approved by the Massachusetts Water Supply Protection Trust (with a vacancy adjustment applied). The FTE count at the end of May was 148 (and 146.1 on a year-to-date basis) vs. a budget assumption of 150.

**FY4 Indirect Expenses  
(in millions)**

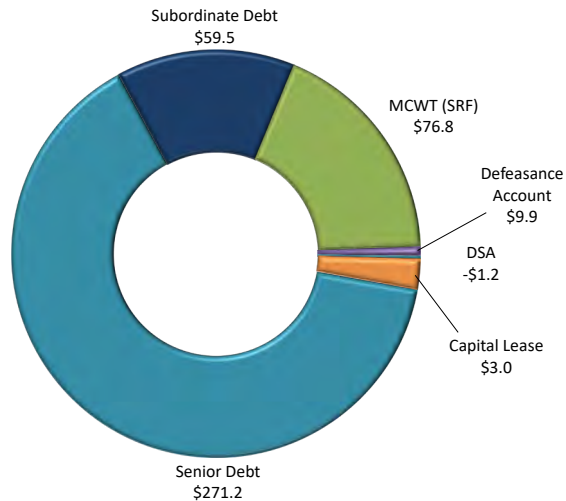


**Capital Financing**

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

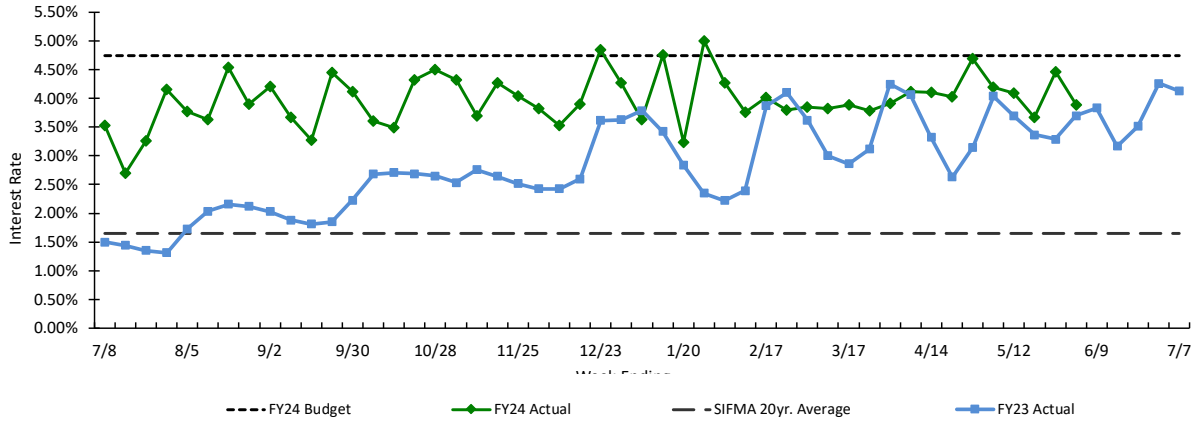
Capital Financing expenses for FY24 through May totaled \$419.2 million, which is at budget after the transfer of \$9.9 million year-to-date to the Defeasance account. The transfer reflects lower variable rate debt expense due to lower than anticipated interest rates, swap termination savings, and lower SRF spending due to timing.

**FY24 Capital Finance  
(\$ in millions)**



The graph below reflects the FY24 actual variable rate trend by week against the FY24 Budget.

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

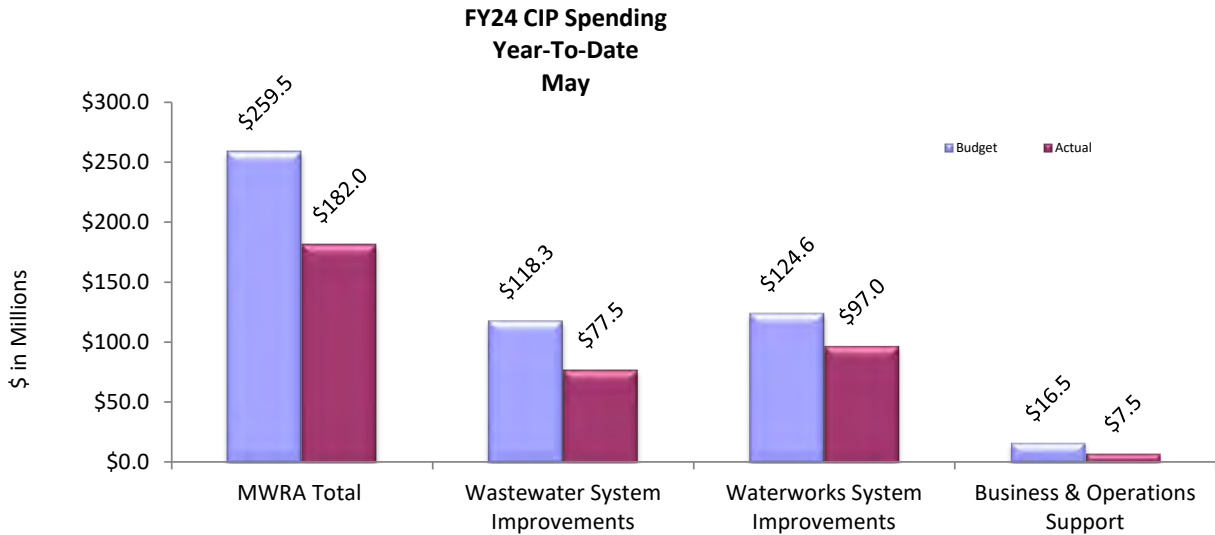


**Revenue & Income**

Revenues of \$815.9 million were \$9.7 million or 1.2% greater than the estimate driven by Investment Income which was \$8.1 million or 39.4% over the estimate due to higher than anticipated interest rates and higher average balances.

## FY24 Capital Improvement Program

Capital expenditures in Fiscal Year 2024 through May total \$182.0 million, \$77.5 million or 29.8% under planned spending.



After accounting for programs which are not directly under MWRA’s control, most notably the Inflow and Infiltration (I/I) grant/loan program, the Local Water System Assistance loan program, and the community managed Combined Sewer Overflow (CSOs) projects, capital spending totaled \$125.8 million, \$73.9 million or 37.0% under planned spending.

Overall, CIP spending reflects under planned spending in Wastewater Improvements (\$40.8 million), Waterworks (\$27.6 million) and Business and Operations Support (\$9.1 million). Major variances in Wastewater are primarily due to timing of community grants and loans for the I/I Local Financial Assistance Program, changes to the structural steel design leading to later than anticipated date for fabrication and installation of the Braintree/Weymouth Improvements Construction contract, updated schedules for Siphon Structure Rehabilitation Construction, DITP Roofing Replacement, Hayes Pump Station Rehabilitation Construction, DITP DiStor Membrane Replacements, and Fire Alarm System Replacement Construction, delay in performing shaft inspections and issuing NTP for Final Design for the Ward Street & Columbus Park Headworks Upgrades - Design/CA contract, lower than projected task order work for DITP As-Needed Design contracts, and work scheduled for FY24 that was completed in FY23 for Chelsea 008 Pipe Replacement. This was partially offset by equipment received ahead of schedule for the Clarifier Rehabilitation Phase 2 Construction contract, and claim settlements for Chelsea Creek Upgrades Design/CA and Construction.

Waterworks variances are primarily due to updated schedule for Section 75 Extension, timing of consultant’s work for Tunnel Redundancy Preliminary Design and Massachusetts Environmental Policy Act (MEPA) Review, updated schedules for Shaft 5 Improvements Design/CA and Construction, and Maintenance Garage/Wash Bay/Storage Building – Construction, timing of final work including paving for CP-1 NEH Improvements, less than anticipated contractor progress for

Section 89/29 Replacement, and timing of services for Tunnel Redundancy Administration, Legal & Public Outreach and Program Support. This was partially offset by timing of community loan distributions for the Water Loan Program, contractor progress for CP-2, Sections 25 & 24 Construction contract, work scheduled in FY23 that was completed in FY24 for the CWTP Chemical Feed System Improvements Construction and Waltham Water Pipeline contracts.

\$ in Millions	Budget	Actuals	\$ Var.	% Var.
<b>Wastewater System Improvements</b>				
Interception & Pumping	28.2	18.8	(9.3)	-33.2%
Treatment	41.6	26.7	(14.9)	-35.7%
Residuals	0.0	0.0	0.0	0.0%
CSO	5.6	10.2	4.6	81.2%
Other	42.9	21.7	(21.2)	-49.4%
<b>Total Wastewater System Improvements</b>	<b>\$118.3</b>	<b>\$77.5</b>	<b>(\$40.8)</b>	<b>-34.5%</b>
<b>Waterworks System Improvements</b>				
Drinking Water Quality Improvements	3.6	2.1	(1.5)	-42.4%
Transmission	55.5	35.4	(20.2)	-36.3%
Distribution & Pumping	42.1	28.9	(13.2)	-31.4%
Other	23.4	30.7	7.3	31.5%
<b>Total Waterworks System Improvements</b>	<b>\$124.6</b>	<b>\$97.0</b>	<b>(\$27.6)</b>	<b>-22.1%</b>
<b>Business &amp; Operations Support</b>	<b>\$16.5</b>	<b>\$7.5</b>	<b>(\$9.1)</b>	<b>-54.8%</b>
<b>Total MWRA</b>	<b>\$259.5</b>	<b>\$182.0</b>	<b>(\$77.5)</b>	<b>-29.8%</b>

### FY24 Spending by Program:

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

**Other Wastewater:** Net under planned spending of \$21.2 million

- \$21.2 million for Community I/I due to timing of community distributions of grants and loans.

**Waterworks Transmission:** Net under planned spending of \$20.2 million

- \$3.2 million for Tunnel Redundancy Preliminary Design & MEPA Review, \$1.1 million for WASM 3 MEPA/Design/CA/RI, and \$0.6 million for WASM/SPSM Pressure Reducing Valves (PRVs) Design/CA due to less than anticipated consultant work.
- \$4.2 million for CP3 Shafts 7, 7B, 7C & 7D, \$2.4 million for Shaft 5 Improvements Design/CA and Construction, and \$2.4 million for Maintenance Garage/Wash Bay/Storage Building Construction all due to updated schedules.
- \$1.7 million for Administration, Legal & Public Outreach due to timing of costs.
- \$1.3 million for WASM 3 Rehabilitation CP-1 due to work scheduled for FY24 performed in FY23.
- \$0.5 million for Wachusett Lower Gatehouse Pipe & Boiler Replacement Construction due to longer lead-time on some larger items and a change in design for the multi-orifice valve.
- \$0.8 million for Program Support Services due to less than anticipated services.
- This under planned spending was partially offset by greater than planned spending of \$2.4 million for CP-2, Sections 25 & 24 Construction due to contractor progress, \$0.8 million for CWTP Chemical Feed System Improvements Construction, and \$0.5 million for Waltham Water Pipeline due to work scheduled in FY23 that was performed in FY24.

**Wastewater Treatment:** Net under planned spending of \$14.9 million

- \$3.2 million for DITP Roofing Replacement, \$2.1 million for DiStor Membrane Replacements, \$2.0 million for Motor Control Center & Switchgear Replacement Construction, \$1.3 million for Fire Alarm System Replacement Construction, \$0.9 million for Clinton Treatment Plant Digester Covers, \$0.8 million for Chemical Pipe Replacement Construction, and \$0.6 million for Combined Heat and Power Design/ESDC/REI, and \$0.6 million for Gas Protection System Replacement all due to schedule changes.
- \$1.5 million for Deer Island As-Needed Design contracts due to lower than projected task order work, and \$1.3 million for South System Pump Station VFD Replacement Design due to Design Report phase being more complicated than originally anticipated.
- This under planned spending was partially offset by greater than planned spending of \$2.0 million for Clarifier Rehabilitation Phase 2 Construction due to equipment received ahead of schedule.

**Water Distribution and Pumping:** Net under planned spending of \$13.2 million

- \$5.1 million for Section 75 Extension Construction CP-1, \$0.9 million for Cathodic Protection Shafts E, L, N & W Construction, and \$0.8 million for NEH Improvements CP-2 due to updated schedules.
- \$2.6 million for CP-1 NEH Improvements due to timing of final work including paving.
- \$2.5 million for Section 89/29 Replacement Construction due to less than anticipated contractor progress.

**Interception & Pumping:** Net under planned spending of \$9.3 million

- \$3.0 million for Braintree/Weymouth Improvements Construction due to changes to the structural steel design leading to later than anticipated date for its fabrication and installation.
- \$2.8 million for Ward Street & Columbus Park Headworks Upgrades Design/CA due to delay in performing shaft inspections and issuing NTP for Final Design.
- \$2.8 million for Siphon Structure Rehabilitation and \$2.2 million for Hayes Pump Station Rehabilitation Construction due to updated schedules.
- This under planned spending was partially offset by greater than planned spending of \$2.5 million for Prison Point Construction 2 Discharge Piping Rehab due to the contract award being greater than amount in the CIP, and \$1.6 million for Chelsea Creek Upgrades Design/CA and Construction due to claim settlements.

**Business & Operations Support:** Net under planned spending of \$9.1 million

- \$2.2 million for As-Needed Design Contracts due to lower than projected task order work.
- \$1.7 million for FY24-28 Vehicle Purchases due to industry shift to a just-in-time purchase model adding between 9 months to two years for acquisition of large vehicles.
- \$1.5 million for Security Equipment & Installation due to delays with upgrades to communication circuits, security cameras, and back-up of the head-end of intrusion alarms.
- \$1.6 million for Cabling due to timing and scheduling of work including identifying available conduit paths and verification of phone & network data jack locations.
- \$0.8 million for Lawson Upgrade due to timing of vendor invoicing.



**Other Waterworks:** Net greater than planned spending of \$7.3 million

- \$11.4 million for Local Financial Assistance due to timing of community loan distributions.
- This over planned spending was partially offset by less than planned spending of \$3.3 million for Steel Tank Improvements due to updated schedule.

**Combined Sewer Overflow:** Net greater than planned spending of \$4.6 million

- \$6.3 million for Fort Point Channel & Mystic due to timing of Community Managed CSO payments.
- This greater than planned spending was partially offset by under planned spending of \$0.8 million for Somerville Marginal New Pipe Connection due to updated schedule, and \$0.4 million for Chelsea 008 Pipe Replacement due to work scheduled for FY24 performed in FY23.

**Drinking Water Quality Improvements:** Net under planned spending of \$1.5 million

- \$1.9 million for the John Carroll Water Treatment Plant (JCWTP) Technical Assistance due to lower than projected task order work, partially offset by \$0.8 million for JCWTP Chemical Feed System Improvements Construction due to work scheduled for FY23 that was performed in FY24.

**Construction Fund Balance**

The construction fund balance was \$87.8 million as of the end of May. Commercial Paper/Revolving Loan available capacity was \$70.0 million.

**ATTACHMENTS:**

Attachment 1 – Variance Summary May 2024

Attachment 2 – Current Expense Variance Explanations

Attachment 3 – Capital Improvement Program Variance Explanation

Attachment 4 – Year-End Current Expense Projections vs. Budget

ATTACHMENT 1  
FY24 Actuals vs. FY24 Budget

	May 2024 Year-to-Date				
	Period 11 YTD Budget	Period 11 YTD Actual	Period 11 YTD Variance	%	FY24 Approved
	<b>EXPENSES</b>				
WAGES AND SALARIES	\$ 113,972,241	\$ 101,506,945	\$ (12,465,296)	-10.9%	\$ 127,828,242
OVERTIME	5,286,601	5,694,712	408,111	7.7%	5,727,593
FRINGE BENEFITS	23,417,997	22,033,630	(1,384,367)	-5.9%	25,823,383
WORKERS' COMPENSATION	1,965,695	2,434,719	469,024	23.9%	2,144,395
CHEMICALS	25,195,140	19,087,088	(6,108,052)	-24.2%	28,269,124
ENERGY AND UTILITIES	28,879,645	30,688,270	1,808,625	6.3%	31,064,890
MAINTENANCE	34,129,408	34,366,257	236,849	0.7%	38,574,256
TRAINING AND MEETINGS	408,942	297,634	(111,308)	-27.2%	498,597
PROFESSIONAL SERVICES	9,393,710	7,628,468	(1,765,242)	-18.8%	10,410,484
OTHER MATERIALS	5,480,682	6,024,041	543,359	9.9%	7,167,400
OTHER SERVICES	34,426,167	27,482,623	(6,943,544)	-20.2%	38,494,660
<b>TOTAL DIRECT EXPENSES</b>	<b>\$ 282,556,228</b>	<b>\$ 257,244,387</b>	<b>\$ (25,311,842)</b>	<b>-9.0%</b>	<b>\$ 316,003,024</b>
<b>INDIRECT EXPENSES</b>					
INSURANCE	\$ 3,752,659	\$ 3,970,031	\$ 217,372	5.8%	\$ 4,065,380
WATERSHED/PILOT	27,527,119	25,248,084	(2,279,035)	-8.3%	30,358,187
HEEC PAYMENT	6,955,903	7,316,783	360,880	5.2%	7,500,650
MITIGATION	1,642,234	1,642,234	-	0.0%	1,779,086
ADDITIONS TO RESERVES	7,256,340	7,256,340	-	0.0%	7,861,035
RETIREMENT FUND	15,972,804	15,972,804	-	0.0%	15,972,804
POST EMPLOYEE BENEFITS	-	-	-	---	2,849,365
<b>TOTAL INDIRECT EXPENSES</b>	<b>\$ 63,107,059</b>	<b>\$ 61,406,275</b>	<b>\$ (1,700,783)</b>	<b>-2.7%</b>	<b>\$ 70,386,507</b>
<b>CAPITAL FINANCE EXPENSES</b>					
STATE REVOLVING FUND	\$ 82,395,198	\$ 76,829,236	\$ (5,565,962)	-6.8%	\$ 90,798,263
SENIOR DEBT	271,206,172	271,206,172	-	0.0%	294,055,644
DEBT SERVICE ASSISTANCE	(1,187,297)	(1,187,297)	-	0.0%	(1,187,297)
CURRENT REVENUE/CAPITAL	-	-	-	---	19,200,000
SUBORDINATE MWRA DEBT	63,828,469	63,828,469	-	0.0%	69,931,072
LOCAL WATER PIPELINE CP	-	-	-	---	7,744,625
CAPITAL LEASE	2,969,594	2,969,594	-	0.0%	3,217,060
VARIABLE DEBT	-	(4,355,001)	(4,355,001)	---	-
DEFEASANCE ACCOUNT	-	9,920,964	9,920,964	---	-
DEBT PREPAYMENT	-	-	-	---	4,000,000
<b>TOTAL CAPITAL FINANCE EXPENSE</b>	<b>\$ 419,212,136</b>	<b>\$ 419,212,136</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ 487,759,367</b>
<b>TOTAL EXPENSES</b>	<b>\$ 764,875,423</b>	<b>\$ 737,862,798</b>	<b>\$ (27,012,625)</b>	<b>-3.5%</b>	<b>\$ 874,148,898</b>
<b>REVENUE &amp; INCOME</b>					
RATE REVENUE	\$ 770,093,539	\$ 770,093,539	\$ -	0.0%	\$ 834,268,000
OTHER USER CHARGES	9,655,510	10,403,530	748,020	7.7%	10,390,434
OTHER REVENUE	5,484,688	6,304,458	819,770	14.9%	5,838,903
RATE STABILIZATION	281,983	281,983	-	0.0%	305,482
INVESTMENT INCOME	20,689,340	28,836,440	8,147,100	39.4%	23,346,079
<b>TOTAL REVENUE &amp; INCOME</b>	<b>\$ 806,205,060</b>	<b>\$ 815,919,949</b>	<b>\$ 9,714,891</b>	<b>1.2%</b>	<b>\$ 874,148,898</b>

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

Total MWRA	FY24 Budget YTD May	FY24 Actuals May	FY24 YTD Actual vs. FY24 Budget		Explanations
			\$	%	
<b>Direct Expenses</b>					
Wages & Salaries	113,972,241	101,506,945	(12,465,296)	-10.9%	Wages and Salaries were under budget by \$12.9 million or 10.9%. Year to date, there have been 100 fewer average FTEs (1,068 versus 1,168 budget), lower average new hire salaries versus retirees, the timing of backfilling vacant positions.
Overtime	5,286,601	5,694,712	408,111	7.7%	Overtime expenses were greater than budget by \$408,000 or 7.7%. Greater than budget spending at Deer Island of \$632,000 was due to shift coverage, partially offset by Field Operations of \$72,000 due to less scheduled overtime due to vacancies and Engineering & Construction of \$53,000. Year-to-date rainfall was a major contributor for the increased overtime.
Fringe Benefits	23,417,997	22,033,630	(1,384,367)	-5.9%	Fringe Benefit spending was lower than budget by \$1.4 million or 5.9%. Spending was lower than budget for <b>Health Insurance</b> of \$1.4 million, due to fewer than budgeted participants in health insurance plans, increased contribution by external new hires vs. lower contribution rates of staff retiring, and the shift from family to individual plans which are less expensive.
Worker's Compensation	1,965,695	2,434,719	469,024	23.9%	Worker's Compensation expenses were greater than budget by \$469,000 or 23.9%. The higher than budgeted expenses were due to <b>Compensation Payments</b> of \$371,000 and <b>Medical Payments</b> of \$136,000, partially offset by lower <b>Administrative Expenses</b> of \$38,000. Due to uncertainties of when spending will happen, the budget is spread evenly throughout the year.
Chemicals	25,195,140	19,087,088	(6,108,052)	-24.2%	Chemicals were lower than budget by \$6.1 million or 24.2%. Lower than budget spending on <b>Sodium Hypochlorite</b> of \$3.2 million was driven by Water Operations of \$1.9 million and Wastewater Operations of \$188,000 primarily due to contract pricing, and DITP of \$1.1 million due to lower pricing for the new contract, which is offset by additional usage for disinfection due to higher flows earlier in the fiscal year, <b>Ferric Chloride</b> of \$1.4 million primarily due to lower pricing, <b>Carbon Dioxide</b> was lower than budget by \$643,000 primarily due to lower volume, lower contract price, and lower dose required to meet target residual levels in finished water, <b>Aqua Ammonia</b> of \$356,000 due to lower price and lower flows, <b>Sodium Bisulfite</b> of \$258,000 primarily driven by Water Operations of \$138,000 due to lower dose and volume due to lower flows, lower price and volume at Clinton Wastewater Treatment Plant of \$59,000, and lower volume at DITP of \$39,000 due to lower quantities to dechlorinate the effluent, <b>Other Oxidizers</b> (Bioxide) at Framingham PS was lower than budget by \$118,000 due to lower price and less deliveries, partially offset by higher <b>Hydrogen Peroxide</b> of \$132,000 which is added to the DITP influent to reduce elevated H2S levels for odor pretreatment and corrosion control, and allows staff to perform maintenance activities more safely within the tanks. DITP flows are 14.1% greater than the budget and the CWTP flows are 2.6% less than the budget through April. It is important to note that Chemical variances are also based on deliveries which in general reflect the usage patterns. However, the timing of deliveries is an important factor.

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

Total MWRA	FY24 Budget YTD May	FY24 Actuals May	FY24 YTD Actual vs. FY24 Budget		Explanations
			\$	%	
Utilities	28,879,645	30,688,270	1,808,625	6.3%	Utilities were greater than budget by \$1.8 million or 6.3%. Overspending in <b>Electricity</b> of \$2.2 million primarily at DITP of \$1.5 million was driven by higher demand usage due to the many rain events and new pass through cost associated with the Mystic Power Station and winter reliability pass through cost. Electricity in Field Operations was greater than budget by \$729,000 primarily due to higher use as a result of the many rain events for pumping and fan use for odor control. Underspending in <b>Diesel Fuel</b> of \$444,000 primarily in field Operations due to less than projected cost of diesel.

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

Total MWRA	FY24 Budget YTD May	FY24 Actuals May	FY24 YTD Actual vs. FY24 Budget		Explanations
			\$	%	
Maintenance	34,129,408	34,366,257	236,849	0.7%	Maintenance was greater than budget by \$237,000 or 0.7%, largely driven by the timing of projects. Maintenance Materials were higher than budget by \$779,000 driven by <b>Plant &amp; Machinery Materials</b> of \$1.4 million due to timing of spending and higher costs for glass lined pipe/fittings, seals, grinder cartridges, rotating assemblies for pump, and end caps and tubes for the residual heat exchangers, and <b>Warehouse Inventory</b> of \$860,000 due to need for spare parts as well as purchasing of materials early due to supply chain delays. These are partially offset by lower <b>Special Equipment Materials</b> of \$963,000 due to later than anticipated purchase of hatch covers at Loring Road and at the Fells Covered Storage, <b>Electrical Materials</b> of \$338,000 and <b>Computer Materials</b> of \$172,000, both due to less than anticipated purchases through May. <i>Maintenance Services</i> were lower than budget by \$542,000 driven by <b>Plant &amp; Machinery Services</b> of \$1.7 million primarily due to the earlier purchase of parts related to the Combustion Turbine Generator (CTG) control system upgrade, <b>Electrical Services</b> of \$1.1 million due to timing of work including JCWTP Ozone generator PLC replacement, JCWTP emergency generator emissions monitoring PLC repair, and JCWTP Switchgear PLC Replacement, <b>Building &amp; Grounds Services</b> of \$954,000 due to less than anticipated spending through May including a delay of the Deer Island Treatment Plant door replacements, and <b>Special Equipment Services</b> of \$238,000 due to less than anticipated costs through May. This lower than budgeted spending was partially offset by <b>HVAC Services</b> of \$143,000 due to purchase of a temporary air handler unit at Columbus Park Headworks.
Training & Meetings	408,942	297,634	(111,308)	-27.2%	Training & Meetings was lower than budget by \$111,000 or 27.2% primarily due to less than anticipated spending on meetings and conferences driven by MIS (\$71,000), Water Redundancy (\$26,000), Deer Island Treatment Plant (\$16,000), Engineering & Construction (\$12,000), and Procurement (\$11,000), partially offset by higher spending in Operations Administration of \$23,000 and Laboratory Services of \$15,000.
Professional Services	9,393,710	7,628,468	(1,765,242)	-18.8%	Professional Services were less than budget by \$1.8 million or 18.8% driven by lower <b>Other Services</b> of \$722,000 due to timing of services including the Disparity Study, <b>Legal Services</b> of \$420,000, and <b>Lab &amp; Testing Analysis</b> of \$244,000 all due to the timing of spending through May.
Other Materials	5,480,682	6,024,041	543,359	9.9%	Other Materials were greater than budget by \$543,000 or 9.9% driven by <b>Computer Hardware</b> of \$891,000 million primarily due additional purchases for printers, audiovisual equipment and equipment kiosks, <b>Vehicle Purchases</b> of \$250,000 due to timing of purchases, and <b>Health/Safety</b> of \$171,000 due to additional safety materials purchases than originally planned through May. These were partially offset by lower than budgeted spending for <b>Other Materials</b> of \$451,000 primarily due to timing of spending related to Phase 3 of the Office Consolidation to Chelsea and DITP through May and <b>Equipment/Furniture</b> of \$385,000 due to timing of purchases including the Operations Control Center (OCC) furniture and other miscellaenous items.

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

Total MWRA	FY24 Budget YTD May	FY24 Actuals May	FY24 YTD Actual vs. FY24 Budget		Explanations
			\$	%	
Other Services	34,426,167	27,482,623	(6,943,544)	-20.2%	Other Services were lower than budget by \$6.9 million or 20.2% driven by <b>Sludge Pelletization</b> of \$5.2 million primarily due to \$5.1 million of the \$6.2 million of potential landfill costs due to anticipated PFAS regulations that were budgeted in the second half of FY24 as well as lower inflation on the fixed portion of the contract, <b>Telecommunications</b> of \$933,000 due to updated and less than anticipated costs, and <b>Grit &amp; Screenings Removal</b> of \$322,000 due to lower quantities.
<b>Total Direct Expenses</b>	<b>282,556,228</b>	<b>257,244,387</b>	<b>(25,311,841)</b>	<b>-9.0%</b>	
<b>Indirect Expenses</b>					
Insurance	3,752,659	3,970,031	217,372	5.8%	Higher Payments/Claims of \$217,000 than budgeted.
Watershed/PILOT	27,527,118	25,248,084	(2,279,034)	-8.3%	Lower Watershed Reimbursement of \$2.3 million driven by lower spending on Wages & Salaries, Equipment/Maintenance, and Fringe Benefits.
HEEC Payment	6,955,903	7,316,783	360,880	5.2%	HEEC Revenue Requirement of \$367,000.
Mitigation	1,642,234	1,642,233	(1)	0.0%	
Addition to Reserves	7,256,340	7,256,340	-	0.0%	
Pension Expense	15,972,804	15,972,804	-	0.0%	
Post Employee Benefits	-	-	-		
<b>Total Indirect Expenses</b>	<b>63,107,058</b>	<b>61,406,275</b>	<b>(1,700,783)</b>	<b>-2.7%</b>	
<b>Debt Service</b>					
Debt Service	420,399,433	420,399,434	1	0.0%	Capital Financing was on budget after the transfer of \$9.9 million to the Defeasance account. The transfer reflects lower variable rate debt expense due to lower than budget variable interest expense of \$4.4 million as a result of lower interest rates, savings from the swap terminations, and lower SRF spending of \$5.6 million due to timing.
Debt Service Assistance	(1,187,297)	(1,187,297)	-	0.0%	
<b>Total Debt Service Expenses</b>	<b>419,212,136</b>	<b>419,212,137</b>	<b>1</b>	<b>0.0%</b>	
<b>Total Expenses</b>	<b>764,875,422</b>	<b>737,862,799</b>	<b>(27,012,622)</b>	<b>-3.5%</b>	

**ATTACHMENT 2  
Current Expense Variance Explanations**

Total MWRA	FY24 Budget YTD May	FY24 Actuals May	FY24 YTD Actual vs. FY24 Budget		Explanations
			\$	%	
<b>Revenue &amp; Income</b>					
Rate Revenue	770,093,539	770,093,538	(1)	0.0%	
Other User Charges	9,655,510	10,403,530	748,020	7.7%	Clinton charge paid earlier than anticipated and water usage by Cambridge.
Other Revenue	5,484,688	6,304,458	819,770	14.9%	Other Revenue was \$820,000 or 14.9% greater than budget due to <b>Energy Rebates</b> of \$270,000, <b>Miscellaneous Revenue</b> of \$273,000, <b>Permit Fees</b> of \$264,000, <b>Energy Revenue</b> of \$171,000, and <b>Penalties</b> of \$105,000, partially offset by <b>Profit and Loss on Disposal of Equipment</b> of \$267,000.
Rate Stabilization	281,983	281,983	-	0.0%	
Investment Income	20,689,340	28,836,440	8,147,100	39.4%	Investment Income is over budget due to higher than budgeted interest rates and higher average balances.
<b>Total Revenue</b>	<b>806,205,060</b>	<b>815,919,949</b>	<b>9,714,889</b>	<b>1.2%</b>	
<b>Net Revenue in Excess of Expenses</b>	<b>41,329,638</b>	<b>78,057,150</b>	<b>36,727,511</b>		

**ATTACHMENT 3**  
**FY24 CIP Variance Report (\$000s)**

	FY24 Budget May	FY24 Actuals May	Actuals vs. Budget		Explanations
			\$	%	
<b>Wastewater</b>					
Interception & Pumping (I&P)	\$28,172	\$18,824	(\$9,347)	-33.2%	<u>Less than planned spending</u> Braintree/Weymouth Improvements Construction, Construction Services and REI: \$3.0M (changes to the structural steel design leading to later than anticipated date for its fabrication and installation) Ward Street & Columbus Park Headworks Upgrades Design/CA: \$2.8M (delay in performing shaft inspections and issuing NTP for Final Design) Siphon Structure Rehabilitation Construction: \$2.8M, and Hayes Pump Station Rehabilitation Construction: \$2.2M (updated schedules) <u>Greater than planned spending</u> Prison Point Construction 2 Discharge Piping Rehab: \$2.5M (award greater than budget) Chelsea Creek Upgrades Design/CA and Construction: \$1.6M (claim settlements) Nut Island Odor Control & HVAC Improvements Construction Phase 2: \$765K (work scheduled for FY23 performed in FY24)
Treatment	\$41,603	\$26,736	(\$14,868)	-35.7%	<u>Less than planned spending</u> DITP Roofing Replacement: \$3.2M, DiStor Membrane Replacements: \$2.1M, MCC & Switchgear Replacement - Construction: \$2.0M, Fire Alarm System Replacement - Construction: \$1.3M, Clinton Treatment Plant Digester Covers: \$900k, Chemical Pipe Replacement Construction: \$750k, Gas Protection System Replacement: \$625k, and Combined Heat and Power Design/ESDC/REI: \$595k (updated schedules) DITP As-Needed Design: \$1.5M (lower than projected task order work) SSPS VFD Replacement - Design/ESDC/REI: \$1.3M (Design Report phase more complicated than originally anticipated) Clinton Clariflocculator Valve Replacement: \$433k (work will be incorporated into Clinton Rehabilitation contract) <u>Greater than planned spending</u> Clarifier Rehabilitation Phase 2 Construction: \$2.0M (equipment received ahead of schedule)
Residuals	\$0	\$0	\$0	0.0%	



**ATTACHMENT 3**  
**FY24 CIP Variance Report (\$000s)**

	FY24 Budget May	FY24 Actuals May	Actuals vs. Budget		Explanations
			\$	%	
CSO	\$5,639	\$10,215	\$4,576	81.2%	<u>Greater than planned spending</u> Fort Point Channel & Mystic: \$6.3M (timing of Community Managed CSO payments) <u>Less than planned spending</u> Somerville Marginal New Pipe Connection: \$833k (updated schedule) Chelsea 008 Pipe Replacement: \$427k (work scheduled for FY24 performed in FY23)
Other Wastewater	\$42,935	\$21,736	(\$21,199)	-49.4%	<u>Less than planned spending</u> I/I Local Financial Assistance: \$21.2M (timing of community distributions of grants and loans)
<b>Total Wastewater</b>	<b>\$118,349</b>	<b>\$77,511</b>	<b>(\$40,838)</b>	<b>-34.5%</b>	
<b>Waterworks</b>					
Drinking Water Quality Improvements	\$3,590	\$2,069	(\$1,521)	-42.4%	<u>Less than planned spending</u> CWTP Technical Assistance: \$1.9M (lower than projected task order work) CWTP Parapet Wall Repairs: \$323k (award later than originally anticipated) <u>Greater than planned spending</u> CWTP Chemical Feed System Improvements Construction: \$839k (work scheduled for FY23 performed in FY24)

**ATTACHMENT 3  
FY24 CIP Variance Report (\$000s)**

	FY24 Budget May	FY24 Actuals May	Actuals vs. Budget		Explanations
			\$	%	
Transmission	\$55,543	\$35,392	(\$20,151)	-36.3%	<p><u>Less than planned spending</u>  Tunnel Redundancy Preliminary Design &amp; MEPA Review: \$3.2M (less than anticipated consultant work)  CP3 Shafts 7, 7B, 7C &amp; 7D: \$4.2M, Shaft 5 Improvements Design/CA and Construction: \$2.4M, Maintenance Garage/Wash Bay/Storage Building - Construction: \$2.4M, and Sudbury/Foss Dam Improvements - Construction: \$474k (updated schedules)  Administration, Legal &amp; Public Outreach: \$1.7M (timing of administration, legal and public acquisition costs)  WASM 3 Rehabilitation CP-1: \$1.3M (work scheduled for FY24 performed in FY23)  WASM 3 - MEPA/Design/CA/RI: \$1.1M (timing of consultant work)  Program Support Services: \$842k (less than anticipated services)  WASM/SPSM PRV - Design/CA: \$566k (less than anticipated consultant services)  Watershed Land Acquisition: \$554k (timing of land purchases)  Wachusett Lower Gatehouse Pipe &amp; Boiler Replacement Construction: \$533K (longer lead time on some larger items and a change in design for the multi-orifice valve)</p> <p><u>Greater than planned spending</u>  Waltham Water Pipeline Construction: \$463k (work scheduled in FY23 performed in FY24)</p>
Distribution & Pumping	\$42,124	\$28,884	(\$13,240)	-31.4%	<p><u>Less than planned spending</u>  Section 75 Extension Construction CP-1: \$5.1M, Cathodic Protection Shafts E, L, N &amp; W - Construction: \$921k, Northern Intermediate High Storage - Design: \$894k, and NEH Improvements CP-2 : \$833k (updated schedules)  NEH Improvements CP-1: \$2.6M (timing of final work including paving)  Section 89/29 Replacement Construction: \$2.5M (less than anticipated contractor progress)  New Connecting Mains CP3-Sections 23, 24 &amp; 47 Rehabilitation: \$869k (final paving work has been delayed multiple times. Work started in June)  Northern Extra High Service Legal: \$500k (less than anticipated legal expenses)</p> <p><u>Greater than planned spending</u>  CP-2, Sections 25 &amp; 24 Construction: \$2.4M (contractor progress)</p>

**ATTACHMENT 3**  
**FY24 CIP Variance Report (\$000s)**

	FY24 Budget May	FY24 Actuals May	Actuals vs. Budget		Explanations
			\$	%	
Other Waterworks	\$23,355	\$30,701	\$7,347	31.5%	<u>Greater than planned spending</u> Local Water Pipeline Financial Assistance Program: \$11.4M (timing of community loan distributions) Electrical Distribution Upgrades at Southborough: \$246k (work planned for FY23 performed in FY24) <u>Less than planned spending</u> Steel Tank Improvements: \$3.3M, and Other Design and Programming Services: \$550k (updated schedules)
<b>Total Waterworks</b>	<b>\$124,612</b>	<b>\$97,047</b>	<b>(\$27,565)</b>	<b>-22.1%</b>	
<b>Business &amp; Operations Support</b>					
<b>Total Business &amp; Operations Support</b>	<b>\$16,535</b>	<b>\$7,480</b>	<b>(\$9,056)</b>	<b>-54.8%</b>	<u>Less than planned spending</u> As-Needed Design Contracts: \$2.2M (lower than projected task order work) FY24-28 Vehicle Purchases: \$1.7M (industry has changed to a just-in-time purchase model adding between 9 months to two years for acquisition) Cabling: \$1.6M (timing and scheduling of work including identifying available conduit paths and verification of phone & network data jack locations) Security Equipment & Installation: \$1.5M (delays with upgrades to communication circuits, security cameras, and back-up of the head-end of intrusion alarms) Lawson Upgrade: \$830k (timing of vendor invoicing) <u>Greater than planned spending</u> Office Space Modifications: \$824k (FY23 planned work completed in FY24)
<b>Total MWRA</b>	<b>\$259,497</b>	<b>\$182,037</b>	<b>(\$77,459)</b>	<b>-29.8%</b>	

**Attachment 4  
FY24 Budget vs. FY24 Projection**

TOTAL MWRA	FY24 Budget	FY24 Projection	Change FY24 Budget vs FY24 Projection	
			\$	%
<b>EXPENSES</b>				
WAGES AND SALARIES	\$ 127,828,242	\$ 115,045,418	\$ (12,782,824)	-10.0%
OVERTIME	5,727,593	6,243,283	515,690	9.0%
FRINGE BENEFITS	25,823,383	24,532,214	(1,291,169)	-5.0%
WORKERS' COMPENSATION	2,144,395	2,412,444	268,049	12.5%
CHEMICALS	28,269,124	20,340,501	(7,928,623)	-28.0%
ENERGY AND UTILITIES	31,064,893	31,733,215	668,322	2.2%
MAINTENANCE	38,574,255	38,750,865	176,610	0.5%
TRAINING AND MEETINGS	498,597	373,948	(124,649)	-25.0%
PROFESSIONAL SERVICES	10,410,484	9,410,484	(1,000,000)	-9.6%
OTHER MATERIALS	7,167,398	7,667,398	500,000	7.0%
OTHER SERVICES	38,494,660	33,736,660	(4,758,000)	-12.4%
<b>TOTAL DIRECT EXPENSES</b>	<b>\$ 316,003,024</b>	<b>\$ 290,246,430</b>	<b>\$ (25,756,594)</b>	<b>-8.2%</b>
INSURANCE	\$ 4,065,380	\$ 4,295,270	\$ 229,890	5.7%
WATERSHED/PILOT	30,358,187	28,073,556	(2,284,631)	-7.5%
HEEC PAYMENT	7,500,650	7,643,162	142,512	1.9%
MITIGATION	1,779,086	1,779,086	-	0.0%
ADDITIONS TO RESERVES	7,861,035	7,861,035	-	0.0%
RETIREMENT FUND	15,972,805	15,972,805	-	0.0%
POSTEMPLOYMENT BENEFITS	2,849,365	2,849,365	-	0.0%
<b>TOTAL INDIRECT EXPENSES</b>	<b>\$ 70,386,507</b>	<b>\$ 68,474,278</b>	<b>\$ (1,912,229)</b>	<b>-2.7%</b>
STATE REVOLVING FUND	\$ 90,798,263	\$ 83,358,104	\$ (7,440,159)	-8.2%
SENIOR DEBT	294,055,644	290,300,910	(3,754,734)	-1.3%
SUBORDINATE DEBT	69,931,072	65,420,788	(4,510,284)	-6.4%
LOCAL WATER PIPELINE CP	7,744,625	7,370,009	(374,616)	-4.8%
CURRENT REVENUE/CAPITAL	19,200,000	19,200,000	-	0.0%
CAPITAL LEASE	3,217,060	3,217,060	-	0.0%
DEBT PREPAYMENT	4,000,000	4,000,000	-	0.0%
DEBT SERVICE ASSISTANCE	(1,187,297)	(1,187,297)	-	0.0%
<b>TOTAL DEBT SERVICE</b>	<b>\$ 487,759,367</b>	<b>\$ 471,679,574</b>	<b>\$ (16,079,793)</b>	<b>-3.3%</b>
<b>TOTAL EXPENSES</b>	<b>\$ 874,148,898</b>	<b>\$ 830,400,282</b>	<b>\$ (43,748,616)</b>	<b>-5.0%</b>
<b>REVENUE &amp; INCOME</b>				
RATE REVENUE	\$ 834,268,000	\$ 834,268,000	\$ -	0.00%
OTHER USER CHARGES	10,390,434	10,349,723	(40,711)	-0.4%
OTHER REVENUE	5,838,903	5,645,942	(192,961)	-3.3%
RATE STABILIZATION	305,482	305,482	-	0.0%
INVESTMENT INCOME	23,346,079	31,520,079	8,174,000	35.0%
<b>TOTAL REVENUE &amp; INCOME</b>	<b>\$ 874,148,898</b>	<b>\$ 882,089,226</b>	<b>\$ 7,940,328</b>	<b>0.9%</b>

**VARIANCE:** **\$ (51,688,944)** **\$ (51,688,943)**

**STAFF SUMMARY**




**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Approval of the FY25 Final Capital Improvement Program

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**COMMITTEE:** Administration, Finance & Audit

     INFORMATION

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

  X   VOTE  
  
Thomas J. Durkin  
Director, Finance

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**RECOMMENDATION:**

To approve the FY25 Final Capital Improvement Program (CIP) with planned spending of \$347.9 million, including \$252.4 million in project spending and \$95.5 million in community assistance loan programs.

**DISCUSSION:**

The Fiscal Year 2025 Capital Improvement Program (CIP) represents an update to the FY24 CIP Program approved by the Board in June 2023 for Fiscal Year 2024. This budget includes the latest cost estimates and revised schedules that were the result of prioritizing the planned projects to support the MWRA’s core operations, and meet regulatory requirements. It also reaffirms MWRA’s commitment to the community financing assistance programs on both the water and wastewater sides. The FY25 Final CIP projects \$347.9 million in spending for FY25, of which \$176.7 million supports Wastewater System Improvements, \$145.8 million supports Waterworks System Improvements, and \$25.3 million is for Business and Operations Support. The projects with significant spending in FY25 include Inflow and Infiltration (I/I) (\$65.9 million net), Deer Island Clarifier Rehabilitation Phase 2 Construction (\$50.0 million), Water Loan Program (\$29.6 million), Waltham Water Pipeline Construction (\$10.6 million), Metropolitan Tunnel Final Design/ESDC (\$10.0 million), NIH Redundancy & Storage - Section 89 & 29 Replacement Construction (\$9.3 million), and Wachusett Lower Gate House Pipe & Boiler Replacement (\$8.0 million).

The FY25 Proposed CIP includes \$29.7 million for projects supporting DCR’s Division of Water Supply Protection. Upcoming projects with spending in the FY24-28 Cap Period include the Quabbin Administration Building Design and Construction (\$15.1 million), the New Salem Building Design and Construction (\$6.1 million), and the Quabbin Maintenance Garage Design and Construction (\$6.7 million).

The Authority remains committed to its Community Loan initiatives with FY25 spending for its Inflow and Infiltration and Water Loan Program of \$65.9 million and \$29.6 million, respectively.

The FY25 CIP includes the expansion of the community assistance programs based on the MWRA Advisory Board recommendations. I/I Phase 15 with interest free loans only for \$100 million was included as well as Phase 16 for \$125 million (75% grant, 25% loan). Phase 4 water loans was added for \$300 million and Lead Service Line Replacement program was increased from \$100 million to \$200 million and now includes a 25% grant portion.

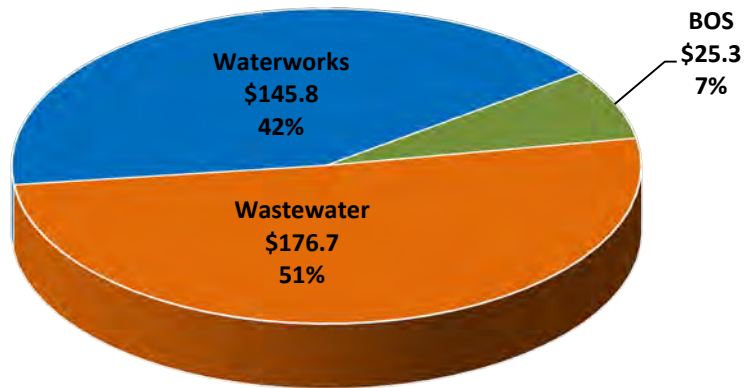
The CIP continues to address critical redundancy improvements for the Metropolitan Tunnel System. The FY25 CIP includes \$2.1 billion in spending for this project, an increase of \$347.8 million over the FY24 Approved CIP driven by updated cost estimates from the now completed preliminary design. The initial contract for Program Support Services began in April 2019 in the amount of \$10.2 million with an increase of \$7.0 million and 24-month time extension (with one additional optional contract extension for \$7.5 million in the CIP) and has a total budget of \$24.7 million that spans over a nine-year period. This contract provides assistance with program-wide activities, such as risk management, quality management, design and construction package planning, independent technical reviews, construction practices review and implementation, independent cost estimates, critical path scheduling, and budget tracking. The second contract, Preliminary Design & MEPA Review (Massachusetts Environmental Policy Act), for \$15.7 million was awarded in May 2020 and ended in January 2024. Spending for Preliminary Design and MEPA Review began in early FY21 and was completed in January 2024. The third contract, Metropolitan Water Tunnel Program Geotechnical Support Services, for \$12.8 million and a term of 36 months was awarded in December 2022. This contract focuses on the collection of geotechnical/geological data to support final design, bidding and construction of the Program. The Final Design is now expected to be awarded in early FY25.

Today, the Authority is better positioned to reinvest in rehabilitation and replacement of aging facilities as a result of conservative fiscal management which includes judicious control of expenses, and the fact that MWRA has implemented the practice of utilizing available funds for defeasances resulting in the reduction of debt service expense. MWRA projects an overall reduction in outstanding principal of debt during the FY24-28 cap period.

### **Final FY25 Spending**

The FY25 Final Capital Improvement Program projects \$347.9 million in spending for FY25, of which \$176.7 million supports Wastewater System Improvements, \$145.8 million supports Waterworks System Improvements, and \$25.3 million is for Business and Operations Support.

### FY25 Spending



The FY25 Final CIP includes \$95.5 million for community assistance programs, which are a combination of loan and partial grant programs, with net expenditures of \$65.9 million for the local Infiltration/Inflow program and net expenditures of \$29.6 million for the local water pipeline program.

The \$347.9 million in projected spending is driven by 42 active wastewater and water projects. Of this \$347.9 million in spending, project contracts with spending greater than \$5.0 million in FY25, excluding local community assistance programs, total \$120.6 million and account for 34.7% of the total annual spending. These projects are presented in the following table:

Project	Subphase	FY25 \$s in Millions
Deer Island Treatment Plant Asset Protection	Clarifier Rehab Phase 2 - Construction	\$50.0
Metro Redundancy Interim Improvements	Waltham Water Pipeline Construction	\$10.6
Metro Tunnel Redundancy	Final Design/ESDC	\$10.0
NIH Redundancy & Storage	Section 89 & 29 Repl - Construction	\$9.3
Quabbin Transmission System	Wachusett Lower Gate House Pipe & Boiler Replacement Construction	\$8.0
New Connect Mains-Shaft 7 to WASM 3	Sect 25 & 24 - Construction CP-2	\$7.6
Deer Island Treatment Plant Asset Protection	DITP Roofing Replacement	\$7.4
Waterworks Facility Asset	Steel Tank/Improvement Construction	\$7.3
Clinton Wastewater Treatment Plant	Digestr Cover Replacement	\$5.5
Metro Tunnel Redundancy	Admin Legal & Public Outreach	\$5.0
<b>Total Contracts ≥ \$5 million (excluding Loan Programs)</b>		<b>\$120.6</b>
<b>% of FY25 Spending</b>		<b>34.7%</b>
<b>Other Project Spending</b>		<b>\$227.3</b>
<b>Total FY25 Spending</b>		<b>\$347.9</b>

**Clarifier Rehabilitation Phase 2 Construction** - \$50.0 million (\$289.8 million total construction cost). This project will rehabilitate the sludge removal system in the primary tanks and the aeration/recirculation systems in the secondary tanks. The influent gates, effluent launders and aeration systems, and concrete corrosion in primary clarifiers will also be addressed and repaired.

**Waltham Water Pipeline Construction** - \$10.6 million (\$29.4 million total construction cost). This contract will include installation of approximately 8,920 linear feet of new 36-inch diameter water main along Lexington Street in Waltham, from Meter 182 to a new meter near Totten Pond Road, including installation of valves, meters and other appurtenances, by-pass pumping, replacement of certain utilities, pavement restoration, traffic and environmental controls.

**Final Design/ESDC for the Metropolitan Tunnel** - \$10.0 million (\$117.8 million total contract cost). Final Design and Engineering Services During Construction of the Northern and Southern Tunnels, including connecting mains.

**Northern Intermediate High Redundancy Section 89 and 29 Replacement Construction** - \$9.3 million (\$35.9 million total construction cost). This is a redundancy project for MWRA's Northern Intermediate High service area. Section 89 will be replaced now that the redundant pipeline is completed. This contract was awarded in May 2021.

**Wachusett Lower Gatehouse Pipe & Boiler Replacement Construction** - \$8.0 million (\$20.5 million total construction cost). Replace the oldest piping in the Lower Gatehouse. Provide CFRP lining of the pipes between the dam and the Lower Gatehouse. Replace the existing propane fueled boilers and radiators.

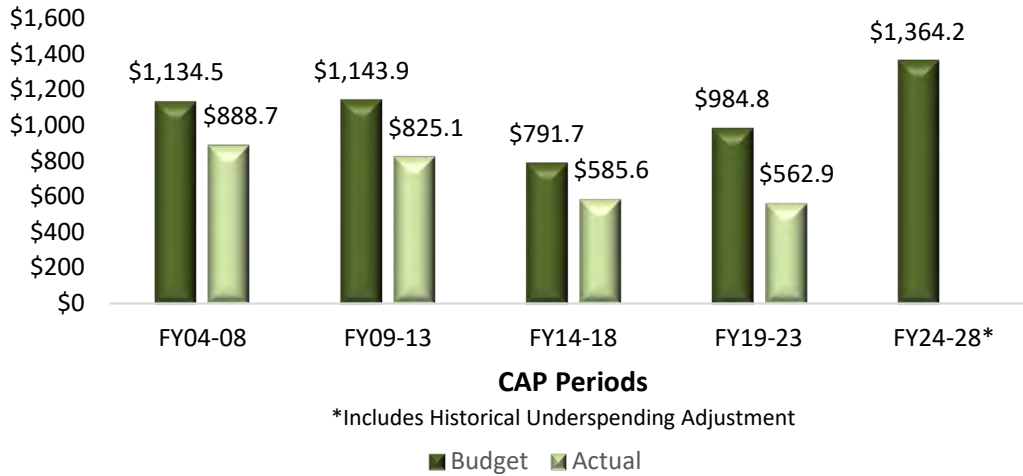
#### **FY24-28 Expenditures & Five-Year Spending Cap**

The concept of a five-year spending Cap was first introduced at the Advisory Board's recommendation in 2003 for the FY04-08 period. The FY24-28 Cap is the fifth cap established by the Authority at \$1.4 billion when the FY24 CIP was adopted. The Cap represents a targeted maximum spending limit to ensure adequate capital program funding and to serve as a guide for long-term planning estimates and community assessments. The following graph illustrates the history of the past four five-year Caps and the Final FY24-28 Cap, both in terms of the Cap levels and actual spending:



## CAP Spending Budget & Actuals

\$s in millions



MWRA project spending (excluding water and wastewater loan programs) has been 25% under plan levels on average since FY04. Underspending for the past two Cap periods, FY14-18 and FY19-23, were 26% and 43%, respectively. To try to better predict future spending, the Authority discounts projected Cap spending by applying a Spend Rate Adjustment of 25%. This will be a better reflection of likely spending targets without removing future projects from plan. The FY24-28 Base-Line Cap is set at \$1.4 billion. The Base-Line Cap includes Cap cash flows total \$1.8 billion and net to \$1.4 billion after applying the 25% Spend Rate Adjustment. Annual cash flows for the Cap period are shown in the following table (in millions):

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

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

FY24-28 Cap spending based on the FY25 Final Budget totals \$1.8 billion before the Spend Rate Adjustment of \$440.4 million nets FY24-28 forecast of \$1.3 billion, \$43.0 million under the FY24-28 Base-Line Cap. Annual cashflows for the FY24-28 period are presented in the following table:

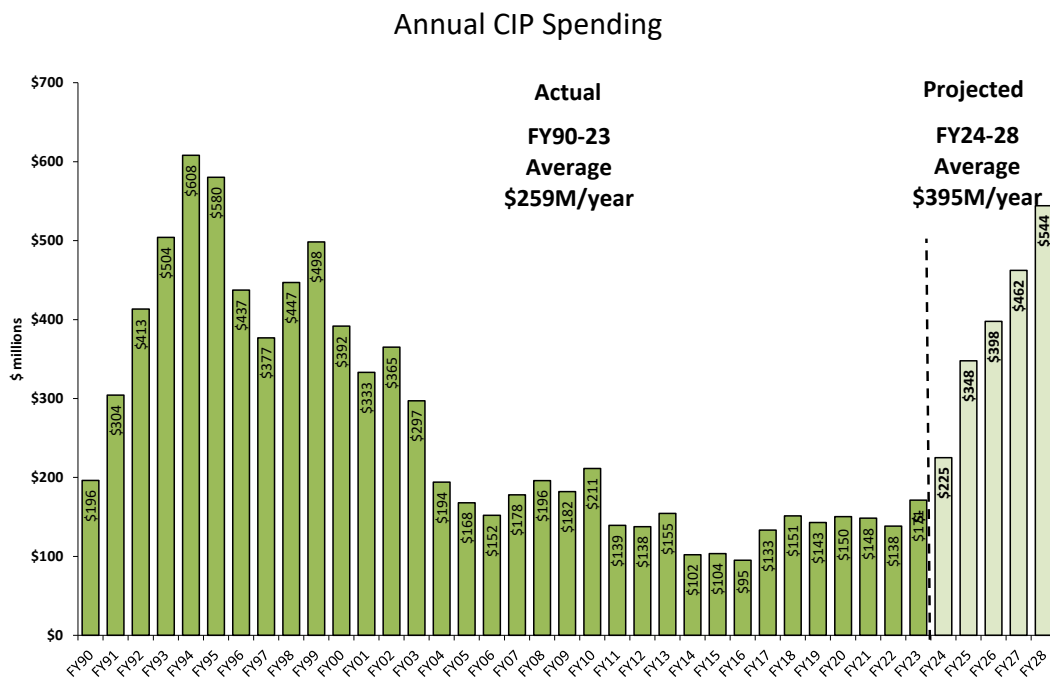
FY25 Final CAP		FY24	FY25	FY26	FY27	FY28	FY24-28
	Projected Expenditures excl. Metro Tunnel	\$212.4	\$324.9	\$360.8	\$422.6	\$476.4	\$1,797.1
	Metropolitan Tunnel	\$12.8	\$23.0	\$37.0	\$39.8	\$67.9	\$180.4
	I/I Program	(23.3)	(65.9)	(51.3)	(48.6)	(53.4)	(242.6)
	Water Loan Program	(33.4)	(29.6)	(31.5)	(20.0)	(16.4)	(130.9)
	<b>MWRA Spending</b>	<b>\$168.5</b>	<b>\$252.4</b>	<b>\$315.0</b>	<b>\$393.7</b>	<b>\$474.4</b>	<b>\$1,604.0</b>
	Contingency	0.0	15.9	21.5	27.1	34.9	99.4
	Inflation on Unawarded Construction	0.0	1.4	6.9	17.7	33.0	59.0
	Chicopee Valley Aqueduct Projects	0.0	0.0	(0.5)	(0.3)	0.0	(0.8)
	<b>Projected Spending before Adjustment</b>	<b>\$168.5</b>	<b>\$269.7</b>	<b>\$342.8</b>	<b>\$438.2</b>	<b>\$542.3</b>	<b>\$1,761.5</b>
Spend Rate Adjustment (25%)*	(42.1)	(67.4)	(85.7)	(109.5)	(135.6)	(440.4)	
<b>FY25 Final FY24-28 Spending</b>	<b>\$126.4</b>	<b>\$202.3</b>	<b>\$257.1</b>	<b>\$328.6</b>	<b>\$406.8</b>	<b>\$1,321.1</b>	

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

In addition to the Spend Rate Adjustment, the format of the Cap table is adjusted to account separately for MWRA and Metropolitan Tunnel spending, and excludes the local I/I grant and loan program and the local water pipeline loan spending which are both outside of MWRA’s control. The Cap also excludes Chicopee Valley Aqueduct system projects. As in past Caps, contingency for each fiscal year is incorporated into the CIP to fund the uncertainties inherent to construction. The contingency budget is calculated as a percentage of budgeted expenditure outlays. Specifically, contingency is 7% for non-tunnel projects and 15% for tunnel projects. Inflation is added for unawarded construction contracts.

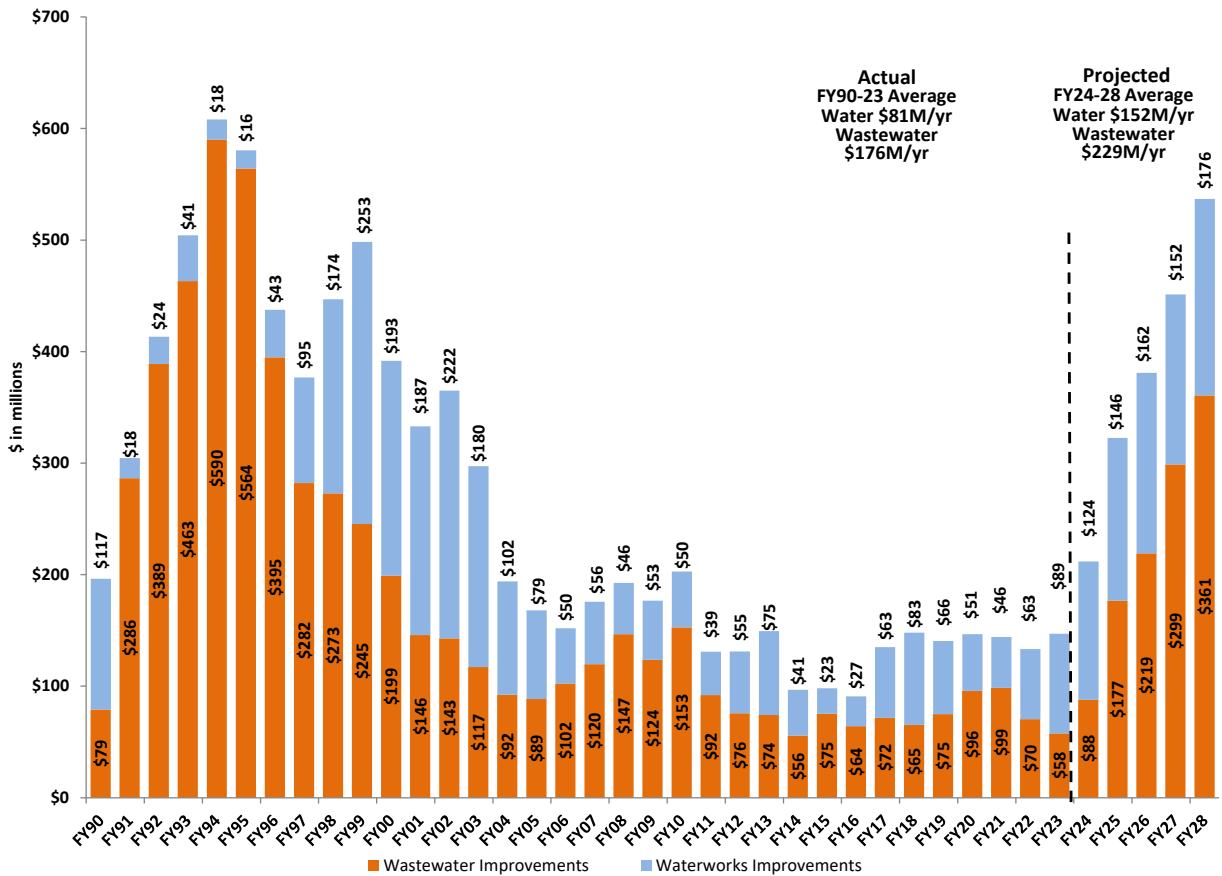
### Historical & Projected Spending

The following chart captures the historical CIP spending through FY23 and projects spending through FY28 based on the FY25 CIP. Average annual CIP spending through FY23 was \$259 million. Average annual CIP spending for the FY24-28 period is projected to be \$395 million.



The following chart shows the historical CIP spending from FY90 through FY23 by utility with projections through FY28. Average annual CIP spending through FY23 was \$81 million for Waterworks and \$176 million for Wastewater. Average annual CIP spending for FY24-28 is projected to be \$152 million for Waterworks and \$229 million for Wastewater.

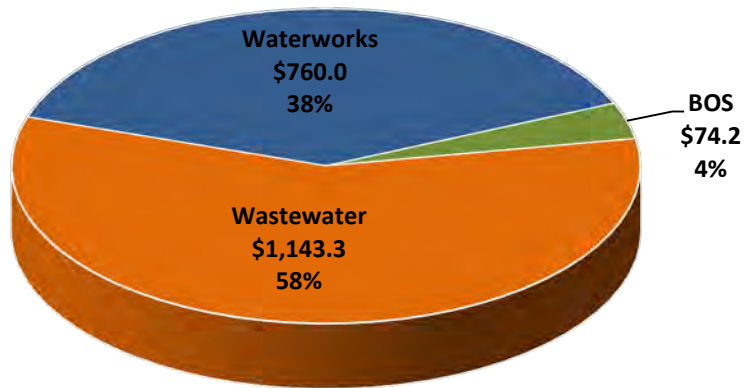
Annual CIP Spending by Utility



### FY24-28 Spending

Spending during the FY24-28 timeframe is planned to be \$2.0 billion, including local community spending of \$242.6 million for the I/I loan and grant program and \$130.9 million for the water pipeline loan program. Spending under the Wastewater and Waterworks programs is projected at \$1,143.3 million and \$760.0 million, respectively, followed by Business and Operations at \$74.2 million. The spending projections set forth here include updates to the approved FY24 CIP with the latest cost estimates, revised schedules, and new projects.

### FY24-28 Spending



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

	Future Spending Beyond FY23	FY24	FY25	FY26	FY27	FY28	Total FY24-28
<b>Wastewater System Improvements</b>	<b>\$2,550.6</b>	<b>\$87.9</b>	<b>\$176.7</b>	<b>\$219.1</b>	<b>\$298.9</b>	<b>\$360.6</b>	<b>\$1,143.3</b>
Interception & Pumping	885.1	22.0	24.0	38.3	80.3	118.3	282.9
Treatment	1,322.4	32.4	81.0	116.2	162.3	184.0	575.8
Residuals	90.6	0.0	0.4	10.0	7.1	3.5	20.9
CSO	25.3	10.2	5.4	3.5	0.6	1.4	21.1
Other Wastewater	227.2	23.3	65.9	51.3	48.6	53.4	242.6
<b>Waterworks System Improvements</b>	<b>\$3,149.9</b>	<b>\$123.8</b>	<b>\$145.8</b>	<b>\$161.8</b>	<b>\$152.4</b>	<b>\$176.2</b>	<b>\$760.0</b>
Drinking Water Quality Improvements	75.4	3.7	4.4	4.1	6.0	4.9	23.0
Transmission	2,461.4	44.7	58.7	56.1	59.2	96.1	314.8
Distribution & Pumping	615.3	35.4	34.0	58.8	58.9	44.0	231.1
Other Waterworks	(2.1)	40.0	48.7	42.9	28.4	31.2	191.1
<b>Business &amp; Operations Support</b>	<b>\$76.2</b>	<b>\$13.5</b>	<b>\$25.3</b>	<b>\$16.8</b>	<b>\$11.1</b>	<b>\$7.5</b>	<b>\$74.2</b>
<b>Total MWRA</b>	<b>\$5,776.8</b>	<b>\$225.2</b>	<b>\$347.9</b>	<b>\$397.8</b>	<b>\$462.4</b>	<b>\$544.3</b>	<b>\$1,977.5</b>

It is important to emphasize that the majority of spending within the Wastewater and Waterworks programs is concentrated in several larger projects with significant spending in the FY24-28 timeframe. The top 20 project contracts in terms of spending for the FY24-28 period total \$799.3 million, which excludes local community assistance programs. These 20 projects account for over 40.4% of total period spending. Largest construction initiatives in terms of FY24-28 spending include the Clarifier Rehabilitation at Deer Island of \$224.4 million (total cost \$289.8 million), Tunnel Final Design \$70.5 million (total cost \$117.8 million), NHS – Revere & Malden Pipelines CP-1 Section 53 Connection Construction \$55.5 million (total cost \$55.5 million), Ward Street Headworks of \$44.3 million (total cost \$147.8 million), Deer Island Asset Protection South System Pump Station VFD Replacement of \$40.5 million (total cost \$90.5 million), and Prison Point Rehabilitation \$38.7 million (total cost \$38.7 million).

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

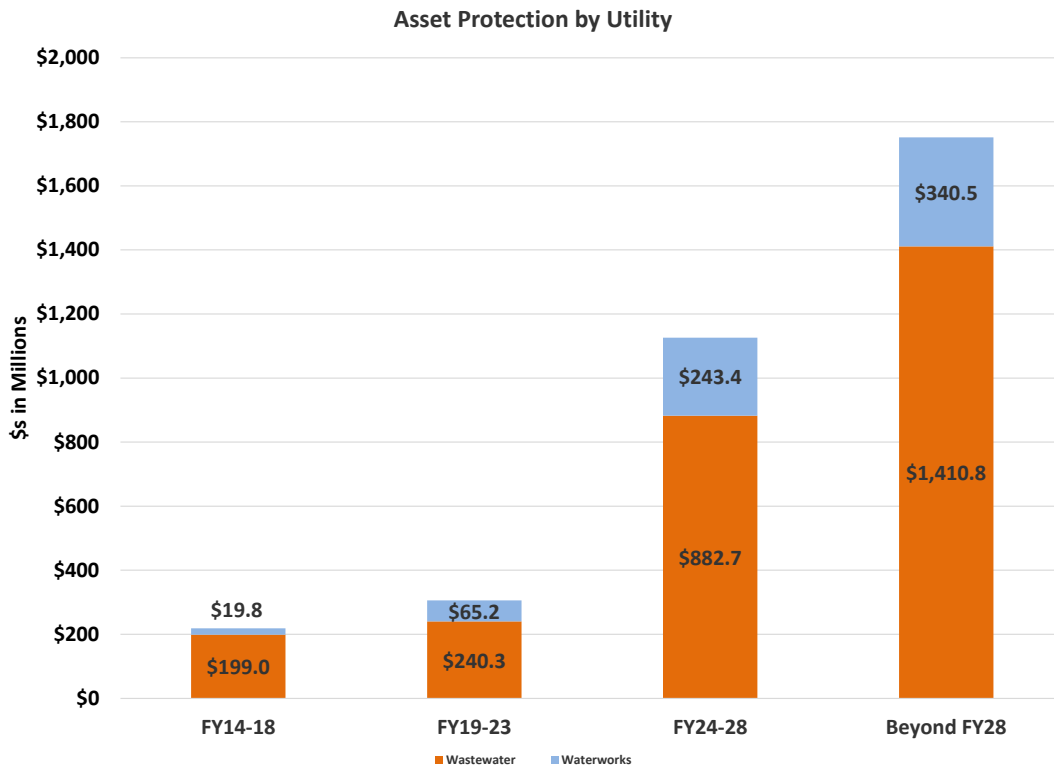
Project	Subphase	FY24-FY28 \$s in Millions
Deer Island Treatment Plant Asset Protection	Clarifier Rehab Phase 2 - Construction	\$224.4
Metro Tunnel Redundancy	Final Design/ESDC	\$70.5
NHS - Revere & Malden Pipelines	CP-1 Section 53 Connection - Construction	\$55.5
Facility Asset Protection	Ward St Headworks Construction	\$44.3
Deer Island Treatment Plant Asset Protection	SSPS VFD Replace Construction	\$40.5
Facility Asset Protection	Prison Point Rehab Repackaged	\$38.7
Metro Tunnel Redundancy	Admin Legal & Public Outreach	\$35.5
Deer Island Treatment Plant Asset Protection	Fire Alarm System Replacement - Construction	\$35.0
Deer Island Treatment Plant Asset Protection	Combined Heat & Power - Construction	\$33.5
Facility Asset Protection	Columbus Park HW Construction	\$29.6
Metro Redundancy Interim Improvements	Waltham Water Pipeline Construction	\$25.9
Metro Tunnel Redundancy	Tunnel Construction South CP2	\$25.0
Facility Asset Protection	Hayes Pump Station Rehab Construction	\$22.7
Deer Island Treatment Plant Asset Protection	Motor Control Center & Switchgear Replace Construction	\$21.0
Northern Extra High Service New Pipelines	CP-2 NEH Improvements	\$20.7
Quabbin Transmission System	Wachusett Lower Gate House Pipe &Boiler Replacement Construction	\$20.5
New Connect Mains-Shaft 7 to WASM 3	Sect 25 & 24 - Construction CP-2	\$19.9
NIH Redundancy & Storage	Section 89 & 29 Repl - Construction	\$18.4
Deer Island Treatment Plant Asset Protection	Digester/Storage Tank Rehab Construction	\$17.9
New Connect Mains-Shaft 7 to WASM 3	Section 75 Extension - Construction CP-1	\$16.9
<b>Total Top 20 Spending Subphases (excluding Loan Programs)</b>		<b>\$799.3</b>
<b>% of FY24-28 Spending</b>		<b>40.4%</b>
<b>Other Project Spending</b>		<b>\$1,178.1</b>
<b>Total FY24-FY28 Spending</b>		<b>\$1,977.5</b>

Asset Protection accounts for the largest share of capital expenditures for the FY24-28 period. The FY25 Final CIP includes \$1.1 billion for asset protection initiatives, representing 57.8% of total MWRA spending in this timeframe. Asset protection spending by program is as follows: Wastewater (\$882.7 million), Waterworks (\$243.4 million), and Business and Operations Support (\$16.8 million). Spending for Water Redundancy projects totals \$357.7 million in the same FY24-28 period, accounting for 18.1% of total spending.

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

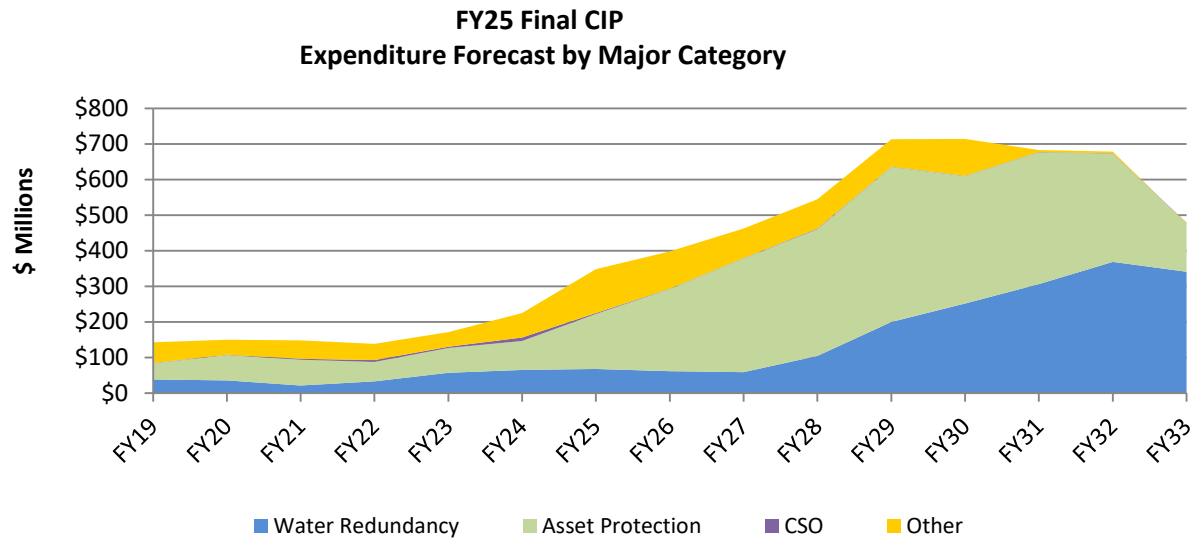
Project Category	FY19-23	FY24-28	Beyond 28
Asset Protection	\$313.4	\$1,142.9	\$1,752.8
Water Redundancy	\$186.9	\$357.7	\$2,237.6
CSO	\$12.6	\$16.0	\$4.2
Other	\$238.4	\$460.8	-\$195.2
<b>Total</b>	<b>\$751.3</b>	<b>\$1,977.5</b>	<b>\$3,799.3</b>
<b>Asset Protection</b>	<b>41.7%</b>	<b>57.8%</b>	<b>30.3%</b>
<b>Water Redundancy</b>	<b>24.9%</b>	<b>18.1%</b>	<b>38.7%</b>
CSO	1.7%	0.8%	0.1%
Other	31.7%	23.3%	-3.4%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>9.3%</b>

In terms of utility spending, Wastewater Asset Protection accounts for 77.2% of the FY24-28 projected Asset Projection spending at \$882.7 million of which \$558.4 million is designated for the Deer Island Wastewater Treatment Plant and \$324.3 million for headworks and pipelines. The \$243.4 million targeted for Waterworks Asset Protection includes \$155.9 million for water pipeline projects.



As illustrated by the following graph, the next two waves of spending over the FY24-28 and the FY29-33 periods will be for asset protection and water redundancy. This reflects MWRA's

commitment to maintaining its physical plant and addressing the need for water system redundancy in some critical service areas.



### FY25 CIP Future Expenditures

The FY25 CIP contains future spending (beyond FY23) estimated at \$5.8 billion, including \$2.6 billion for Wastewater (primarily Asset Protection of \$2.3 billion) and \$3.1 billion for Waterworks (primarily Redundancy projects of \$2.6 billion). Wastewater Asset Protection includes \$1.3 billion for Deer Island and \$780.9 million for Wastewater Facility Asset Protection (primarily pump station rehabilitation). Redundancy projects include the Metro Tunnel Redundancy and Metro Redundancy Interim Improvement projects with future spending of \$2.1 billion and \$188.0 million, respectively. FY24-FY28 spending is projected at \$2.0 billion or 34.2% of future spending.

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

	Future Spending Beyond FY23	Total FY19-23	Total FY24-28	Beyond 28
<b>Wastewater System Improvements</b>	<b>\$2,550.6</b>	<b>\$397.1</b>	<b>\$1,143.3</b>	<b>\$1,407.3</b>
Interception & Pumping	885.1	161.5	282.9	602.3
Treatment	1,322.4	63.3	575.8	746.5
Residuals	90.6	15.6	20.9	69.7
CSO	25.3	12.6	21.1	4.2
Other Wastewater	227.2	144.1	242.6	-15.4
<b>Waterworks System Improvements</b>	<b>\$3,149.9</b>	<b>\$314.4</b>	<b>\$760.0</b>	<b>\$2,389.9</b>
Drinking Water Quality Improvements	75.4	10.8	23.0	52.3
Transmission	2,461.4	105.6	314.8	2,146.6
Distribution & Pumping	615.3	127.9	231.1	384.2
Other Waterworks	(2.1)	70.2	191.1	-193.2
<b>Business &amp; Operations Support</b>	<b>\$76.2</b>	<b>\$39.7</b>	<b>\$74.2</b>	<b>\$2.1</b>
<b>Total MWRA</b>	<b>\$5,776.8</b>	<b>\$751.3</b>	<b>\$1,977.5</b>	<b>\$3,799.3</b>

## FY25 New Projects

The FY25 CIP adds 3 new projects at a total cost of \$18.7 million with projected spending of \$14.2 million over the FY24-28 period. There are 2 water projects totaling \$13.7 million and 1 wastewater project at \$5.0 million. The largest new project is the Shaft L Interconnection Project with design and construction totaling \$7.6 million. The newest wastewater project is the High Level Sewer Culverts for \$5.0 million. A complete listing of projects is included as Attachment C.

Project	Total Contract Amount	FY24-28 Spending	Beyond 28
Shaft L Interconnection Project	\$7.6	\$5.8	\$1.8
New Salem Building Design & Construction	\$6.1	\$3.3	\$2.8
<b>Total Waterworks( #2)</b>	<b>\$13.7</b>	<b>\$9.2</b>	<b>\$4.5</b>
High Level Sewer Culverts	\$5.0	\$5.0	\$0.0
<b>Total Wastewater (#1)</b>	<b>\$5.0</b>	<b>\$5.0</b>	<b>\$0.0</b>
<b>3 New Projects</b>	<b>\$18.7</b>	<b>\$14.2</b>	<b>\$4.5</b>

## ATTACHMENTS:

- A. FY25 Project Level Expenditure Forecast
- B. Overview of the FY25 CIP and Changes from the FY24 Final CIP
- C. FY25 New Projects



**ATTACHMENT A**  
**FY25 Final CIP**  
**Expenditure Forecast at Project Level**  
**(\$000s)**

Project	Total Contract Amount	Payments through FY23	Remaining Balance	FY24	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
<b>Total MWRA</b>	<b>10,801,816</b>	<b>5,025,023</b>	<b>5,776,792</b>	<b>225,186</b>	<b>347,876</b>	<b>397,777</b>	<b>462,353</b>	<b>544,275</b>	<b>1,977,466</b>	<b>3,264,163</b>	<b>535,163</b>
<b>Wastewater</b>	<b>5,009,056</b>	<b>2,458,441</b>	<b>2,550,614</b>	<b>87,927</b>	<b>176,721</b>	<b>219,135</b>	<b>298,873</b>	<b>360,638</b>	<b>1,143,294</b>	<b>1,420,488</b>	<b>(13,168)</b>
<b>Interception &amp; Pumping</b>	<b>1,649,003</b>	<b>763,859</b>	<b>885,145</b>	<b>21,974</b>	<b>23,999</b>	<b>38,260</b>	<b>80,328</b>	<b>118,292</b>	<b>282,853</b>	<b>568,264</b>	<b>34,029</b>
102 Quincy Pump Facilities	25,907	25,907	-	completed project							
104 Braintree-Weymouth Relief Facilities	249,042	232,410	16,632	9,627	3,454				13,081	3,551	
105 New Neponset Valley Relief Sewer	30,300	30,300	-	completed project							
106 Wellesley Extension Replacement Sewer	64,359	64,359	-	completed project							
107 Framingham Extension Relief Sewer	47,856	47,856	-	completed project							
127 Cummingsville Replacement Sewer	8,999	8,999	-	completed project							
130 Siphon Structure Rehabilitation	24,362	3,103	21,259	420	5,049	5,234	818	2,068	13,590	7,669	
131 Upper Neponset Valley Sewer System	54,174	54,174	-	completed project							
132 Corrosion & Odor Control	104,633	69,442	35,191	4,280	889				5,168	26,008	4,015
136 West Roxbury Tunnel	11,514	10,314	1,200		800	400			1,200		
137 Wastewater Central Monitoring	27,482	19,926	7,556				627	1,328	1,955	5,601	
139 South System Relief Project	4,939	3,439	1,500							1,500	
141 Wastewater Process Optimization	8,310	2,200	6,111							6,111	
142 Wastewater Meter System - Equipment Replacement	21,057	11,950	9,107	(19)	135	540	540	540	1,736	945	6,426
143 Regional I/I Management & Planning	169	169	-	completed project							
145 Facility Asset Protection	960,202	179,311	780,891	7,666	13,672	32,086	78,343	114,356	246,123	516,181	18,588

**ATTACHMENT A**  
**FY25 Final CIP**  
**Expenditure Forecast at Project Level**  
**(\$000s)**

Project	Total Contract Amount	Payments through FY23	Remaining Balance	FY24	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
146 D.I. Cross Harbor Tunnel	5,000	-	5,000								5,000
147 Randolph Trunk Sewer Relief	698	-	698							698	
<b>Treatment</b>	<b>1,686,865</b>	<b>364,487</b>	<b>1,322,378</b>	<b>32,413</b>	<b>81,006</b>	<b>116,167</b>	<b>162,269</b>	<b>183,980</b>	<b>575,836</b>	<b>693,377</b>	<b>53,165</b>
182 Deer Island Primary and Secondary Treatment	(958)	(958)	-	completed project							
200 DI Plant Optimization	33,279	33,279	-	completed project							
206 Deer Island Treatment Plant Asset Protection	1,613,142	311,593	1,301,548	30,874	73,626	112,732	158,947	182,270	558,449	689,934	53,165
210 Clinton Wastewater Treatment Plant	39,190	18,361	20,830	1,539	7,380	3,435	3,322	1,710	17,387	3,443	
211 Laboratory Services	2,212	2,212	-	completed project							
<b>Residuals</b>	<b>171,326</b>	<b>80,697</b>	<b>90,629</b>		<b>400</b>	<b>9,950</b>	<b>7,050</b>	<b>3,492</b>	<b>20,892</b>	<b>45,261</b>	<b>24,476</b>
261 Residuals	63,811	63,811	-	completed project							
271 Residuals Asset Protection	107,515	16,886	90,629		400	9,950	7,050	3,492	20,892	45,261	24,476
<b>CSO</b>	<b>940,246</b>	<b>914,964</b>	<b>25,280</b>	<b>10,224</b>	<b>5,391</b>	<b>3,466</b>	<b>596</b>	<b>1,425</b>	<b>21,100</b>	<b>4,180</b>	
<b>CSO MWRA Managed</b>	<b>440,516</b>	<b>434,864</b>	<b>5,651</b>	<b>573</b>	<b>2,300</b>	<b>2,778</b>			<b>5,651</b>		
339 North Dorchester Bay	221,510	221,510	-	completed project							
347 East Boston Branch Sewer Relief	85,637	85,637	-	completed project							
348 BOS019 Storage Conduit	14,288	14,288	-	completed project							
349 Chelsea Trunk Sewer	31,683	31,109	573	573					573		
350 Union Park Detention Treatment Facility	49,583	49,583	-	completed project							

**ATTACHMENT A**  
**FY25 Final CIP**  
**Expenditure Forecast at Project Level**  
**(\$000s)**

Project	Total Contract Amount	Payments through FY23	Remaining Balance	FY24	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
353 Upgrade Existing CSO Facilities	22,385	22,385	-	completed project							
354 Hydraulic Relief Projects	7,373	2,295	5,078		2,300	2,778			5,078		
355 MWR003 Gate & Siphon	4,424	4,424	-	completed project							
357 Charles River CSO Controls	3,633	3,633	-	completed project							
<b>CSO Community Managed</b>	<b>435,662</b>	<b>424,530</b>	<b>11,131</b>	<b>9,000</b>	<b>2,131</b>				<b>11,131</b>		
340 Dorchester Bay Sewer Separation (Fox Point)	55,029	55,029	-	completed project							
341 Dorchester Bay Sewer Separation (Commercial Point)	61,443	61,443	-	completed project							
342 Neponset River Sewer Separation	2,492	2,492	-	completed project							
343 Constitution Beach Sewer Separation	3,731	3,731	-	completed project							
344 Stony Brook Sewer Separation	44,319	44,319	-	completed project							
346 Cambridge Sewer Separation	104,552	104,552	-	completed project							
351 BWSC Floatables Controls	946	946	-	completed project							
352 Cambridge Floatables Controls	1,127	1,127	-	completed project							
356 Fort Point Channel Sewer Separation	23,389	12,257	11,131	9,000	2,131				11,131		
358 Morrissey Boulevard Drain	32,181	32,181	-	completed project							
359 Reserved Channel Sewer Separation	70,524	70,524	-	completed project							
360 Brookline Sewer Separation	24,715	24,715	-	completed project							
361 Bulfinch Triangle Sewer Separation	9,032	9,032	-	completed project							
362 East Boston CSO Control	2,182	2,182	-	completed project							

**ATTACHMENT A**  
**FY25 Final CIP**  
**Expenditure Forecast at Project Level**  
**(\$000s)**

Project	Total Contract Amount	Payments through FY23	Remaining Balance	FY24	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33	
CSO Planning & Support	64,068	55,570	8,498	651	960	688	596	1,425	4,318	4,180		
324 CSO Support	64,068	55,570	8,498	651	960	688	596	1,425	4,318	4,180		
Other Wastewater	561,616	334,434	227,182	23,316	65,925	51,292	48,630	53,449	242,613	109,406	(124,838)	
128 I/I Local Financial Assistance	561,335	334,153	227,182	23,316	65,925	51,292	48,630	53,449	242,613	109,406	(124,838)	
138 Sewerage System Mapping Upgrades	281	281	-	completed project								
Waterworks	5,575,802	2,425,861	3,149,943	123,805	145,813	161,835	152,401	176,167	760,016	1,841,727	548,201	
Drinking Water Quality Improvements	736,137	660,773	75,363	3,705	4,372	4,084	5,959	4,929	23,047	52,316		
542 Carroll Water Treatment Plant (CWTP)	448,432	429,803	18,629	1,645	2,735	2,500	2,500		9,379	9,250		
543 Quabbin Water Treatment Plant	19,973	19,973	-	completed project								
544 Norumbega Covered Storage	106,674	106,674	-	completed project								
545 Blue Hills Covered Storage	40,083	40,083	-	completed project								
550 Spot Pond Covered Storage Facility	60,126	60,126	-	completed project								
555 Carroll Water Treatment Plant (CWTP) Asset Protection	60,849	4,114	56,734	2,060	1,637	1,584	3,459	4,929	13,668	43,066		
Transmission	3,392,175	930,761	2,461,414	44,705	58,749	56,086	59,164	96,084	314,787	1,463,230	683,399	
597 Winsor Station Pipeline	71,835	7,475	64,360							58,110	6,251	
601 Sluice Gate Rehabilitation	9,158	9,158	-	completed project								
604 MetroWest Tunnel	709,574	697,182	12,392		151	601	2,048	5,725	8,524	3,868		
615 Chicopee Valley Aqueduct Redundancy	8,666	8,666	-	completed project								
616 Quabbin Transmission System	42,487	14,573	27,914	9,344	8,892	5,538	250	2,775	26,799	1,115		

**ATTACHMENT A**  
**FY25 Final CIP**  
**Expenditure Forecast at Project Level**  
**(\$000s)**

Project	Total Contract Amount	Payments through FY23	Remaining Balance	FY24	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
617 Sudbury/Weston Aqueduct Repairs	18,284	4,870	13,414			306	1,530	1,024	2,860	10,554	
620 Wachusett Reservoir Spillway Improvements	9,287	9,287	-	completed project							
621 Watershed Land	34,000	28,879	5,121	805	1,000	1,000	1,000	1,316	5,121		
622 Cosgrove Tunnel Redundancy	58,619	58,619	-	completed project							
623 Dam Projects	12,222	3,731	8,491	673	4,403	2,215	400	800	8,491		
625 Metro Tunnel Redundancy	2,142,343	27,808	2,114,534	12,775	23,000	37,017	39,750	67,868	180,410	1,343,842	590,283
628 Metropolitan Redundancy Interim Improvements	245,418	57,417	188,002	21,001	18,495	5,954	12,426	12,140	70,016	31,121	86,865
630 Watershed Division Capital Improvements	30,282	3,096	27,186	107	2,808	3,455	1,760	4,436	12,566	14,620	
<b>Distribution And Pumping</b>	<b>1,207,526</b>	<b>592,223</b>	<b>615,306</b>	<b>35,380</b>	<b>34,034</b>	<b>58,809</b>	<b>58,862</b>	<b>43,998</b>	<b>231,083</b>	<b>290,721</b>	<b>93,500</b>
618 Peabody Pipeline Project	1,448	1,448	-	completed project							
677 Valve Replacement	12,016	12,016	-	completed project							
678 Boston Low Service - Pipe & Valve Rehabilitation	23,691	23,691	-	completed project							
683 Heath Hill Road Pipe Replacement	19,358	19,358	-	completed project							
689 James L. Gillis Pump Station Rehabilitation	33,419	33,419	-	completed project							
692 Northern High Service (NHS) - Section 27 Improvements	2,136	124	2,013							2,013	
693 NHS - Revere & Malden Pipeline Improvements	128,739	35,569	93,169	1,616	3,525	26,286	36,650	10,150	78,227	14,942	
702 New Connecting Mains - Shaft 7 to WASM 3	106,475	33,044	73,432	22,150	14,763	15,000	3,788	750	56,452	16,980	
704 Rehabilitation of Other Pump Stations	51,572	30,090	21,482			594	793	793	2,180	19,302	

**ATTACHMENT A**  
**FY25 Final CIP**  
**Expenditure Forecast at Project Level**  
**(\$000s)**

Project	Total Contract Amount	Payments through FY23	Remaining Balance	FY24	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
706 NHS - Connecting Mains from Section 91	2,360	2,360	-	completed project							
708 Northern Extra High Service (NEH) - New Pipelines	67,511	17,048	50,464	2,502	3,714	9,926	12,897	9,875	38,914	11,550	
712 Cathodic Protection Of Distribution Mains	7,268	1,160	6,108			3,665	2,443		6,108		
713 Spot Pond Supply Mains Rehabilitation	67,285	65,672	1,613	113	500	200			813	800	
714 Southern Extra High Sections 41 & 42	3,657	3,657	-	completed project							
719 Chestnut Hill Connecting Mains	55,509	18,287	37,222							23,205	14,017
720 Warren Cottage Line Rehabilitation	1,205	1,205	-	completed project							
721 Southern Spine Distribution Mains	111,964	38,661	73,302	55	235	313	313	3,794	4,709	66,754	1,839
722 Northern Intermediate High (NIH) Redundancy & Storage	156,075	93,577	62,498	8,853	11,224	2,739	1,347	16,550	40,712	21,785	
723 Northern Low Service Rehabilitation - Section 8	68,970	5,546	63,425	3	11	11	11	11	48	63,377	
725 Hydraulic Model Update	598	598	-	completed project							
727 Southern Extra High (SEH) Redundancy & Storage	172,202	65,022	107,180	87	61	73	60	1,291	1,572	27,963	77,644
730 Weston Aqueduct Supply Mains (WASM)	80,403	80,403	-	completed project							
731 Lynnfield Pipeline	5,626	5,626	-	completed project							
732 Walnut St. & Fisher Hill Pipeline Rehabilitation	2,717	2,717	-	completed project							
735 Section 80 Rehabilitation	25,322	1,925	23,398	1	1	2	560	784	1,348	22,050	
<b>Other Waterworks</b>	<b>239,964</b>	<b>242,104</b>	<b>(2,140)</b>	<b>40,015</b>	<b>48,658</b>	<b>42,856</b>	<b>28,416</b>	<b>31,156</b>	<b>191,099</b>	<b>35,460</b>	<b>(228,698)</b>
753 Central Monitoring System	45,061	33,104	11,956	5,363	2,514	1,248	844	423	10,392	1,564	
763 Distribution Systems Facilities Mapping	3,087	1,575	1,513	91	128	32	346	345	941	572	

**ATTACHMENT A**  
**FY25 Final CIP**  
**Expenditure Forecast at Project Level**  
**(\$000s)**

Project	Total Contract Amount	Payments through FY23	Remaining Balance	FY24	FY25	FY26	FY27	FY28	FY24-FY28	FY29-FY33	Beyond FY33
764 Local Water Infrastructure Rehabilitation	7,488	7,488	-	completed project							
765 Local Water System Assistance Program	38,459	184,472	(146,013)	33,382	29,569	31,522	20,022	16,400	130,894	(12,979)	(263,928)
766 Waterworks Facility Asset Protection	145,869	15,465	130,404	1,179	16,447	10,054	7,204	13,988	48,872	46,303	35,230
<b>Business &amp; Operations Support</b>	<b>216,958</b>	<b>140,723</b>	<b>76,234</b>	<b>13,454</b>	<b>25,341</b>	<b>16,808</b>	<b>11,080</b>	<b>7,471</b>	<b>74,151</b>	<b>1,952</b>	<b>130</b>
881 Equipment Purchase	43,107	26,965	16,141	3,016	4,134	3,051	2,783	2,638	15,621	390	130
925 Technical Assistance	1,055	-	1,055	24	528	252	252		1,055		
930 MWRA Facility - Chelsea	9,812	9,812	-	completed project							
931 Business Systems Plan	24,562	24,562	-	completed project							
932 Environmental Remediation	1,479	1,479	-	completed project							
933 Capital Maintenance Planning/Development	39,362	22,078	17,284	4,111	4,111	2,500	2,500	2,500	15,721	1,562	
934 MWRA Facilities Management & Planning	22,213	18,690	3,523	823		873	1,195	633	3,523		
935 Alternative Energy Initiatives	28,184	18,184	10,000		3,000	6,000	1,000		10,000		
940 Applications Improvements Program	24,027	6,295	17,732	3,395	5,275	4,012	3,350	1,700	17,732		
942 Information Security Program (ISP)	4,493	3,112	1,381	349	1,032				1,381		
944 Information Technology Management Program	2	2	-	completed project							
946 IT Infrastructure Program	18,662	9,544	9,118	1,736	7,261	120			9,118		

**ATTACHMENT B**  
**Overview of the FY25 Final CIP and Changes from the FY24 Final CIP**

Program and Project	FY24 Final			
	Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>Total MWRA</b>	<b>10,106,708</b>	<b>1,824,753</b>	<b>2,198,351</b>	<b>1,037,902</b>
<b>Wastewater</b>	<b>4,821,408</b>	<b>1,094,737</b>	<b>1,212,629</b>	<b>51,671</b>
<b>Interception &amp; Pumping</b>	<b>1,622,777</b>	<b>299,537</b>	<b>507,613</b>	<b>46,639</b>
102 Quincy Pump Facilities	25,907	-	-	-
104 Braintree-Weymouth Relief Facilities	248,035	11,580	3,448	-
105 New Neponset Valley Relief Sewer	30,300	-	-	-
106 Wellesley Extension Replacement Sewer	64,359	-	-	-
107 Framingham Extension Relief Sewer	47,856	-	-	-
127 Cummingsville Replacement Sewer	8,999	-	-	-
130 Siphon Structure Rehabilitation	24,362	13,251	7,669	-
131 Upper Neponset Valley Sewer	54,174	-	-	-
132 Corrosion & Odor Control	103,497	2,969	26,768	3,145
136 West Roxbury Tunnel	10,964	650	-	-
137 Wastewater Central Monitoring	27,482	3,322	4,234	-
139 South System Relief Project	4,939	-	1,500	-
141 Wastewater Process Optimization	8,310	-	6,111	-
142 Wastewater Meter System-Equipment	21,030	-	-	8,674
143 Regional I/I Management Planning	169	-	-	-
145 Facility Asset Protection	936,696	262,765	457,185	34,820
146 D.I. Cross Harbor Tunnel Inspection	5,000	5,000	-	-
147 Randolph Trunk Sewer Relief	698	-	698	-
<b>Treatment</b>	<b>1,626,193</b>	<b>595,762</b>	<b>619,033</b>	<b>53,164</b>
182 DI Primary and Secondary	(958)	-	-	-
200 DI Plant Optimization	33,279	-	-	-
206 DI Treatment Plant Asset Protection	1,556,032	581,371	616,539	53,165
210 Clinton Wastewater Treat Plant	35,628	14,391	2,494	-
211 Laboratory Services	2,212	-	-	-
<b>Residuals</b>	<b>171,326</b>	<b>8,586</b>	<b>57,567</b>	<b>24,476</b>
261 Residuals	63,811	-	-	-
271 Residuals Asset Protection	107,515	8,586	57,567	24,476

Program and Project	FY25 Final			
	Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>Total MWRA</b>	<b>10,801,817</b>	<b>1,977,460</b>	<b>3,264,169</b>	<b>535,166</b>
<b>Wastewater</b>	<b>5,009,056</b>	<b>1,143,293</b>	<b>1,420,487</b>	<b>(13,169)</b>
<b>Interception &amp; Pumping</b>	<b>1,649,003</b>	<b>282,853</b>	<b>568,264</b>	<b>34,029</b>
102 Quincy Pump Facilities	25,907	-	-	-
104 Braintree-Weymouth Relief Facilities	249,042	13,081	3,551	-
105 New Neponset Valley Relief Sewer	30,300	-	-	-
106 Wellesley Extension Replacement Sewer	64,359	-	-	-
107 Framingham Extension Relief Sewer	47,856	-	-	-
127 Cummingsville Replacement Sewer	8,999	-	-	-
130 Siphon Structure Rehabilitation	24,362	13,590	7,669	-
131 Upper Neponset Valley Sewer	54,174	-	-	-
132 Corrosion & Odor Control	104,633	5,168	26,008	4,015
136 West Roxbury Tunnel	11,514	1,200	-	-
137 Wastewater Central Monitoring	27,482	1,955	5,601	-
139 South System Relief Project	4,939	-	1,500	-
141 Wastewater Process Optimization	8,310	-	6,111	-
142 Wastewater Meter System-Equipment	21,057	1,736	945	6,426
143 Regional I/I Management Planning	169	-	-	-
145 Facility Asset Protection	960,202	246,123	516,181	18,588
146 D.I. Cross Harbor Tunnel Inspection	5,000	-	-	5,000
147 Randolph Trunk Sewer Relief	698	-	698	-
<b>Treatment</b>	<b>1,686,865</b>	<b>575,836</b>	<b>693,377</b>	<b>53,164</b>
182 DI Primary and Secondary	(958)	-	-	-
200 DI Plant Optimization	33,279	-	-	-
206 DI Treatment Plant Asset Protection	1,613,142	558,449	689,934	53,165
210 Clinton Wastewater Treat Plant	39,190	17,387	3,443	-
211 Laboratory Services	2,212	-	-	-
<b>Residuals</b>	<b>171,326</b>	<b>20,892</b>	<b>45,261</b>	<b>24,476</b>
261 Residuals	63,811	-	-	-
271 Residuals Asset Protection	107,515	20,892	45,261	24,476

Program and Project	Change from Final FY24			
	Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>Total MWRA</b>	<b>695,107</b>	<b>152,706</b>	<b>1,065,819</b>	<b>(502,739)</b>
<b>Wastewater</b>	<b>187,648</b>	<b>48,556</b>	<b>207,858</b>	<b>(64,840)</b>
<b>Interception &amp; Pumping</b>	<b>26,226</b>	<b>(16,684)</b>	<b>60,651</b>	<b>(12,610)</b>
102 Quincy Pump Facilities	-	-	-	-
104 Braintree-Weymouth Relief Facilities	1,007	1,501	103	-
105 New Neponset Valley Relief Sewer	-	-	-	-
106 Wellesley Extension Replacement Sewer	-	-	-	-
107 Framingham Extension Relief Sewer	-	-	-	-
127 Cummingsville Replacement Sewer	-	-	-	-
130 Siphon Structure Rehabilitation	-	339	-	-
131 Upper Neponset Valley Sewer	-	-	-	-
132 Corrosion & Odor Control	1,136	2,199	(760)	870
136 West Roxbury Tunnel	550	550	-	-
137 Wastewater Central Monitoring	-	(1,367)	1,367	-
139 South System Relief Project	-	-	-	-
141 Wastewater Process Optimization	-	-	-	-
142 Wastewater Meter System-Equipment	27	1,736	945	(2,248)
143 Regional I/I Management Planning	-	-	-	-
145 Facility Asset Protection	23,506	(16,642)	58,996	(16,232)
146 D.I. Cross Harbor Tunnel Inspection	-	(5,000)	-	5,000
147 Randolph Trunk Sewer Relief	-	-	-	-
<b>Treatment</b>	<b>60,672</b>	<b>(19,926)</b>	<b>74,344</b>	<b>-</b>
182 DI Primary and Secondary	-	-	-	-
200 DI Plant Optimization	-	-	-	-
206 DI Treatment Plant Asset Protection	57,110	(22,922)	73,395	-
210 Clinton Wastewater Treat Plant	3,562	2,996	949	-
211 Laboratory Services	-	-	-	-
<b>Residuals</b>	<b>-</b>	<b>12,306</b>	<b>(12,306)</b>	<b>-</b>
261 Residuals	-	-	-	-
271 Residuals Asset Protection	-	12,306	(12,306)	-



**ATTACHMENT B**  
**Overview of the FY25 Final CIP and Changes from the FY24 Final CIP**

Program and Project	FY24 Final			
	Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>CSO</b>	<b>933,246</b>	<b>16,352</b>	<b>2,166</b>	<b>-</b>
324 CSO Support	61,769	3,815	2,167	-
339 North Dorchester Bay	221,510	-	-	-
340 Dorchester Bay Sewer Separation (Fox Point)	55,029	-	-	-
341 Dorchester Bay Sewer Separation (Commercial Point)	61,443	-	-	-
342 Neponset River Sewer Separation	2,492	-	-	-
343 Constitution Beach Sewer Separation	3,731	-	-	-
344 Stony Brook Sewer Separation	44,319	-	-	-
346 Cambridge Sewer Separation	104,552	-	-	-
347 East Boston Branch Sewer Relief	85,637	-	-	-
348 BOS019 Storage Conduit	14,288	-	-	-
349 Chelsea Trunk Sewer	31,779	1,000	-	-
350 Union Park Detention Treatment Facility	49,583	-	-	-
351 BWSC Floatables Controls	946	-	-	-
352 Cambridge Floatables Control	1,127	-	-	-
353 Upgrade Existing CSO Facilities	22,385	-	-	-
354 Hydraulic Relief Projects	4,458	2,163	-	-
355 MWR003 Gate & Siphon	4,424	-	-	-
356 Fort Point Channel Sewer Separation	21,507	9,375	-	-
357 Charles River CSO Controls	3,633	-	-	-
358 Morrissey Boulevard Drain	32,181	-	-	-
359 Reserved Channel Sewer Separation	70,524	-	-	-
360 Brookline Sewer Separation	24,715	-	-	-
361 Bulfinch Triangle Sewer Separation	9,032	-	-	-
362 East Boston CSO Control	2,182	-	-	-
<b>Other Wastewater</b>	<b>467,866</b>	<b>174,500</b>	<b>26,250</b>	<b>(72,608)</b>
128 I/I Local Financial Assistance	467,585	174,500	26,250	(72,608)
138 Sewerage System Mapping Upgrade	281	-	-	-
<b>Total Waterworks</b>	<b>5,072,430</b>	<b>663,864</b>	<b>984,159</b>	<b>986,234</b>
<b>Drinking Water Quality</b>	<b>730,720</b>	<b>26,574</b>	<b>41,616</b>	<b>-</b>
542 Carroll Water Treatment Plant	444,062	4,057	9,250	-
543 Quabbin Water Treatment Plant	19,973	-	-	-
544 Norumbega Covered Storage	106,674	-	-	-
545 Blue Hills Covered Storage	40,083	-	-	-
550 Spot Pond Storage Facility	60,126	-	-	-
555 CWTP Asset Protection	59,802	22,517	32,366	-

FY25 Final			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>940,246</b>	<b>21,099</b>	<b>4,179</b>	<b>-</b>
64,068	4,318	4,180	-
221,510	-	-	-
55,029	-	-	-
61,443	-	-	-
2,492	-	-	-
3,731	-	-	-
44,319	-	-	-
104,552	-	-	-
85,637	-	-	-
14,288	-	-	-
31,683	573	-	-
49,583	-	-	-
946	-	-	-
1,127	-	-	-
22,385	-	-	-
7,373	5,078	-	-
4,424	-	-	-
23,389	11,131	-	-
3,633	-	-	-
32,181	-	-	-
70,524	-	-	-
24,715	-	-	-
9,032	-	-	-
2,182	-	-	-
<b>561,616</b>	<b>242,613</b>	<b>109,406</b>	<b>(124,838)</b>
561,335	242,613	109,406	(124,838)
281	-	-	-
<b>5,575,803</b>	<b>760,016</b>	<b>1,841,730</b>	<b>548,205</b>
<b>736,137</b>	<b>23,047</b>	<b>52,316</b>	<b>-</b>
448,432	9,379	9,250	-
19,973	-	-	-
106,674	-	-	-
40,083	-	-	-
60,126	-	-	-
60,849	13,668	43,066	-

Change from Final FY24			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>7,000</b>	<b>4,747</b>	<b>2,013</b>	<b>-</b>
2,299	503	2,013	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
(96)	(427)	-	-
-	-	-	-
-	-	-	-
-	-	-	-
2,915	2,915	-	-
-	-	-	-
-	-	-	-
1,882	1,756	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
<b>93,750</b>	<b>68,113</b>	<b>83,156</b>	<b>(52,230)</b>
93,750	68,113	83,156	(52,230)
-	-	-	-
<b>503,373</b>	<b>96,152</b>	<b>857,571</b>	<b>(438,029)</b>
<b>5,417</b>	<b>(3,527)</b>	<b>10,700</b>	<b>-</b>
4,370	5,322	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
1,047	(8,849)	10,700	-

**ATTACHMENT B**  
**Overview of the FY25 Final CIP and Changes from the FY24 Final CIP**

Program and Project	FY24 Final			
	Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>Transmission</b>	<b>2,976,392</b>	<b>293,910</b>	<b>783,153</b>	<b>961,781</b>
597 Winsor Station Pipeline	70,000	-	57,248	5,403
601 Sluice Gate Rehabilitation	9,158	-	-	-
604 MetroWest Tunnel	700,184	3,002	-	-
615 Chicopee Valley Aqueduct Redundancy	8,666	-	-	-
616 Quabbin Transmission System	40,506	22,063	515	-
617 Sudbury/Weston Aqueduct Repairs	12,913	6,912	1,131	-
620 Wachusett Reservoir Spillway Improvement	9,287	-	-	-
621 Watershed Land	34,000	5,523	-	-
622 Cosgrove/Wachusett Redundancy	58,619	-	-	-
623 Dam Projects	10,523	6,813	-	-
625 Metro Tunnel Redundancy	1,794,583	166,208	643,921	955,630
628 Metro Redundancy Interim Improvement	204,369	67,943	75,626	746
630 Watershed Division Capital Improvement	23,582	15,444	4,710	-
<b>Distribution &amp; Pumping</b>	<b>1,178,967</b>	<b>248,143</b>	<b>251,656</b>	<b>87,505</b>
618 Peabody Pipeline	1,448	-	-	-
677 Valve Replacement	12,016	-	-	-
678 Boston Low Service-Pipe & Valve Rehabilitation	23,691	-	-	-
683 Heath Hill Road Pipe Replacement	19,358	-	-	-
689 James L. Gillis Pump Station Rehabilitation	33,419	-	-	-
692 NHS - Section 27 Improvements	2,141	-	2,013	-
693 NHS - Revere & Malden Pipeline Improvement	122,270	72,135	14,441	-
702 New Connect Mains-Shaft 7 to WASM 3	99,669	66,163	-	-
704 Rehabilitation of Other Pump Stations	51,572	2,180	19,302	-
706 NHS-Connecting Mains from Section 91	2,360	-	-	-
708 Northern Extra High Service New Pipelines	59,771	35,098	8,063	-
712 Cathodic Protection Of Distribution Mains	7,268	6,108	-	-
713 Spot Pond Supply Mains Rehabilitation	67,282	187	800	-
714 Southern Extra High Sections 41 & 42	3,657	-	-	-
719 Chestnut Hill Connecting Mains	54,433	-	23,205	12,941
720 Warren Cottage Line Rehabilitation	1,205	-	-	-
721 South Spine Distribution Mains	113,605	2,356	71,889	681
722 NIH Redundancy & Storage	151,514	59,371	-	-
723 Northern Low Service Rehabilitation Section 8	68,982	69	63,351	-
724 Northern High Service - Pipeline Rehabilitation	-	-	-	-
725 Hydraulic Model Update	598	-	-	-
727 Southern Extra High Redundancy & Storage	169,288	3,130	27,189	73,883
730 Weston Aqueduct Supply Mains	80,403	-	-	-
731 Lynnfield Pipeline	5,626	-	-	-
732 Walnut St. & Fisher Hill Pipeline Rehabilitation	2,717	-	-	-
733 NHS Pipeline Rehabilitation 13-18 & 48	-	-	-	-
734 Southern Extra High Pipelines-Sections 30, 39,40, & 44	-	-	-	-
735 Section 80 Rehabilitation	24,675	1,347	21,402	-

FY25 Final			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>3,392,177</b>	<b>314,789</b>	<b>1,463,232</b>	<b>683,401</b>
71,835	-	58,110	6,251
9,158	-	-	-
709,574	8,524	3,868	-
8,666	-	-	-
42,487	26,799	1,115	-
18,284	2,860	10,554	-
9,287	-	-	-
34,000	5,121	-	-
58,619	-	-	-
12,222	8,491	-	-
2,142,343	180,410	1,343,842	590,283
245,418	70,016	31,121	86,865
30,282	12,566	14,620	-
<b>1,207,525</b>	<b>231,082</b>	<b>290,722</b>	<b>93,500</b>
1,448	-	-	-
12,016	-	-	-
23,691	-	-	-
19,358	-	-	-
33,419	-	-	-
2,136	-	2,013	-
128,739	78,227	14,942	-
106,475	56,452	16,980	-
51,572	2,180	19,302	-
2,360	-	-	-
67,511	38,914	11,550	-
7,268	6,108	-	-
67,285	813	800	-
3,657	-	-	-
55,509	-	23,205	14,017
1,205	-	-	-
111,964	4,709	66,754	1,839
156,075	40,712	21,785	-
68,970	48	63,377	-
-	-	-	-
598	-	-	-
172,202	1,572	27,963	77,644
80,403	-	-	-
5,626	-	-	-
2,717	-	-	-
-	-	-	-
-	-	-	-
25,322	1,348	22,050	-

Change from Final FY24			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>415,785</b>	<b>20,879</b>	<b>680,079</b>	<b>(278,380)</b>
1,835	-	862	848
-	-	-	-
9,390	5,522	3,868	-
-	-	-	-
1,981	4,736	600	-
5,371	(4,052)	9,423	-
-	-	-	-
-	(402)	-	-
-	-	-	-
1,699	1,678	-	-
347,760	14,202	699,921	(365,347)
41,049	2,073	(44,505)	86,119
6,700	(2,878)	9,910	-
<b>28,558</b>	<b>(17,061)</b>	<b>39,066</b>	<b>5,995</b>
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
(5)	-	-	-
6,469	6,092	501	-
6,806	(9,711)	16,980	-
-	-	-	-
-	-	-	-
7,740	3,816	3,487	-
-	-	-	-
3	626	-	-
-	-	-	-
1,076	-	-	1,076
-	-	-	-
(1,641)	2,353	(5,135)	1,158
4,561	(18,659)	21,785	-
(12)	(21)	26	-
-	-	-	-
-	-	-	-
2,914	(1,558)	774	3,761
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
647	1	648	-

**ATTACHMENT B**  
**Overview of the FY25 Final CIP and Changes from the FY24 Final CIP**

Program and Project	FY24 Final			
	Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>Other</b>	<b>186,351</b>	<b>95,237</b>	<b>(92,266)</b>	<b>(63,054)</b>
753 Central Monitoring System	43,500	11,043	-	-
763 Distribution Systems Facilities Mapping	3,087	1,461	-	-
764 Local Water Infrastructure Rehabilitation Assistance Program	7,488	-	-	-
765 Local Water Pipeline Improvement Loan Program	-	24,000	(115,300)	(97,285)
766 Waterworks Facility Asset Protection	132,276	58,734	23,034	34,231
<b>Business &amp; Operations Support</b>	<b>212,870</b>	<b>66,152</b>	<b>1,563</b>	<b>-</b>
881 Equipment Purchase	42,623	15,648	-	-
925 Technical Assistance	1,300	940	-	-
930 MWRA Facility - Chelsea	9,812	-	-	-
931 Business Systems Plan	24,562	-	-	-
932 Environmental Remediation	1,479	-	-	-
933 Capital Maintenance Planning	39,160	14,479	1,562	-
934 MWRA Facilities Management	22,700	2,700	-	-
935 Alternative Energy Initiatives	28,184	10,000	-	-
940 Applicat Improv Program	21,375	13,387	-	-
942 Info Security Program ISP	3,709	592	-	-
944 Info Tech Mgmt Program	2	-	-	-
946 IT Infrastructure Program	17,966	8,407	-	-

FY25 Final			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>239,964</b>	<b>191,098</b>	<b>35,460</b>	<b>(228,698)</b>
45,061	10,392	1,564	-
3,087	941	572	-
7,488	-	-	-
38,459	130,894	(12,979)	(263,928)
145,869	48,872	46,303	35,230
<b>216,958</b>	<b>74,151</b>	<b>1,952</b>	<b>130</b>
43,107	15,621	390	130
1,055	1,055	-	-
9,812	-	-	-
24,562	-	-	-
1,479	-	-	-
39,362	15,721	1,562	-
22,213	3,523	-	-
28,184	10,000	-	-
24,027	17,732	-	-
4,493	1,381	-	-
2	-	-	-
18,662	9,118	-	-

Change from Final FY24			
Total Budget Amount	FY24-28	FY29-33	Beyond 33
<b>53,613</b>	<b>95,861</b>	<b>127,726</b>	<b>(165,644)</b>
1,561	(651)	1,564	-
-	(520)	572	-
-	-	-	-
38,459	106,894	102,321	(166,643)
13,593	(9,862)	23,269	999
<b>4,086</b>	<b>7,998</b>	<b>390</b>	<b>130</b>
484	(27)	390	130
(245)	115	-	-
-	-	-	-
-	-	-	-
-	-	-	-
202	1,242	-	-
(487)	823	-	-
-	-	-	-
2,652	4,345	-	-
784	789	-	-
-	-	-	-
696	711	-	-

**Attachment C  
New Capital Projects Added to the FY25 CIP**

Program	Project	Subphase	Total Contract Amount	NTP	SC	FY25	FY26	FY27	FY28	FY24-28	Beyond FY28	Total Expenditures
Interception & Pumping	145 Facility Asset Protection	High Level Sewer Culverts	\$ 5,000,000	Apr-26	Oct-27	\$ -	\$ -	\$ 3,157,000	\$ 1,843,000	\$ 5,000,000	\$ -	\$ 5,000,000
Transmission	604 MetroWest Tunnel	Shaft L Interconnect Des/ESDC	\$ 1,140,000	Jan-25	Jan-29	\$ 150,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 990,000	\$ 150,000	\$ 1,140,000
Transmission	604 MetroWest Tunnel	Shaft L Interconn-Construction	\$ 5,700,000	Jan-27	Jan-29	\$ -	\$ -	\$ 1,425,000	\$ 2,850,000	\$ 4,275,000	\$ 1,425,000	\$ 5,700,000
Transmission	604 MetroWest Tunnel	Shaft L Interconnection-REI	\$ 750,000	Jan-27	Jan-29	\$ -	\$ -	\$ 187,500	\$ 375,000	\$ 562,500	\$ 187,500	\$ 750,000
Transmission	630 Watershed Div Cap Impr	New Salem Building Design	\$ 2,100,000	Jan-25	Jul-30	\$ 100,000	\$ 410,000	\$ 410,000	\$ 410,000	\$ 1,330,000	\$ 770,000	\$ 2,100,000
Transmission	630 Watershed Div Cap Impr	New Salem Building Constr	\$ 4,000,000	Jul-27	Jul-29	\$ -	\$ -	\$ -	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 4,000,000
<b>SUMMARY:</b>												
<b>Total Wastewater Projects</b>			\$ 5,000,000			\$ -	\$ -	\$ 3,157,000	\$ 1,843,000	\$ 5,000,000	\$ -	\$ 5,000,000
<b>Total Water Projects</b>			\$ 13,690,000			\$ 250,000	\$ 690,000	\$ 2,302,500	\$ 5,915,000	\$ 9,157,500	\$ 4,532,500	\$ 13,690,000
<b>Total Projects</b>			\$ 18,690,000			\$ 250,000	\$ 690,000	\$ 5,459,500	\$ 7,758,000	\$ 14,157,500	\$ 4,532,500	\$ 18,690,000

**STAFF SUMMARY**




**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Approval of the Final FY25 Current Expense Budget

COMMITTEE Administration, Finance & Audit

     INFORMATION  
  X   VOTE

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

  
Thomas J. Durkin  
Director, Finance

*The Proposed FY25 Current Expense Budget (CEB) submitted to the Advisory Board at the February 2024 Board meeting included a 3.0% combined assessment increase.*

*MWRA received the Advisory Board comments and recommendations in May 2024, which recommended a combined assessment increase of 2.53% representing a \$4.1 million decrease to the Proposed FY25 Rate Revenue Requirement. The Authority has updated the Proposed Budget with the latest information, incorporated many of the Advisory Board recommendations and was able to achieve a 2.54% combined assessment increase.*

*As every year, the main focus is on next year’s budget, but always with the goal of continuing to utilize MWRA’s multi-year rate management strategy to provide sustainable, and predictable assessment increases to its member communities. To achieve this goal again this year, MWRA has continued to employ conservative budgeting and fiscal discipline which includes controlled spending and use of historical variable interest rate assumptions. The combination of these measures resulted in assessment increase projections below 3.5% for the next several years.*

*The FY25 Final Budget reflects the benefits of a planned \$25.5 million defeasance to be executed in FY24 with targeted savings during FY25-30. Besides the planned defeasances, the Authority is continuing to address the Pension and the Other Post Employment Benefits (OPEB) obligations, which are the largest long-term liabilities after the debt payments.*

**RECOMMENDATION:**

1. To adopt the Final FY25 Current Expense Budget (CEB) set forth in Attachment A with current revenue and expense of \$900,622,003.
2. To adopt the Final FY25 Operating Budget (Trustee’s Budget) set forth in Attachment B.

## **DISCUSSION:**

This staff summary presents the Final FY25 CEB. Discussions and materials are provided herein outlining changes to the budget since the transmittal of the FY25 Proposed CEB in February 2024. In working with the MWRA Advisory Board, staff revisited all major line items of the budget and evaluated options to increase the Rate Revenue Requirement to 2.54%.

For a line item comparison between the Proposed FY25 CEB and the Final FY25 CEB, please refer to Attachment A.

### **Summary**

The Final FY25 Budget recommends a combined increase in rates and charges of 2.54%. Total expenses are \$900.6 million, an increase of \$26.5 million or 3.0% over the FY24 Budget. Capital Financing costs remain the largest component of the CEB and account for 56.0% of total expenses. There are no offsets from Debt Service Assistance (DSA) assumed for FY25 or in any future years.

Total expenses include \$504.2 million for Capital Financing costs and \$396.5 million for operating expenses, of which \$321.0 million is for Direct Expenses and \$75.4 million is for Indirect Expenses. The \$26.5 million increase in total expenses is due to higher Direct Expenses of \$5.0 million, Indirect Expenses of \$5.1 million, and higher Capital Financing costs of \$16.4 million.

The FY25 Final Budget revenues, excluding rate revenue, total \$45.1 million, an increase of \$5.3 million or 13.2% over the FY24 Budget. The FY25 Final Budget non-rate revenue estimates include \$16.7 million in Other User Charges and Other Revenue, \$28.4 million for Investment Income.

The FY25 Final Rate Revenue Requirement is \$855.5 million, an increase of \$21.2 million or 2.54% over the FY24 Budget.

*Table 1 on the following page provides a comparison of the Final FY25 CEB to the Approved FY24 CEB by major categories. Additional detail by line item is provided in Attachment A.*

<b>Table 1</b>				
<b>MWRA Current Expense Budget</b>				
<b>FY25 Final Budget versus FY24 Approved Budget</b>				
(\$ in Millions)	FY24 Approved Budget	FY25 Final Budget	\$ Change	% Change
Directs	\$ 316.0	\$ 321.0	\$ 5.0	1.6%
Indirects	70.4	75.4	5.1	7.2%
<b>Sub-Total Operating Expenses</b>	<b>\$ 386.4</b>	<b>\$ 396.5</b>	<b>\$ 10.1</b>	<b>2.6%</b>
Capital Financing (before Offsets)	488.9	504.2	15.2	3.1%
<i>Offsets:</i> Bond Redemption <sup>1</sup>	-	-	-	-
Variable Debt Savings	-	-	-	-
Debt Service Assistance	(1.2)	-	1.2	-100.0%
<b>Sub-Total Capital Financing</b>	<b>\$ 487.8</b>	<b>\$ 504.2</b>	<b>\$ 16.4</b>	<b>3.4%</b>
<b>Total Expenses</b>	<b>\$ 874.1</b>	<b>\$ 900.6</b>	<b>\$ 26.5</b>	<b>3.0%</b>
Investment Income	\$ 23.3	\$ 28.4	\$ 5.1	21.6%
Non-Rate Revenue	16.2	16.7	0.5	3.1%
Rate Stabilization <sup>1</sup>	0.3	-	(0.3)	-100.0%
<b>Sub-Total Non-Rate Revenue</b>	<b>\$ 39.9</b>	<b>\$ 45.1</b>	<b>\$ 5.3</b>	<b>13.2%</b>
Rate Revenue	834.3	855.5	21.2	2.54%
<b>Total Revenue &amp; Income</b>	<b>\$ 874.1</b>	<b>\$ 900.6</b>	<b>\$ 26.5</b>	<b>3.0%</b>
<b>FY25 Rate Revenue Increase</b>		2.54%		
<b>Combined Use of Reserves</b>		\$ -		

<sup>1</sup> MWRA has two reserve funds (Bond Redemption and Rate Stabilization) which can be used at the discretion of the Authority to manage the rate revenue requirement. Use of the Bond Redemption reduces total expenses and Rate Stabilization increases total revenue. Under the terms of the General Bond Resolution the annual use of Rate Stabilization funds cannot exceed 10% of the year's senior debt service. Bond Redemption funds can be used only to retire or prepay outstanding debt. There is no annual limit on the amount of Bond Redemption funds used in a year, however the use is tied to the bonds' maturity dates and it is utility specific.

**EXPENSES:**

Direct Expenses

FY25 Direct Expenses total \$321.0 million, an increase of \$5.0 million, or 1.6%, over the FY24 Budget.

<b>FY25 FINAL CURRENT EXPENSE BUDGET</b>				
<b>MWRA DIRECT EXPENSES BY LINE ITEM</b>				
Line Item	FY24 Approved Budget	FY25 Final Budget	Change FY25 vs FY24	
WAGES AND SALARIES	\$127,828,242	\$133,658,956	\$5,830,714	4.6%
OVERTIME	\$5,727,593	\$6,133,077	\$405,484	7.1%
FRINGE BENEFITS	\$25,823,383	\$27,834,124	\$2,010,741	7.8%
WORKERS' COMPENSATION	\$2,144,395	\$2,073,434	(\$70,961)	-3.3%
CHEMICALS	\$28,269,124	\$19,706,033	(\$8,563,091)	-30.3%
ENERGY AND UTILITIES	\$31,064,893	\$32,048,177	\$983,284	3.2%
MAINTENANCE	\$38,574,255	\$46,653,200	\$8,078,945	20.9%
TRAINING AND MEETINGS	\$498,597	\$568,346	\$69,749	14.0%
PROFESSIONAL SERVICES	\$10,410,484	\$11,121,730	\$711,246	6.8%
OTHER MATERIALS	\$7,167,398	\$7,270,879	\$103,481	1.4%
OTHER SERVICES	\$38,494,660	\$33,945,804	(\$4,548,856)	-11.8%
<b>TOTAL</b>	<b>\$316,003,024</b>	<b>\$321,013,760</b>	<b>\$5,010,736</b>	<b>1.6%</b>

Direct Expenses

- *Wages and Salaries* – The budget includes \$133.7 million for Wages and Salaries as compared to \$127.8 million in the FY24 Budget, an increase of \$5.8 million or 4.6%. Regular Pay makes up \$131.1 million or 98.1% of the total Wages and Salaries. The FY25 Budget includes 1,168.0 FTE’s which is the same as the FY24 Budget. As always, new hires and backfilling of vacant positions will be managed at the agency level and addressed on a case-by-case basis by senior management. A vacancy adjustment (reduction) of \$5.6 million is factored in to the FY25 Budget.
- *Overtime* – The budget includes \$6.1 million for Overtime, an increase of \$405,000 or 7.1% over the FY24 Budget. Overtime was increased to reflect wage increases and recent trends in planned overtime for off-hours maintenance, emergency, coverage, and planned projects that include construction.
- *Fringe Benefits* – The budget includes \$27.8 million for Fringe Benefits, an increase of \$2.0 million or 7.8% over the FY24 Budget. Health Insurance premiums total \$24.1 million, an increase of \$2.0 million or 8.8% over the FY24 Budget largely due to anticipated increases in the health plans rates.



- *Workers' Compensation* – The budget includes \$2.1 million for Workers' Compensation. This is \$71,000 or 3.3% less than the prior year's level and is based on a three-year historical average spending for Worker's Compensation.
- *Chemicals* – The budget includes \$19.7 million for Chemicals, a decrease of \$8.6 or 30.3% less than the FY24 Budget. Lower prices drove the budget decrease. Several chemicals decreased including Sodium Hypochlorite by \$5.4 million or 44.5%, Ferric Chloride by \$1.9 million or 32.7%, Aqua Ammonia by \$390,000 or 55.4%, Carbon Dioxide by \$359,000 or 30.8%, and Polymer by \$340,000 or 37.7% primarily due to lower pricing. The FY25 Budget includes \$726,000 for the anticipated Deer Island National Pollutant Discharge Elimination System (NPDES) permit, which is projected to have more stringent requirements for enterococcus treatment compliance, resulting in an increase from \$489,000.
- *Utilities* – The budget includes \$32.0 million for Utilities, which is an increase of \$983,000 or 3.2% over the FY24 Budget. The budget funds \$24.8 million for Electricity, an increase of \$1.4 million or 6.0% over the FY24 budget primarily due to higher pricing. The Diesel Fuel budget of \$3.4 million is \$414,000 or 10.8% lower than the FY24 Budget primarily due to decreases in price at DITP and Field Operations Department (FOD) facilities and volume at DITP. The Natural Gas budget of \$844,000 is \$271,000 or \$24.3% less than the FY24 Budget primarily due to lower pricing in Wastewater Operations and at Western Facilities.
- *Maintenance* – The budget includes \$46.7 million for Maintenance projects, an increase of \$8.1 million or 20.9% over the FY24 budget. The increase is driven by Plant and Machinery Services of \$5.9 million for updated cost to boiler, STG, Hydroplant and Wind service contract including replacing the wicket gates on the hydro units, CTG Control System Upgrade, Duct Cleaning for pump stations, solar repair at John Carroll Water Treatment Plant, installation of diesel exhaust silencers at Cottage Farm Facility, Nut Island Treatment Plant fire pump and controller replacement, increase for reactor mixer gearbox rebuilds, partially offset by changes to ongoing spare motor for Alewife Brook Pump Station which is an FY24 purchase; Special Equipment Services of \$1.4 million for PICS Human Machine Interface (HMI) System Upgrade, Waterfall Data Diodes (for EDS & PI), Emerson Enterprise Data Solutions (EDS) Upgrades; Plant and Machinery Materials of \$734,000 for submersible wastewater pumps at headworks, Residual Odor Control (ROC) fan replacement, primary and secondary flights, and transfer switch at Prison Point Facility, partially offset by purchases completed or expected to be completed in FY24 including reactor gearbox, polymer pumps, and latheHVAC Materials of \$602,000 for replacement of Roof Top Units (RTU's); Electrical Materials of \$194,000 for North Main Pump Station inverter, inspect and rebuild Norwalk valves, and VFD's at Caruso Pump Station, partially offset by emergency lights at DITP purchased and expected to be completed in FY24; Electrical Services of \$163,000 due to the planned installation of a heat pump at Squantum Pump Station. These increases are partially offset by lower Special Equipment Materials of \$878,000 for materials that were purchased or expected to be completed in FY24 including hatch covers at the Fells and flow meter at Nut Island Headworks; and

Computer/Software Licenses/Upgrades of \$484,000 due to the removal of Financial Management System Upgrade related costs from the CEB since they are included in the current CIP contract (awarded in June 2023), partially offset by updated costs including Oracle Database Management System (DBMS) maintenance, Okta, and MAXIMO maintenance amongst others.

- *Training and Meetings* – The budget includes \$568,000 for Training and Meetings, an increase of \$70,000 or 14.0% over the FY24 Budget.
- *Professional Services* – The budget includes \$11.1 million for Professional Services, an increase of \$711,000 or 6.8% over the FY24 Budget. The increase is driven by Engineering Services of \$294,000 for expected costs associated with Local Limits analysis for Boston Harbor NPDES Permit and Security Services of \$292,000 for updated contract rates.
- *Other Materials* – The budget includes \$7.3 million for Other Materials, an increase of \$103,000 or 1.4% over the FY24 Budget. The increase reflects \$85,000 in Other Materials largely due to updated cost for gravel for the Clinton landfill.
- *Other Services* – The budget includes \$33.9 million for Other Services, a decrease of \$4.5 million or 11.8% from the FY24 Budget. Sludge Pelletization decreased by \$3.9 million or 14.6%. This decrease reflects a reduction of \$5.0 million for potential landfill disposal costs due to PFAS issues, partially offset by an increase of \$1.2 million for the pellet plant new contract that began in January 2024. Also, Telecommunications decreased by \$362,000 due to updated cost. Grit & Screenings Removal decreased by \$287,000 due to lower anticipated quantities.

### Indirect Expenses

Indirect Expenses for FY25 total \$75.4 million, an increase of \$5.1 million or 7.2% over the FY24 Budget. Below are the highlights of major changes:

- The budget includes \$4.5 million for Insurance, an increase of \$406,000 or 10.0% over the FY24 Budget. Insurance Premiums increased 11.6% based on proposals received. Claim payments decreased based on a 5-year average.
- The budget includes \$32.5 million for the Watershed Management budget, an increase of \$2.1 million or 7.1% above the FY24 Budget. The budget includes \$23.6 million for reimbursement of operating expenses net of revenues, and \$8.9 million for Payment in Lieu of Taxes (PILOT). The budget increase is driven by contractual wage increases, reclassifications of position grades, and health care costs.
- The budget includes \$8.2 million for the Harbor Energy Electric Company (HEEC), a increase of \$685,000 or 9.1% from the FY24 Budget. The budget reflects the latest cost estimates and true up payment due for prior calendar year.

- The budget includes \$1.8 million for Mitigation payments to the City of Quincy and Town of Winthrop in accordance with mitigation agreements, which expire in FY25.
- Funding for the Additions to the Operating Reserve for FY25 is \$1.9 million. The Operating Reserve balance is in compliance with MWRA General Bond Resolution which requires a balance of one-sixth of annual operating expenses. Based on the FY25 Proposed Budget, the required balance is \$59.5 million versus the \$57.6 million required in FY24.
- The budget includes \$21.3 million for the Retirement Fund, an increase of \$5.3 million or 33.1% over the FY24 budget. The increase to the Actuarially Determined Contribution (ADC) of \$2.0 million is based on the January 2023 actuarial valuation. Staff are recommending an additional \$5.2 million be allocated for the Retirement Fund to assist in reaching the full funding by 2030. MWRA's pension fund is at the 88.4% funding level and projected to be fully funded by June 30, 2030.
- The Authority has complied with the GASB 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions (OPEB)*, by disclosing this liability in the year-end Financial Statements. As part of the multi-year strategy to address its unfunded liabilities for OPEB and pension holistically, the Board approved a plan to pay down the pension liability and upon reaching full funding, move to address the OPEB obligation. To maximize the benefits in terms of returns and accounting treatment, an irrevocable OPEB Trust was established with Board approval and funding started on April 23, 2015. The OPEB Trust balance was \$76.7 million (45% funded) as of April 2024. Starting in FY18, GASB 75 is the governing regulation for employee OPEB contributions. The FY25 \$5.3 million budget is based on 50% of the Annual Determined Contribution (ADC) determined in the January 1, 2024 actuarial report. This is a \$2.4 million increase from FY24.

### Capital Financing

Capital financing as a percent of total expenses is 56% which is the same as the FY24 Current Expense Budget. Much of this debt service is for completed projects, primarily the Boston Harbor Project, the Integrated Water Supply Improvement Program, and the Combined Sewer Overflow (CSO) projects. MWRA's capital spending, from its inception, had been dominated by projects mandated by court ordered or regulatory requirements, which in total have accounted for ~70% of capital spending to date. Going forward, the majority of spending will be focused on asset protection and water redundancy initiatives.

The Authority has actively managed its debt structure to take advantage of favorable interest rates. Tools used by MWRA to lower borrowing costs and manage rates include current and advanced refunding of outstanding debt, maximizing the use of the subsidized State Revolving Fund (SRF) debt, issuance of variable rate debt, swap agreements (all swaps terminated in FY24), and the use of positive year-end budget variances to defease debt. MWRA also uses tax exempt commercial paper to minimize the financing cost of construction in process.

The FY25 Budget capital financing costs total \$504.2 million and remains the largest portion of the MWRA's budget.

The FY25 Budget includes a planned defeasance of \$25.5 million in FY24 which will reduce debt service by approximately \$1.1million in FY25 and FY26, \$9.7 million in FY27, \$8.9 million in FY28, \$0.3 million in FY29 and \$6.2 million in FY30. In addition to the defeasance savings, as part of the 2024 Series C refunding MWRA utilized current year Debt Service Funds to pay off \$11.1 million in tendered bonds. The tender reduced debt service in \$0.6 million in FY25 and FY26, \$1.8 million in FY27, \$4.1 million in FY28 and \$6.5 in FY29. MWRA saved approximately \$3.3 million in avoided interest costs from the defeasance and tender.

The FY25 Budget assumes a 4.75% interest rate for variable rate debt which is the same as the FY24 assumed rate. The Authority's variable rate debt assumption is comprised of three separate elements: the interest rate for the daily and weekly series; liquidity fees for the Standby Bond Purchase Agreement, Letter of Credit, and Direct Purchase providers; and remarketing fees. The Federal Reserve Open Market Committee has maintained the Federal Funds Rate at between 5.25% and 5.50% which is related to higher and more volatile tax-exempt short-term interest rates. MWRA has experienced weekly rates exceeding budget projections, and an average rate over 4.0% to date.

The FY25 Budget capital financing costs increased by \$16.4 million or 3.4% compared to the FY24 Budget. This increase in the MWRA's debt service is the result of projected FY25 borrowings, the structure of the existing debt, and by the impact of the projected defeasance.

The FY25 capital financing budget includes:

- \$315.2 million in principal and interest payments on MWRA's senior fixed rate bonds. This amount includes \$17.1 million to support a new money issuance of \$290.0 million in January 2025;
- \$64.8 million in principal and interest payments on subordinate bonds;
- \$85.4 million in principal and interest payments on SRF loans. This amount includes \$5.3 million to support an issuances of \$82.0 million during fiscal 2025;
- \$20.2 million to fund ongoing capital projects with current revenue and to meet coverage requirements;
- \$5.5 million in debt prepayment;
- \$9.8 million to fund the interest expense related to the Local Water Pipeline Assistance Program; and
- \$3.2 million for the Chelsea Lease.

## Revenue

FY25 non-rate revenue totals \$45.1 million, which is an increase of \$5.2 million or 13.2% versus the FY24 Budget. The FY25 non-rate revenue budget includes:

- \$10.7 million in Other User Charges, including \$5.7 million for the Chicopee Valley Aqueduct (CVA) communities, \$2.4 million for Deer Island water usage, \$500,000 for the Commonwealth's partial reimbursement for Clinton Wastewater Treatment Plant expenses, and \$426,000 for entrance fees payments from existing member communities. Other User Charges are \$278,000 or 2.7% higher than the FY24 Budget.
- \$6.1 million in Other Revenue, an increase of \$228,000 or 3.9% over the FY24 Budget. Other Revenue includes \$1.5 million from the sale of the Authority's Renewable Portfolio Credits, revenue from participating in load response programs, and the sale of generated power to the grid. The balance of Other Revenue includes \$3.0 million in permit fees and penalties, an increase of \$296,000 over the FY24 Budget.
- \$28.4 million in Investment Income, an increase of \$5.1 million or 21.6% from the FY24 Budget. The budget assumes an average interest short-term interest rate of 5.0% in FY25 and a long-term rate of 3.25% based on existing and projected investments.

The Rate Revenue Requirement for FY25 is \$855.5 million, an increase \$21.2 million or 2.5% over the FY24 Budget. The Rate Revenue Requirement is the difference between total expenses of \$900.6 million and non-rate revenue of \$45.1 million.

MWRA's planning estimates are projections based on a series of assumptions about future spending (operating and capital), interest rates, inflation, and other factors. MWRA uses the planning estimates to model and project what future rate increases might be based upon these assumptions, as well as to test the impact of changes to assumptions on future rate increases. The planning estimates are not predictions of what rate increases will be but rather they provide the context and framework for guiding MWRA financial policy and management decision making that ultimately determine the level of actual rate increases on an annual basis. Historically, the planning estimates were based on conservative financial assumptions. Conservative projections of future rate increases benefit the MWRA by providing assurance to all stakeholders, including the rating agencies that MWRA anticipates raising revenues sufficient to pay for its operations and outstanding debt obligations now and over the long-term. Additionally, conservative forecasts of rate revenue requirements enable member communities to adequately plan and budget for future payments to MWRA.

Table 3 on the following page presents the combined estimated future rate increases and household charges based on the Final FY25 Budget. The planning estimates shown below assume no Debt Service Assistance from the Commonwealth or use of Bond Redemption reserves through FY29.

**Table 3**

<b>Rates &amp; Budget Projections</b>						
<b>Final FY25 CEB</b>	<b>FY2024</b>	<b>FY2025</b>	<b>FY2026</b>	<b>FY2027</b>	<b>FY2028</b>	<b>FY2029</b>
Total Rate Revenue (\$000)	\$ 834,268	\$ 855,488	\$ 883,648	\$ 912,517	\$ 942,439	\$ 973,775
Rate Revenue Change from Prior Year (\$000)	\$ 19,620	\$ 21,220	\$ 28,160	\$ 28,869	\$ 29,921	\$ 31,336
Rate Revenue Increase	2.4%	2.5%	3.3%	3.3%	3.3%	3.3%
Use of Reserves (\$000)	\$ 305	\$ -	\$ 809	\$ 780	\$ 782	\$ 740

***Estimated Household Bill***

Based on annual water usage of 61,000 gallons	\$1,375	\$1,431	\$1,493	\$1,558	\$1,626	\$1,697
Based on annual water usage of 90,000 gallons	\$2,029	\$2,111	\$2,203	\$2,298	\$2,398	\$2,503

**CEB Review and Adoption Process**

In February, the MWRA transmitted the Proposed FY25 Budget to the Advisory Board for its review and comments. MWRA staff have worked closely with MWRA Advisory Board staff in an effort to review the budget and reduce the rate revenue requirement from 3.0% in the FY25 Proposed Budget to 2.54% in the FY25 Final Budget.

**ATTACHMENTS:**

- Attachment A FY25 Final Budget vs. FY25 Proposed Budget vs. FY24 Approved Budget
- Attachment B FY25 Final Operating Budget (Trustee’s Budget)
- Attachment C FY25 Final Budget vs. FY24 Projection
- Attachment D MWRA Responses to Advisory Board’s FY25 Integrated CIP and CEB Comments and Recommendations

**ATTACHMENT A**  
**FY25 Final Budget vs. FY24 Approved Budget**

TOTAL MWRA	FY24 Approved Budget	FY25 Proposed Budget	FY25 Final Budget	Change FY25 Final Budget vs FY24 Approved Budget		Change FY25 Final Budget vs FY25 Proposed Budget	
				\$	%	\$	%
<b>EXPENSES</b>							
WAGES AND SALARIES	\$ 127,828,242	\$ 135,679,805	\$ 133,658,956	\$ 5,830,714	4.6%	\$ (2,020,849)	-1.5%
OVERTIME	5,727,593	6,133,077	6,133,077	405,484	7.1%	-	0.0%
FRINGE BENEFITS	25,823,383	27,265,765	27,834,124	2,010,741	7.8%	568,359	2.1%
WORKERS' COMPENSATION	2,144,395	2,073,434	2,073,434	(70,961)	-3.3%	-	0.0%
CHEMICALS	28,269,124	20,054,280	19,706,033	(8,563,091)	-30.3%	(348,247)	-1.7%
ENERGY AND UTILITIES	31,064,893	29,660,076	32,048,177	983,284	3.2%	2,388,102	8.1%
MAINTENANCE	38,574,255	43,578,318	46,653,200	8,078,945	20.9%	3,074,883	7.1%
TRAINING AND MEETINGS	498,597	547,346	568,346	69,749	14.0%	21,000	3.8%
PROFESSIONAL SERVICES	10,410,484	11,000,628	11,121,730	711,246	6.8%	121,102	1.1%
OTHER MATERIALS	7,167,398	7,255,219	7,270,879	103,481	1.4%	15,660	0.2%
OTHER SERVICES	38,494,660	37,409,229	33,945,804	(4,548,856)	-11.8%	(3,463,425)	-9.3%
<b>TOTAL DIRECT EXPENSES</b>	<b>\$ 316,003,024</b>	<b>\$ 320,657,175</b>	<b>\$ 321,013,760</b>	<b>\$ 5,010,736</b>	<b>1.6%</b>	<b>\$ 356,585</b>	<b>0.1%</b>
INSURANCE	\$ 4,065,380	\$ 4,471,045	\$ 4,471,045	\$ 405,665	10.0%	-	0.0%
WATERSHED/PILOT/DEBT	30,358,187	32,109,392	32,507,642	2,149,455	7.1%	398,250	1.2%
HEEC PAYMENT	7,500,650	7,103,385	8,185,723	685,073	9.1%	1,082,338	15.2%
MITIGATION	1,779,086	1,823,563	1,823,563	44,477	2.5%	-	0.0%
ADDITIONS TO RESERVES	7,861,035	2,075,783	1,906,278	(5,954,757)	-75.8%	(169,506)	-8.2%
RETIREMENT FUND	15,972,805	23,720,476	21,264,519	5,291,715	33.1%	(2,455,957)	-10.4%
POSTEMPLOYMENT BENEFITS	2,849,365	2,824,849	5,280,806	2,431,441	85.3%	2,455,957	86.9%
<b>TOTAL INDIRECT EXPENSES</b>	<b>\$ 70,386,507</b>	<b>\$ 74,128,494</b>	<b>\$ 75,439,576</b>	<b>\$ 5,053,068</b>	<b>7.2%</b>	<b>\$ 1,311,082</b>	<b>1.8%</b>
STATE REVOLVING FUND	\$ 90,798,263	\$ 87,726,088	\$ 85,449,151	\$ (5,349,112)	-5.9%	\$ (2,276,937)	-2.6%
SENIOR DEBT	294,055,644	312,373,644	315,206,721	21,151,077	7.2%	2,833,078	0.9%
SUBORDINATE DEBT	69,931,072	64,768,074	64,768,074	(5,162,998)	-7.4%	-	0.0%
LOCAL WATER PIPELINE CP	7,744,625	9,827,661	9,827,661	2,083,036	26.9%	-	0.0%
CURRENT REVENUE/CAPITAL	19,200,000	20,200,000	20,200,000	1,000,000	5.2%	-	0.0%
CAPITAL LEASE	3,217,060	3,217,060	3,217,060	-	0.0%	-	0.0%
DEBT PREPAYMENT	4,000,000	7,000,000	5,500,000	1,500,000	37.5%	(1,500,000)	-21.4%
DEBT SERVICE ASSISTANCE	(1,187,297)	-	-	1,187,297	-100.0%	-	0.0%
<b>TOTAL DEBT SERVICE</b>	<b>\$ 487,759,367</b>	<b>\$ 505,112,526</b>	<b>\$ 504,168,667</b>	<b>\$ 16,409,300</b>	<b>3.4%</b>	<b>\$ (943,859)</b>	<b>-0.2%</b>
<b>TOTAL EXPENSES</b>	<b>\$ 874,148,898</b>	<b>\$ 899,898,195</b>	<b>\$ 900,622,003</b>	<b>\$ 26,473,105</b>	<b>3.0%</b>	<b>\$ 723,808</b>	<b>0.1%</b>
<b>REVENUE &amp; INCOME</b>							
RATE REVENUE	\$ 834,268,000	\$ 859,438,000	\$ 855,488,000	\$ 21,220,000	2.5%	\$ (3,950,000)	-0.5%
OTHER USER CHARGES	10,390,434	10,719,376	10,668,572	278,138	2.7%	(50,804)	-0.5%
OTHER REVENUE	5,838,903	5,985,461	6,066,670	227,767	3.9%	81,209	1.4%
RATE STABILIZATION	305,482	-	-	(305,482)	-100.0%	-	0.0%
INVESTMENT INCOME	23,346,079	23,755,359	28,398,761	5,052,682	21.6%	4,643,402	19.5%
<b>TOTAL REVENUE &amp; INCOME</b>	<b>\$ 874,148,898</b>	<b>\$ 899,898,196</b>	<b>\$ 900,622,003</b>	<b>\$ 26,473,105</b>	<b>3.0%</b>	<b>\$ 723,807</b>	<b>0.1%</b>
<b>Rate Revenue Increase over FY24</b>		<b>3.02%</b>	<b>2.54%</b>				

**ATTACHMENT B**

**Massachusetts Water Resources Authority  
Fiscal Year 2025 Operating Budget for Filing with the Trustee  
Pursuant to Section 712 of General Bond Resolution Adopted January 24, 1990**

(\$000s)

Projected Monthly Deposits:

Fund	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
Operating	\$27,849	\$34,811	\$27,849	\$27,849	\$34,811	\$27,849	\$27,849	\$34,811	\$27,849	\$27,849	\$34,811	\$27,849	\$362,039
Debt Service & Coverage	38,782	48,478	38,782	38,782	48,478	38,782	38,782	48,478	38,782	38,782	48,478	38,782	504,169
Debt Service Reserve	---	---	---	---	---	---	---	---	---	---	---	---	0
CORE	---	---	---	---	---	---	---	---	---	---	---	---	0
Commonwealth Obligations	2,501	3,126	2,501	2,501	3,126	2,501	2,501	3,126	2,501	2,501	3,126	2,501	32,508
Operating Reserve	147	183	147	147	183	147	147	183	147	147	183	147	1,906
Insurance Reserve	---	---	---	---	---	---	---	---	---	---	---	---	0
Renewal & Replacement Reserve	---	---	---	---	---	---	---	---	---	---	---	---	0
Rate Stabilization Reserve	---	---	---	---	---	---	---	---	---	---	---	---	0
<b>Total</b>	<u>\$69,279</u>	<u>\$86,598</u>	<u>\$69,279</u>	<u>\$69,279</u>	<u>\$86,598</u>	<u>\$69,279</u>	<u>\$69,279</u>	<u>\$86,598</u>	<u>\$69,279</u>	<u>\$69,279</u>	<u>\$86,598</u>	<u>\$69,279</u>	<u>\$900,622</u>



## Attachment C

### FY25 Final Budget vs. FY24 Projection

TOTAL MWRA	FY24 Projection	FY25 Final Budget	Change	% Change
<b>EXPENSES</b>				
WAGES AND SALARIES	\$ 115,045,418	\$ 133,658,956	\$ 18,613,538	16.2%
OVERTIME	6,243,283	6,133,077	(110,206)	-1.8%
FRINGE BENEFITS	24,532,214	27,834,124	3,301,910	13.5%
WORKERS' COMPENSATION	2,412,444	2,073,434	(339,010)	-14.1%
CHEMICALS	20,340,501	19,706,033	(634,468)	-3.1%
ENERGY AND UTILITIES	31,733,215	32,048,177	314,962	1.0%
MAINTENANCE	38,750,865	46,653,200	7,902,335	20.4%
TRAINING AND MEETINGS	373,948	568,346	194,398	52.0%
PROFESSIONAL SERVICES	9,410,484	11,121,730	1,711,246	18.2%
OTHER MATERIALS	7,667,398	7,270,879	(396,519)	-5.2%
OTHER SERVICES	33,736,660	33,945,804	209,144	0.6%
<b>TOTAL DIRECT EXPENSES</b>	<b>\$ 290,246,430</b>	<b>\$ 321,013,760</b>	<b>\$ 30,767,330</b>	<b>10.6%</b>
INSURANCE	\$ 4,295,270	\$ 4,471,045	\$ 175,775	4.1%
WATERSHED/PILOT/DEBT	28,073,556	32,507,642	4,434,086	15.8%
HEEC PAYMENT	7,643,162	8,185,723	542,561	7.1%
MITIGATION	1,779,086	1,823,563	44,477	2.5%
ADDITIONS TO RESERVES	7,861,035	1,906,278	(5,954,757)	-75.8%
RETIREMENT FUND	15,972,805	21,264,519	5,291,715	33.1%
POSTEMPLOYMENT BENEFITS	2,849,365	5,280,806	2,431,441	85.3%
<b>TOTAL INDIRECT EXPENSES</b>	<b>\$ 68,474,278</b>	<b>\$ 75,439,576</b>	<b>\$ 6,965,297</b>	<b>10.2%</b>
STATE REVOLVING FUND	\$ 83,358,104	\$ 85,449,151	\$ 2,091,047	2.5%
SENIOR DEBT	290,300,910	315,206,721	24,905,811	8.6%
SUBORDINATE DEBT	65,420,788	64,768,074	(652,714)	-1.0%
LOCAL WATER PIPELINE CP	7,370,009	9,827,661	2,457,652	33.3%
CURRENT REVENUE/CAPITAL	19,200,000	20,200,000	1,000,000	5.2%
CAPITAL LEASE	3,217,060	3,217,060	-	0.0%
DEBT PREPAYMENT	4,000,000	5,500,000	1,500,000	37.5%
DEBT SERVICE ASSISTANCE	(1,187,297)	-	1,187,297	-100.0%
<b>TOTAL DEBT SERVICE</b>	<b>\$ 471,679,574</b>	<b>\$ 504,168,667</b>	<b>\$ 32,489,093</b>	<b>6.9%</b>
<b>TOTAL EXPENSES</b>	<b>\$ 830,400,282</b>	<b>\$ 900,622,003</b>	<b>\$ 70,221,720</b>	<b>8.5%</b>
<b>REVENUE &amp; INCOME</b>				
RATE REVENUE	\$ 834,268,000	\$ 855,488,000	\$ 21,220,000	2.5%
OTHER USER CHARGES	10,349,723	10,668,572	318,849	3.1%
OTHER REVENUE	5,645,942	6,066,670	420,728	7.5%
RATE STABILIZATION	305,482	-	(305,482)	-100.0%
INVESTMENT INCOME	31,520,079	28,398,761	(3,121,318)	-9.9%
<b>TOTAL REVENUE &amp; INCOME</b>	<b>\$ 882,089,226</b>	<b>\$ 900,622,003</b>	<b>\$ 18,532,777</b>	<b>2.1%</b>

ATTACHMENT D

**MWRA's Responses to the Advisory Board's FY2025 Integrated CIP and CEB Recommendations and Comments**

Advisory Board Recommendations and Comments	MWRA Responses
1. The Advisory Board recommends reducing the FY25 Rate Revenue Requirement by \$4,098,434 resulting in a combined wholesale assessment increase of 2.53%.	Agree. MWRA has reduced the FY25 Rate Revenue Requirement by \$3,950,000 resulting a combined wholesale assessment increase of 2.54%.
2. Reduce Wages & Salaries by \$3,930,000 by increasing the vacancy rate assumption by 35 FTEs.	Partially Agree. MWRA has reduced Wages & Salaries by \$1,695,000 by increasing the vacancy rate assumption by 15 FTEs.
3. Reduce Fringe Benefits by \$1,572,000 to account for the fringe benefits expense that will not be incurred for both the MWRA's 35 FTEs vacancy rate adjustment and the Advisory Board's recommended additional 35 FTE vacancy rate.	Disagree. Health Insurance is the biggest category within Fringe Benefits making up 87% of total fringe costs. Unlike the Division of Water Supply Protection at DCR (which budgets fringe based on an allocation per FTE), the Authority budgets for Health Insurance at the plan type and insurer level which makes it more difficult to predict as staffing changes can occur throughout the year.
4. Reduce Other Services by \$28,176 for the Advisory Board's FY25 final Operating Budget.	Agree.
5. That MWRA redirect the \$2.8 million currently budgeted to fund the OPEB line item to the pension line item.	Disagree. Staff recommend that MWRA budget 50% of the Actuarially Determined Contribution (ADC) per the latest Actuarial Valuation Report as of January 1, 2024.
6. MWRA should continue to redirect all future OPEB contributions to the pension line item until full funding is achieved in FY30.	Disagree. Staff recommend that MWRA continuing the practice of budgeting 50% of the Actuarially Determined Contribution (ADC) per the latest Actuarial Valuation Reports available each fiscal year.
7. Advisory Board recommends that the MWRA should evaluate its current variable rate debt service portfolio and develop a plan to bring the variable rate debt composition up to the 15% target level to help optimize the MWRA's capital financing approach by balancing stability and cost savings over the long term.	Agree. MWRA will continue to review and work towards achieving a 15% range of variable rate debt composition.
8. Use \$1.5 million in rate stabilization funds directed toward the water utility's costs to provide some modest rate relief for MWRA communities.	Disagree. MWRA will continue to use the defeasance strategy and other tools to keep the water assessment increases below 4.0%.
9. Advisory Board recommends that the MWRA approve the following and include projected spending into its final FY25 CIP: 1. Phase 15: \$100 million interest-free loan phase (similar to Phase 13) available in FY25. 2. Phase 16: \$125 million grant-loan phase (75% grant, 25% loan) available in FY26 with 10-year loan repayments.	Agree.
10. The Advisory Board recommends that the MWRA authorize Phase 4 of the Local Water Supply Assistance Program with the current terms and conditions with a total amount of \$300 million.	Agree.
11. Advisory Board recommends that the MWRA Board of Directors approve the proposed modifications to the LLP and incorporate associated spending into the final FY25 Capital Improvement Program (CIP) with specific program requirements and mechanisms to be determined between MWRA and Advisory Board staff.	Agree.
12. That MWRA using its role on the Water Supply Protection Trust advocate for continued, carefully considered, deliberately limited active forestry for the watersheds through DWSP's current practice of 1% of watershed forests being harvested in small parcels.	MWRA will continue to advocate for DWSP's ability to perform thoughtful forest management based on science and best forestry practices to support watershed protection goals and the long term viability of forests in our watersheds.
13. That MWRA similarly advocate for DWSP to demonstrate how its forestry program utilizes current best management practices including methods to ensure that contracted foresters are conducting their harvests according to the DWSP's specifications and safeguarding soil structure.	MWRA agrees with this recommendation.
14. That MWRA request DWSP share its detailed records of forestry activities and present it as a standardized report, provide regular updates to the Water Supply Protection Trust at its quarterly meetings, and highlight their on-going research on forest health and the innovative approaches they are testing to deliberately increase species composition within the watershed forests	MWRA agrees with this recommendation.

ATTACHMENT D

MWRA's Responses to the Advisory Board's FY2025 Integrated CIP and CEB Recommendations and Comments

Advisory Board Recommendations and Comments	MWRA Responses
<p>15 The Advisory Board strongly recommends that the MWRA join the Board of Directors in vigorously opposing the proposed legislation H.897/S.447, "An Act Relative to the Quabbin Watershed and Regional Equity". We further recommend that no funding be allocated for the Quabbin study beyond the existing 12 communities included in the initial proposal.</p>	<p>MWRA appreciates the Advisory Board's legislative advocacy on all legislation that impacts member communities. The Authority will continue to monitor all legislation related to the Authority and engage with our legislative partners to ensure that the benefits and impacts of potential policy changes are fully understood.</p>
<p>16. Advisory Board endorses and recommends a two-pronged approach to begin addressing watershed DCR Rangers enforcement concerns:</p> <p><b>Short Term</b></p> <ul style="list-style-type: none"> <li>• It is unacceptable to simply take no action, allowing the current situation of weak and limited enforcement to persist.</li> <li>• MWRA should ask DWSP to account for what is happening with the estimated 450-500 annual offenders who would previously have faced stiffer penalties. Are they being appropriately referred to law enforcement, as DCR has insisted is still an option?</li> <li>• MWRA should urge DWSP to develop a non-punitive, educational "reminder notice" that rangers could provide to serious offenders, identifying them by name and citing the specific violation observed. This would require restoring rangers' ability to request ID from violators.</li> </ul> <p><b>Long Term</b></p> <ul style="list-style-type: none"> <li>• MWRA should support legislative or administrative efforts to secure a permanent remedy that restores sensible enforcement abilities for rangers while upholding the spirit of the Police Reform Bill.</li> <li>• Alternatively, the lengthy process of restructuring and training rangers to attain whatever certification is required under the new legislation should be explored, with DCR providing full transparency on the specific challenges involved rather than dismissing it as "too hard" anecdotally. Only after all the information is gathered can well-thought out and fully informed decision be made.</li> </ul>	<p>Protecting watershed areas is also a top priority for MWRA. We understand there are certain legal constraints to DCR Rangers engaging in law enforcement activities. MWRA is supportive of working with DWSP to learn more about the recorded incidents and developing educational programs and materials to enhance awareness of the rules and restrictions regarding activities in the watershed areas.</p>

**STAFF SUMMARY**


**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Final FY25 Water and Sewer Assessments



**COMMITTEE:** Administration, Finance & Audit

INFORMATION  
 VOTE

Michael Cole, Budget Director  
Leo Norton, Asst. Mgr, Rates, Revenue and Finance  
Preparer/Title

Thomas J. Durkin  
Director of Finance 

*The Proposed FY25 Current Expense Budget (CEB) was submitted to the Advisory Board at the February 2024 Board meeting and included a 3.0% combined assessment increase.*

*MWRA's long-term goal has been to provide sustainable and predictable assessments to its member communities. In the past few years, the Advisory Board challenged MWRA to limit the assessment increases at a level less than 4%. MWRA has continuously been successful in achieving this goal by utilizing a multi-year rates management strategy, which includes controlled spending, the use of historical variable rate assumptions, and the practice of targeted debt defeasance.*

*Consistent with the FY25 Final Budget, the combined assessment increase of 2.54% includes a 1.8% increase for sewer assessments, and a 3.9% increase for water assessments.*

**RECOMMENDATION:**

To adopt the following effective July 1, 2024:

- 1) Water system assessments of \$311,379,328 and sewer system assessments of \$544,108,672 for FY25.
- 2) FY25 sewer assessments of \$500,000 for the Town of Clinton and \$501,935 for the Lancaster Sewer District.
- 3) FY25 charge to the City of Worcester of \$233,026 representing approximately 7.9% of the direct operating expenses for the Clinton Wastewater Treatment Plant.
- 4) FY25 water assessments of \$4,088,633 for the City of Chicopee, \$755,970 for South Hadley Fire District #1, and \$857,930 for the Town of Wilbraham.
- 5) A wholesale water rate of \$4,991.08 per million gallons.
- 6) A retail sewer rate of \$8,310.71 per million gallons.

**DISCUSSION:**

The Final FY25 Current Expense Budget includes a Rate Revenue Requirement of \$855,488,000, an increase of 2.54% over the FY24 requirement.

	Rate Revenue Requirement		Change from FY24	
	FY25 Final	FY24 Approved	Dollars	Percent
<b>Water</b>	\$311,379,328	\$299,675,872	\$11,703,456	3.9%
<b>Sewer</b>	\$544,108,672	\$534,592,128	\$ 9,516,544	1.8%
<b>Total</b>	\$855,488,000	\$834,268,000	\$21,220,0008	2.5%

*Attachment 1 details the FY25 wholesale water and sewer charges for each MWRA community.*

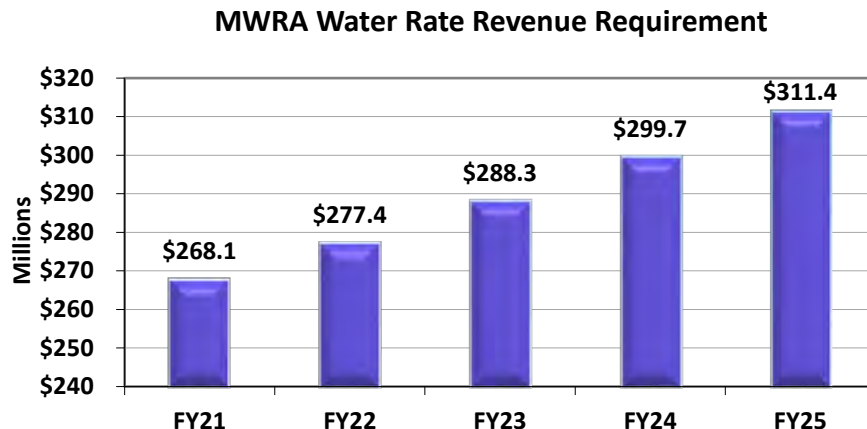
The estimated annual impact of the FY25 assessment increase on the MWRA portion of the average household bill for water and sewer service in a fully served MWRA community that uses close to the system average of 61,000 gallons of water per year is approximately \$16.

**Water Assessments**

MWRA calculates water assessments for customer communities by apportioning the water rate revenue requirement according to each community’s share of total water use for the most recent calendar year. FY25 water assessments are based on each community's share of CY23 water use of 62.387 billion gallons, a 5.6% decrease compared to CY22 water use of 66.065 billion gallons. Changes in FY25 water assessments for customer communities compared to FY24 assessments will vary considerably, depending on each community's use of water and how that use factors into their share of the water system in CY23 compared to CY22. This is particularly true for communities that receive only part of their water from MWRA.

Preliminary FY25 water assessments were calculated based on preliminary CY23 water use as of February 2024. Since February, ongoing review of CY23 water meter data resulted in revised water use for the City of Malden. Malden’s CY23 water use has been increased by 104.8 million gallons, and will add \$507,929 or 5.6% to their FY25 water assessment.

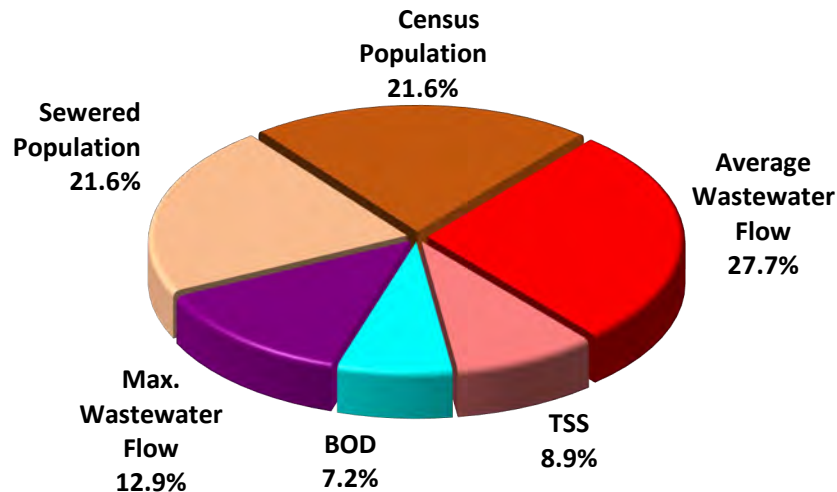
The graph below illustrates the water Rate Revenue Requirement for the past 5 years. The changes from FY24 to FY25 are primarily the result of increased debt service related to water system rehabilitation and improvements.



## Sewer Assessments

MWRA allocates sewer assessments based on each community's share of the following allocation parameters: three-year average of annual wastewater flow, maximum month flow, strength of flow, census population, and sewered population.

On average, approximately 57% of a community's FY25 sewer assessment is based on each community's share of wastewater flow and strength of flow (total suspended solids or TSS and biochemical oxygen demand or BOD), and approximately 43% is based on population as illustrated in the following graph.



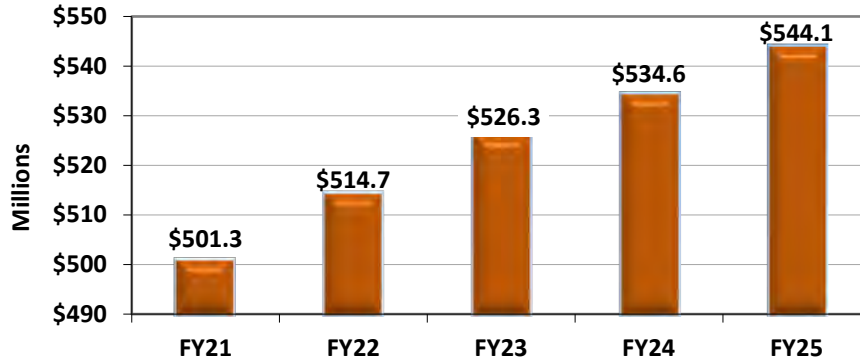
The population component of FY25 assessments were calculated using July 2022 community population estimates from the U.S. Census Bureau, as well as the percentage of total population receiving municipal sewer service reported by each MWRA community.

The flow component of the FY25 assessments were calculated using the average of CY21, CY22 and CY23 wastewater flows and strength of flows. CY22 and CY23 flows are based on actual metered flow, and CY21 flows were estimated during the sewer system meter replacement project.

Since preliminary assessments were calculated in February, ongoing review of CY23 wastewater meter data resulted in revised wastewater flows for the Town of Needham. Needham's CY23 water use has been decreased by 109.0 million gallons, and will decrease their FY25 sewer assessment by \$80,470 or 1.1%.

The graph below illustrates the sewer Rate Revenue Requirement for the past 5 years. As with the water utility, the annual changes continue to be primarily the result of increased debt service related to sewer system rehabilitation and improvements.

**MWRA Sewer Rate Revenue Requirement**



**Clinton Sewer Service Area Assessments**

FY25 operating and maintenance (O&M) and capital expenses attributable to the Clinton Wastewater Treatment Plant are \$5,493,277, an increase of 3.4% from FY24. This includes a 3.0% decrease in operating costs, and a 17.9% increase in capital expenses.

In accordance with the agreement that allows the City of Worcester to take water from the Wachusett watershed, Worcester is charged approximately 7.9% of the direct operating expenses for the Clinton Wastewater Treatment Plant. FY25 direct operating expenses for the plant total \$2,945,604, resulting in an FY25 charge of \$233,026 for the City of Worcester. Worcester has been paying this annual charge to MWRA or its predecessors since 1914.

The Town of Clinton and the Lancaster Sewer District are allocated proportional shares of the remaining expenses based on annual metered wastewater flow to the Clinton Plant. Based on FY25 expenses and CY23 wastewater flows, Lancaster’s FY25 charge is \$501,935, a decrease of 1.4% from FY24.

The FY25 charge for the Town of Clinton is \$4,734,852. However, pursuant to Chapter 307, Section 8 of the Acts of 1987, Clinton is only liable for the first \$500,000 of its share of O&M and capital costs.

*Attachment 2* details the expenses and corresponding charges for the Clinton Sewer Service Area.

**CVA Water Assessments**

Based on the FY25 CIP and CEB for the Chicopee Valley Aqueduct (CVA) water system, the FY25 system assessment is \$5,702,533, an increase of 1.9% from FY24.

MWRA’s CVA water assessment methodology allocates CVA assessments to the three communities served by the CVA system based on their share of prior calendar year water use. Based on CY23 water use, FY25 assessments are as follows:

- City of Chicopee: \$4,088,633 (+3.9%)
- South Hadley Fire District #1: \$ 755,970 (-3.0%)
- Town of Wilbraham: \$ 857,930 (-2.5%)

As with the metropolitan water system, changes in FY25 water assessments for each CVA community compared to FY24 assessments vary depending on their water use and how that use factors into their share of the CVA water system in CY23 compared to CY22.

*Attachment 3* details the expenses and corresponding assessments for the CVA Water Service Area.

### **Wholesale Water Rate**

MWRA's wholesale water rate per million gallons is applied to customers purchasing MWRA water on a pay-as-you-go basis (including customers with emergency agreements). The wholesale water rate for FY25 is \$4,991.08 per million gallons. The FY25 CEB includes revenue of \$148,717 from these customers.

### **Retail Sewer Rate**

MWRA provides direct retail sewer service to Regis College in Weston and the New England Center for Children in Southborough. In accordance with MWRA Policy #OP.11, "Admission of New Community to MWRA Sewer System and Other Requests for Sewer Service to Locations Outside MWRA Sewer Service Area", both entities are charged a modified per million gallon "retail" rate that captures both sanitary and non-sanitary flows. Based on FY25 sewer assessments, the FY25 retail sewer rate is \$8,310.71 per million gallons. The FY25 CEB includes revenue of \$82,405 from these customers.

### **ATTACHMENTS:**

1. FY25 Water and Sewer Assessments
2. Clinton Wastewater Treatment Plant Sewer User Charge Determination
3. Chicopee Valley Aqueduct System Assessment



MWRA Fully Served Water and Sewer Customers	Final FY24 Water Assessment	Final FY25 Water Assessment	Percent Change from FY24	Final FY24 Sewer Assessment	Final FY25 Sewer Assessment	Percent Change from FY24	Final FY24 Combined Assessment	Final FY25 Combined Assessment	Dollar Change from FY24	Percent Change from FY24
ARLINGTON	\$5,723,767	\$5,700,350	-0.4%	\$9,375,412	\$9,492,790	1.3%	\$15,099,179	\$15,193,140	\$93,961	0.6%
BELMONT	3,281,643	3,259,822	-0.7%	5,652,772	5,692,509	0.7%	8,934,415	8,952,331	17,916	0.2%
BOSTON (BWSC)	101,284,742	109,867,908	8.5%	148,321,901	150,037,179	1.2%	249,606,643	259,905,087	10,298,444	4.1%
BROOKLINE	8,536,286	8,373,742	-1.9%	13,902,081	13,457,245	-3.2%	22,438,367	21,830,987	(607,380)	-2.7%
CHELSEA	5,466,192	5,851,930	7.1%	9,640,943	9,894,333	2.6%	15,107,135	15,746,263	639,128	4.2%
EVERETT	6,179,040	6,856,064	11.0%	10,045,294	10,362,447	3.2%	16,224,334	17,218,511	994,177	6.1%
FRAMINGHAM	9,526,952	9,692,961	1.7%	14,213,653	14,830,822	4.3%	23,740,605	24,523,783	783,178	3.3%
LEXINGTON	8,832,742	8,432,204	-4.5%	8,861,891	9,153,352	3.3%	17,694,633	17,585,556	(109,077)	-0.6%
MALDEN	8,565,543	9,497,417	10.9%	14,777,974	14,576,224	-1.4%	23,343,517	24,073,641	730,124	3.1%
MEDFORD	7,823,249	8,041,818	2.8%	13,530,297	14,191,728	4.9%	21,353,546	22,233,546	880,000	4.1%
MELROSE	3,520,729	3,865,069	9.8%	7,002,292	6,926,272	-1.1%	10,523,021	10,791,341	268,320	2.5%
MILTON	4,176,564	4,046,121	-3.1%	6,314,438	6,786,934	7.5%	10,491,002	10,833,055	342,053	3.3%
NEWTON	14,430,518	15,254,114	5.7%	23,540,735	24,471,190	4.0%	37,971,253	39,725,304	1,754,051	4.6%
NORWOOD	4,646,813	4,735,735	1.9%	9,252,685	9,377,625	1.4%	13,899,498	14,113,360	213,862	1.5%
QUINCY	14,041,679	14,668,740	4.5%	23,052,419	23,271,259	0.9%	37,094,098	37,939,999	845,901	2.3%
READING	2,826,508	2,854,927	1.0%	5,245,406	5,198,653	-0.9%	8,071,914	8,053,580	(18,334)	-0.2%
REVERE	6,411,786	6,555,178	2.2%	12,448,042	12,651,589	1.6%	18,859,828	19,206,767	346,939	1.8%
SOMERVILLE	9,500,557	10,694,450	12.6%	17,759,770	17,561,095	-1.1%	27,260,327	28,255,545	995,218	3.7%
STONEHAM	3,617,722	3,671,848	1.5%	5,906,212	6,085,041	3.0%	9,523,934	9,756,889	232,955	2.4%
WALTHAM	11,996,268	12,987,389	8.3%	14,796,930	15,008,366	1.4%	26,793,198	27,995,755	1,202,557	4.5%
WATERTOWN	4,202,656	4,583,303	9.1%	7,004,552	7,277,190	3.9%	11,207,208	11,860,493	653,285	5.8%
WINTHROP	1,865,387	2,127,216	14.0%	3,978,407	4,029,198	1.3%	5,843,794	6,156,414	312,620	5.3%
<b>TOTAL</b>	<b>\$246,457,343</b>	<b>\$261,618,306</b>	<b>6.2%</b>	<b>\$384,624,106</b>	<b>\$390,333,041</b>	<b>1.5%</b>	<b>\$631,081,449</b>	<b>\$651,951,347</b>	<b>\$20,869,898</b>	<b>3.3%</b>

MWRA Full Sewer and Partial Water Customers	Final FY24 Water Assessment	Final FY25 Water Assessment	Percent Change from FY24	Final FY24 Sewer Assessment	Final FY25 Sewer Assessment	Percent Change from FY24	Final FY24 Combined Assessment	Final FY25 Combined Assessment	Dollar Change from FY24	Percent Change from FY24
ASHLAND	\$0	\$0	-	\$2,924,453	\$2,975,664	1.8%	\$2,924,453	\$2,975,664	\$51,211	1.8%
BURLINGTON	1,668,047	2,637,231	58.1%	6,153,342	6,231,204	1.3%	7,821,389	8,868,435	1,047,046	13.4%
CANTON	2,490,180	2,745,413	10.2%	5,085,296	5,157,794	1.4%	7,575,476	7,903,207	327,731	4.3%
NEEDHAM	1,887,130	1,212,985	-35.7%	7,084,841	7,445,411	5.1%	8,971,971	8,658,396	(313,575)	-3.5%
STOUGHTON	103,566	97,985	-5.4%	5,714,438	5,752,600	0.7%	5,818,004	5,850,585	32,581	0.6%
WAKEFIELD	3,337,730	3,304,401	-1.0%	6,826,973	6,791,838	-0.5%	10,164,703	10,096,239	(68,464)	-0.7%
WELLESLEY	4,211,496	3,262,215	-22.5%	6,630,804	7,020,669	5.9%	10,842,300	10,282,884	(559,416)	-5.2%
WILMINGTON	1,145,370	484,407	-57.7%	3,173,321	3,341,156	5.3%	4,318,691	3,825,563	(493,128)	-11.4%
WINCHESTER	2,356,818	2,034,253	-13.7%	4,875,271	5,385,020	10.5%	7,232,089	7,419,273	187,184	2.6%
WOBURN	5,851,127	5,715,234	-2.3%	10,478,117	11,159,078	6.5%	16,329,244	16,874,312	545,068	3.3%
<b>TOTAL</b>	<b>\$23,051,464</b>	<b>\$21,494,124</b>	<b>-6.8%</b>	<b>58,946,856</b>	<b>61,260,434</b>	<b>3.9%</b>	<b>\$81,998,320</b>	<b>\$82,754,558</b>	<b>\$756,238</b>	<b>0.9%</b>

MWRA Fully Served Sewer-only Customers	Final FY24 Water Assessment	Final FY25 Water Assessment	Percent Change from FY24	Final FY24 Sewer Assessment	Final FY25 Sewer Assessment	Percent Change from FY24	Final FY24 Combined Assessment	Final FY25 Combined Assessment	Dollar Change from FY24	Percent Change from FY24
BEDFORD				\$3,784,242	\$3,886,054	2.7%	\$3,784,242	\$3,886,054	\$101,812	2.7%
BRAINTREE				10,766,148	10,613,254	-1.4%	10,766,148	10,613,254	(152,894)	-1.4%
CAMBRIDGE				30,213,141	31,407,738	4.0%	30,213,141	31,407,738	1,194,597	4.0%
DEDHAM				6,409,056	6,319,318	-1.4%	6,409,056	6,319,318	(89,738)	-1.4%
HINGHAM SEWER DISTRICT				2,172,503	2,165,417	-0.3%	2,172,503	2,165,417	(7,086)	-0.3%
HOLBROOK				2,028,551	2,122,461	4.6%	2,028,551	2,122,461	93,910	4.6%
NATICK				6,408,947	6,648,860	3.7%	6,408,947	6,648,860	239,913	3.7%
RANDOLPH				7,144,574	7,343,719	2.8%	7,144,574	7,343,719	199,145	2.8%
WALPOLE				4,614,313	4,670,240	1.2%	4,614,313	4,670,240	55,927	1.2%
WESTWOOD				3,249,150	3,171,027	-2.4%	3,249,150	3,171,027	(78,123)	-2.4%
WEYMOUTH				14,230,541	14,167,109	-0.4%	14,230,541	14,167,109	(63,432)	-0.4%
<b>TOTAL</b>				<b>\$91,021,166</b>	<b>\$92,515,197</b>	<b>1.6%</b>	<b>\$91,021,166</b>	<b>\$92,515,197</b>	<b>\$1,494,031</b>	<b>1.6%</b>

MWRA Fully Served Water-only Customers	Final FY24 Water Assessment	Final FY25 Water Assessment	Percent Change from FY24	Final FY24 Sewer Assessment	Final FY25 Sewer Assessment	Percent Change from FY24	Final FY24 Combined Assessment	Final FY25 Combined Assessment	Dollar Change from FY24	Percent Change from FY24
LYNNFIELD WATER DISTRICT	\$945,917	\$919,790	-2.8%				\$945,917	\$919,790	(\$26,127)	-2.8%
MARBLEHEAD	3,130,039	3,043,998	-2.7%				3,130,039	3,043,998	(86,041)	-2.7%
MARLBOROUGH	7,138,193	7,379,850	3.4%				7,138,193	7,379,850	241,657	3.4%
NAHANT	592,489	567,027	-4.3%				592,489	567,027	(25,462)	-4.3%
NORTHBOROUGH	1,476,411	1,550,117	5.0%				1,476,411	1,550,117	73,706	5.0%
SAUGUS	5,446,924	5,363,922	-1.5%				5,446,924	5,363,922	(83,002)	-1.5%
SOUTHBOROUGH	1,202,081	1,086,340	-9.6%				1,202,081	1,086,340	(115,741)	-9.6%
SWAMPSCOTT	2,610,031	2,496,307	-4.4%				2,610,031	2,496,307	(113,724)	-4.4%
WESTON	2,867,622	2,462,486	-14.1%				2,867,622	2,462,486	(405,136)	-14.1%
<b>TOTAL</b>	<b>\$25,409,707</b>	<b>\$24,869,837</b>	<b>-2.1%</b>				<b>\$25,409,707</b>	<b>\$24,869,837</b>	<b>(\$539,870)</b>	<b>-2.1%</b>

MWRA Partial Water-only Customers	Final FY24 Water Assessment	Final FY25 Water Assessment	Percent Change from FY24	Final FY24 Sewer Assessment	Final FY25 Sewer Assessment	Percent Change from FY24	Final FY24 Combined Assessment	Final FY25 Combined Assessment	Dollar Change from FY24	Percent Change from FY24
DEDHAM-WESTWOOD WATER DISTRICT	\$670,890	\$909,823	35.6%				\$670,890	\$909,823	\$238,933	35.6%
LYNN (LWSC)	133,677	163,485	22.3%				133,677	163,485	29,808	22.3%
PEABODY	3,952,791	2,323,753	-41.2%				3,952,791	2,323,753	(1,629,038)	-41.2%
<b>TOTAL</b>	<b>\$4,757,358</b>	<b>\$3,397,061</b>	<b>-28.6%</b>				<b>\$4,757,358</b>	<b>\$3,397,061</b>	<b>(\$1,360,297)</b>	<b>-28.6%</b>
<b>SYSTEMS TOTAL</b>	<b>\$299,675,872</b>	<b>\$311,379,328</b>	<b>3.91%</b>	<b>\$534,592,128</b>	<b>\$544,108,672</b>	<b>1.78%</b>	<b>\$834,268,000</b>	<b>\$855,488,000</b>	<b>\$21,220,000</b>	<b>2.54%</b>

Massachusetts Water Resources Authority  
Clinton Wastewater Treatment Plant  
Sewer User Charge Determination

BUDGETED EXPENSES: Final FY25	
Clinton Direct Operating Expenses:	\$2,945,604
MWRA Support Allocation:	615,602
Subtotal O&M Expenses:	\$3,561,206
Total Debt Service Expenses:	\$1,932,071
Total Clinton Service Area Expenses	\$5,493,277
Less Revenue (City of Worcester Payment)	-233,026
Clinton WWTP Rate Revenue Requirement:	\$5,260,251

WASTEWATER FLOW and FLOW SHARES:	CY2023		
	Town of Clinton Flow	Lancaster Sewer District Flow	Total Wastewater Flow
Average Daily Flow (MGD)	2.861	0.318	3.179
Average Flow (MG/YR)	1,044.406	115.892	1,160.297
Proportional Share of Flow	90.01%	9.99%	100.0%

Sewer User Charge Determination

TOWN OF CLINTON	
O&M Expenses	\$3,561,206
Less Revenue (City of Worcester Payment)	-233,026
O&M Expenses to be Recovered	\$3,328,179
Clinton's Share of Flow	90.01%
Clinton's Share of O&M Costs	\$2,995,758
<b>Total Clinton O&amp;M Charge</b>	<b>\$2,995,758</b>

LANCASTER SEWER DISTRICT	
O&M Expenses	\$3,561,206
Less Revenue (City of Worcester Payment)	-233,026
O&M Expenses to be Recovered	\$3,328,179
Lancaster's Share of Flow	9.99%
Lancaster's Share of O&M Costs	\$332,421
<b>Total Lancaster Sewer District O&amp;M Charge</b>	<b>\$332,421</b>

Debt Service Costs to be Recovered	\$1,932,071
Clinton's Share of Wastewater Flow	90.01%
<b>Total Clinton Debt Service Charge</b>	<b>\$1,739,094</b>
<b>Total Clinton O&amp;M and Debt Service Charge</b>	<b>\$4,734,852</b>

Debt Service Costs to be Recovered	\$1,932,071
Lancaster's Share of Wastewater Flow	9.99%
<b>Total Lancaster Sewer District Debt Service Charge</b>	<b>\$192,977</b>
<b>Total Lancaster O&amp;M and Debt Service Charge</b>	<b>\$525,398</b>

Less MWRA Water Ratepayer Subsidy	-4,234,852
Billable Charge to the Town of Clinton as per CH. 307, Section 8 The Acts of 1987	\$500,000

Billable Charge to Lancaster Sewer District	\$525,398
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Clinton WWTP Charges and Payment Schedule

Sewer Customer	Billable Charges	Change from Prior Year	
		Change	%
Town of Clinton (billable)	\$500,000	\$0	5.0%
Lancaster Sewer District (before adj.)	\$525,398		
Lancaster Sewer District (prior yr. adj.)	-\$23,463		
Lancaster Sewer District (billable)	\$501,935	-\$7,194	-1.4%
<b>Total Billable Sewer Use Charges</b>	<b>\$1,001,935</b>		
<b>City of Worcester</b>	<b>\$233,026</b>	<b>-\$8,781</b>	<b>-3.6%</b>

Payment 1 on or before Sept 15, 2024	Payment 2 on or before Nov 15, 2024	Payment 3 on or before Feb 15, 2025	Payment 4 on or before May 15, 2025
\$125,000	\$125,000	\$125,000	\$125,000
\$125,484	\$125,484	\$125,484	\$125,484
\$250,484	\$250,484	\$250,484	\$250,484
\$0	\$0	\$233,026	\$0

# Massachusetts Water Resources Authority

## Chicopee Valley Aqueduct Water System Assessment

### FY2025 Budget and Assessments

CVA Operating Budget	FY24	FY25	Change from Prior Year	
			Dollars	Percent
CVA Cost Center Expenses	\$1,210,632	\$1,106,821	-\$103,811	-8.6%
Allocated Waterworks Expenses	143,193	141,904	-1,289	-0.9%
Allocated Watershed/PILOT	502,979	494,160	-8,818	-1.8%
Allocated Watershed Land Acquisition	28,853	27,561	-1,292	-4.5%
Allocated MWRA Indirect Expenses	702,601	682,305	-20,295	-2.9%
<b>SUBTOTAL OPERATING BUDGET</b>	<b>\$2,588,257</b>	<b>\$2,452,753</b>	<b>-\$135,505</b>	<b>-5.2%</b>

CVA Capital Budget	FY24	FY25	Change from Prior Year	
			Dollars	Percent
Capital Expenses	\$3,153,967	\$3,393,987	\$240,020	7.6%
<b>TOTAL CVA BUDGET</b>	<b>\$5,742,224</b>	<b>\$5,846,740</b>	<b>\$104,516</b>	<b>1.8%</b>

BASE COMMUNITY ASSESSMENT	FY24 <sup>1</sup>	FY25 <sup>2</sup>	Change from Prior Year	
			Dollars	Percent
Chicopee	\$4,037,457	\$4,188,894	\$151,438	3.8%
South Hadley Fire District #1	801,557	777,399	-24,158	-3.0%
Wilbraham	903,210	880,446	-22,764	-2.5%
<b>CVA BASE SYSTEM ASSESSMENT</b>	<b>\$5,742,224</b>	<b>\$5,846,740</b>	<b>\$104,516</b>	<b>1.8%</b>

PRIOR PERIOD ADJUSTMENTS <sup>3</sup>	FY24	FY25	Change from Prior Year	
			Dollars	Percent
Chicopee	-\$102,827	-\$100,261	\$2,566	-2.5%
South Hadley Fire District #1	-22,020	-21,429	590	-2.7%
Wilbraham	-23,141	-22,516	625	-2.7%
<b>TOTAL ADJUSTMENTS</b>	<b>-\$147,988</b>	<b>-\$144,207</b>	<b>\$3,781</b>	<b>-2.6%</b>

ADJUSTED ASSESSMENT	FY24	FY25	Change from Prior Year	
			Dollars	Percent
Chicopee	\$3,934,629	\$4,088,633	\$154,004	3.9%
South Hadley Fire District #1	779,537	755,970	-23,567	-3.0%
Wilbraham	880,070	857,930	-22,139	-2.5%
<b>ADJUSTED ASSESSMENT</b>	<b>\$5,594,236</b>	<b>\$5,702,533</b>	<b>\$108,297</b>	<b>1.94%</b>

<sup>1</sup> Based on CY2022 water use and before prior period adjustments.

<sup>2</sup> Based on CY2023 water use and before prior period adjustments.

<sup>3</sup> Prior period adjustment to account for budget to actual expenses.

**STAFF SUMMARY**




**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Bond Defeasance of Future Debt Service

**COMMITTEE:** Administration, Finance & Audit

X VOTE  
\_\_\_\_ INFORMATION

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

  
Thomas J. Durkin  
Director of Finance

*Consistent with MWRA's multi-year rates management strategy, MWRA staff are recommending the execution of an approximately \$25.5 million defeasance in June 2024 to reduce future year rate increases. The \$25.5 million in available funds is derived from the use of \$19.5 million from the FY24 projected positive budget variance, the \$4.0 million Debt Prepayment included in the FY24 CEB, \$0.7 million in remaining FY23 funds and projected \$1.3 million of interest earnings on the escrow. These funds will be used to prepay debt service coming due in FY25 through FY30 (\$22.7 million in principal and \$2.9 million in interest).*

**RECOMMENDATION:**

To authorize the Executive Director or his designee, on behalf of the Authority, to enter into, execute and deliver all necessary agreements and other instruments and to take such other actions necessary to effectuate the redemption and defeasance of an aggregate principal amount of \$22,665,000 of outstanding MWRA senior bonds including to cause the escrow of cash and/or securities in an amount necessary to fund such redemption and defeasance, in order to reduce the debt service requirement by \$27,360,750 in the FY25 through FY30 timeframe.

**DISCUSSION:**

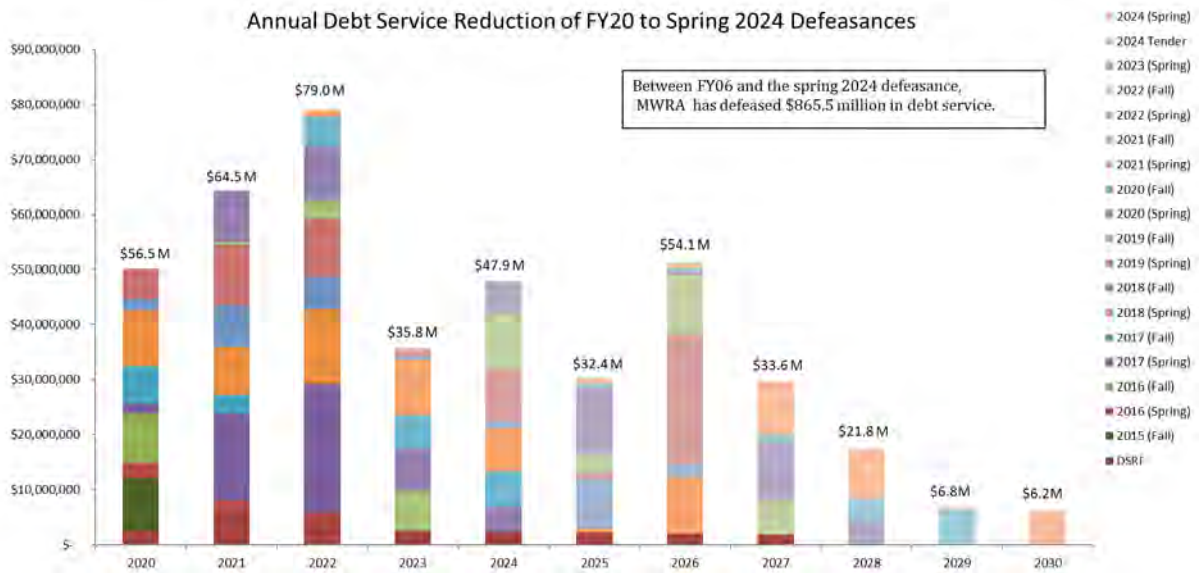
Since FY12, the MWRA has utilized the budgetary defeasance account strategy to set aside positive budget variances associated with the capital finance budget to defease outstanding debt. In order to mitigate rate increases, staff reflected the impact of a \$15.0 million defeasance in the Proposed FY25 CEB comprised of the projected FY24 positive budget variance as well as the FY24 CEB Debt Prepayment. Now, based on current year-end projections, the proposed defeasance has increased to approximately \$25.5 million, consisting of \$19.5 million from the projected FY24 positive budget variance, \$4.0 million of FY24 Debt Prepayment, \$0.7 million and \$1.3 million of interest earnings on the escrow for even greater debt service reductions in future years. In the low interest rate environment over the last 15-years staff had not factored escrow earnings when sizing the defeasance. With the large increase in short-term interest rates, MWRA

is able to earn significant more on the escrow securities and that additional income has been factored into the sources of funding.

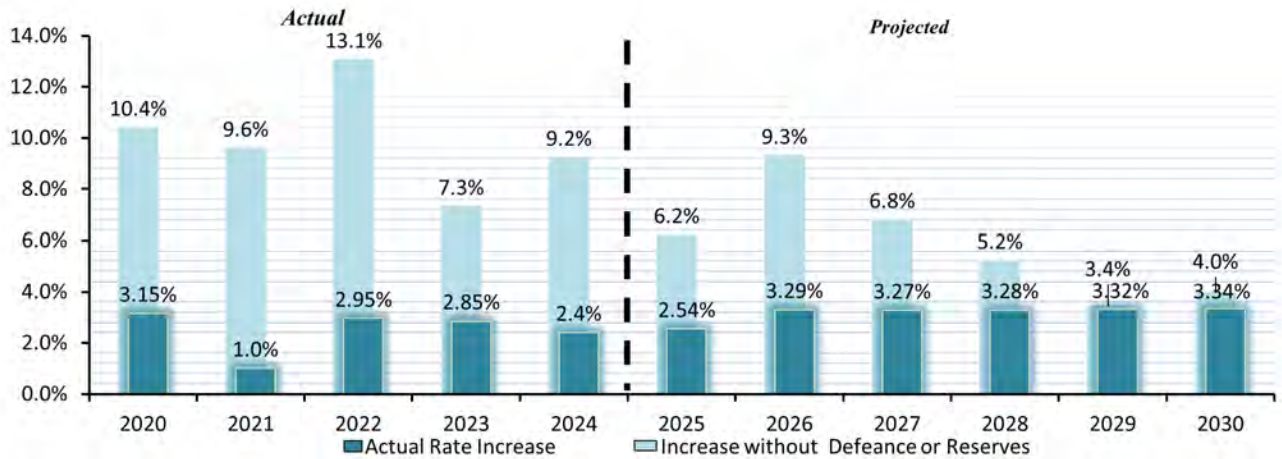
In addition to the typical defeasance, as part of the 2024 Series B refunding transaction, MWRA was able to pay off early \$11.1 million in bonds which were tendered back to MWRA with current year debt service funds. The tendered bonds result in a debt service reduction of \$13.5 million between FY25 and FY29. Through the tender process MWRA was able to pay the bonds off ahead of their maturity and avoid \$1.5 million in interest expense. The following table details the budget reductions by fiscal year from the tender process.

Budget Reduction by Fiscal Year					Total CEB Savings
2025	2026	2027	2028	2029	
\$ 553,500	\$ 553,500	\$ 1,753,500	\$ 4,133,500	\$ 6,541,500	\$ 13,535,500

MWRA’s ongoing use of defeasances has had a significant impact in lowering future debt service payments and limiting annual rate revenue increases. From 2006 through this proposed transaction, MWRA has defeased \$865.5 million in debt service to reduce future year rate revenue requirements. The following chart details the multi-year impact of those defeasances.



The application of these defeasances has had a significant impact on rate increases. The following chart shows the estimated rate increase without the application of the defeasances.



Staff reviewed all bonds available to be defeased, and have identified the maturities of the bonds in the following table as the most advantageous defeasance candidates.

Series	Maturity	Call Date	Principal	Defeasance Cost <sup>1</sup>
2016B	August 1, 2028	August 1, 2026	\$ 1,750,000	\$ 1,925,000
2016C	August 1, 2027	August 1, 2026	\$ 8,525,000	\$ 9,377,500
2016C	August 1, 2028	August 1, 2026	\$ 2,000,000	\$ 2,200,000
2016C	August 1, 2028	August 1, 2026	\$ 4,500,000	\$ 4,950,000
2017B	August 1, 2030	August 1, 2027	\$ 2,850,000	\$ 3,277,500
2019B	August 1, 2030	August 1, 2029	\$ 1,000,000	\$ 1,250,000
2019B	August 1, 2030	August 1, 2029	\$ 2,040,000	\$ 2,550,000
<b>Total</b>			<b>\$ 22,665,000</b>	<b>\$ 25,530,000</b>

(1) Defeasance costs is only anticipated funds from surplus and does not included current year deposits.

The following table details the annual budget savings by fiscal year for the proposed FY24 spring defeasance.

Budget Reduction by Fiscal Year						Total CEB Savings
2025	2026	2027	2028	2029	2030	
\$ 1,133,250	\$ 1,133,250	\$ 9,658,250	\$ 8,957,000	\$ 294,500	\$ 6,184,500	\$ 27,360,750

The proposed defeasance reduces debt service by a total of \$27.4 million between FY25 and FY30. The total debt service reduction attributable to the defeasance is approximately \$1.8 million higher than the defeasance cost because all of the bonds selected for this defeasance are callable prior to their maturity date. The payment of these bonds on the call date will yield interest savings, as a result of paying off the bonds prior to maturity without interest accruing. Since 2006, MWRA has avoided \$42.7 million in interest by defeasing callable bonds.

The funds will be utilized to purchase governmental securities in an amount sufficient to make all future interest and principal payments on the bonds to be defeased, offset by the interest earned on the securities.

The governmental securities purchased will be deposited with an escrow agent (bond trustee). Once established, an escrow is irrevocable, replacing any future debt service payments due for the bonds being escrowed, and therefore reducing the rate revenue requirement. Establishing an escrow reduces debt service requirements for each fiscal year from the time it is executed until the defeased bonds mature.

Establishing an escrow to defease debt requires that MWRA’s bond counsel draft an agreement to this effect and an independent verification agent must certify that the funds in the escrow are sufficient to pay the remaining debt service. Bonds that are escrowed to maturity are not included in the MWRA’s debt cap or debt service coverage calculations. Staff will continue to monitor market conditions and the maturities available to be defeased to ensure that the bonds selected provide MWRA with the highest available debt service savings.

**BUDGET/FISCAL IMPACT:**

The tender and defeasance combined will decrease the FY25 through FY30 debt service requirement by \$40.9 million. In addition to the fiscal year budgetary reductions shown below, these transactions together resulted in \$3.4 million in avoided interest expenses, which are direct savings for the MWRA’s ratepayers.

Budget Reduction by Fiscal Year						Total CEB Savings
2025	2026	2027	2028	2029	2030	
\$ 1,686,750	\$ 1,686,750	\$ 11,411,750	\$ 13,090,500	\$ 6,836,000	\$ 6,184,500	\$ 40,896,250

The cost associated with bond counsel and financial advisory services will be paid out of the Treasury Department’s professional services budget.

**STAFF SUMMARY**



**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Surplus a Portion of the Abandoned Mystic Water Main Water Easement

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COMMITTEE: Administration, Finance & Audit

     INFORMATION  
  X   VOTE



Michele S. Gillen  
Director, Administration

Colleen Guida, Project Manager, Real Property  
Preparer/Title



David W. Coppes, PE  
Chief Operating Officer

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**RECOMMENDATION:**

To declare as surplus to the Authority’s water system construction, maintenance, or operation needs and purposes a certain portion of an existing Commonwealth of Massachusetts water easement under the care, custody and control of the Authority located on a parcel of land with an address of 58 Main Street, Somerville, as shown on the attached plan (Attachment A), and to return it to the control of the Massachusetts Division of Capital Asset Management and Maintenance (“DCAMM”) in accordance with Section 9(c) of Chapter 372 of the Acts of 1984, as amended (“Enabling Act”).

**DISCUSSION:**

Section 9(c) of MWRA’s Enabling Act sets forth the procedures by which the Authority may relinquish its jurisdiction and control over Commonwealth-owned water and sewer facilities that are under MWRA’s care, control, and jurisdiction and MWRA finds to be surplus to its water and sewer system needs. MWRA’s policy for Disposition of Real Property requires that, for property acquired through the enabling legislation, prior to declaring a site as surplus, the responsible division must first declare it surplus, confirm that it is surplus Authority-wide, obtain Board approval of this surplus designation, and finally, dispose of it by notifying DCAMM.

In 1898, the Metropolitan Water Board acquired water easements for the Metropolitan Water Works (originally taken in 1863 by the City of Boston) in multiple towns and cities. Part of the acquisition included the Mystic Water Works situated in the towns and cities of Winchester, Medford, Arlington and Somerville, and included a pump station, now known as Mystic Shops, a reservoir, formerly located at Tufts University and abandoned in 1948, and 30-inch and 24-inch water pipelines, which were partially abandoned in 1950 and 1992, respectively. The water pipelines were abandoned due to the inability to maintain water quality in the Northern Low service area, the condition of the pipes and that the pipelines were no longer needed due to improvements since 1898 to the Northern Low service area, which resulted in very little flow going through these lines.



Keach Development LLC owns the property located at 58 Main Street, Somerville. In order to redevelop this property, Keach requested that MWRA release the portion of the approximately 17-foot-wide water easement that crosses the parcel at 58 Main Street. Staff have determined that MWRA has no future need for this portion of the old water easement. Therefore, David W. Coppes, MWRA's Chief Operating Officer, declared this portion of the water easement as surplus to the construction, maintenance, or operational needs of MWRA and determined that such disposition will not impair the maintenance and operation of the sewer or waterworks systems. Accordingly, staff recommend that the portion of the 17-foot-wide water easement crossing the parcel at 58 Main Street, Somerville, as shown in Attachment A, be declared surplus to MWRA's needs.

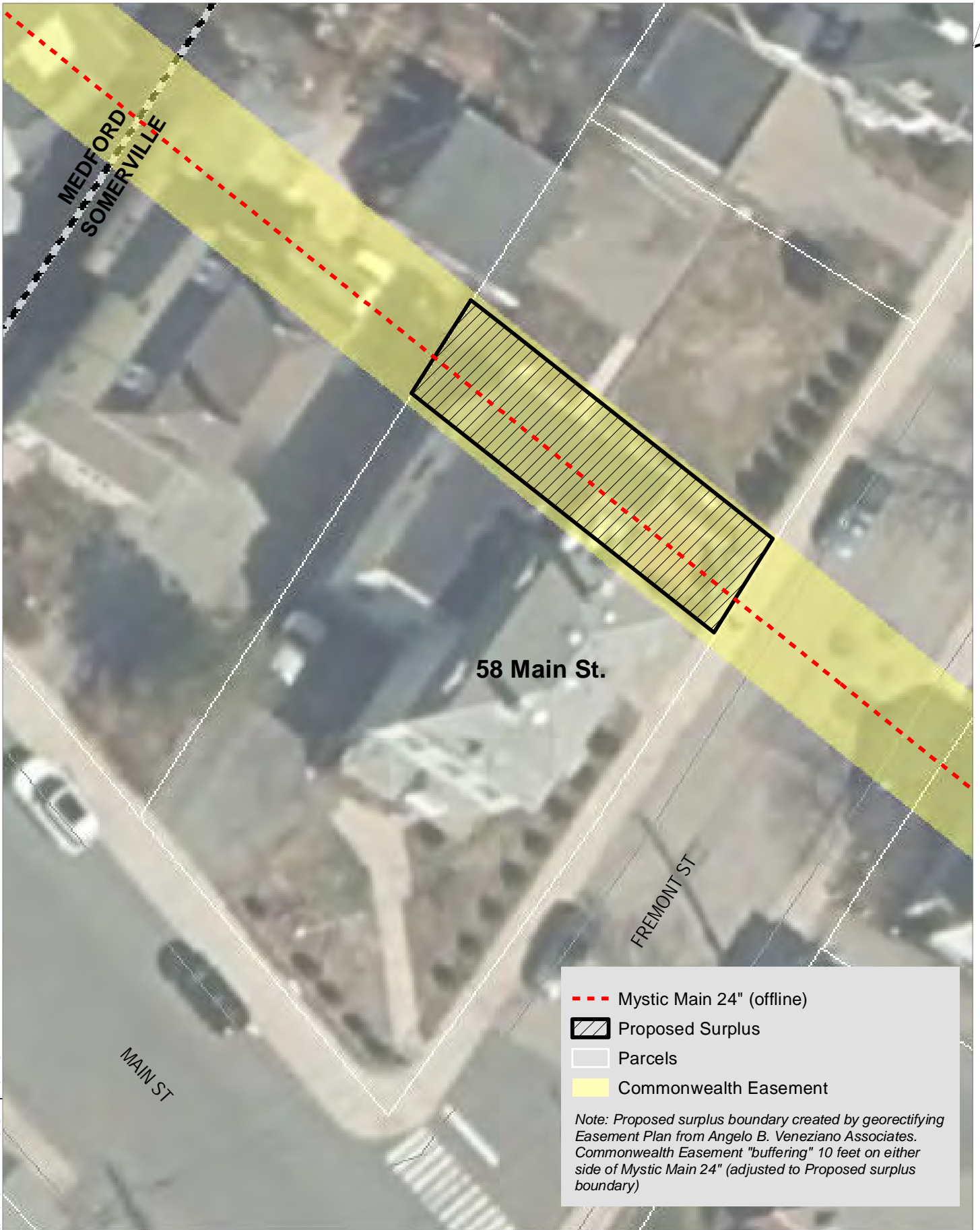
**BUDGET/FISCAL IMPACTS:**

There is no fiscal impact from this transaction.

**ATTACHMENTS:**

A: Map of Proposed Surplus Sewer Easement

**Attachment A**  
Proposed Surplus Water Easement  
58 Main Street, Somerville



5/14/2024 MwaGISmap2021-3

0 10 20 Feet

1 inch = 20 feet

--- Municipal Boundary

**STAFF SUMMARY**


**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Maximo Lawson Interface Enhancements  
Starboard Consulting, LLC  
MWRA Contract No.7649 - Amendment 4



**COMMITTEE:** Administration, Finance & Audit

     INFORMATION  
  X   VOTE

Paula Weadick, Director, MIS  
Paul Fentross / Business Applications Manager, MIS  
Preparer/Title

  
Michele S. Gillen  
Director of Administration

Maximo is a Computerized Maintenance Management System (CMMS) currently used for managing asset lifecycle and maintenance activities for MWRA’s water, wastewater, fleet and IT assets. It also tracks costs, including original asset cost, spare parts, consumables used in maintenance, and staff support hours to realize the total cost of ownership of an asset. MWRA is presently managing more than 146,400 pieces of equipment that generate approximately 8,080 work orders a month.

**RECOMMENDATION:**

That the Executive Director, on behalf of the Authority, approve Amendment 4 to Contract 7649, Maximo Lawson Interface Enhancements, with Starboard Consulting, LLC, to extend the contract term by three months from June 26, 2024 to September 26, 2024 at no additional cost to the Authority.

**DISCUSSION:**

MWRA acquired Maximo through a competitive bid process in 1994 in support of the Deer Island Treatment Plant’s maintenance management program, which developed in parallel with the construction of the plant. Upon successful implementation, MWRA expanded the use of Maximo to Field Operations and Vehicle Maintenance Management in 1998, and standardized on Maximo as the maintenance management software application for the Authority. In 2015, through a competitive bid process, Maximo was upgraded to version 7.6.x and the Deer Island, Field Operations and Vehicle Maintenance Management systems were consolidated to a single, multi-site system supporting Deer Island, Field Operations, Vehicle Maintenance Management, Clinton Advanced Wastewater Treatment Plan and MIS.

The Lawson system is responsible for inventory, staffing information, and procurement. Integration between the Maximo and Lawson systems is essential for maintenance management and calculation of total cost of ownership, and therefore, needs to be 100% accurate.

**This Contract:**

On June 23, 2021, the Board approved the award of Contract 7649 to Starboard Consulting, LLC to provide professional services for the Maximo Lawson Interface Enhancements. The original contract, in the amount of \$1,184,000, was for 18 months. The scope of work associated with these professional services was to provide for enhancements to MWRA's existing Computerized Maintenance Management System, Maximo, and its interface to MWRA's current ERP System, Lawson/Infor.

Since Lawson is the system of record for all procurement, accounts payable and staffing information, Maximo relies heavily on the synchronization of this information for tracking costs. During the Maximo upgrade and consolidation process that started in 2015, numerous touchpoints were developed for the interface between Maximo and Lawson. Based on the MWRA staff experience with the interface over the past few years, staff have recommendations to build upon the existing interface to streamline process flows, enhance functionality, and add data validation for optimal performance and transaction integrity.

Staff identified 18 touchpoints where improvements could be made to increase effectiveness of the transactions in a shorter time. Examples of some of these touchpoints are the Maximo Work Order touchpoint, which triggers a Lawson event for picking materials from the warehouse and the Lawson Item touchpoint that triggers an inventory update in Maximo.

On occasion one of these touchpoints would fail due to a wrong value entered in either Lawson or Maximo creating a failed transaction that required manual intervention to resolve. Resolution could be anything from updating the database for an item that was classified incorrectly to updating global ledger account code information. In either case, the transaction must then be manually reprocessed. If not corrected the transactions remain in a queue and the Lawson and Maximo systems drift out of sync. In addition to implementing enhancements in the interface to address these issues, the vendor is also responsible for reviewing and recovering the failed transactions in the queue in order to ensure data integrity between the Maximo and Lawson Systems.

These interface touchpoints were developed using a third party software product, TRM Rules Manager. At the time, IBM had no way to accomplish this task without recompiling and redeploying source code. Since then, IBM implemented a simple scripting tool that can be used to develop and modify touchpoints more easily and efficiently without the need to recompile code or third party tools. The vendor also removed the use of this third party tool from the modified interface touchpoints.

**Amendment #1**

Additional workshops with MWRA and Starboard staff were held to further clarify requirements elicited during previous workshops with the vendor Starboard Consulting, LLC. These additional

workshops were not anticipated in the initial project schedule. The additional requirements workshops and analysis took 6 months to complete and needed to be incorporated into the project schedule.

Amendment #1 extended the contract end date an additional 6 months to accommodate the time used by these additional workshops with no additional cost.

### **Amendment #2**

Two separate issues caused delays in the project that made it unlikely that the project would complete prior to the contract end date. The first issue was that additional requirements gathering needed to determine the business rules for usage of the IT Storeroom in Maximo. The second issue was that the Maximo application version and the underlying infrastructure needed to be upgraded prior to the vendor Starboard testing and implementing the newly developed interfaces.

Amendment #2 extended the contract end date an additional 5 months to restore the project time used to resolve the aforementioned Maximo upgrade and IT Storeroom issues with no additional cost.

### **Amendment #3**

During unit testing of the newly developed interfaces, functional and technical issues related to the interfaces and the new version of Maximo added additional development and testing time to the project schedule pushing the anticipated completion date past the contract end date of December 26, 2023.

Amendment #3 extended the contract end date an additional 6 months to complete the remaining project tasks (development, unit testing, user acceptance testing, production implementation and warranty) with no additional cost.

### **This Amendment**

MWRA staff and the vendor, Starboard Consulting, LLC, implemented the newly developed interfaces into production on April 22, 2024. The vendor is currently in the 90 day contract warranty period supporting the implementation but the contract end date will occur before the 90 day warranty period has expired. Since going live with the new interfaces and Maximo version, staff have identified additional potential enhancements to the environment. Staff are requesting an additional three month extension to accommodate the 90 day warranty period and implement additional enhancements. Staff will review and prioritize potential additional enhancements utilizing a task order.

Amendment #4 is to extend the contract end date an additional three months from June 26, 2024 to September 26, 2024 at no additional contract cost.

**CONTRACT SUMMARY:**

	<u>Amount</u>	<u>Time</u>	<u>Dated</u>
Original Contract:	\$1,184,000	18 Months	7/21/2021
Amendment 1	\$0	6 Months	11/03/2022
Amendment 2	\$0	5 Months	10/12/2023
Amendment 3	\$0	6 Months	12/08/2023
Amendment 4	\$0	3 Months	Pending
Amended Contract:	\$1,184,000	38 Months	

The percentage of amendments for this contract is 0% of the original contract value.

**BUDGET/FISCAL IMPACT**

The FY24 CIP includes \$1,184,000 for Contract 7649. Amendment 4 is for a time extension only.

**MBE/WBE PARTICIPATION:**

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



# MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island  
33 Tafts Avenue  
Boston, MA 02128

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

*Chair:* J. Walsh  
*Vice-Chair:* P. Walsh  
*Committee Members:*  
A. Pappastergion  
B. Peña  
H. Vitale  
M. White-Hammond  
J. Wolowicz

## **WASTEWATER POLICY & OVERSIGHT COMMITTEE MEETING**

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

Date: Wednesday, June 26, 2024  
Time: Immediately following the Administration, Finance & Audit Committee  
Location: Deer Island Reception/Training Building, 1st Floor  
33 Tafts Avenue – Favaloro Meeting Room  
Boston, MA 02128

A photo ID will be required for entry.

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

**Webex meeting link (Registration required):**

<https://mwra.webex.com/weblink/register/rd8e53ef2bd8abb5820fd658867c9774b>

Meeting Number: 2349 352 1994      Password: 6282024

## **AGENDA**

**A. Approvals**

1. Annual Renewal of Wastewater Advisory Committee (WAC) Contract

**B. Contract Awards**

1. West Roxbury Tunnel Inspection: Black Dog Divers, Inc., Contract 6898

**C. Contract Amendments/Change Orders**

1. Agency-Wide Technical Assistance Consulting Services: Hazen and Sawyer, P.C., Contract 7990, Amendment 1
2. Agency-Wide Technical Assistance Consulting Services: Kleinfelder Northeast, Inc., Contract 7991, Amendment 1
3. Nut Island Headworks Odor Control and HVAC Improvements: Walsh Construction Co. II, LLC, Contract 7548, Change Order 18

**MASSACHUSETTS WATER RESOURCES AUTHORITY**  
Meeting of the Wastewater Policy & Oversight Committee  
of the MWRA the Board of Directors  
March 13, 2024

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A meeting of the Wastewater Policy and Oversight Committee of the Massachusetts Water Resources Authority (“MWRA”) Board of Directors was held on March 13, 2024 at MWRA’s Administration Facility in Chelsea, and via remote participation.

Committee Chair Jack Walsh presided at the MWRA Administration Building in Chelsea. Board Members Foti, Pappastergion, Peña, Taverna, Patrick Walsh and White-Hammond participated at the Chelsea Administration Facility. Board Members Vitale and Wolowicz participated remotely. Board Member Flanagan was absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Special Assistant for Affirmative Action Patterson Riley; Tunnel Program Director Kathy Murtagh; Director of Procurement; Deer Island Treatment Plant Director David Duest; Deer Island Engineering Services Manager Richard Adams; Asset Management Analyst Michael Curtis; Chief of Staff Katie Ronan; Associate General Counsels Angela Atchue, Kimberley McMahon and Kristen Schuler Scammon; and, Assistant Secretary Kristin MacDougall participated at MWRA’s Chelsea Administration Facility.

Vandana Rao, Executive Office of Environmental Affairs (“EEA”), and Matt Romero, MWRA Advisory Board (“Advisory Board”), participated at MWRA’s Chelsea Administration Facility.

**CALL TO ORDER**

Committee Chair Jack Walsh called the meeting to order at 11:57am.

**INFORMATION**

**Infiltration/Inflow Local Financial Assistance Program Annual Update**

This item was deferred to the Board of Directors Meeting. (ref. WW A.1/BI C)

**CONTRACT AWARDS**

**Thermal Plant, Hydro Power and Wind Turbine Maintenance: O’Connor Corporation, Contract OP-464**

David Coppes, MWRA Chief Operating officer and David Duest, MWRA Deer Island Treatment Plant Director, and Richard Adams, MWRA Manager Deer Island Engineering Services Manager, presented the scope and terms of a proposed award for a Thermal Plant, Hydro Power and Wind Turbine Maintenance contract, as detailed in the March 13, 2024 Staff Summary and filed with the records of this meeting.



The presentation included a summary of the procurement process for this contract; the bid results; the recommended contractor's qualifications; and the reasons for a variance between the bid price and the Engineer's Estimate.

There was brief, general discussion about the risks of rebidding contracts to attract more interest. There were questions and answers about the purpose and environmental benefits of the Deer Island hydro turbine wicket gate assemblies and the cost of the contract's wicket gate rehabilitation line item. There was also discussion about payback on MWRA's green energy and carbon reduction strategies; procurement approaches for this contract; the logistics of rehabilitating the wicket gates; and the recommended contractor's past performance.

Board Member White-Hammond suggested a future discussion about longer-term planning with respect to maintenance staffing to alleviate shortages of qualified contractors. There was general discussion about potential reasons why contractors may decline to place bids.

Board Member Vitale complimented staff for preparing a well-documented presentation. He stressed the net economic benefits of this contract, and expressed his support for approval.

There was further, general discussion about the challenge of attracting more qualified bidders and potential strategies to mitigate them.

Hearing no further discussion or questions from the Board, Chair Jack Walsh moved to Adjournment. (ref. WW B.1/ V B.1)

#### ADJOURNMENT

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

A roll call vote was taken in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
J. Walsh		
P. Wash		
White-Hammond		
Wolowicz		

The meeting adjourned at 12:18pm.

LIST OF DOCUMENTS AND EXHIBITS USED

- March 13, 2024 Staff Summary and Presentation – Infiltration/Inflow Local Financial Assistance Program Annual Update (ref. WW A.1, deferred to BI C)
- March 13, 2024 Staff Summary and Presentation – Thermal Plant, Hydro Power and Wind Turbine Maintenance: O’Connor Corporation, Contract OP-464 (ref. WW B.1/V B.1)

**STAFF SUMMARY**

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Wastewater Advisory Committee Contract

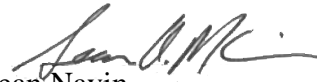


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**COMMITTEE:** Wastewater Policy & Oversight

       INFORMATION  
  X   VOTE

Rebecca Weidman, Deputy Chief Operating Officer  
Wendy Leo, Senior Program Manager  
Rose Souliotis, Administrative Coordinator  
Preparer/Title

  
Sean Navin  
Director, Public Affairs

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**RECOMMENDATION:**

To authorize the Executive Director, on behalf of the Authority, to execute a contract, substantially in the form attached hereto, with the Wastewater Advisory Committee for a term of one year, from July 1, 2024 to June 30, 2025, for a total contract cost of \$87,374.

**DISCUSSION:**

In addition to the critical oversight functions of the Advisory Board, many of MWRA's policy decisions are made with advice and support from two standing citizens' advisory committees, the Wastewater Advisory Committee (WAC) and the Water Supply Citizens Advisory Committee (WSCAC). A separate staff summary presented at this meeting recommends authorization for the Executive Director to execute a similar contract with WSCAC for FY25.

The Wastewater Advisory Committee was created in 1990 to offer independent recommendations on wastewater programs and policies; it is a successor to the Facilities Planning Citizen Advisory Committee established during the planning of the new Deer Island Treatment Plant. WAC's members include citizen advocates, representatives from the Metropolitan Area Planning Council, watershed associations, the engineering and business communities, environmental law, and science and education fields. The Advisory Board has historically appointed a member as well.

The proposed FY25 WAC contract is 1.82% higher than the FY24 contract. Health insurance increased by 8.8%, while other reimbursable expense items increased by \$450 to cover the increased cost of the payroll service. Health insurance is budgeted at 80% reimbursement for the Executive Director only, not to exceed \$13,732, with an optional health insurance buy-out program similar to that offered to MWRA employees who do not use MWRA's health insurance benefit. Office space and support services for WAC are provided by MWRA at 2 Griffin Way, Chelsea, MA 02150. The proposed total FY25 WAC funding is \$87,374.

WAC's monthly meetings are geared toward engendering discussion and facilitating timely recommendations to MWRA's Board of Directors and staff on wastewater policies, projects, and program initiatives directly related to MWRA, and public concerns. Current topics of interest to WAC include reissuance of MWRA NPDES permits, operations and maintenance, combined

sewer overflows, green energy, PFAS, treatment technologies, climate change, and wastewater/water policy and funding initiatives in Massachusetts.

WAC elects its Chair and employs an Executive Director (selected by WAC's membership with the concurrence and approval of MWRA's Public Affairs Department). WAC's current Chair is Kannan Vembu and WAC's current Executive Director is Andreae Downs. Pursuant to the terms of the attached contract, WAC's members are approved by MWRA's Board of Directors.

**BUDGET/FISCAL IMPACT:**

Sufficient funds for the WAC contract are included in the Draft Final FY25 Current Expense Budget.

**ATTACHMENT:**

Agreement between Massachusetts Water Resources Authority and Wastewater Advisory Committee

AGREEMENT  
BETWEEN  
MASSACHUSETTS WATER RESOURCES AUTHORITY  
AND  
WASTEWATER ADVISORY COMMITTEE

This Agreement (“Agreement”) is by and between the Massachusetts Water Resources Authority (“Authority”), a body politic and corporate and a public instrumentality of the commonwealth, created by Chapter 372 of the Acts of 1984, with offices at Deer Island, 33 Tafts Avenue, Boston, MA 02128 and the Wastewater Advisory Committee (“WAC”) a body created by the Authority’s Board of Directors (“Board”) (collectively “Parties”).

WHEREAS, the WAC was created to offer independent advice to the Board and to the professional staff of the Authority, regarding wastewater programs and policies directly related to the Authority;

WHEREAS, the WAC will (i) review and comment to the Authority on wastewater reports and related proposed documents, and (ii) offer independent commentary and advice on current and proposed wastewater program and policy directions to further Authority objectives;

WHEREAS, the WAC membership is designed to reflect the knowledge and interest of major affected constituencies, including engineering, construction, business/industry, planning, academic research, and environmental advocacy;

WHEREAS, the Authority desires the WAC to advise the Authority in wastewater planning; and

WHEREAS, the WAC desires to have a role advising the Authority on such matters.

NOW, THEREFORE, for the consideration of mutual promises contained herein, the Authority and WAC agree as follows:

ARTICLE 1. EFFECTIVE DATE

This Agreement shall be effective from July 1, 2024 through June 30, 2025, inclusive.

## ARTICLE 2. COMPENSATION, BUDGET, PAYMENT, AND EXPENSES

2.1 The Authority shall make funds available as follows:

(a) Executive Director Salary.

In order to minimize the WAC's expenses and for the WAC's convenience, the Authority shall make direct payments to the WAC for the WAC Executive Director salary. Such payments shall not exceed \$70,368 from July 1, 2024 through June 30, 2025, inclusive. The hourly salary rate (inclusive of payroll taxes) shall be \$48.63 with annual total hours of 1,447 (average 30 hours per week for 49 weeks).

(b) Reimbursable expenses.

The Authority shall reimburse the WAC for 80% of the non-employer-sponsored health insurance for the WAC Executive Director (not to exceed \$13,732), and for stationery, payroll services expenses, bank expenses, and for mileage costs, public transportation costs, highway tolls and parking expenses for meeting attendance by WAC's Executive Director and membership, and for other miscellaneous expenses of the WAC staff approved by the Authority on a case-by-case basis. Such expenses will be reimbursed when submitted to the Public Affairs Unit. Mileage costs will be reimbursed at the prevailing Authority rate per mile.

The percentage rate for reimbursement of health insurance costs shall be changed to that of Authority staff if the Group Insurance Commission changes the rate.

Health insurance buy-out: The WAC Executive Director may elect a monetary allowance in lieu of reimbursement of health insurance costs, provided he or she has health insurance coverage through another employer-sponsored plan that meets Internal Revenue Service "minimum value" criteria, throughout that six-month period. The amount of the allowance will be \$1000 to waive family coverage or \$700 for waiving individual coverage. The WAC Executive Director is responsible for any withholding taxes on these payments with WAC being responsible for the employer share of payroll taxes.

The total annual expense reimbursement to WAC, excluding health insurance reimbursements or buy-out, shall not exceed \$3,274.

(c) Non-reimbursable expenses.

The following expenses are not reimbursable: meals, entertainment, room and board expenses, fines, fees, or costs assessed as a result of improper or illegal actions on the part of the member, such as parking tickets or speeding fines.

### ARTICLE 3. RESPONSIBILITIES OF THE AUTHORITY AND WAC

- (a) The WAC shall employ an Executive Director who is prohibited from being a member of the WAC while serving his or her term as a paid employee. The Authority Public Affairs Office must concur with and approve the selection of the WAC Executive Director by the WAC. The duties of the Executive Director shall be in accordance with the job description prepared by the WAC, and on file with the Authority.
- (b) The WAC shall submit weekly statements to the Authority requesting payment for expenses listed in Article 2. Such requests shall be supplemented or accompanied by timesheets, travel and expense vouchers, and by such other supporting data as may be required by the Authority.
- (c) The WAC shall maintain accounts, records, documents, and other evidence directly pertinent to performance of work under this Agreement. The parties and their duly authorized representatives shall have access to such records, documents, and other evidence for the purpose of inspection, audit, and copying.
- (d) The Authority or its duly authorized agent shall have the right at any and all reasonable times, to examine and audit WAC's records, documents and other evidence.
- (e) This Agreement is subject to the laws dealing with the expenditures of public funds, including Chapter 12A of the Massachusetts General Laws.
- (f) The parties shall agree to any reasonable modifications or changes in this contract that may be required by the Commonwealth of Massachusetts or any of its agencies.
- (g) The WAC acknowledges that the Authority is a state agency for purposes of Chapter 268A of the General Laws (the Massachusetts Conflict of Interest Law) and understands that for the purposes of that law, WAC staff and members are special state employees.
- (h) The WAC shall be responsible for compliance with all applicable provisions and requirements of the Massachusetts Open Meeting Law and the Public Records Law.

### ARTICLE 4. RESPONSIBILITIES OF THE WAC STAFF

- 4.1 The WAC staff shall be responsible for the following tasks:
  - (a) aiding the WAC in its tasks under Article 6, educating the public, and acting as liaison with the Authority and its staff;
  - (b) maintaining financial records, minutes of the WAC meetings, and other WAC records;
  - (c) providing to the Authority copies of the notices for and minutes of all meetings of WAC and of all WAC correspondence relative to Authority projects and proposals as soon as such materials are available; and

(d) administering and maintaining compliance by all its members and staff with the provisions of the Massachusetts Conflict of Interest Law including, without limitation, those mandatory provisions relating to: (i) annual distribution to members and staff of the State Ethics Commission's (SEC) Summary of Law and maintenance and archiving of acknowledgements of receipt of the Summary of Law from all members and staff, and (ii) compliance by members and staff with the SEC's bi-annual educational training exercises.

## ARTICLE 5. MEMBERSHIP, MEETINGS, TERMS

5.1 The WAC membership, meetings and terms shall be as follows:

- (a) the WAC will have a maximum of twenty (20) members ("Members") approved by the Board. (Alternates or designees are prohibited);
- (b) the WAC shall meet once per month and maintain records of its meetings;
- (c) to the extent reasonable, Members will meet as a committee of the whole, without resort to subcommittees;
- (d) members will elect their Chair;
- (e) members' terms will be three (3) years; members may succeed themselves; and
- (f) members unable to maintain reasonable participation in the committee's work will be expected to resign. The Authority's Public Affairs Unit, in consultation with the WAC Chair, will nominate a replacement for Board approval.

## ARTICLE 6. WAC TASKS

The WAC shall undertake the following tasks:

### 6.1 Wastewater Policies and Programs Review.

Advise the Authority staff and Board. Participate in review and evaluation of wastewater management plans (e.g., local limits, I/I, CSO), reports and new ideas for programs. Provide comments, information, advice, recommendations and guidance as to the direction, intent and execution of wastewater planning and policy directly related to MWRA.

### 6.2 Outreach and Education.

Strive to increase citizen participation and education by providing assistance in outreach to various groups regarding the Authority's wastewater programs and state wastewater resource policies. Review programs and explain plans and policies to organizations and citizens.



6.3 Working Group Representation.

When possible, provide a representative on Authority working groups, comprising MWRA staff and consultants, related to wastewater programs and policy, including the Advisory Board and its subcommittees and the Water Supply Citizens Advisory Committee.

6.4 Recommendations on Long-Term Public Involvement.

Provide to the Authority staff and Board, proposals for continued effective and efficient long-term public involvement in wastewater programs.

6.5 Recommendations and Discussion Documents.

The WAC staff shall be responsible for providing to the Authority's staff, Board, and others, recommendation and discussion documents on wastewater programs and policy. Documents may be in the form of minutes of WAC meetings, memoranda, letters, reports, presentations and discussions as appropriate.

ARTICLE 7. MISCELLANEOUS REQUIREMENTS

7.1 Nondiscrimination and Equal Employment Opportunity.

The WAC agrees to comply with the Authority's policy regarding non-discrimination and affirmative action.

ARTICLE 8. GENERAL PROVISIONS

8.1 Termination of Contract.

(a) This Agreement may be terminated in writing, at any time, in whole or in part, by the Authority for its convenience or in the event of substantial failure by the WAC to fulfill its obligations, or for violation of any of the covenants and stipulations of this Agreement.

(b) If termination is effected by the Authority an equitable adjustment shall be made providing for payment to the WAC for services rendered and expenses incurred prior to the termination.

(c) No termination hereunder may be effected unless the terminating party gives the other party:

- (1) not less than forty-five days' written notice delivered by certified mail, return receipt requested, of intent to terminate; and
- (2) an opportunity for consultation with the other party prior to termination; or
- (3) by mutual agreement of the parties.

8.2 Assignability.

The WAC shall not assign or transfer this Agreement or delegate its responsibility for the performance of services under this agreement.

8.3 Integration Clause.

This Agreement integrates and supersedes all prior negotiations, representations, or agreements.

8.4 Amendment.

This Agreement may be amended only by a writing executed by each of the parties.

8.5 Severability of Provisions.

If any provision of this Agreement shall, to any extent, be held invalid or unenforceable, the remainder of this Agreement shall not be deemed affected thereby.

8.6 Massachusetts Law to Govern.

All parties to this Agreement agree that this Agreement shall be governed by and enforced in accordance with the laws of the Commonwealth of Massachusetts.

8.7 Duplicate Originals.

This Agreement may be signed in more than one identical counterpart, each of which shall be deemed to be an original hereof.

8.8 Notices.

Communications shall be deemed to have been made when mailed postage prepaid or delivered among:

Executive Director  
Wastewater Advisory Committee  
c/o MWRA  
2 Griffin Way  
Chelsea, MA 02150

Executive Director  
Massachusetts Water Resources Authority  
Deer Island  
33 Tafts Avenue  
Boston, MA 02128

Director of Public Affairs  
Massachusetts Water Resources Authority  
Deer Island  
33 Tafts Avenue  
Boston, MA 02128

IN WITNESS WHEREOF, this Agreement is executed as of this \_\_\_\_ day of  
June, 2024.

FOR: WASTEWATER ADVISORY COMMITTEE

By: \_\_\_\_\_  
Kannan Vembu, Chair

FOR: MASSACHUSETTS WATER RESOURCES AUTHORITY

By: \_\_\_\_\_  
Frederick A. Laskey, Executive Director

**STAFF SUMMARY**

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** West Roxbury Tunnel Inspection, Sections 637 & 637A  
Black Dog Divers, Inc.  
Contract 6898



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**COMMITTEE:** Wastewater Policy & Oversight

         INFORMATION

  X   VOTE

  
Michele S. Gillen

Director of Administration

Brian L. Kubaska, P.E., Chief Engineer  
Shannon M. Matuschak, P.E., Project Manager  
Preparer/Title

  
David W. Coppes, P.E.

Chief Operating Officer

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**RECOMMENDATION:**

To approve the award of Contract 6898, West Roxbury Tunnel Inspection, Sections 637 & 637A, to the lowest responsive bidder, Black Dog Divers, Inc. and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the bid amount of \$1,656,930 for a contract term of 365 calendar days from the Notice to Proceed.

**DISCUSSION:**

The West Roxbury Tunnel (Tunnel), wastewater pipeline Sections 637 and 637A, is located in Boston and conveys wastewater from the Wellesley Extension Relief Sewer and the Upper Neponset Valley Replacement Sewer in West Roxbury to the High Level Sewer in Hyde Park. The Tunnel was constructed in 1964 as part of an expansion of the sewer system to serve the southern portion of the metropolitan region. The service area includes all or parts of Ashland, Brookline, Dedham, Framingham, Natick, Needham, Newton, Wellesley, and the Hyde Park and West Roxbury sections of Boston. The Tunnel was constructed to provide relief to the Neponset Valley Sewer, a wastewater pipeline running through Hyde Park to its connection to the High Level Sewer.

Section 637 is a 12,400-foot-long, concrete-lined, 84-inch rock tunnel. The tunnel is connected to the Wellesley Extension Relief Sewer at its upstream (western) portal located at New Haven Street in West Roxbury. Approximately 5,100 feet downstream of the western portal is an access shaft (Construction Shaft) located in the Stony Brook Reservation. Approximately 7,300 feet downstream of the Construction Shaft is the downstream Section 637 portal (East Portal) located at Grew Avenue in Hyde Park. Section 637A, constructed of both concrete-lined tunnel and 84-inch pre-cast reinforced concrete pipe, extends downstream 1,600 feet from the East Portal to its connection to the High Level Sewer at Navarre Street in Hyde Park (see Figure A, attached).

In 1999, MWRA contracted for a physical inspection of the West Roxbury Tunnel and the section of wastewater pipeline just upstream, Section 638. This inspection indicated that Section 638 and the New Haven Street drop chamber had severe concrete deterioration and were in danger of collapse. While a portion of the Tunnel was also severely deteriorated, the concrete-lined tunnel is in rock and was not believed to be in any immediate danger of collapse. Based on these findings, Construction Contract 6569 for the rehabilitation of Section 638 and the New Haven Street drop chamber was approved by the Board of Directors and awarded to R. Zoppo Corp. on May 23, 2001; the contract was completed on June 30, 2002.

In March 2002, Jacobs Engineering Group, Inc. prepared a Conceptual Design Report that identified, evaluated, and recommended alternatives for the rehabilitation of Sections 637 and 637A. The recommended alternative was to rehabilitate the entire West Roxbury Tunnel by slip-lining with a corrosion-resistant pipe. At that time, a decision was made to not move forward with the proposed rehabilitation due to the difficult construction impacts encountered in the New Haven Street drop chamber rehabilitation contract.

In 2009, staff recommended re-inspection of the Tunnel to reevaluate the recommendations of the Conceptual Design Report. Staff anticipated that corrosion continued to have a negative impact on the condition of the Tunnel. In addition, technology and construction methods involved in tunnel construction and pipeline rehabilitation had continued to develop and improve.

On March 4, 2009, the Board of Directors approved the award of Contract 6897 for West Roxbury Tunnel Design and Engineering Services during Construction/Resident Inspection to Stantec Consulting Services, Inc. in an amount not to exceed \$4,853,484. The scope of work under the Contract included investigation of the condition of Sections 637 and 637A and final design of construction documents for rehabilitation, if needed.

The entire length of the West Roxbury Tunnel and the downstream interceptor were physically inspected in late August 2010 by J.F. White, a subcontractor to Stantec (see Figure 1). Findings from this inspection indicated that there had been negligible deterioration of the Tunnel since the 1999 inspection. The conditions were found to be similar to those found previously. However, this inspection showed some loss of the concrete tunnel liner for the first 300 feet from the New Haven Street drop chamber, gradually improving to negligible concrete liner loss at the construction shaft in the Stony Brook Reservation. There was negligible to no deterioration from there to the East Portal.



*Figure 1: Construction-basket descending at the Construction Shaft*

Based upon the 2010 inspection of the West Roxbury Tunnel, combined with the significant reductions in hydrogen sulfide levels over the past decade in the tributary sewer system, staff recommended implementation of an inspection program to monitor the condition of the Tunnel in lieu of rehabilitation. It has been almost 14 years since the last inspection of this crucial infrastructure.

Tunnel inspection requires that all upstream flow be diverted to the Neponset Valley Sewer through installation of custom flow diversion infrastructure including a bulkhead plate in the Neponset Valley Connection Chamber and plugs in the 84-inch wastewater pipeline. Bypass pumps and piping will be utilized similar to the setup in 2010 shown in Figure 2, and will pump flow from the Upper Neponset Valley Replacement Sewer to the Neponset Valley Connection Chamber. Given the limited capacity of the Neponset



Figure 2: Bypass equipment at Junction Chamber No. 1

Valley Sewer, this work must to be closely coordinated with MWRA and monitored to ensure all wastewater flows can be safely diverted during the inspection. The inspection will require the contractor to fully document through video the entire length of the Tunnel, collect core samples and sediment samples for analysis, and evaluate the condition of the Tunnel to the extent that a rehabilitation design can be developed if determined appropriate. Given the hazardous conditions inside the Tunnel, a rescue team will be on site to monitor the personnel conducting the inspection.

### Procurement Process

Contract 6898 was advertised as a non-professional services contract in the Goods & Services Bulletin, the Boston Herald, Banner Publication and El Mundo. In addition, 447 firms received notice of the advertisement through the MWRA Supplier Portal. A total of 24 firms responded and were added to the plan holders list. A pre-bid site visit was held on April 10, 2024. Bids were opened on April 25, 2024 with the following bid results:

<b>BIDDER</b>	<b>BID PRICE</b>
<i>Engineer's Estimate</i>	\$1,156,335
Black Dog Divers, Inc.	\$1,656,930
R. Zoppo Corp.	\$2,122,000

Black Dog Divers' bid is the lowest responsive bid at \$1,656,930, which is \$500,595 (43%) above the Engineer's Estimate. The major differences between Black Dog Divers' bid price and the Engineer's Estimate are the tunnel inspection rates, the cost associated with the installation of the weir gates and plugs for the bypass system, the cost of the fiber optic cable required to complete the inspection work, and mobilization bid items.

MWRA held a meeting with Black Dog Divers on May 6, 2024 to discuss and evaluate the basis of its bid. Although the Engineer's Estimate had a similar assumption for the number of onsite staff and days required for the tunnel inspection work, Black Dog Divers' average labor rate and shift duration are higher than that utilized in the Engineer's Estimate.

For the bypass work supporting the Tunnel inspection, the Engineer's Estimate accounted for fewer laborers than Black Dog Divers carried in its bid for installing the weir gates and plugs for

the bypass system. Additionally, the Engineer's Estimate did not account for the longer lengths of fiber optic cable required to complete the inspection work. Due to the length of cable required, it is considered a specialty item and requires time to fabricate and deliver. The Engineer's Estimate did not account for acquiring the fiber optic cable as a specialty item and the additional costs associated with manufacturing and delivery.

For mobilization costs, Black Dog Divers included all necessary items identified in the scope of work, but also included equipment testing on and off site. The company estimated a two-week duration to fully mobilize whereas the Engineer's Estimate assumed fewer days.

Black Dog Divers' references and OSHA records were checked and found to be favorable. Staff reviewed the bid received from Black Dog Divers, and after reviewing the Engineer's Estimate and discussion with Black Dog Divers have determined that it is reasonable and complete, and meets all of the requirements of the specifications. Staff have determined that Black Dog Divers possesses the skill, ability and integrity necessary to perform the work under this contract and is qualified to do so. Therefore, staff recommend the award of this contract to Black Dog Divers, Inc. as the lowest responsible and eligible bidder.

**BUDGET/FISCAL IMPACTS:**

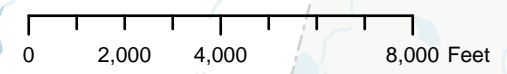
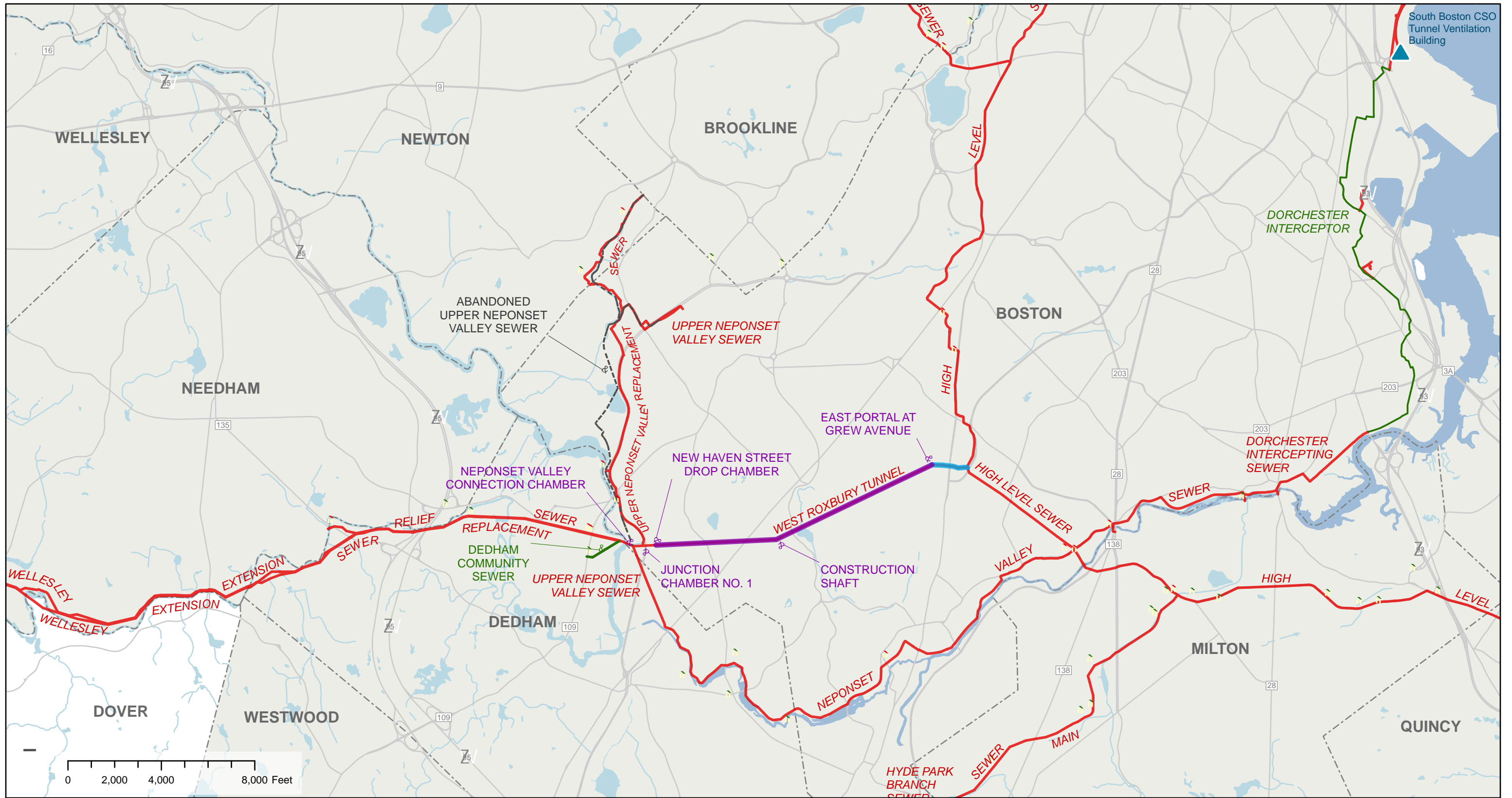
The FY25 Draft Final CIP includes \$1,200,000 for Contract 6898. The award amount is \$1,656,930 or \$456,930 over the CIP amount. This difference will be absorbed within the five-year CIP spending cap.

**MBE/WBE PARTICIPATION:**

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

**ATTACHMENT:**

Figure A – West Roxbury Tunnel Location Plan



- |                       |                             |                    |
|-----------------------|-----------------------------|--------------------|
| MWRA Sewer Meter      | MWRA Sewer Interceptors     | Major Roads        |
| Community Sewer Meter | Decommissioned Interceptors | Municipal Boundary |
| CSO Facilities        | Section 637                 | Member Communities |
| Community Interceptor | Section 637A                |                    |

**FIGURE A**  
**WEST ROXBURY TUNNEL LOCATION PLAN**



**STAFF SUMMARY**

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Agency-Wide Technical Assistance Consulting Services  
Contract 7990, Amendment 1  
Hazen and Sawyer, P.C.




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**COMMITTEE:** Wastewater Policy and Oversight

Brian L. Kubaska, P.E., Chief Engineer  
Meredith R. Norton, Senior Program Manager  
Preparer/Title

           INFORMATION  
  X   VOTE

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

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**RECOMMENDATION:**

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 1 to Contract 7990, Agency-Wide Technical Assistance Consulting Services, with Hazen and Sawyer, P.C., increasing the contract amount by \$1,500,000, from \$3,000,000 to \$4,500,000, and extending the contract term by twelve months from January 9, 2025 to January 9, 2026.

**DISCUSSION:**

Contract 7990 is the first of two technical assistance (TA) contracts for which staff are requesting an amendment. These multi-discipline contracts make available, on a continuing, as needed basis, the services of qualified, professional engineering firms and staff to assist the Authority on engineering study and design initiatives. The contracts may also provide Engineering Services During Construction (ESDC) and Resident Engineering/Inspection (REI) services. The TA contract consultants are required to have expertise in civil, structural, geotechnical, environmental and sanitary, mechanical and process, HVAC, fire protection, electrical, control systems, and chemical engineering as well as architecture, surveying, corrosion and odor control, permitting, security and cost estimating. These agency-wide TA contracts provide a variety of services, including:

- professional services on high priority or unanticipated projects;
- professional services for smaller priority projects such as roof and fuel oil tank replacements;
- access to expertise on short term assignments requiring specialized disciplines that are not cost effective for MWRA to maintain on an in-house basis; and
- ensuring that adequate resources are available to quickly respond when emergency or unanticipated situations arise.

On November 16, 2022, the Board approved Contract 7990 to Hazen and Sawyer, P.C. for a two-year term in an amount not to exceed \$3,000,000 and a Notice to Proceed was issued for this contract effective January 9, 2023.

Examples of projects already completed under Contract 7990 include:

- provided construction inspection services to install hydraulic relief at the Chelsea Combined Sewer Outfall (CSO), CHE008, allowing this outfall to meet its Long-Term Control Plan goals;
- performed emissions testing on the Prison Point CSO Facility's diesel engines to ensure regulatory requirements were met;
- performed an investigation of the Deer Island Treatment Plant wind turbine failure to assist MWRA in determining the appropriate next steps;
- provided services to guide and inspect the contractor's repairs to the Prison Point discharge pipe, which had frequent leaks and jeopardized the CSO facility's reliability; and
- provided monitoring services of the Charlestown Pump Station Seawall, which was noted to show movement presenting a concern for the long-term structural stability of the sea wall and the decommissioned pump station it supports.

Staff are relying more heavily on these TA contracts to design capital projects, in part, due to the low response to RFQ/Ps for design services on projects with values up to approximately \$1 million dollars. As a result, funds in these TA contracts are being utilized faster than initially anticipated. In addition, given the design, permitting, and/or construction complexities of many of these projects, a two-year contract is not sufficient to complete some projects. For example, the Somerville Marginal CSO Facility New Pipe Connection project currently being bid included time consuming design and permitting requirements due to its urban location, depth of excavation, and construction location within heavily traveled roadways (see project description below). In order to keep project work advancing and to complete projects already underway, staff are requesting contract extensions and additional funds for both agency-wide TA contracts (this Contract and Contract 7991 as discussed in a separate staff summary). This will help prevent time delays and costs associated with getting new consultants up-to-speed if we need to transition on-going projects from one TA contract to a new TA contract. Staff will adjust future TA contracts to have higher dollar values and longer durations in order to mitigate this recent trend.

### **This Amendment**

The timing and scope of TA services are not always predictable and in some instances there are unforeseen project delays and issues that arise and the project completion no longer coincides with the TA contract's expiration date. Staff are of the opinion that the projects would be best brought to completion by the current consultant's project team rather than completing the work under a new contract, perhaps by a different consultant firm.

This amendment will allow Hazen and Sawyer, P.C. to continue working on projects that will not be completed within the current contract's duration. Currently, with the exception of the Top of Shaft 5 project, the following on-going task orders can be completed within the recommended time extension for this contract, thereby maintaining design related knowledge and expertise and consistency from design through engineering and construction.

- Farm Pond Inlet Chamber Repair Design and Bidding. The consultant will provide a complete set of biddable plans and specifications to permanently eliminate a badly leaking stop-log connection between Farm Pond in Framingham and the Sudbury Aqueduct and assist the Authority in obtaining required permits, bidding and awarding the construction

project. The preliminary investigations and 30% design have been completed. A construction notice to proceed is anticipated for the spring of 2025.

- Somerville Marginal CSO Facility New Pipe Connection Design, Bid, and Engineering Services During Construction. This project will install a new connection and control gate from the Somerville collection system upstream of MWRA's Somerville Marginal CSO facility to MWRA's Section 35 pipeline. The connection will reduce CSOs to help meet MWRA's Long-Term Control Plan goals. A notice to proceed for construction is expected in August 2024 with substantial completion anticipated by December 31, 2025.
- Top of Shaft 5 Design, Bid and Engineering Services During Construction. This project will improve and protect all exposed piping, shaft caps, end caps, nuts, bolts, and valve bodies via corrosion protection tape wrap or exterior carbon fiber wrapping; remove and replace corroded nuts and bolts; prevent water infiltration through waterproofing and grouting; and abandon and fill with concrete, a pump room located 400 feet below the ground surface at Shaft 5 of the City Tunnel. The construction contract was awarded at the February 21, 2024 Board of Directors' meeting with a contract duration of 913 calendar days. This project will exceed the duration of this TA contract even with the proposed time extension. Based on what services are still needed, as the contract approaches its expiration, staff will determine if a further contract amendment is warranted, if remaining services can be addressed using in-house staff, or if a new task order is appropriate.
- Norumbega Covered Storage Tank Cleaning ESDC and Quality Assurance Inspection Services. The consultant will provide services during construction, resident engineering and structural inspection for a contract to clean the last of three 35 MG cells of the Norumbega Covered Storage Tank in Weston. This final construction contract is expected to be awarded in June 2024 with completion expected in April 2025.
- Shaft E, L, N and W Cathodic Protection Replacement Design and Bid. This project will provide for Cathodic Protection System Improvements at Metrowest Tunnel Shafts E, L, N, and W. Anticipated advertisement for bids is winter of 2024 with construction notice to proceed in the early spring of 2025.
- Gillis, Brattle Court, and Newton Street Roof Replacement Design and Bid. This project will replace and/or repair aging roofs existing flashing, downspouts, drains, and lightning protection. The construction contract has an anticipated advertisement for bids in the winter of 2025.

As of June 5, 2024, \$2,965,634.84 or 98.85% of the total contract amount of three million dollars has been committed to be executed and pending/proposed task orders, including those listed above and the proposed follow-up project to the Charlestown Pump Station Seawall monitoring project, which will include repair, design and bidding services. Based on earlier monitoring, repair of the seawall to stabilize its granite blocks and limit future movement is recommended. Given the measured movement and the seawall being a part of the foundation that supports the decommissioned Charlestown Pump Station the work will be performed in the short-term.

In addition, staff have identified additional task orders with an estimated value of approximately three million dollars (to be distributed between Contracts 7990 and 7991) that are important to move forward over the next several months. The increase in budget through this amendment, and an amendment to Contract 7991, will allow the issuance of task orders for the following additional important MWRA projects:

- development of a preliminary design to further advance repairs to the Belle Isle Sandcatcher noted to have a longitudinal crack (a complete RFQ/P for the full design and construction services was issued, but received no proposals);
- design of the demolition and capping of the Farm Pond Inlet Chamber and Gate House, which pose maintenance and safety concerns for the MWRA;
- advance rehabilitation of the Bellevue Standpipe 1 and Arlington Heights Tank through a structural condition assessment (a complete RFQ/P for this assessment was issued, but received no proposals); and
- implementation of future critical unforeseen task orders.

Staff will pursue procurement of future agency-wide TA contracts with a greater value and longer duration with notices to proceed ready to be issued two months before the end of the proposed time extension period.

**CONTRACT SUMMARY:**

	<u>AMOUNT</u>	<u>TIME</u>	<u>NTP</u>
Original Contract:	\$3,000,000	24 Months	1/9/2024
Amendment 1:	<u>\$1,500,000</u>	<u>12 Months</u>	Pending
Amended Contract Amount:	\$4,500,000	36 Months	

**BUDGET/FISCAL IMPACTS:**

The FY25 CIP includes \$2,500,000 for Contract 7990 CIP related task orders (\$500,000 is allocated to CEB related projects). Including this amendment for \$1,500,000, the adjusted subphase total will be \$4,500,000, or \$2,000,000 over the CIP amount. This amount will be absorbed in the five-year CIP Spending Cap. Some task order work under this contract may be charged to the Current Expense Budget.

**MBE/WBE PARTICIPATION:**

Due to the specialized and uncertain nature of this work, no minimum MBE or WBE participation requirements were established for these contracts. However, Hazen and Sawyer, P.C.’s contract identifies its commitment of 1% MBE and 4% WBE participation.

**STAFF SUMMARY**




**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Agency-Wide Technical Assistance Consulting Services  
Contract 7991, Amendment 1  
Kleinfelder Northeast, Inc.

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**COMMITTEE:** Wastewater Policy and Oversight

Brian L. Kubaska, P.E., Chief Engineer  
Meredith R. Norton, Senior Program Manager  
Preparer/Title

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

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**RECOMMENDATION:**

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 1 to Contract 7991, Agency-Wide Technical Assistance Consulting Services, with Kleinfelder Northeast, Inc., increasing the contract amount by \$1,500,000, from \$3,000,000 to \$4,500,000, and extending the contract term by twelve months from December 21, 2024 to December 21, 2025.

**DISCUSSION:**

Contract 7991 is the second of two technical assistance (TA) contracts for which staff are requesting an amendment. These multi-discipline contracts make available, on a continuing, as needed basis, the services of qualified, professional engineering firms and staff to assist the Authority on engineering study and design initiatives. The contracts may also provide Engineering Services During Construction (ESDC) and Resident Engineering/Inspection (REI) services. The TA contract consultants are required to have expertise in civil, structural, geotechnical, environmental and sanitary, mechanical and process, HVAC, fire protection, electrical, control systems, and chemical engineering as well as architecture, surveying, corrosion and odor control, permitting, security and cost estimating. These agency-wide TA contracts provide a variety of services, including:

- professional services on high priority or unanticipated projects;
- professional services for smaller priority projects such as roof and fuel oil tank replacements;
- access to expertise on short-term assignments requiring specialized disciplines that are not cost effective for MWRA to maintain on an in-house basis; and
- ensuring adequate resources are available to quickly respond when emergency or unanticipated situations arise.

On November 16, 2022, the Board approved Contract 7991 to Kleinfelder Northeast, Inc. for a two-year contract in an amount not to exceed \$3,000,000 and a Notice to Proceed was issued for this contract effective December 21, 2022.

Examples of projects already completed under Contract 7991 include:

- provided inspection services and engineering support of the Winsor Dam Intake Masonry Repairs to address stormwater leaking into this critical and historic structure and ensure the facility is properly maintained; and
- performed emissions testing on the Cottage Farm CSO Facility's diesel engines to ensure regulatory requirements are met.

Currently, as with Contract 7990, staff are relying on these TA contracts to design capital projects, in part, due to the low response to RFQ/Ps for design services on projects with a value up to approximately \$1 million dollars. As a result, funds in these TA contracts are being utilized faster than originally anticipated. In addition, given the design, permitting, and/or construction complexities of many of these projects, a two-year contract is not sufficient to complete some projects. For example, the professional services contract for the West Roxbury Tunnel Sewer Sections 637 and 637A Inspection Plan Development and Condition Assessment required additional time to prepare and review the technical specifications, bid and then provide services during the tunnel inspection. In order to keep project work moving and to complete projects already underway, staff are requesting contract extensions and additional funds for both agency-wide TA contracts (Contracts 7991 and 7990) at this time. This will help to prevent time delays and costs associated with getting new consultants up-to-speed on projects if we need to transition on-going projects from one TA contract to a new TA contract. Staff will adjust future TA contracts to have higher dollar values and longer durations in order to mitigate this recent trend.

### **This Amendment**

As with Contract 7990, the timing and scope of TA services are not always predictable and in some instances there are unforeseen project delays and issues that arise and the project completion no longer coincides with the TA contract's expiration date. Staff are of the opinion that projects would be best brought to completion by the current consultant's project team rather than completing the work under a new contract, perhaps by a different consultant firm.

This amendment will allow Kleinfelder to continue working on projects that cannot be completed within the current contract's duration. Currently, the following on-going projects can be completed within the recommended time extension for this contract thereby maintaining design related knowledge and expertise and consistency from design through engineering and construction.

- West Roxbury Tunnel Sewer Sections 637 and 637A Inspection Plan Development and Condition Assessment. This project includes a physical entry to inspect this important sewer system asset to determine its condition and includes design and bid services for a non-professional services contract as well as engineering services during inspections and the preparation of a Conditions Assessment Report. The non-professional services inspection contract, which is being presented at this meeting for approval, has a one-year duration with a notice to proceed anticipated for July 2024.
- North Dike Embankment Raising and Sudbury Dam Spillway Masonry and Gatehouse Vent Repairs Resident Engineering Services. The consultant will provide resident engineering services for both of these projects and both construction contracts have been awarded and notice to proceeds issued. Although the North Dike Embankment Raising is

substantially complete, materials are still being acquired for the Sudbury Dam Spillway Masonry and Gate Vent Repairs, which has a contract duration of 240 calendar days.

- Quinapoxet Dam Removal Resident Engineering Services. The consultant will provide resident engineering services for this dam removal project and a notice to proceed was issued on December 5, 2023. The in-channel work has a discrete time-of-year requirement to be completed November through April, so as not to interfere with seasonal Quabbin Aqueduct transfers to Wachusett Reservoir, which occur in May through October. A separate staff summary on the progress of this project is being presented at this meeting.

As of June 5, 2024, \$2,978,946.59 or 99.30% of the total contract amount of three million dollars has been committed to be executed and pending/proposed task orders, including those listed above and proposed task orders to:

- continue work to replace underground fuel storage tanks that have reached the end of their useful life;
- construct water quality sampling system upgrades at the Wachusett Reservoir used in alerting staff of possible source water contamination by providing additional permit, design, bid and construction engineering support;
- design and bid the construction of modifications to a weir within the Combined Sewer Outfall (CSO) CAM005 regulator structure to move the Authority closer to its CSO Long-Term Performance goals; and
- design and bid a construction contract to address several needed safety and structural issues at the Lonergan Intake Building in Barre, which allows seasonal water transfers from the Ware River to the Quabbin Reservoir.

As stated in the proposed Contract 7990 staff summary, staff have also identified additional task orders with an estimated value of approximately three million dollars (to be distributed between Contracts 7990 and 7991) that are important to move forward over the next several months. The increase in budget through this amendment, and an amendment to Contract 7990, will allow the issuance of task orders for the following additional important MWRA projects:

- development of a preliminary design to further advance repairs to the Belle Isle Sandcatcher noted to have longitudinal crack (a complete RFQ/P for the full design and construction services was issued, but received no proposals);
- design of the demolition and capping of the Farm Pond Inlet Chamber and Gate House, which pose maintenance and safety concerns for the MWRA;
- advance rehabilitation of the Bellevue Standpipe 1 and Arlington Heights Tank through a structural condition assessment (a complete RFQ/P for this assessment was issued, but received no proposals); and
- implementation of future critical unforeseen task orders.

Staff will pursue procurement of future agency-wide TA contracts with a greater value and longer duration with notices to proceed ready to be issued two months before the end of the proposed time extension period.

**CONTRACT SUMMARY:**

	<u>AMOUNT</u>	<u>TIME</u>	<u>NTP</u>
Original Contract:	\$3,000,000	24 Months	12/21/22
Amendment 1:	<u>\$1,500,000</u>	<u>12 Months</u>	Pending
Amended Contract Amount:	\$4,500,000	36 Months	

**BUDGET/FISCAL IMPACTS:**

The FY25 CIP includes \$2,500,000 for Contract 7991 CIP related task orders (\$500,000 is allocated to CEB related projects). Including this amendment for \$1,500,000, the adjusted subphase total will be \$4,500,000, or \$2,000,000 over the CIP amount. This amount will be absorbed in the five-year CIP Spending Cap. Some task order work under this contract may be charged to the Current Expense Budget.

**MBE/WBE PARTICIPATION:**

Due to the specialized and uncertain nature of this work, no minimum MBE or WBE participation requirements were established for these contracts. However, Kleinfelder Northeast, Inc. identified its commitment of 2.5% MBE and 2.5% WBE participation.



**STAFF SUMMARY**




**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Nut Island Headworks Odor Control and HVAC Improvements  
Walsh Construction Company II, LLC  
Contract 7548, Change Order 18

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**COMMITTEE:** Wastewater Policy & Oversight

         INFORMATION  
  X   VOTE

Martin E. McGowan, Director, Construction  
Jeffrey J. Bina, P.E., Construction Coordinator  
Preparer/Title



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

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**RECOMMENDATION:**

To authorize the Executive Director, on behalf of the Authority, to approve Change Order 18 to Contract 7548, Nut Island Headworks Odor Control and HVAC Improvements, with Walsh Construction Company II, LLC for a not-to-exceed amount of \$236,982.08, increasing the contract amount from \$61,433,487.56 to \$61,670,469.64 with no increase in contract term.

Further, to authorize the Executive Director to approve additional change orders as may be needed to Contract 7548 in an amount not to exceed the aggregate of \$200,000, in accordance with the Management Policies and Procedures of the Board of Directors.

**DISCUSSION:**

Contract 7548 provided upgrades to the odor control system, heating, ventilation and air conditioning system and other equipment. Most of the equipment was at or near the end of its useful life and replacement was required to ensure the continued reliability of this critical facility. This contract also provided reconfiguration of ductwork serving the odor control system to expand the system’s operational flexibility and improved surface access into the below-grade odor control room, the need for which was made evident during the January 2016 fire.

Improvements to the odor control system included replacement of the carbon adsorbers, fans, ductwork, dampers, and the odor control SCADA system, rehabilitation of the wet scrubbers system and installation of roof hatches and a new stairway to improve access into the odor control room. Improvements to the HVAC system included replacement of the air handling units and unit heaters; replacement of the boilers; and replacement of the energy management system. Improvements to other equipment included replacement of the underground fuel oil storage tanks serving the standby generator and boilers; replacement of the dewatering system pumps serving the bottom level; and replacement of the emergency spillway isolation sluice gates and stop logs.

Contract 7548 was declared substantially complete on September 8, 2023 when the new odor control and HVAC systems were placed into continuous service. Remaining work includes punchlist items, as well as commissioning the new carbon loading and dust collection system now

scheduled to be complete in June 2024. The Contractor and MWRA are continuing to negotiate and finalize costs for the remaining change order items encountered during the project. It is expected that the requested \$200,000 in re-delegation will be sufficient to cover these final costs.

### **This Change Order**

Change Order 18 consists of the following four items:

Additional Surface Preparation for New Floor Coating System \$110,857.29

The Contractor is required to apply a floor coating system on the lower level of the facility. The coating system is a two-part epoxy applied in multiple coats. The coating system, specifically designed for application on concrete surfaces, requires the substrate to be sound, stable and free of moisture. After commencement of the contract and prior to application of the first primer coat, the specified moisture test indicated water vapor being transmitted through the concrete. The presence of moisture requires the use of a primer that is tolerant of residual moisture in concrete, which is different from the primer specified and approved. The moisture test is a destructive test that requires complete removal of the existing epoxy coating and could not be readily performed during design. As the Contractor stripped away the existing epoxy coating, widespread cracks and voids were revealed. The width and depth of these cracks and voids exceeded the coating manufacturer's tolerances, which required additional concrete repairs prior to applying the new coating system. These concrete repairs included grinding all cracks and removing loose material from the voids to provide a solid substrate. These areas were sealed with a trowel applied filler material compatible with the final coating system. Because the above-described water vapor and extensive cracks and voids in the concrete were concealed by the existing epoxy coating system, these additional surface preparation activities were not included in the Contractor's scope of work. The Contractor was required to apply a vapor resistant primer in lieu of the specified primer and repair all cracks and voids pursuant to the coating system manufacturer's instructions prior to applying the new floor coating system.



Existing Cracks and Voids in Floor



Finished Epoxy Coated Floor

These items were identified by MWRA staff as unforeseen conditions. MWRA staff, the Consultant, and the Contractor have agreed to a lump sum amount of \$110,857.29 for this additional work. The Contractor proceeded with this work at its own risk in order to proceed with the remainder of the contract work.

Odor Control Roof Modifications

\$60,615.72

The contract requires the removal and replacement of all the existing precast concrete roof panels over the odor control room and providing a new roofing system over the entire odor control room roof. The roofing system is comprised of liquid-applied waterproofing membrane, insulation board and sloped concrete topping slab. This roofing system acts not only as a roof, but also as a base for the lawn area that is part of the public park at Nut Island. The contract also requires that new access hatches be installed over each wet scrubber and carbon adsorber in the odor control room. These precast access structures have a masonry veneer block installed around the four sides to match the existing masonry details of the facility.

After commencement of the contract and during submittal review, the roofing system supplier noted the drainage for the as-designed roofing system might be inadequate to shed surface water. The Designer met with the roofing supplier to review its concerns and concluded that additional drainage measures are required to provide proper drainage and eliminate standing water. These measures include placement of an additional four-inch crushed stone layer and increasing the thickness of the sloped concrete topping slab to shed all water off the roof. Additionally, it was noted that the design called for the masonry block veneer to be installed directly on top of the membrane roofing. The roofing system supplier cautioned that installing the masonry block on the membrane would cause damage and void the warranty. To eliminate the direct contact of the masonry and the membrane, the Contractor must furnish and install a six-inch by six-inch galvanized angle shelf to support the masonry block and protect the waterproof membrane roofing. As a result of these design errors, new roofing details were provided to correct the drainage deficiencies and to maintain the roof warranty.



Sloped Concrete Topping Slab



Crushed Stone Drainage Layer and Masonry Shelf at Access Hatches

These items were identified by MWRA staff as design errors. MWRA staff, the Consultant, and the Contractor have agreed to a lump sum amount of \$60,615.72 for this additional work. The Contractor proceeded with this work at its own risk in order to proceed with the remainder of the contract work.

Carbon Loading and Dust Collection System Wiring

Not to Exceed \$40,000

The Contractor is required to replace the existing carbon loading and dust collection equipment used for loading and removing the activated carbon media from the carbon adsorbers. The equipment is comprised of a hopper with an activated bin, a dust collector and an air compressor mounted on a bridge crane that travels across the width of the odor control room, allowing access to each of the new carbon adsorbers.

After commencement of the contract and prior to demolition of the existing equipment, it was discovered that the work associated with the carbon loading and dust collection system was not included in the Electrical Subcontractor’s scope of work. The electrical contract drawings did not indicate the demolition of existing electrical circuits or the installation of new circuits. As a result of this omission, the Electrical Subcontractor must de-energize this equipment and remove the existing conduits and wiring, as well as furnish and install new conduits, wires and supports to power the new carbon loading and dust collection equipment.



Carbon Loading and Dust Collection System

This item was identified by MWRA staff as a design omission. MWRA staff, the Consultant, and the Contractor have agreed to a not-to-exceed amount of \$40,000, for this additional work. The Contractor proceeded with this work at its own risk in order to proceed with the remainder of the contract work.

Carbon Adsorber Sample Lines

\$25,509.07

The Contractor is required to furnish and install ten new vertical dual-bed carbon adsorbers as part of the new odor control system. Each carbon adsorber vessel is equipped with multiple sampling ports used for testing the odorous air, treated air and the activated carbon media in each bed. The sample ports are comprised of a ball valve, pipe and fittings that extend into the vessel. Operations staff are required to take daily air samples to ensure the facility’s exhaust can be treated to meet the requirements of the Massachusetts DEP-approved Air Pollution Control Plan. Additionally, staff periodically collect and test the condition and quality of the activated carbon media.

After commencement of the contract, plant staff noted they could not take daily air samples because the valves, tubing and fittings on the carbon adsorbers were incompatible with the

Authority’s sampling equipment and sampling procedures. The omitted valves, fittings and tubing prevent staff from performing the required monitoring. To correct this omission, the Contractor must furnish and install additional pipe, fittings, valves, tubing, and stainless steel fittings to allow operations personnel to perform the monitoring required to ensure the carbon bed can meet the Massachusetts DEP Air Pollution Control Plan.

This item was identified by MWRA staff as a design omission. MWRA staff, the Consultant, and the Contractor have agreed to a lump sum amount of \$25,509.07, for this additional work. The Contractor proceeded with this work at its own risk in order to proceed with the remainder of the contract work.

**CONTRACT SUMMARY:**

	<b>Amount</b>	<b>Time</b>	<b>Date</b>
Original Contract:	\$57,565,399.00	1,034 Days	02/12/20
<b>CHANGE ORDERS</b>			
Change Order 1*	\$24,995.58	0 Days	12/08/20
Change Order 2*	\$126,224.03	0 Days	01/08/21
Change Order 3	\$376,355.91	0 Days	03/10/21
Change Order 4*	\$22,320.58	0 Days	03/10/21
Change Order 5*	\$203,986.91	0 Days	09/22/21
Change Order 6	\$222,179.61	0 Days	09/22/21
Change Order 7*	\$23,871.28	0 Days	11/29/21
Change Order 8*	\$161,181.94	0 Days	02/25/22
Change Order 9	\$187,410.85	0 Days	02/25/22
Change Order 10*	\$25,000.00	0 Days	10/06/22
Change Order 11*	\$662,554.51	0 Days	11/30/22
Change Order 12	\$318,164.42	0 Days	11/30/22
Change Order 13*	\$0.00	180 Days	01/10/23
Change Order 14*	\$524,892.66	0 Days	03/31/23
Change Order 15	\$ 0.00	90 Days	07/31/23
Change Order 16*	\$491,644.21	0 Days	02/22/24
Change Order 17*	\$497,306.07	0 Days	Pending
Change Order 18	<u>\$236,982.08</u>	<u>0 Days</u>	Pending
Total Change Orders	\$4,105,070.64	270 Days	
Adjusted Contract:	\$61,670,469.64	1,304 Days	

\*Approved under delegated authority

If Change Order 18 is approved, the cumulative value of all change orders will be \$4,105,070.64 or 7.11% of the original contract. Work on this contract is 99% complete.

**BUDGET/FISCAL IMPACT:**

The FY24 Capital Improvement Program (CIP) includes \$61,339,537 for contract 7548. Including this change order for \$236,982.08, the adjusted subphase total will be \$61,670,469.64 or \$330,932.64 over the CIP amount. This amount will be absorbed within the five-year CIP spending cap.

**MBE/WBE PARTICIPATION:**

The MBE/WBE participation requirements for this project were established at 1.1% and 1.2%, respectively. The Contractor has met these requirements.



# MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island  
33 Tafts Avenue  
Boston, MA 02128

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

*Chair:* H. Vitale

*Vice-Chair:* L. Taverna

*Committee Members:*

J. Foti

P. Flanagan

J. Walsh

P. Walsh

J. Wolowicz

## **WATER POLICY & OVERSIGHT COMMITTEE MEETING**

Telephone: (617) 242-6000

Fax: (617) 788-4899

TTY: (617) 788-4971

Date: Wednesday, June 26, 2024

Time: Immediately following the Wastewater Policy & Oversight Committee

Location: Deer Island Reception/Training Building, 1st Floor  
33 Tafts Avenue – Favaloro Meeting Room  
Boston, MA 02128

A photo ID will be required for entry.

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

**Webex meeting link (Registration required):**

<https://mwra.webex.com/weblink/register/rd8e53ef2bd8abb5820fd658867c9774b>

Meeting Number: 2349 352 1994

Password: 6282024

## **AGENDA**

### **A. Information**

1. 2023 Annual Water Quality Report (Consumer Confidence Report)

### **B. Approvals**

1. Annual Renewal of Water Supply Citizens Committee (WSCAC) Contract

### **C. Contract Amendments/Change Orders**

1. Dam Safety Compliance and Consulting, GZA GeoEnvironmental, Contract 7614, Amendment 3

**MASSACHUSETTS WATER RESOURCES AUTHORITY**  
Meeting of the Water Policy and Oversight Committee  
of the MWRA the Board of Directors  
March 13, 2024

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A meeting of the Water Policy and Oversight Committee of the Massachusetts Water Resources Authority (“MWRA”) Board of Directors was held on March 13, 2024 at MWRA’s Administration Facility in Chelsea, and via remote participation.

Committee Chair Vitale presided remotely. Board Member Wolowicz also participated remotely. Board Members Foti, Pappastergion, Peña, Taverna, Jack Walsh and White-Hammond participated at the Chelsea Administration Facility. Board Member Patrick Walsh participated remotely by telephone and, thereafter, joined the meeting at MWRA’s Administration Facility. Board Member Flanagan was absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Special Assistant for Affirmative Action Patterson Riley; MIS Director Paula Weadick; Tunnel Program Director Kathy Murtagh; Waterworks Director Valerie Moran; Assistant Director of Engineering Lisa Hamilton; Director of Tunnel Program Design and Construction Paul Savard; Deputy Director of Procurement Rita Mercado; Director of Construction Martin McGowan; Construction Coordinator Terrence Flynn; Construction Coordinator Jeremiah Sheehan; Asset Management Analyst Michael Curtis; Chief of Staff Katie Ronan; Associate General Counsels Angela Atchue, Kimberley McMahon and Kristen Schuler Scammon; and, Assistant Secretary Kristin MacDougall participated at MWRA’s Chelsea Administration Facility.

Vandana Rao, Executive Office of Environmental Affairs (“EEA”), and Matt Romero, MWRA Advisory Board (“Advisory Board”), participated at MWRA’s Chelsea Administration Facility.

**ROLL CALL**

Before the meeting was called to order, Board Vice Chair Pappastergion offered opening remarks and requested a roll call of Board Members in attendance for the Committee meetings. MWRA General Counsel Francisco Murphy took roll call and announced that Board Members Vitale and Wolowicz were participating remotely. (Board Member Patrick Walsh also temporarily participated remotely by telephone; however, he was on mute during Roll Call.) The Vice Chair announced that the meeting was being held at MWRA’s Chelsea Administration Facility and virtually, via a link posted on MWRA’s website. He added that the meetings would be recorded, and that the agenda and meeting materials were available on MWRA’s website.

**CALL TO ORDER**

Committee Chair Vitale called the meeting to order at 10:03am.



## INFORMATION

MWRA Executive Director Frederick Laskey discussed the significance of the Metropolitan Water Tunnel Program (“Tunnel Program”), and the history of its development. He invited staff to present five information items about the Program.

### Metropolitan Water Tunnel Program: Needs and Overview

Kathy Murtagh, MWRA Tunnel Program Director, presented an overview of the Tunnel Program as detailed in the March 13, 2024 Staff Summary and filed with the records of this meeting.

Ms. Murtagh’s presentation included discussion of the Metropolitan Tunnel System service area; the purpose of the Metropolitan Tunnel Program; the need for the Tunnel Program with respect to water system redundancy; the Program’s goals; an overview of the Tunnel Program’s development; and summaries of the preferred tunnel alternative and the anticipated schedule.

(Board Member Patrick Walsh joined the meeting at the MWRA Chelsea Administration Facility during the presentation.) (ref. W A.1)

### Metropolitan Redundancy Interim Improvements Projects Update

Valerie Moran, MWRA Waterworks Director, and Lisa Hamilton, MWRA Assistant Director of Engineering, presented an update on MWRA’s Metropolitan Redundancy Interim Improvement Projects as detailed in the March 13, 2024 Staff Summary and filed with the records of this meeting.

The presentation included discussion about the purpose of the Interim Improvement Projects, a summary of recently-completed interim projects such as The Commonwealth Avenue Pumping Station Improvements Project; and, updates of ongoing projects, such as Tunnel-Shaft Pipeline Improvements; Weston Aqueduct Supply Main (WASM) 3 Rehabilitation; Low Service Pressure Reducing Valve Improvements; and, the Section 101 Waltham Pipeline Extension. Ms. Moran and Ms. Hamilton also discussed the cost of the interim improvements.

There was discussion and questions and answers about the age of the existing valves; their anticipated useful lives upon the completion of the interim improvements; the overall purpose of the Metropolitan Redundancy Interim Improvements Projects; and, the bolt removal process. (ref. W A.2)

### Metropolitan Water Tunnel Program: Preliminary Design and Environmental Impact Report

Paul Savard, MWRA Director of Tunnel Program Design and Construction, presented a status update on the Tunnel Program’s Preliminary Design and Environmental Impact Report as detailed in the March 13, 2024 Staff Summary and filed with the records of this meeting.

Mr. Savard's presentation included a summary of the Preliminary Design and Environmental Impact Report, including their developments, purposes and objectives; an overview of the tunnel's alignment, segments and shaft site locations; and, geological conditions and their influence on the tunnel's alignment and construction. Mr. Savard also presented an animated illustration depicting how tunnels are constructed using tunnel boring machines (TBMs). The presentation also included discussion of tunnel launching and receiving shafts; intermediate shaft construction; potential permits and approvals; and the Tunnel Program's approaches for mitigating potential environmental and community impacts and for community outreach.

There was discussion followed by questions and answers about the status of shaft site selection and land acquisition; starter tunnel construction; the tunnel alignment, including geological conditions and shaft locations; past MWRA tunnel projects; tunnel construction safety; tunnel stabilization techniques; geological fault data; risk mitigation; tunnel boring machines ("TBMs"); and, the raised-bore method.

(Board Member White-Hammond joined the meeting, and Board Member Foti temporarily left and returned to the meeting during the discussion.) (ref. W A.3)

#### Metropolitan Water Tunnel Program Look Ahead

Mr. Savard and Ms. Murtagh presented a summary of ongoing and future activities for the Tunnel Program as detailed in the March 13, 2024 Staff Summary and filed with the records of this meeting.

The presentation included an overview of Tunnel Program contracts and their values, durations and timelines; critical path tasks, including geotechnical investigations, land acquisitions, community and stakeholder agreements such as MOUs and emergency response plans; and TBM power supply. Mr. Savard and Ms. Murtagh, in discussing the critical path schedule for the Tunnel Program, provided a look-ahead for the tunnel system construction schedule. They discussed the major shaft sites and the locations, and confirmed no private land will be used for the shaft sites; however, privately-owned land is planned for subterranean easements. Ms. Murtagh noted the seven communities that will be impacted by the Tunnel Program, and the MOUs with the communities will be part of the construction bid documents. Ms. Murtagh explained that emergency response for a Tunnel Program is unique. She identified coordination with the local communities and emergency personnel, and confirmed that this is a critical path item. Thereafter, she spoke to the consumption of electricity and advance coordination with Eversource to design and build duct banks and cabling – ensuring that such is in place at the MWRA's shaft sites and ready for the start of construction. This was also identified as a critical path item. Additionally, Ms. Murtagh relayed there will be agreements with Eversource presented to the Board of Directors for approval that will dictate schedule and cost. She discussed coordination with MassDOT to minimize impacts. She referenced the critical path

schedule as outlined in the PowerPoint slides. And, further she identified what is needed to support the South and North Tunnels. Discussion followed concerning the early enabling projects and bidding the South Tunnel first, and thereafter bidding the North Tunnel. Planning purposes, outreach during the project, and construction scheduling for the two segments of the South Tunnel were discussed. Ms. Murtagh confirmed the launching shaft is on the critical path, and the early submittal item of the TBM. The period of mining and the work that will take place underground were discussed. She noted that three TBMs are planned to be in the ground at that same time.

Board Member Jack Walsh asked if the South Tunnel will be a single contract, and Ms. Murtagh confirmed it would. Discussion followed about the TBMs and Ms. Murtagh confirmed that such are built for the specific ground conditions, and if the ground conditions are similar then the TBMs will be similar. It was noted that the third TBM will be for the North Tunnel. Ms. Murtagh confirmed the South Tunnel will be constructed first and that such was a change from what had been previously envisioned, as beginning construction of the South Tunnel first provides more benefits to the Tunnel Program.

Board Member Peña inquired about community outreach and engagement in the naming of the TBMs by elementary school children. Ms. Murtagh confirmed that such an opportunity is planned, with the goal of inspiring a new generation to undertake this rewarding field of work. Mr. Laskey noted opportunities for tours. Finally, Mr. Taverna noted the importance of early coordination by Eversource and municipal governments as roads will be paved where conduit will be placed. Ms. Murtagh confirmed Eversource's outreach to communities to be on the critical path. Rev. White-Hammond noted energy challenges and current planning for the American Legion area, and Ms. Murtagh confirmed awareness and assured that the area is not being used for a launching shaft site as Eversource cannot provide power at that location.

There were questions and answers about property-owner compensation for subterranean easements; applicability of Article 97 for DCR properties and the location of the parcels and the shaft selection process included a DCR parcel that is not located in parkland in the Mattapan area where wood waste is currently processed; the South Tunnel's anticipated contract structure and scope; and, the number of TBMs expected to be required. There was also general discussion about prospective community outreach activities; the coordination of TBM power supplies; and, energy challenges at the American Legion site in Boston. (ref. W A.4)

#### Metropolitan Water Tunnel Program: Contract Structure for Final Design Engineering Services, Contract 7556

Ms. Murtagh and Thomas Durkin, MWRA Finance Director, presented an update on the cost estimates for the Tunnel Program, and summarized cost control measures for the Program as reflected in the proposed FY25 Capital Improvement Program ("CIP"), as detailed in the March

13, 2024 Staff Summary and filed with the records of this meeting.

The presentation included an overview of the Tunnel Program's Capital Improvement Program ("CIP") history; Preliminary Design construction cost estimates with respect to the Proposed FY25 CIP; staff's plan for future cost updates; key cost controls principles; and, Tunnel Program financial considerations, including strategies to mitigate impacts on water utility assessments.

Ms. Murtagh explained the preliminary cost components and the inclusion of accurate quotes from contractors with escalation costs, and that such reflects a true bottom-up cost estimate. She confirmed cost estimating is happening at the 30 percent stage, and will also be done at the 60 percent, 90 percent, and 100 percent stages. She relayed the current construction estimate includes a 25 percent design contingency, which will be reduced closer to the time of bid. Cost control principals were discussed for program. The location of the launching shaft sites along the highway was noted to save money. Next, Ms. Murtagh identified two important contracts for the Tunnel Program being (i.e. final designer and construction manager) and noted that these are long-term contracts. She discussed avoiding costly mitigation and what that includes and how such impacts the contractor's construction schedule. Outreach to the tunneling industry was discussed. Use of a geotechnical baseline report was identified to assist with risk allocation. Ms. Murtagh explained the importance of managing the construction contractor's contingency for commodities and escalation items (e.g. concrete, steel, asphalt and fuel). Rev. White-Hammond inquired about financing and trade-offs. Ms. Murtagh explained with examples of pay items, such as TBMs, timely payment to the construction contractor, not delaying payment and an analysis that will factor in contractor contingencies.

Mr. Durkin explained the finance model, the rates model, and cited the PowerPoint slides for spending and debt service. The time value of money was discussed for the capital improvement program, and the inclusion of inflation. Mr. Durkin relayed the borrowing plan will include debt service that fits in the assessment affordability and will be calculated through the end of the tunnel project. Ms. Murtagh cited the PowerPoint slides and the anticipated yearly spending for the Tunnel Program.

There was discussion with questions and answers about potential Tunnel Program costs and contractor contingencies; targets for community water assessments; and, MWRA's strategies for rate management, Tunnel Program financing, and debt service. During the discussion Board Member Jack Walsh requested that staff develop an executive summary of Tunnel Program costs for Board Members. Ms. Murtagh confirmed such would be prepared and provided to the Board. Mr. Laskey added that the Authority has been successful with its conservative strategy of debt service and paying it back. He noted MWRA would continue to maintain its conservative approach for costs related to the Tunnel Program.

(Board Member Taverna left and returned to the meeting during the discussion.) (ref. W A.5)

## APPROVALS

### Metropolitan Water Tunnel Program: Contract Structure for Final Design Engineering Services, Contract 7566

Rita Mercado, MWRA Deputy Director of Procurement, presented staff's recommended contract structure for Final Design Engineering Services for the Tunnel Program, as detailed in the March 13, 2024 Staff Summary and filed with the records of this meeting. Ms. Mercado's presentation included discussion about the advantages of the recommended contract structure; and an overview of the role of the Final Design Engineering Services firm with respect to the Tunnel Program.

Ms. Mercado referred to the Staff Summary for background information and noted that her presentation focused on staff's recommendation related to an alternative approach to obtaining proposals for Final Design Engineering Services for the tunnel construction packages due to the challenges in accurately scoping and pricing the level of effort necessary for Engineering Services During Construction (ESDC) for the future tunnel work. Ms. Mercado explained the approach involves obtaining proposals that include labor rates, maximum overhead, percentage fee and level of effort for the final design phase services. She noted the final design phase services for the contract include the final design of the two tunnels, and the final design and ESDC for the enabling works (i.e. two or three smaller construction packages, which are expected to occur within the first five years of the contract's duration). In addition, she noted staff are proposing that design firms provide proposals, which would include the maximum overhead rate and percentage fee for the tunnel construction ESDC. She referred to the staff summary for further details on the types of services included for ESDC. She explained that staff do not recommend pricing the level of support necessary for ESDC for tunnel construction, but rather propose toward the end of the tunnel design phase to develop the ESDC scope for the tunnel construction and negotiate those costs with the final design engineering firm. She cited the importance of the final design engineering firm being the engineer of record for the entire program. Moreover, she noted the firm's involvement is necessary to maintain the integrity of the design. Ms. Mercado presented once costs are negotiated, and if approved by the Board, such costs would be added by amendment to the Final Design Engineering Services contract. She highlighted this approach as being consistent with industry practice for other large tunnel programs where ESDC is deferred until later in the final design phase. Similarly she cited this approach was last used by MWRA for the MetroWest Tunnel program. In summary, she requested the Board's approval to go forward with an alternative contract structure for final design where costs for ESDC during tunnel construction will be authorized and added by amendment to the Final Design Engineering Services contract if approved by the Board.

There was brief discussion about the proposed contract's structure. Board Member Taverna

inquired if the proposed contract would be structured as a time and materials contract with a not to exceed price. Ms. Mercado replied that the proposed contract is a cost plus with a percentage fee. (ref. W B.1)

#### INFORMATION (CONTINUED)

##### Local Water System Assistance Program Annual Update

This item was deferred to the March 13, 2024 Board of Directors' meeting. (ref. W C.1/BI A)

#### CONTRACT AMENDMENTS/CHANGE ORDERS

##### Section 101 Pipeline Extension (Waltham): Baltazar Contractors, Inc., Contract 7457, Change Order 4

Martin McGowan, MWRA Director of Construction, and Terrence Flynn, MWRA Construction Coordinator, presented the reasons for the proposed change order to the Section 101 Pipeline Extension Project in Waltham, as well as its scope and duration, as detailed in the March 13, 2024 Staff Summary and filed with the records of this meeting.

The presentation included a discussion of the reasons for the proposed change order, including supply chain delays with delivery of the pipe, revised work hours as requested by the City of Waltham due to traffic impacts, night work, more ledge than anticipated along the pipe alignment, and other unforeseen site conditions. Mr. McGowan also discussed the terms and anticipated costs of the proposed change order. He noted that the ledge and revised work hours were cited as compensable costs to the Contractor and such are allowed per the terms of the contract. He noted the estimate from the Contractor and the not-to-exceed costs, and that MWRA would only pay for actual costs, using a month-to-month review of costs. Mr. McGowan explained that the requested change order amount is based on a rough estimate of \$50,000 a month for 10 months.

Hearing no discussion or questions from the Board, Chair Vitale moved to the next agenda item. (ref. W D.1)

##### Rehabilitation of WASM 3 Sections W11/W12/W16/51 (Medford, Somerville and Arlington) Albanese D&S, Inc. Contract 6544, Change Order 9

Mr. McGowan and Jeremiah Sheehan, MWRA Construction Coordinator, discussed the reasons for a proposed change order to the Rehabilitation of WASM 3 Sections W11/W12/W16/51 (Medford, Somerville and Arlington) Project, as presented in the March 13, 2024 Staff Summary and filed with the records of this meeting.

Mr. McGowan noted that this project was completed 15 months ahead of schedule, that there are significant savings, and that the proposed change order addresses unforeseen overruns in quantities throughout the project.

There was discussion about the scope of the proposed change order, the contract's next steps, and expected additional costs. Rev. White-Hammond inquired if the change order is related to the work being completed ahead of schedule. Mr. McGowan responded that the change order request is for additional work. Further, Mr. Sheehan noted that the change order does not include credit costs, but instead there would be a balancing change order that would reflect the savings for the work being completed ahead of schedule.

Hearing no further discussion or questions from the Board, Chair Vitale complimented staff on their presentations and moved to Adjournment. (ref. W D.2)

### ADJOURNMENT

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

A roll call vote was taken in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
J. Walsh		
P. Wash		
White-Hammond		
Wolowicz		

The meeting adjourned at 11:51am.

### LIST OF DOCUMENTS AND EXHIBITS USED

- March 13, 2024 Staff Summary and Presentation – Metropolitan Water Tunnel Program: Needs and Overview (ref. W A.1)
- March 13, 2024 Staff Summary and Presentation – Metropolitan Redundancy Interim Improvements Projects Update (ref. W A.2)
- March 13, 2024 Staff Summary and Presentation – Metropolitan Water Tunnel Program: Preliminary Design and Environmental Impact Report (ref W A.3)
- March 13, 2024 Staff Summary and Presentation – Metropolitan Water Tunnel Program: Look Ahead (ref. W A.4)
- March 13, 2024 Staff Summary and Presentation – Metropolitan Water Tunnel Program: FY25 CIP Updated Program Cost Estimate and Cost Controls (ref W A.5)
- March 13, 2024 Staff Summary and Presentation – Metropolitan Water Tunnel Program:

Contract Structure for Final Design Engineering Services Contract 7556 (ref. W B.1/V A.1)

- March 13, 2024 Staff Summary and Presentation – Local Water System Assistance Program Annual Update (ref. W C.1, deferred to BI B)
- March 13, 2024 Staff Summary and Presentation – Section 101 Pipeline Extension (Waltham): Baltazar Contractors, Inc., Contract 7457, Change Order 4 (ref. W D.1/V C.1)
- March 13, 2024 Staff Summary– Rehabilitation of WASM 3 Sections W11/W12/W16/51 (Medford, Somerville and Arlington): Albanese D&S, Inc., Contract 6544, Change Order 9 (ref. W D.2/V C.2)



**STAFF SUMMARY**

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** 2023 Annual Water Quality Report (Consumer Confidence Report)




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**COMMITTEE:** Water Policy & Oversight

X  INFORMATION  
  VOTE

Beverly Anderson, Project Manager, Public Health  
Sean Navin, Director, Public Affairs  
Stephen Estes-Smargiassi, Director, Planning & Sustainability  
Preparer/Title

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

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**RECOMMENDATION:**

For information only. The 2023 Annual Water Quality Report is being mailed to every household in MWRA’s service area to meet EPA’s Consumer Confidence Report Rule annual deadline of July 1. This staff summary highlights the Report’s key findings and features. A PDF of the “generic” Report is attached, and links to electronic copies of community-specific reports will be emailed to Board members.

**DISCUSSION:**

MWRA has used EPA’s Consumer Confidence Report (CCR) program as an integral part of its drinking water communication and water quality transparency efforts since 1999, along with monthly water quality reports and extensive additional web-based data and information.

MWRA produces the required Annual Water Quality Report for each fully supplied community and most of the partially supplied communities. Each Report contains information about the MWRA water system and system-wide data. Within each Report is a community-specific page with local water system information, including local lead data.

As part of its inclusive communication efforts, MWRA goes well beyond the required distribution of the Report. Each year since 1999, the Report has been mailed to every household, rather than just those who pay water bills as is permitted by the EPA regulation. This allows the Report to reach all customers, including the hard-to-reach lower income renter population. Roughly twice as many Reports are mailed than is required for compliance with the EPA regulation. A Spanish translation and a large print version are produced, and the online version is set-up to be translated into dozens of languages (as is the whole of the MWRA web page) via the Google translate service.

All of the community-specific reports were posted on MWRA’s website in the first weeks of June. MWRA maintains an online archive of previous years’ Annual Water Quality Reports as well as of the monthly Water Quality Update reports.

As it does each year, the 2023 Report emphasizes MWRA's excellent source water, state-of-the-art treatment and test results from the reservoir to the tap. This year, the Report's cover, graphics and text provided an opportunity to highlight the people and skills needed to deliver high-quality water all day, every day to all of MWRA's customers. The Executive Director's letter on the first page emphasizes the importance of lead service line replacement and highlights the fact that MWRA water meets both the Massachusetts and new EPA standards for PFAS.

Given the importance of lead, and anticipating additional publicity over the next several months, two of the seven pages in the Report focus on lead - highlighting the health risks of lead service lines, how to find out if you have a lead service line, and how to get it replaced. The Report also emphasizes how to get water tested for lead, steps customers can take to make sure there is no lead in their tap water, and a brief summary of the school lead testing program.

MWRA is conducting an outreach effort to increase awareness of the Report, including emailing copies to local officials, health care professionals, and other interested parties, and sending press releases to local weekly publications and all regional newspapers. The Report has also been promoted through MWRA social media. Information and pictures of the Report, with links to MWRA's website, will be provided to community web pages, and local public health and environmental organizations.

The Report is printed on paper, which is recycled and certified by the Forest Stewardship Council and Sustainable Forestry Initiative, with appropriate logos included on the cover.

Certification of the Report to MassDEP is due by July 1, 2024. In addition to producing and mailing the Annual Water Quality Report, MWRA provides certification materials to DEP on behalf of each community.

### **Changes to EPA's Consumer Confidence Report Regulations:**

In May, EPA finalized its long anticipated package of changes to the CCR regulations, prompted primarily by new requirements mandated by Congress in the America's Water Infrastructure Act of 2018. Among the changes will be a requirement that larger water systems issue two CCRs each year, with the second report due in December providing an update on any violations or other important water quality information from the first half of the calendar year. The final regulation also codifies EPA's policy allowing electronic distribution of the CCRs. There are also a number of other changes intended to increase the readability, clarity and accessibility of these reports, adding more required language and topics. Responding to comments on the need for systems to prepare for these changes, EPA is now requiring that the changes be in effect for CCRs published beginning in 2027, with the twice annual reports then due by July 1 and December 30 of each year.

MWRA has already been using some of the flexibility offered by EPA's policy on electronic distribution to include web links to allow communities to provide more detailed materials on violations or other important topics, as well as providing additional, more comprehensive information on unregulated contaminants, lead, PFAS, and *Giardia* and *Cryptosporidium*. With all the additional types of information now being required to be in the Annual Water Quality Report, many community-specific reports have been running into space constraints for the printed version. Staff will evaluate ways to accommodate the additional material, including considering lengthening the printed version mailed in June, or some type of printed and online hybrid. A longer

report would provide additional space to highlight other important aspects of MWRA's mission and current projects.

Current thinking about the second December report is to produce the report online as an update of the June version, and provide notice of it with an attractive postcard with some summary level information and links to the online version of the report, as well as making printed copies available to anyone who requests one.

Staff anticipate working with the Advisory Board's Operations Committee to further explore options for complying with the changes in the rule, and to work out processes with communities for managing the data needs for the December version of the report.

**BUDGET/FISCAL IMPACT:**

The FY24 Current Expense Budget includes sufficient funds for printing and mail house services, and postage. Production and graphic design are performed in-house by MWRA staff. The cost of printing and mailing almost 900,000 copies of the 2023 CCR is approximately \$0.35 per copy.

**ATTACHMENT:**

Copy of generic Annual Water Quality Report with Conservation Page



# Providing Safe Drinking Water, From Watershed To Workplace



## MASSACHUSETTS WATER RESOURCES AUTHORITY 2023 DRINKING WATER TEST RESULTS



This report contains very important information about your drinking water. Please translate it, or speak with someone who understands it.

Si usted desea obtener una copia de este reporte en español, llámenos al teléfono 617-788-1190.

La relazione contiene importanti informazioni sulla qualità dell'acqua della Comunità. Tra-durlo o parlarne con un amico che lo comprende.

O relatório contém informações importantes sobre a qualidade da água da comunidade. Tra-duza-o ou peça a alguém que o ajude a entendê-lo melhor.

Sprawozdanie zawiera ważne informacje na temat jakości wody w Twojej miejscowości. Poproś kogoś o przelumaczenie go lub porozmawiaj z osobą która je dobrze rozumie.

يحتوي هذا التقرير على معلومات هامة عن نوعية مياه الشرب في منطقتك. يرجى ترجمته أو البحث للتقرير مع من يدرك أنهم هذه المعلومات جيدا.

Η κατάσταση αναφοράς παρακολούθησής σας είναι η καλύτερη που θα μπορούσατε να τη μεταβάσετε ή να το αξιολογήσετε με καλύτερη από το καλύτερη κατάσταση.

Im Bericht steht wichtige Information über die Qualität des Wassers Ihrer Gemeinschaft. Der Bericht soll übersetzt werden, oder sprechen Sie mit einem Freund, der ihn gut versteht.

这份报告中有重要的信息。请寻求您所在社区的饮水品质。请别人翻译一下。或者请能看懂这份报告的朋友给您解释一下。

この資料には、あなたの飲料水についての大切な情報が書かれています。内容をよく理解するために、日本語に翻訳して読むか説明を受けてください。

इस रिपोर्ट में अपने के पानी के गुणवत्ता पर बहुत जरूरी जानकारी दी गई है। अपना इसका अनुवाद करें, या किसी जानकार से इस बारे में पूछें।

កុំភ្លេចអំពីការពិនិត្យគុណភាពទឹកស្របរបស់អ្នកនៅក្នុងតំបន់របស់អ្នក។

이 보고서에는 귀하의 귀족하는 지역의 수질에 관한 중요한 정보가 담겨 있습니다. 이것을 번역하거나 설명을 받아보시는 친구를 찾으십시오.

Bản báo cáo có ghi những chi tiết quan trọng về phẩm chất nước trong cộng đồng quý vị. Hãy nhờ người thông dịch, hoặc hỏi một người bạn biết rõ về vấn đề này.

Ce rapport contient des informations importantes à propos de votre eau potable. Demander à quelqu'un de traduire ces informations pour vous ou discuter avec une personne qui comprend ces informations.



### Massachusetts Water Resources Authority And Your Local Water Department

#### Where To Go For Further Information

Massachusetts Water Resources Authority (MWRA)  
Department of Conservation and Recreation (DCR)  
Massachusetts Dept. of Public Health (DPH)  
Massachusetts Dept. of Environmental Protection  
US Centers for Disease Control & Prevention (CDC)  
List of State Certified Water Quality Testing Labs  
Source Water Assessment and Protection Reports  
Information on Water Conservation

[www.mwra.com](http://www.mwra.com)  
[www.mass.gov/dcr/watersupply](http://www.mass.gov/dcr/watersupply)  
[www.mass.gov/dph](http://www.mass.gov/dph)  
[www.mass.gov/dep](http://www.mass.gov/dep)  
[www.cdc.gov](http://www.cdc.gov)  
[www.mwra.com/testinglabs.html](http://www.mwra.com/testinglabs.html)  
[www.mwra.com/sourcewater.html](http://www.mwra.com/sourcewater.html)  
[www.mwra.com/conservation.html](http://www.mwra.com/conservation.html)

617-242-5323  
617-626-1250  
617-624-6000  
617-292-5500  
800-232-4636  
617-242-5323  
617-242-5323  
617-242-SAVE

#### Public Meetings

MWRA Board of Directors  
MWRA Advisory Board  
Water Supply Citizens Advisory Committee

[www.mwra.com/boardofdirectors.html](http://www.mwra.com/boardofdirectors.html)  
[www.mwraadvisoryboard.com](http://www.mwraadvisoryboard.com)  
[www.mwra.com/wscac.html](http://www.mwra.com/wscac.html)

617-788-1117  
617-788-2050  
413-213-0454

For A Larger Print Version, Call 617-242-5323.  
This report is required under the Federal Safe Drinking Water Act. MWRA PWS ID# 6000000





## MWRA BOARD OF DIRECTORS

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Rev. Mariama White-Hammond

Jennifer L. Wolowicz

Dear Customer,

On behalf of the over 1000 women and men who work every day to provide you with excellent drinking water, I am happy to present this year's annual water quality report. You can be sure that the reliability and safety of your drinking water is our top priority.

This report provides you with the results of our drinking water testing for 2023. Our staff conduct hundreds of thousands of tests each year to ensure that your water is safe. Our state-of-the-art surveillance system monitors your water every step of the way from the reservoir all the way to your kitchen tap. Once again, MWRA met every federal and state standard and the quality of your drinking water is excellent.

Every day, we see news stories about PFAS—or 'forever chemicals'—in drinking water. Because our source water is so well protected, the water we deliver to you meets the current state, as well as the new federal EPA standards issued in April, with levels so low they cannot be quantified.

MWRA continues to be a leader in working to reduce the risk of lead in drinking water. System-wide, we remain below the Lead Action Level. Since 2016, we have provided \$41 million in zero-interest loans to 17 communities for full lead service line removals. Please read your community's letter on page 7 for more information on your local water system, and consider replacing your lead service line if your home has one.

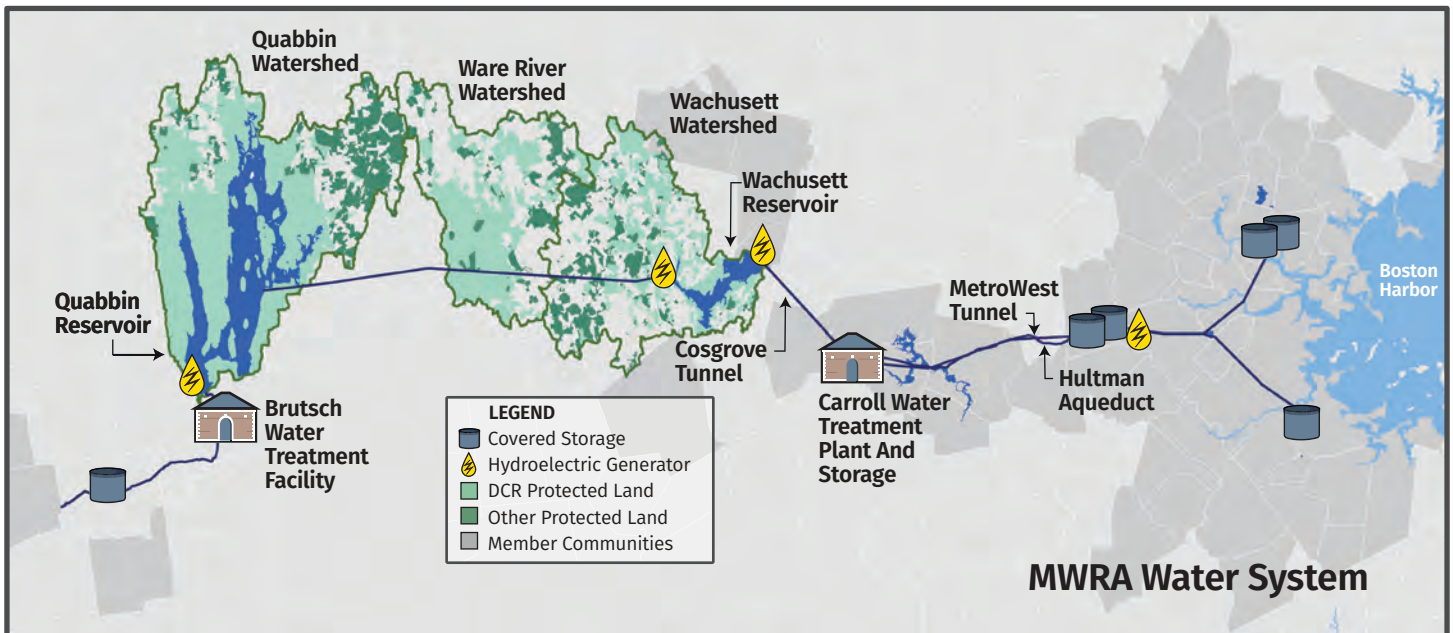
While 2023 was a wet year, as stewards of these reservoirs, we know how precious a resource we have and we cannot afford to waste it. It is an exciting time to be working at MWRA as we continue to maintain and modernize the regional system begun over 175 years ago, while providing a vital service every day.

Please take a moment to read this report. We want you to have the same confidence in the water we deliver to your homes and businesses as we do. Please contact us with any questions or comments about your water quality, or any of MWRA's programs.

Sincerely,

Frederick A. Laskey  
Executive Director

For more information on MWRA and its Board of Directors, visit [www.mwra.com](http://www.mwra.com)



# Providing Safe Drinking Water, From Watershed To Workplace

For over 175 years, water professionals have been working to build, maintain and operate the regional system that provides a reliable safe supply of drinking water to your community.

Today, MWRA professionals work to ensure the delivery of safe, pure water for your home, school or business, 24/7/365. Our staff collaborate with water departments in 53 communities, to ensure the continuing delivery of safe drinking water to 2.5 million people at their homes and businesses.

This annual MWRA drinking water quality report for 2023 provides information on how we work to provide high quality water to your community and to you.

MWRA staff work with staff at your community, the Department of Conservation and Recreation (DCR), and state and federal health professionals and regulators to provide and protect your drinking water. From the 400 square mile forest covered watersheds, to billions of gallons of water in the reservoirs, through treatment and thousands of miles of pipelines, and finally to your drinking water faucet, MWRA's water experts conduct hundreds of thousands of tests on your water every year. Keeping the water safe is a continuous process, from watershed to water tap. MWRA's staff across our entire organization carry out the work needed to protect your water.



## Protected At The Source

The water MWRA and your community provide to your home or business starts with our two pristine reservoirs in central Massachusetts – the Quabbin Reservoir, 65 miles from Boston, and the Wachusett Reservoir, 35 miles from Boston. Combined, these two reservoirs provide an average of 200 million gallons of pure, highly protected, high quality water each day. The Ware River provides additional water when needed.

The Quabbin and Wachusett watersheds—areas that drain water to the reservoirs—are naturally protected. More than 85% of the land is covered with forests and wetlands, which filter the rain and snow that enter the streams that flow to the reservoirs. This water comes in contact with soil, rock, plants, and other material as it follows its natural path to the reservoirs. This

process helps to clean the water, but it also can dissolve and carry very small amounts of material into the reservoir. Minerals and rock do not typically cause problems in the water. Water can also transport contaminants, including naturally occurring minerals or radioactive material, and bacteria, viruses or other potential pathogens from human and animal activity that can cause illness. Testing results show that few contaminants are found in the reservoir water, and those few are in very small amounts well below EPA's treatment standards.

MWRA and DCR staff work together to implement our nationally recognized watershed protection program. The Department of Environmental Protection's (MassDEP) Source Water Assessment report for the Quabbin and Wachusett Reservoirs commended DCR and MWRA for our source water protection plans. The report states that our "watershed protection programs are very successful and greatly reduce the actual risk of contamination." MWRA and DCR follow the report recommendations to maintain the pristine watershed areas and high quality source water. For more information on our source water, go to: [www.mwra.com/sourcewater.html](http://www.mwra.com/sourcewater.html).



## Water: Tested From The Source

DCR biologists and environmental scientists sample the streams that feed the reservoirs to identify and resolve potential pollution sources, and to monitor water quality trends. MWRA and DCR scientists sample and analyze water in the reservoirs, and use specialized monitoring buoys to remotely and continuously monitor the

reservoirs. Based on this information, MWRA operators can make key decisions on how to manage the Wachusett and Quabbin reservoirs. A key, initial test for reservoir water quality leaving the reservoirs is turbidity, or cloudiness. Turbidity refers to the amount of suspended particles in the water and can impair water disinfection. All water must be below 5 NTU (nephelometric turbidity units), and water can only be above 1 NTU if it does not interfere with effective disinfection. In 2023, typical levels in the Wachusett Reservoir were 0.27 NTU, and highest level was only 0.49 NTU.

MWRA also tests water for potential disease-causing organisms, including fecal coliform bacteria, and parasites such as *Giardia* and *Cryptosporidium*, that can enter the water from animal or human waste. All test results were well within state and federal treatment standards. Learn more about test results for waterborne contaminants and their potential health impacts at: [mwra.com](http://mwra.com).

This annual water quality report provides MWRA customers with important information on water quality. MWRA also has monthly water quality reports, information on specific potential contaminants, water system updates, and more at [mwra.com](http://mwra.com). We welcome your questions at 617-242-5323 or [Ask.MWRA@mwra.com](mailto:Ask.MWRA@mwra.com).

## How We Treat Your Water

MWRA's John J. Carroll Water Treatment Plant in Marlborough provides state-of-the-art treatment and monitoring of your water. Our well-trained and licensed operators add measured doses of treatment chemicals, and continuously monitor dozens of parameters. Treatment steps include:

- Ozone, made from pure oxygen, disinfects the water, killing bacteria, viruses and other organisms, and improves water clarity and taste.
- Ultraviolet light (UV), a similar but more powerful form of natural disinfection than sunlight, renders pathogens non-infectious.
- Fluoride protects dental health.
- The water chemistry is adjusted to reduce corrosion of lead from home plumbing (see page 4).
- Monochloramine (a compound of chlorine and ammonia), provides a mild and long-lasting disinfectant to protect the water as it travels through miles of pipelines to your home.

# Testing All The Way To Your Home



After we treat your water, MWRA operators and environmental quality staff test it as it leaves the treatment plant, and as it travels towards your home, as required by EPA and state regulations. MWRA sampling teams, and chemists and biologists at MWRA's four laboratories conduct hundreds of thousands of tests per year for over 120 contaminants. A complete list is available on [mwra.com](http://mwra.com). The results for 2023 are shown in the table below. They confirm the quality and safety of the water your community receives from MWRA.

**Building Redundancy For Reliability**  
Maintaining the system and adding redundancy allows us to continue uninterrupted water delivery to your community, even if sections of our system need inspection, repair or rehabilitation.

MWRA's engineers and geologists have completed environmental review and continue to work on design for two new tunnels north and south of Boston to provide reliable service to the entire region, as well as interim improvements to add resilience to the system. We also have major projects underway to rehabilitate the Weston Aqueduct Supply Main 3, a 60-inch pipe in Weston, Waltham, Belmont, Arlington and Medford, as well as a 48-inch pipe in Stoneham and Woburn. See [mwra.com](http://mwra.com) for more information.

Your community is investing in reliability as well. MWRA provides zero-interest loans to communities for pipeline rehabilitation and other water quality improvements. During 2023, we loaned \$50 million to 17 communities for pipeline projects.



*Washing vegetables at a pump (Greenwich)*

**The 2,500 people who lived in the four towns that were removed to build the Quabbin Reservoir didn't work for the water system, but their sacrifices help protect our drinking water, even today. Learn more at [MWRA.com](http://MWRA.com).**

### Your Water Wins Awards

The MWRA received an award from Mass DEP for outstanding performance in 2023.

## MWRA Water Test Results 2023

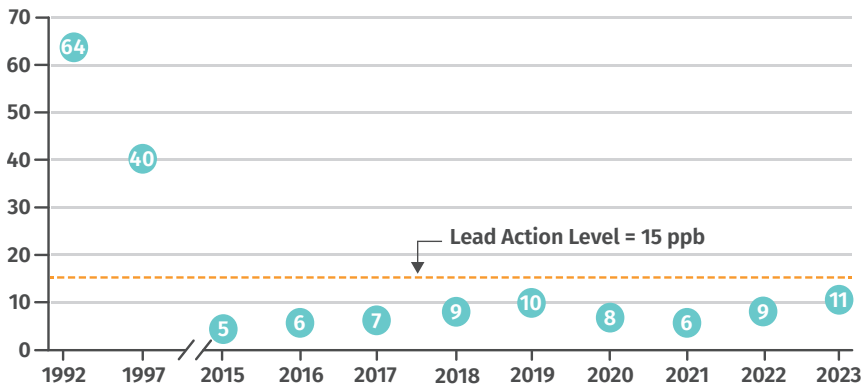
MWRA found only the contaminants listed here or discussed in this report. All are below EPA's Maximum Contaminant Levels (MCLs).

Compound	Units	(MCL) Highest Level Allowed	(We Found) Detected Level-Average	Range of Detections	(MCLG) Ideal goal	Violation	How It Gets in the Water
Barium	ppm	2	0.009	0.007-0.01	2	No	Common mineral in nature
Fluoride	ppm	4	0.633	ND-0.8	4	No	Additive for dental health
Nitrate <sup>^</sup>	ppm	10	0.62	ND-0.62	10	No	Byproduct of disinfection
Total Trihalomethanes	ppb	80	24.2	5.95-37.6	NS	No	Byproduct of water disinfection
Haloacetic Acids-5	ppb	60	20.5	4.8-34.9	NS	No	Byproduct of water disinfection
Monochloramine	ppm	4-MRDL	1.98	0.04-3.7	4-MRDLG	No	Water disinfectant
Radium-226	pCi/L	5	0.82	0.82	0	No	Erosion of natural deposits

KEY: MCL=Maximum Contaminant Level. The highest level of a contaminant allowed in water. MCLs are set as close to the MCLGs as feasible using the best available technology. MCLG=Maximum Contaminant Level Goal. The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. MRDL=Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants. MRDLG=Maximum Residual Disinfectant Level Goal. The level of a drinking water disinfectant below which there is no known or expected health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination. ppm=parts per million ppb=parts per billion pCi/L=picocuries per liter ND=Not detected NS=no standard <sup>^</sup>=As required by DEP, the maximum result is reported, not the average.

# Working To Keep Lead Out Of Drinking Water

## 90% Lead Levels in MWRA System of Fully Served Communities (ppb)



### What Is An Action Level?

An Action Level is the amount of lead in water that requires action to reduce exposure. If your home or school drinking water is above the lead Action Level, additional steps to reduce lead may be required. If more than 10% of your community's samples were over the lead Action Level, your local water department is taking action to address the problem. See page 7.

The water from MWRA's reservoirs is free of lead. Lead can be found, however, in your home piping system—and in your home or business drinking water. Learn about the health impacts of lead and how to reduce exposure to this toxic metal.

Lead affects young children and may cause damage to the brain, slow growth and development, and create learning and behavior problems. Preventing lead exposure is particularly important if a pregnant woman or a child lives in your home or apartment. Lead can also impact the health of your entire family. While lead poisoning frequently comes from exposure to lead paint chips or dust, lead in drinking water can also contribute to total lead exposure.

### How Lead Enters Drinking Water

Lead in your home plumbing, or a lead service line, can contribute to elevated lead levels in the water you drink. MWRA's water is lead-free when it leaves our reservoirs. Water mains that provide water to your community are made mostly of iron, steel, or concrete, and do not add lead to the water. Lead can enter your tap water from your service line—the pipe connecting your home to the water main—if it is made of lead, lead solder used in plumbing, or from some older brass faucets.

### 3 Ways to reduce lead in your water:

- Remove your lead service line
- Run your water before using
- Use a filter certified to remove lead

Corrosion, or wearing away of lead-based materials, can add lead to tap water, especially if water sits in the pipes for a long time before it is used. MWRA's licensed treatment operators adjust the water's pH and buffering capacity by adding sodium carbonate and carbon dioxide to the water. This treatment makes water less corrosive and reduces leaching of lead into

## Lead & Copper Results, September 2023

	Range	90% Value	AL	Ideal Goal (MCLG)	#Homes Above AL/ #Homes Tested
Lead (ppb)	0.08–965	10.8	15	0	36/595
Copper (ppb)	ND–292	140	1300	1300	0/595

Key: AL=Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow.

drinking water. Lead levels found in tests of tap water have dropped by nearly 90% since we made this treatment change in 1996. Learn more about lead in drinking water at [mwra.com](http://mwra.com).

### Important EPA Information On Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing. MWRA is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Water Drinking Hotline at 1-800-426-4791 or [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

### MWRA Meets Lead Standard In 2023

Under EPA and DEP rules, MWRA and your local water department are required to test local tap water each year. We collect samples from homes with lead service lines or lead solder. The EPA

rule requires that 9 of 10 homes tested must have lead levels below the Action Level of 15 parts per billion (ppb).

This testing process can provide information on whether lead is corroding and mixing with the drinking water. It also provides communities and homeowners with information on how to reduce lead in their drinking water. The results do not reflect lead levels in all homes.

All sampling rounds over the past 21 years have been below the EPA Action Level. Nine out of ten homes were below 10.8 ppb—below the 15 ppb Action Level. See page 7 for your local results.

**Six communities—Boston, Medford, Melrose, Revere, Quincy and Winthrop—exceeded the Action Level in September/October 2023. See page 7 for local results and more information.**

### Sodium and Drinking Water

MWRA tests for sodium monthly, and the highest level was 35.1 mg/L (about 8.3 mg per 8 oz. glass). This level would be considered Very Low Sodium by the Food and Drug Administration (FDA). Sodium in drinking water contributes only a small fraction of a person's overall intake (less than 5%).



# Working To Reduce Lead Exposure

## Lead Service Lines

A service line is the pipe that connects your home or building to the water main in the street. If your service line is made of lead, it can be a main source of lead in your tap water. Older pipes that combined galvanized iron and lead connectors (“goosenecks”) can also release lead. Lead service lines should be removed entirely to prevent lead in your drinking water.

## Working To Replace Lead Service Lines

To help replace lead service lines, MWRA and its Advisory Board offer zero-interest loans to member communities. Each MWRA community can develop its own local plan, and many communities have already taken steps to remove lead service lines. Since 2016, MWRA has provided \$41 million to 17 communities to replace lead service lines. Your local water department staff can help



you find out if you have a lead service line, and provide help in replacing it. In some cases, an onsite check is necessary to determine the specific piping to your building.



Your water service line connects your house to the water main which runs under your street.

## Water Service Lines



Copper



Galvanized



Lead With Bulb



Lead



Many communities have on-line maps. You can also see if your service line is made of lead by scratching the pipe near your water meter with a key or other metal object. Lead pipes will show a dull grey color, while copper pipes will not. For a how-to guide, go to: [www.epa.gov/pyt](http://www.epa.gov/pyt).

## Lead Testing In Schools And Childcares

Children can consume much of their drinking water at school or childcare. Plumbing there may contain lead and contribute to lead exposure. MWRA, in coordination with MassDEP, provides no-cost lab analysis and technical assistance for schools and childcare centers in MWRA communities. Since 2016, MWRA's laboratory staff have conducted over 40,000 tests for 576 schools and childcares in 44 communities. Results are available on the MassDEP website at: [www.mass.gov/dep](http://www.mass.gov/dep) (search for “lead in schools”). Or contact your local school or water department.

## How To Test Your Drinking Water

If you are concerned about lead piping in your home, contact your local water department about testing for lead in your drinking water. MWRA also maintains a list of certified laboratories and sampling instructions at [mwra.com](http://mwra.com). You may also talk to an MWRA expert at 617-242-5323.

## Steps To Reduce Lead In Your Home Or Office

- Find out if you have a lead service line, and get it replaced.
- Let water run before using it—fresh water is better than stale.
- Any time water has not been used for more than 6 hours, run the faucet used for drinking water or cooking for at least one minute or until after the water runs cold. To save water, fill a pitcher with fresh water and place it in the refrigerator.
- Never use hot water from the faucet for drinking or cooking, especially when making baby formula or other food for infants or young children.
- Remove loose lead solder and debris. Every few months, remove the aerator from each faucet and run water for 3 to 5 minutes.
- Be careful of places where you may find lead in or near you home. Paint, soil, dust and pottery may contain lead. Call the Massachusetts Department of Public Health at 1-800-532-9571 or 1-800-424-LEAD for information on lead and health impacts.

## Did you know?

The word “plumbing” originally came from the latin word for lead-plumbum.

# Information We All Need



## EPA Information On Bottled Water And Tap Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791) or MWRA. In order to ensure that tap water is safe to drink, MassDEP and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) and the Massachusetts Department of Public Health (MDPH) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

## Monitoring For PFAS

PFAS, or per- and polyfluoroalkyl substances, used since the 1940's for many purposes from stain and water proofing to firefighting, continue to be a national concern. Due to our well protected sources, tests of MWRA water show only trace amounts of these compounds, well below the state PFAS6 standard of 20 parts per trillion. MWRA also meets the new EPA standards announced in April 2024. See [mwra.com](http://mwra.com) for results and more details.

## Important Health Information: Drinking Water And People With Weakened Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorder, some elderly, and infants, can be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (1-800-426-4791).

## Working With Your Community To Test Your Water

MWRA works with local water department staff to sample and test 300-500 water samples each week for total coliform bacteria. Total coliform bacteria can come from the intestines of warm-blooded animals, or can be found in soil, plants, or other places. Most of the time, they are not harmful. However, their presence could signal that harmful bacteria from fecal waste may be there as well. If total coliform is detected in more than 5% of water samples in a month, the water system is required to investigate the possible source and fix any identified problems. If a water sample does test positive, our laboratory staff run a more specific test for *E. coli*, which is a bacteria found in human and animal fecal waste and may cause illness. If your community was required to do an investigation, or found *E. coli*, it will be in the letter from your community on page 7.

## Important Research For New Regulations

MWRA works with EPA and health research organizations to help define new national drinking water standards by collecting data on water contaminants that are not yet regulated. Very few of these potential contaminants are found in MWRA water due to our source water protection efforts. Detailed information on testing for unregulated contaminants, as well as data on PFAS, disinfection by-products, *Giardia* and *Cryptosporidium*, and other contaminants can be found at [mwra.com](http://mwra.com), search for UCMR.



## Prevent Cross-Connections

Your water department staff work to prevent cross-connections that may allow harmful organisms or other contaminants to contaminate your water if a backflow occurs.

Backflow sources could include:

- Garden hoses or swimming pools
- Boilers
- Irrigation systems or wells
- Residential fire protection systems

MassDEP recommends you install backflow prevention devices on inside and outside hose connections to protect the drinking water in your home and community. For more information, please call 617-242-5323, or visit [mwra.com](http://mwra.com).



## Leading By Example On Climate Change

MWRA energy managers have helped reduce MWRA's energy use and produce more green energy. We have reduced our greenhouse gas emissions by over 40% and were awarded the Massachusetts Leading by Example Award in 2023.

# Water Conservation



## Indoor Water Saving Tips

### Check for leaky pipes, faucets, or toilets.

On average, household leaks can waste 10,000 gallons every year! To see if your toilet has a leak, add a dye tablet or food coloring to your toilet's water tank. If any color or dye appears in the bowl within 15 minutes, you have a leak. The flush valve or flapper can be easily cleaned or replaced.

**Low-flush toilets** could cut your water use by 20-60%! Old inefficient toilets can use over 6 gallons per flush. The current federal standard requires all new toilets use no more than 1.6 gallons per flush. Newer models use 1.3 gallons or less per flush.

### Replace dripping faucets and showerheads.

Installing new fixtures are an easy and cost-effective way to reduce unnecessary water use. A low-flow faucet aerator can reduce the flow from 2.2 gallons to 1.5 gallons per minute

**Showering for 5 minutes** uses only 10-25 gallons while a full bathtub uses up to 70 gallons. Try conserving water by taking shorter showers or filling the tub only halfway.

**"Never let the water run"** in the bathroom or kitchen.

- Try turning off the tap while you brush your teeth or shave.
- Fill a bowl of water when you wash the dishes, fruits or vegetables, rinsing only when needed.

Reduce your water use by only washing full loads of dishes or clothes.

Look for the **Energy Star** or **WaterSense**® label for the most efficient household products and appliances.



## Outdoor Water Saving

**Avoid Evaporation:** Water your lawn in the early mornings, between 6 & 10 AM, while temperatures are cooler and the wind is calmer. If you have a pool, cover it when not in use.

**Never water on a windy day.**

**Use a broom** to clean debris from your driveway or sidewalk. No need to use the hose.

### Grow native and low-water using plants!

Regionally appropriate and established plants are accustomed to the climate and soil conditions. Planting drought resistant and native plants will require less maintenance, water, and fertilizer.

**The Inch Rule:** If there has been an inch of rainfall during the week, you more than likely don't need to water at all.

Lawn irrigation can account for as much as 30% of water consumption. **Be sure sprinklers are not damaged and aimed correctly.** Water only your lawn, not your pavement.

Consider installing a **Water-Sense® labeled weather-based irrigation controller** to automate your watering system.

Healthy soils hold more water. **Apply mulch** around plants to reduce evaporation, promote plant growth, and control weeds.



## Protect Boston Harbor And Our Rivers

Only flush toilet paper—most “flushable wipes” can clog pipes and cause overflows.

Fat, oil and grease go in the trash, not the drain.

Sump pumps and roof drains should connect to a storm drain or a dry well, not the sanitary sewer. Too much clean water can overload the sewer system.

For more information, go to [mwra.com](http://mwra.com).

### Why Save Water?

- Saving water can save you money by lowering your monthly water bill.
- Water is a shared resource. Wildlife, rivers and crops all need water too.
- Reducing water use reduces energy costs by decreasing the energy needed to clean, pump, and heat water.

**More information on water conservation and efficiency can be found at:**

[www.mwra.com/comsupport/waterconservationmain.htm](http://www.mwra.com/comsupport/waterconservationmain.htm)

## MWRA is an EPA Water Sense Partner!

MWRA has teamed up with the EPA's WaterSense Program to help consumers save water for future generations and reduce costs on their utility bills. For more information on WaterSense, and for a full list of labeled products and WaterSense irrigation partners, visit: [www.epa.gov/watersense](http://www.epa.gov/watersense).

Request free MWRA water conservation kits at: [wc.mwra.com/home](http://wc.mwra.com/home)



**STAFF SUMMARY**

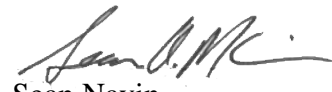
**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Water Supply Citizens Advisory Committee Contract



**COMMITTEE:** Water Policy & Oversight

     INFORMATION  
  X   VOTE

Rebecca Weidman, Deputy Chief Operating Officer  
Stephen Estes-Smargiassi, Director, Planning and Sustainability  
Rose Souliotis, Administrative Coordinator  
Preparer/Title

  
Sean Navin  
Director, Public Affairs

**RECOMMENDATION:**

To authorize the Executive Director, on behalf of the Authority, to execute a contract, substantially in the form attached hereto, with the Water Supply Citizens Advisory Committee for a one-year period beginning July 1, 2024 to June 30, 2025, with a total contract cost of \$125,043.

**DISCUSSION:**

In addition to the critical oversight functions of the Advisory Board, many of MWRA's policy decisions are made with advice and support from two standing citizens' advisory committees, the Water Supply Citizens Advisory Committee (WSCAC) and the Wastewater Advisory Committee (WAC). A separate staff summary presented at this meeting recommends authorization for the Executive Director to execute a similar contract with WAC for FY25.

WSCAC originated in 1978 when its predecessor committee, the Northfield Citizens Advisory Committee, was formed at the direction of the Secretary of the Executive Office of Environmental Affairs. WSCAC has received direct funding from MWRA since MWRA's formation in 1984.

The proposed FY25 WSCAC contact is 1.26% greater than the FY24 contract. Health insurance increased 8.8%, while other reimbursable expense items increased by \$450 to cover the increased cost of the payroll service. Health insurance is budgeted at 80% reimbursement for the Executive Director only, not to exceed \$13,732, with an optional health insurance buy-out program similar to that offered to MWRA employees who do not use MWRA's health insurance benefit. The proposed total FY25 WSCAC funding is \$125,043.

Current topics of interest to WSCAC include system redundancy, energy efficiency and carbon footprint, water system expansion issues, changing drinking water regulations, the Water System Master Plan, and watershed management and protection issues, including forestry. The committee

currently has 13 active members. WSCAC continues to work to identify additional members in categories which are not well represented on the committee.

WSCAC's office is located at Quabbin Reservoir in a Department of Conservation and Recreation (DCR) building. Most meetings were held at MWRA's Southborough facility prior to the pandemic. Since March 2020, meetings have been held virtually. WSCAC's Executive Director is Moussa Siri (selected by WSCAC's Executive Committee). The current Chair is Paul Lauenstein, elected from among the members.

**BUDGET/FISCAL IMPACT:**

Sufficient funds for the WSCAC contract are included in the FY25 Draft Final Current Expense Budget.

**ATTACHMENT:**

Agreement between Massachusetts Water Resources Authority and Water Supply Citizens Advisory Committee

**AGREEMENT**  
**BETWEEN**  
**MASSACHUSETTS WATER RESOURCES AUTHORITY**  
**AND**  
**WATER SUPPLY CITIZENS ADVISORY COMMITTEE**

This Agreement (“Agreement”) is by and between the Massachusetts Water Resources Authority (“Authority”), a body politic and corporate and a public instrumentality of the commonwealth created by Chapter 372 of the Acts of 1984 with offices at Deer Island, 33 Tafts Avenue, Boston, MA 02128 and the Water Supply Citizens Advisory Committee (“WSCAC”) an organization initially created under the Massachusetts Environmental Policy Act (“MEPA”) to ensure public representation and participation in Authority water supply activities, with offices currently at 485 Ware Road, Belchertown, MA 01007 (collectively “Parties”).

WHEREAS, the Authority is required to meet the water needs of its communities;

WHEREAS, the Authority desires WSCAC to continue to advise in water supply planning and programming; and

WHEREAS, WSCAC desires to have a continued role advising the Authority.

NOW, THEREFORE, for the consideration of mutual promises contained herein, the Authority and WSCAC agree as follows:

Article 1. EFFECTIVE DATE

This Agreement shall be effective from July 1, 2024 through June 30, 2025, inclusive.

Article 2. COMPENSATION, BUDGET, PAYMENT, and EXPENSES

2.1 The Authority shall make funds available as follows:

(a) Salaries and Duties.

Director. An Executive Director shall be chosen by WSCAC members at a salary not to exceed \$81,018 for the year commencing on July 1, 2024 through June 30, 2025, inclusive. The hourly salary rate (inclusive of payroll taxes) shall be \$48.63 with annual total hours of 1,666 (average 34 hours per week for 49 weeks). The duties of the Executive Director shall be in accordance with the job description prepared by the Executive Committee of WSCAC and on file with the Authority.

Administrative Assistant. A part-time Administrative Assistant shall be chosen by the WSCAC Executive Director in consultation with the Executive Committee of WSCAC at a salary not to exceed \$16,996 for the year commencing on July 1, 2024 through June 30, 2025, inclusive. The hourly salary rate shall be \$25.29 (inclusive of payroll taxes) with annual total hours of 672 (average 14 hours per week for 48 weeks). The duties of the Administrative Assistant shall be in accordance with the job description prepared by the Executive Committee of WSCAC and on file with the Authority.

(b) Reimbursable Expenses.

- (1) The Authority shall reimburse the WSCAC for 80% of the non-employer-sponsored health insurance for the WSCAC Executive Director (not to exceed \$13,732). The percentage rate for reimbursement of health insurance costs shall be changed to that of Authority staff if the Group Insurance Commission changes the rate.
- (2) Health insurance buy-out: The WSCAC Executive Director may elect a monetary allowance in lieu of reimbursement of health insurance costs, provided he or she has health insurance coverage through another employer-sponsored plan that meets Internal Revenue Service “minimum value” criteria, throughout that six-month period. The amount of the allowance will be \$1000 to waive family coverage or \$700 for waiving individual coverage. The WSCAC Executive Director is responsible for any withholding taxes on these payments with WSCAC being responsible for the employer share of payroll taxes.
- (3) Mileage costs, public transportation costs, highway tolls and parking expenses incurred by WSCAC staff and members from attendance at WSCAC meetings, pertinent conferences and seminars, or while performing other functions directly related to its scope of services. Mileage costs will be reimbursed at the prevailing Authority rate per mile.
- (4) Office supplies (such as letterhead, envelopes, pencils, paper clips), postage, office telephone and internet access, meeting expenses, and general administrative and office expenses;
- (5) The purchase or rental by WSCAC staff of books, films, cassettes, tapes, etc., if specifically approved by the Authority in advance, except that single copies of individual publications, books, and other written documents may be purchased for the WSCAC library use without prior approval, provided that the cost per item does not exceed \$200. All materials purchased under this section shall be considered property of the Authority.
- (6) Other miscellaneous expenses of the WSCAC staff approved by the Authority on a case-by-case basis. When possible, approval of the Authority should be received in advance of incurring such expenditures.

The Authority may advance up to \$450 to WSCAC, such advance to be applied to the payment of Miscellaneous Expenses as defined herein and as approved and budgeted under the terms of this Agreement. Payments made from an advance shall be accounted for in the same manner as all other Miscellaneous Expense payments. Prior to the expiration of this Agreement, any outstanding balance on an advance shall be applied against amounts due WSCAC.

The annual total reimbursement to WSCAC for annual and miscellaneous expenses combined shall not exceed \$13,297 from July 1, 2024 through June 30, 2025, inclusive.

(c) Non-reimbursable expenses.

The following expenses are not reimbursable: meals, entertainment, room and board expenses, fines, fees, or costs assessed as a result of improper or illegal actions on the part of the member, such as parking tickets or speeding fines.

ARTICLE 3. RESPONSIBILITIES OF THE AUTHORITY AND WSCAC

(a) WSCAC shall employ an Executive Director, who is prohibited from being a member of WSCAC while serving his or her term as a paid employee.

(b) WSCAC shall, whenever applicable, take all necessary steps to receive an exemption from the Massachusetts Sales and Use taxes for materials, printing, and equipment purchased by WSCAC on behalf of the Authority.

(c) WSCAC shall submit monthly or periodic statements to the Authority requesting payment for salary, and for annual and miscellaneous expenses listed in Article 2. Such requests shall be supplemented or accompanied by time sheets, travel and expense vouchers, and by such other supporting data as may be required by the Authority.

(d) WSCAC shall maintain accounts, records, documents, and other evidence directly pertinent to performance of work under this Agreement. The Parties and their duly authorized representatives shall have access to such records, documents, and other evidence for the purpose of inspection, audit, and copying.

(e) The Authority or its duly authorized agent shall have the right at any and all reasonable times, to examine and audit WSCAC's records, documents and other evidence.

(f) This Agreement is subject to the laws dealing with the expenditures of public funds, including Chapter 12A of the Massachusetts General Laws.

(g) The Parties agree to consent to any reasonable modifications or changes in this contract that may be required by the Commonwealth of Massachusetts or any of its agencies.

(h) WSCAC acknowledges that the Authority is a state agency for purpose of Chapter 268A of the General Laws (the Massachusetts Conflict of Interest Law) and understands that for the purposes of that law, WSCAC staff and members are special state employees.



(i) WSCAC shall be responsible for compliance with all applicable provisions and requirements of the Massachusetts Open Meeting Law and the Massachusetts Public Records Law.

#### ARTICLE 4. RESPONSIBILITIES OF THE WSCAC STAFF

4.1 The WSCAC staff shall be responsible for the following tasks:

- (a) aiding WSCAC in its tasks under Article 6, managing the WSCAC office, educating the public, and acting as liaison with the Authority and its staff;
- (b) preparing monthly progress reports for submission to the WSCAC Executive Committee, the WSCAC members, and the Authority;
- (c) maintaining financial records, minutes of the WSCAC meetings, and other WSCAC records;
- (d) assuring that at least every other meeting be held in Eastern Massachusetts at a location to be jointly agreed upon by WSCAC and the Authority where Authority attendance is expected;
- (e) providing to the Authority copies of the notices for and minutes of all meetings of WSCAC and of all the WSCAC correspondence as soon as such materials are available; and
- (f) administering and maintaining compliance by all its members and staff with the provisions of the Massachusetts Conflict of Interest Law including, without limitation, those mandatory provisions relating to: (i) annual distribution to members and staff of the State Ethics Commission's (SEC) Summary of Law and maintenance and archiving of acknowledgements of receipt of the Summary of Law from all members and staff, and (ii) compliance by members and staff with the SEC's bi-annual educational training exercises.

#### ARTICLE 5. MEMBERSHIP

5.1 Membership of WSCAC

- (a) Membership of WSCAC shall maintain parity between those individuals representing the interests of the communities listed in section 8(d) of the Authority's Enabling Act, c. 372 of the Acts of 1984, ("User Representatives") and those individuals representing the interests of the watershed communities ("Donor Representatives") and those individuals representing the interests of statewide or other appropriate interests as mutually agreed upon by WSCAC and the MWRA ("Other Representatives").
- (b) In order to maintain WSCAC membership status, members must be active participants, as defined in the WSCAC by-laws.

5.2 The appointment of WSCAC members shall be by joint designation by WSCAC and the MWRA and shall have a goal of achieving at least 10% minority representation on WSCAC.

## ARTICLE 6. WSCAC TASKS

WSCAC shall undertake the following tasks:

### 6.1 Water Supply Programs Review.

Advise the Authority staff and Board in the performance of their duties relating to water supply planning and policies. Participate in the design, review and evaluation of research, reports and new ideas for programs. Provide comments, information, advice, recommendations and guidance as to the direction, intent and execution of water planning and policy development.

### 6.2 Outreach and Education.

Assure informed public input by providing assistance in outreach to various groups regarding the Authority's water supply programs and policies, and state water resources legislation and policies. Review programs with and explain plans and policies to organizations and citizens, including the scheduling of workshops, meetings and conferences. Provide comments and assistance on legislation of importance to the Authority.

### 6.3 Working Group Representation.

When requested, provide a representative on Authority working groups, comprising MWRA staff and consultants, related to water supply planning and policy development, including the Advisory Board and its subcommittees and the Wastewater Advisory Committee.

### 6.4 Recommendations on Long Term Public Involvement.

Provide to the Authority staff and Board, proposals for continued effective and efficient long-term public involvement in water programs.

### 6.5 Recommendations and Discussion Documents.

The WSCAC staff shall be responsible for providing to the Authority's staff, Board, and others, recommendation and discussion documents on the subjects of the above tasks. Documents may be in the form of minutes of WSCAC meetings, memoranda, letters, reports, presentations and discussions as appropriate.

## ARTICLE 7. MISCELLANEOUS REQUIREMENTS

### 7.1 Nondiscrimination and Equal Employment Opportunity.

(a) WSCAC agrees to comply with all Federal and State laws pertaining to Civil Rights and Equal Opportunity, including executive orders and rules and regulations regarding employment,

demotion, transfers, recruitment, layoffs or termination, rates of pay or other compensation and training, including apprenticeships. With regard to WSCAC membership, WSCAC agrees to affirmatively solicit minority representation.

(b) WSCAC agrees to comply with the Authority's policy regarding non-discrimination and affirmative action.

## ARTICLE 8. GENERAL PROVISIONS

### 8.1 Termination of Contract.

(a) This Agreement may be terminated in writing, at any time, in whole or in part, by the Authority for its convenience or in the event of substantial failure by WSCAC to fulfill their obligations, or for violation of any of the covenants and stipulations of this Agreement.

(b) If termination is effected by the Authority an equitable adjustment shall be made providing for payment to WSCAC for services rendered and expenses incurred prior to the termination. In addition, termination settlement costs reasonably incurred by WSCAC relating to commitments, which had become firm prior to the termination, shall be paid.

(c) This agreement may be terminated at any time, in whole or in part, in writing by WSCAC in the event of substantial failure by the Authority to fulfill its obligations or for violation by the Authority to fulfill its obligations or for violation by the Authority of any of the covenants and stipulations of this agreement.

(d) No termination hereunder may be effected unless the terminating party gives the other party: (1) not less than forty-five days' written notice delivered by certified mail, return receipt requested of intent to terminate; and (2) an opportunity for consultation with the other party prior to termination, or (3) by mutual agreement of the parties.

### 8.2 Ownership of Property.

Upon termination of this Agreement for any reason, WSCAC shall turn over to the Authority all materials, equipment, including computer equipment currently on loan from the Authority and owned by the Authority, unused office supplies, books, pamphlets, publications and all other properties for which Authority or MDC reimbursements were made in whole or in part, directly or indirectly.

### 8.3 Assignability.

WSCAC shall not assign or transfer this Agreement or delegate its responsibility for the performance of services under this contract.

### 8.4 Integration Clause.

This Agreement may be amended only by a writing executed by each of the Parties.

8.5 Severability of Provisions.

If any provision of this Agreement shall, to any extent, be held invalid or unenforceable, the remainder of this Agreement shall not be deemed affected thereby.

8.6 Massachusetts Law to Govern.

All parties to this Agreement agree that this Agreement shall be governed by and enforced in accordance with the laws of the Commonwealth of Massachusetts.

8.7 Duplicate Originals.

This Agreement may be signed in more than one identical counterpart, each of which shall be deemed to be an original hereof.

8.8 Notices.

Communications shall be deemed to have been made when mailed postage prepaid or delivered to among:

Chair and  
Executive Director  
Water Supply Citizens Advisory Committee  
485 Ware Road  
Belchertown, MA 01007

Director of Public Affairs  
Massachusetts Water Resources Authority  
Deer Island  
33 Tafts Avenue  
Boston, MA 02128

Executive Director  
Massachusetts Water Resources Authority  
Deer Island  
33 Tafts Avenue  
Boston, MA 02128

IN WITNESS WHEREOF, this Agreement is executed as of this \_\_\_\_ day of June, 2024.

FOR: WATER SUPPLY CITIZENS ADVISORY COMMITTEE

By: \_\_\_\_\_  
Paul Lauenstein, Chair

Dated: \_\_\_\_\_

FOR: MASSACHUSETTS WATER RESOURCES AUTHORITY

By: \_\_\_\_\_  
Fredrick A. Laskey, Executive Director

Dated: \_\_\_\_\_

**STAFF SUMMARY**



**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Dam Safety Compliance and Consulting Services – Repairs, Design and Engineering Services During Construction  
GZA GeoEnvironmental, Inc.  
Contract 7614, Amendment 3

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**COMMITTEE:** Water Policy & Oversight

           INFORMATION  
  X   VOTE

Valerie Moran, P.E., Director, Waterworks  
John J. Gregoire, Senior Program Manager, Reservoir Operations  
Preparer/Title



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

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**RECOMMENDATION:**

To authorize the Executive Director, on behalf of the Authority, to approve Amendment 3 to Contract 7614, Dam Safety Compliance and Consulting Services - Repairs, Design and Engineering Services During Construction, with GZA GeoEnvironmental, Inc. in the amount of \$101,769.97, increasing the contract amount from \$481,041.54 to \$582,811.51 and increasing the contract term by 15 months from July 21, 2024 to October 21, 2026.

**DISCUSSION:**

Contract 7614 provides for qualified dam safety engineers to design construction repairs and provide Engineering Services During Construction (ESDC) at several reservoir dams. To date, much of the contract work has been completed.

At the Sudbury Reservoir Dam, design has been completed for masonry and weep hole repairs on the downstream spillway face and downstream training walls, and gatehouse vent piping repairs. The construction contract for this work commenced on May 31, 2024. The ESDC will be performed under this contract.

At the Wachusett Reservoir North Dike, this contract provided a design to reconnect a 150-foot-long section of the earthen embankment within the dike, which had been removed in the 1960s to allow construction of a pumping station for the City of Leominster. Prior design flood analyses revealed that wave run-up overtopping during the design flood (Probable Maximum Flood or PMF) could occur at this dike opening. A consequence of overtopping is potential failure of the dike at this location. The construction contract is substantially complete.



*Figure 1. Parapet walls east and west reconnect the North Dike at Leominster Pump Station*

At Foss Reservoir, this contract provides for design for overtopping protection during a PMF event. A consequence of overtopping is potential failure of the dam. The design of this project is 30% complete with GZA working on the 60% submittal.

**Prior Amendments 1 and 2:** On July 23, 2019, Amendment 1 was authorized under delegated authority for additional scope and funding for urgent assessment and engineering services for a dam seepage event at Chestnut Hill Reservoir Dam. The design, permitting, and construction repair work have been completed. On September 19, 2022, Amendment 2 extended the contract term until July 21, 2024, with no increase in cost to provide additional time due to Covid-19 delays to complete the design for overtopping protection at the North Dike at the Leominster Pump Station and to address Foss Dam spillway reclassification issues raised by the Massachusetts Office of Dam Safety (ODS) in the overtopping design.

**This Amendment**

This amendment would add \$101,769.97 for additional design and associated permitting services for Foss Dam overtopping protection. This increase in time and funding is necessary due to the following changes in scope.

Extend the Contract Term by 15 Months

Additional time is required to address ODS’ regulatory feedback and requirements since receiving approval of the preliminary design to support completion of final design, bid support, and ESDC on the Foss Dam overtopping construction contract. This is further described below.

Additional Design and Permitting Services for Foss Reservoir Dam \$48,073.05

Early in the design process, confirmatory survey and updated modeling by GZA revealed substantial changes to the prior understanding of overtopping conditions and proposed protections required to protect the dam during a design flood event. Staff reached out to the ODS and held several meetings in an attempt to get direction. GZA developed presentations for each meeting showing model results and preferred overtopping protection. In January 2024, it became clear that ODS no longer concurred with earlier preliminary design plans and would now require armoring

of the entire approximately 1,700-foot-long dike and dam embankments, as well as raising the embankment to an undetermined height.

ODS indicated amenability to an alternative armoring technology, turf reinforcement mat, with some articulated concrete block protections limited to the steepest section of the dam near Route 9. They also requested a sensitivity analysis of wind speed used in the wave run-up modelling.

As a result of these new requirements, this amendment seeks to increase the contract amount to cover these additional tasks. Further, these design changes add additional complexity to the required M.G.L. Chapter 253 permitting for the project.

Piezometer Design at the Foss Reservoir Dam \$30,850.00

The delay in the overtopping design and subsequent planned construction delay, presents a conflict with other work that was planned for this same location in FY26. This proposed work included installation of required instrumentation (piezometers)<sup>1</sup> at Foss Dam. Staff recommend adding design of this work to the current contract so that it can be completed in the same construction project. Efficiencies include:

- depicting instrumentation on the same drawing set as the overtopping protection;
- combining permits, as the disturbance from instrumentation installation and overtopping protection will impact the same areas of the dam;
- using the same site controls, erosion and sedimentation protection, and site restoration as the overtopping protection, as well as a combined and efficient resident engineering effort; and
- packaging of instrumentation and overtopping protection into one construction contract will likely result in more overall bids as past MWRA instrumentation-only construction contracts have historically attracted only a single bidder.

Additional Design Services for the North Dike Embankment Raising \$14,483.38

Wachusett Reservoir North Dike embankment raising scope of services was based on prior analyses. GZA recommended revising and updating these analyses during design and staff concurred. This updated analysis resulted in GZA recommending a 1.8 foot embankment raising (three feet lower than previously recommended) and significant construction cost savings.

During a confirmatory survey to support the modeling, a topographic low spot that had not previously been identified was discovered. GZA was directed to include this area in the design.

This amendment seeks to increase the contract amount to include the following additional design-related services for the North Dike embankment raising project:

- revised wave run-up analyses to support less embankment raising than originally conceived;

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<sup>1</sup> Required by MA ODS Regulations for all High Hazard Class dams 302 CMR 10.14 (8)(d).

- design and specification of North Dike low spot raising; and
- design and specification of fill for an abandoned conduit to reduce potential for bypass flow during a design storm.

Escalation

\$8,363.54

Additional budget is needed for ESDC services for the armoring and overtopping protection at Foss Dam. The labor rates under this contract were established in early 2019 with three percent annual escalation through 2022. Labor escalation during the period of this contract have exceeded this amount. With the anticipated schedule extension under this proposed amendment, GZA requests a labor inflation adjustment for future ESDC services of ten percent, citing higher industry-wide labor inflation rates. Given these services will conclude more than two years beyond the original contract end date, staff support this request.

**CONTRACT SUMMARY:**

	<u>AMOUNT</u>	<u>TIME</u>	<u>DATED</u>
Contract Amount:	\$432,028.54	48 Months	03/27/19
Amendment 1*	\$49,013.00	0 Days	07/25/19
Amendment 2*	\$0.00	12 Months	08/24/22
Amendment 3	\$101,769.97	15 Months	Pending
Adjusted Contract Amount	\$582,811.51		

\*Approved under delegated authority

**BUDGET/FISCAL IMPACTS:**

The FY25 Draft Final CIP includes \$481,042 for contract 7614. Including this amendment for \$101,769.97, the adjusted contract value will be \$582,811.51 or \$101,769.51 over the amount in the CIP. This amount will be absorbed in the FY24-28 CIP spending cap.

**MBE/WBE PARTICIPATION:**

There are no MBE and WBE participation requirements established for this contract due to the limited opportunities for subcontracting. However, GZA GeoEnvironmental, Inc. proposed 3% WBE participation, which became a requirement for this contract and will remain unchanged by this amendment.





# MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island  
33 Tafts Avenue  
Boston, MA 02128

**Frederick A. Laskey**  
Executive Director

*Chair:* J. Wolowicz  
*Vice-Chair:* M. White-Hammond  
*Committee Members:*  
B. Peña  
L. Taverna  
P. Flanagan  
J. Foti  
H. Vitale

## **PERSONNEL & COMPENSATION COMMITTEE MEETING**

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

Date: Wednesday, June 26, 2024  
Time: Immediately Following the Water Policy & Oversight Committee  
Location: Deer Island Reception/Training Building, 1st Floor  
33 Tafts Avenue – Favaloro Meeting Room  
Boston, MA 02128

A photo ID will be required for entry.

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

### **Webex meeting link (Registration required):**

<https://mwra.webex.com/weblink/register/rd8e53ef2bd8abb5820fd658867c9774b>

Meeting Number: 2349 352 1994      Password: 6282024

## **AGENDA**

### **A. Information**

1. Toxic Reduction and Control Department Reorganization

### **B. Approvals**

1. June 2024 PCR Amendments
2. Extension of Employment Contract for Kathleen Murtagh, Director of Tunnel Redundancy

### **C. Annual Meeting of the Personnel and Compensation Committee Independent of Management**

1. Authority Accountability and Transparency Act Compliance

**MASSACHUSETTS WATER RESOURCES AUTHORITY**  
Meeting of the Personnel and Compensation Committee  
of the MWRA the Board of Directors  
March 13, 2024

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A meeting of the Personnel and Compensation Committee of the Massachusetts Water Resources Authority (“MWRA”) Board of Directors was held on March 13, 2024 at MWRA’s Administration Facility in Chelsea, and via remote participation.

Committee Chair Wolowicz presided at via remote participation. Board Member Vitale also participated remotely. Board Members Foti, Pappastergion, Peña, Taverna, Jack Walsh, Patrick Walsh and White-Hammond participated at the Chelsea Administration Facility. Board Member Flanagan was absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Special Assistant for Affirmative Action Patterson Riley; Tunnel Program Director Kathy Murtagh; Director of Procurement; Human Resources Director Wendy Chu; Asset Management Analyst Michael Curtis; Chief of Staff Katie Ronan; Associate General Counsels Angela Atchue, Kimberley McMahon and Kristen Schuler Scammon; and, Assistant Secretary Kristin MacDougall participated at MWRA’s Chelsea Administration Facility.

Vandana Rao, Executive Office of Environmental Affairs (“EEA”), and Matt Romero, MWRA Advisory Board (“Advisory Board”), participated at MWRA’s Chelsea Administration Facility.

CALL TO ORDER

Committee Chair Wolowicz called the meeting to order at 12:18pm.

APPROVALS

March 2024 PCR Amendments

Wendy Chu, MWRA Human Resources Director, invited Board Members’ questions about proposed Position Control Register (“PCR”) Amendments, as detailed in the March 13, 2024 Staff Summary and filed with the records of this meeting.

(Mr. Foti left the meeting.)

Hearing no discussion or questions from the Board, Chair Wolowicz moved to Adjournment. (ref. P&C A.1/V A.2)

Appointment of Heather Sulejman, Manager, Training and Development

Ms. Chu discussed the proposed appointment of a Training and Development Manager as detailed in the March 13, 2024 Staff Summary and filed with the records of this meeting. She summarized the recruitment, interview and hiring process for the vacant position, and referred

Board Members to the Staff Summary for a review of the recommended candidate's work history and qualifications.

Hearing no discussion or questions from the Board, Chair Wolowicz moved to Adjournment. (ref. P&C A.2/V A.3)

#### ADJOURNMENT

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

A roll call vote was taken in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Pappastergion		
Peña		
Taverna		
Vitale		
J. Walsh		
P. Wash		
White-Hammond		
Wolowicz		

The meeting adjourned at 12:21pm.

#### LIST OF DOCUMENTS AND EXHIBITS USED

- March 13, 2024 Staff Summary – March 2024 PCR Amendments (ref. P&C A.1/V A.2)
- March 13, 2024 Staff Summary – Appointment of Heather Sulejman, Manager, Training and Development (ref. P&C A.2/V A.3)

**STAFF SUMMARY**




**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Reorganization of the Toxic Reduction and Control Department

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**COMMITTEE:** Personnel & Compensation

X  INFORMATION  
  VOTE

Wendy Chu   
Director, Human Resources

Rebecca Weidman, Deputy Chief Operating Officer  
Matthew Dam, Director, Toxic Reduction and Control  
Preparer/Title

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

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**RECOMMENDATION:**

For information only. Staff are recommending a reorganization of the Toxic Reduction and Control Department to address succession planning, redistribute personnel to better utilize existing resources to ensure the Department is achieving program goals, and provide a clearer career ladder for staff within the Department. Approval of necessary PCR amendments is included in a separate staff summary.

**DISCUSSION:**

TRAC continues to experience a number of retirements and more key personnel are expected to retire during fiscal year 2025. Many of TRAC’s currently difficult-to-fill positions are within TRAC’s 8(m) permit and oil/gas separator (traps) programs; these are resource intensive programs. In order to address these concerns, staff are recommending the creation of a new group, Construction Permitting, within the Department, focusing on construction permitting and inspections. This new group will provide a better distribution of work among staff and will include one additional full time equivalent (FTE). This recommendation does not require any additional FTE employees to be added to the TRAC department; TRAC will utilize existing vacant positions for the proposed reorganization and one incumbent Regional Inspector position, which will be upgraded.

The proposed Construction Permitting group will include the 8(m) permits and traps programs. The 8(m) group is responsible for issuing permits, inspecting and marking out MWRA infrastructure for projects that are proposed to build, construct, excavate or cross within a MWRA water or sewer easement or property interest. The traps group is responsible for approving new trap installations, inspecting current traps, permitting and reviewing septage sites and issuing warning letters for improperly maintained traps. This reorganization will result in positions with similar qualifications being grouped together, create a new career ladder within the Department, and provide much needed cross-functionality, redundancy and additional resources during the busy construction season for both the 8(m) and traps program.

Currently, the 8(m) program staff report to the Senior Program Manager of Field Operations and Permitting and the traps program staff report to the Program Manager of Inspections and Permitting. Creating a new Construction Permitting group will allow the Senior Program Manager of Field Operations and Permitting to focus on emerging issues, such as implementing the new National Pollutant Discharge Elimination Permit for the Deer Island Treatment Plant, which will have significant impacts to TRAC, given the emphasis on per- and polyfluoroalkyl substance monitoring at regulated and previously unregulated facilities. It will have a similar impact on the Program Manager of Permitting and Inspection, allowing that individual to focus solely on sewer use discharge permitting and inspection work.

The new Program Manager of Construction Permitting will report to the Senior Program Manager of Field Operations and Permitting. The Program Manager of Construction Permitting will provide supervision, oversight, technical resources, and act as a backup as needed to the 8(m) and traps groups. Some of the duties of the existing Source Coordinator position and the supervisory duties of the Program Manager, Inspections and Permitting related to the traps group will be added to the Program Manager, Construction Permitting position.

In addition to the creation of a new Program Manager of Construction Permitting, staff are recommending creating three new Traps Inspectors. These three inspector positions will be created by amending the existing Source Coordinator and the two Regional Inspector positions. The Traps Inspectors will be responsible for a subset of the existing Source Coordinator duties, all of the existing Regional Inspector duties and will be required to conduct 8(m) program inspections as needed. These new Traps Inspector positions will allow for a better distribution of work within the traps program and will provide much needed support to the 8(m) inspections program.

**BUDGET/FISCAL IMPACTS:**

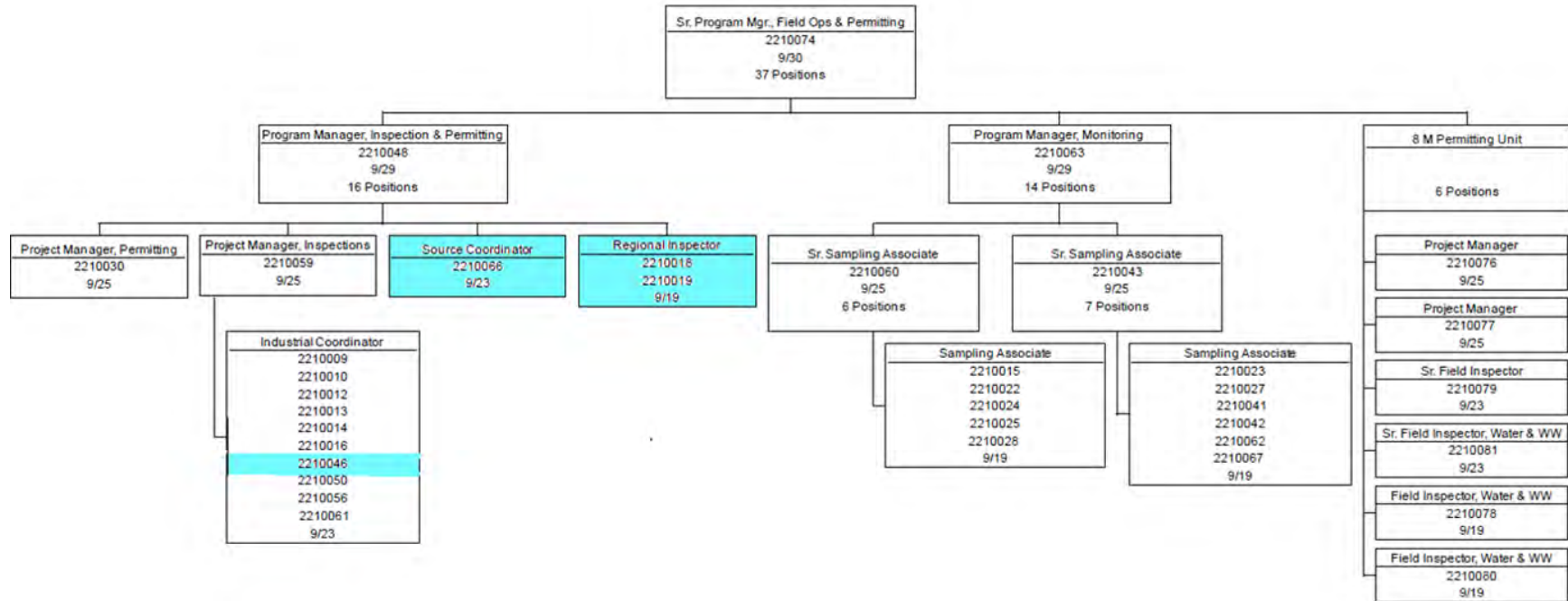
There are sufficient funds for this proposed reorganization in the FY25 Current Expense Budget.

**ATTACHMENTS:**

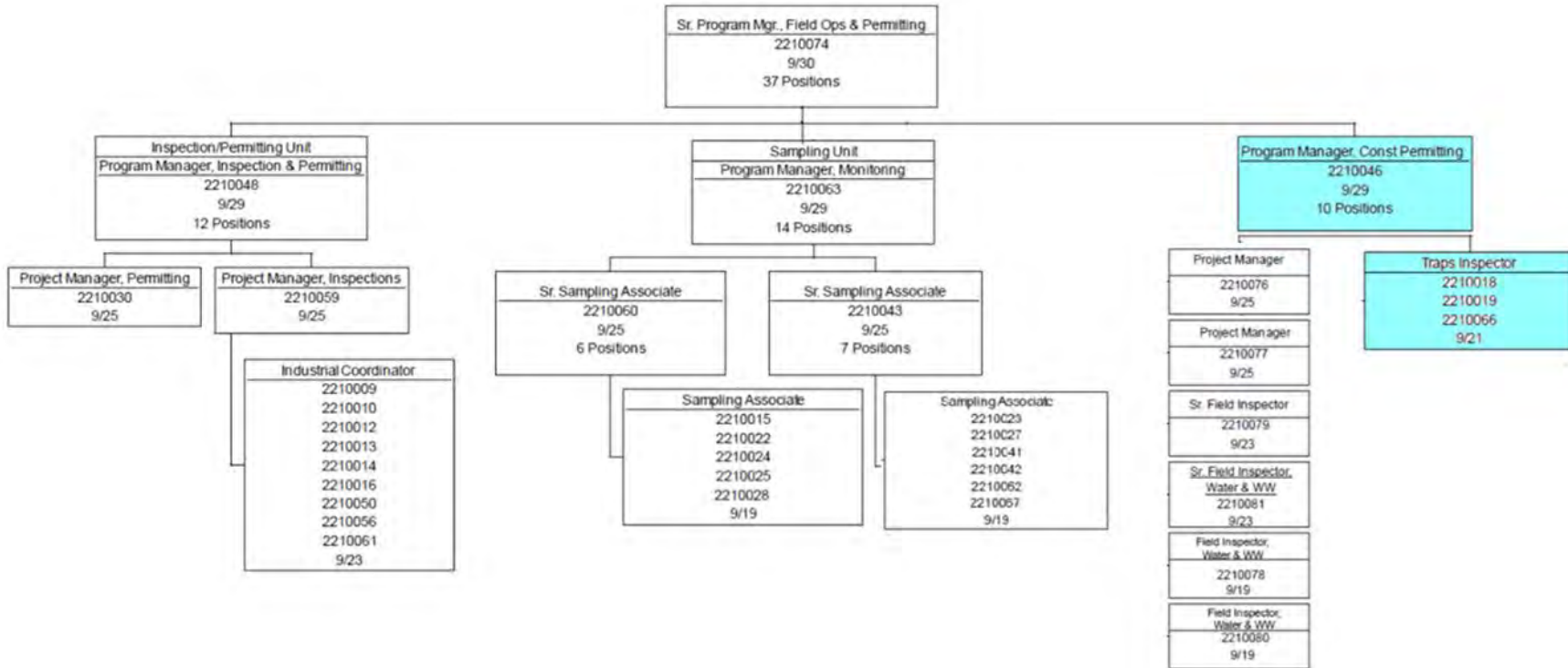
- Attachment 1: Existing Field Operations and Permitting Organizational Chart
- Attachment 2: Proposed Field Operations and Permitting Organizational Chart

# Existing Organization

June, 2024



## Proposed Organization June, 2024



**STAFF SUMMARY**

**TO:** Board of Director  
**FROM:** Frederick A Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** June 2024 PCR Amendments




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**COMMITTEE:** Personnel and Compensation

         INFORMATION  
  X   VOTE

Wendy Chu, Director of Human Resources  
Preparer/Title

  
Michele S. Gillen  
Director, Administration

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**RECOMMENDATION:**

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

**DISCUSSION:**

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

**June 2024 PCR Amendments**

There are four PCR Amendments this month.

Organizational Changes:

1. Title and grade change to one filled position in the Operations Division, TRAC Department from a Regional Inspector (Unit 9, Grade 19) to Oil/Gas Separator Traps Inspector (Unit 9, Grade 21) per union agreement due to new responsibilities.
2. Title and grade change to one vacant position in the Operations Division, TRAC Department from a Regional Inspector (Unit 9, Grade 19) to Oil/Gas Separator Traps Inspector (Unit 9, Grade 21) to better meet staffing needs.
3. Title and grade change to one vacant position in the Operations Division, TRAC Department from a Source Coordinator (Unit 9, Grade 23) to Oil/Gas Separator Traps Inspector (Unit 9, Grade 21) to better meet staffing needs.



4. Title and grade change to one vacant position in the Operations Division, TRAC Department from an Industrial Coordinator (Unit 9, Grade 23) to a Program Manager, Construction Permitting (Unit 9, Grade 29) to better meet staffing needs.

**BUDGET/FISCAL IMPACT:**

The annualized budget impact of these PCR amendments will be a maximum cost of \$40,900. Staff will ensure that the cost associated with these PCR amendments will not result in spending over the FY25 Wages and Salaries budget.

**ATTACHMENTS:**

Job Descriptions



**MWRA  
POSITION DESCRIPTION**



**POSITION:** Regional Inspector  
**DIVISION:** Operations  
**DEPARTMENT:** Toxic Reduction and Control (TRAC)

**BASIC PURPOSE:**

Performs surveillance of septage disposal activities, inspects septage receiving sites, facilities, vehicles, and equipment of septage haulers, and gasoline/oil separators as assigned. Writes permits for issuance to septage haulers. Issues and follows up on Notice of Violation and other informal enforcement actions and coordinates and refers matters requiring escalated enforcement to enforcement staff. Liaison with municipal personnel.

**SUPERVISION RECEIVED:**

Works under the general supervision of the Program Manager, Inspections & Permitting.

**SUPERVISION EXERCISED:**

None.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Conducts inspections of septage receiving sites, and the facilities, vehicles and equipment of septage haulers and drafts resulting reports.
- Conducts inspections of gasoline/oil separators to ensure proper design, structural integrity, and appropriate maintenance and drafts resulting reports.
- Conducts dye tests in sanitary sewer lines and at industries and commercial facilities to determine the presence of gasoline/oil discharges.
- Evaluates the adequacy of applications for septage discharge permits.
- Writes septage discharge permits for issuance to septage haulers and tracks permits through the required approvals to ensure the permit issuing cycle meets established criteria.
- Integrates inspection, sampling, and enforcement activities to develop information for

septage discharge permit revisions and new permit issuance.

- Issues and follows up on Notices of Violation and other informal enforcement actions for violations of the requirements for septage discharge an gasoline/oil separators and coordinates with and refers matters requiring escalated enforcement to enforcement staff.
- Attends meetings with industrial and municipal officials as required and maintains contact with municipal plumbing inspectors and sewer systems personnel within the assigned region.
- Assures that industrial waste surveys are complete and up to date in an assigned region, working in coordination with Industrial Coordinators.
- Maintains accurate and current information relating to septage and gasoline/oil separators.

**SECONDARY DUTIES:**

- Participates actively in TRAC multi-disciplinary work groups.
- Drafts reports, memoranda, and other documents.
- Performs related duties as required.

**MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) A Bachelor's degree in a related engineering or scientific field; and
- (B) Working knowledge of wastewater collection systems and gasoline/oil separators as acquired through one (1) to two (2) years of professional or technical experience working around or sampling wastewater collections systems or a related field such as construction or plumbing; or
- (C) Any equivalent combination of education and/or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge and understanding of wastewater, plumbing or construction principles and practices.
- (B) Ability to read and interpret engineering maps, construction or plumbing plans and specifications.
- (C) Strong written and oral communication skills.

- (D) Familiarity with computers, including word processing, spreadsheet, database, and other information systems.

**SPECIAL REQUIREMENTS:**

Valid Massachusetts Class D Motor Vehicle Operators License.

**TOOLS AND EQUIPMENT USED:**

Inspection equipment, mobile radio, telephone, personal computer, including word processing and other software, copy and fax machine.

**PHYSICAL DEMANDS:**

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

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

The employee must occasionally lift and/or move more than 100 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, and the ability to adjust focus.

**WORK ENVIRONMENT:**

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

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions. The employee occasionally works in high, precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.

The noise level in the work environment is usually loud in field settings, and moderately quiet in office settings.

October 2023

Page 3 of 3

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**MWRA  
POSITION DESCRIPTION**

**NEW**

**POSITION:** Oil/Gas Separator Traps Inspector (Septage)

**DIVISION:** Operations

**DEPARTMENT:** Toxic Reduction and Control (TRAC)

**BASIC PURPOSE:**

Performs surveillance of septage disposal activities, inspects septage receiving sites, 8M construction sites, facilities, vehicles, and equipment of septage haulers, and gasoline/oil separators as assigned. Writes permits for issuance to septage haulers. Issues and follows up on Notice of Violation and other informal enforcement actions and coordinates and refers matters requiring escalated enforcement to enforcement staff. Serves as liaison to municipal personnel.

**SUPERVISION RECEIVED:**

Works under the general supervision of the Program Manager, Construction Permitting.

**SUPERVISION EXERCISED:**

None.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Reviews plans for new gasoline/oil separators to ensure structural integrity and proper design and conducts field inspections to verify plans.
- Conducts inspections of septage hauler facilities and drafts septage hauler permits.
- Identifies instances in combined sewer areas where industrial storm water flows to combined sewers and coordinates TRAC's response to such instances.
- Reviews septage and gasoline/oil separator forms, templates, and other related documents and updates and revises them as appropriate.
- Tracks septage and gasoline/oil separator goals and accomplishments and provides reports on accomplishments.
- Maintains accurate and current information relating to septage and gasoline/oil separators on TRAC databases.

- Conducts inspections of septage receiving sites, and the facilities, vehicles and equipment of septage haulers and drafts resulting reports.
- Conducts inspections of gasoline/oil separators to ensure proper design, structural integrity, and appropriate maintenance and drafts resulting reports.
- Conducts dye tests in sanitary sewer lines and at industries and commercial facilities to determine the presence of gasoline/oil discharges.
- Evaluates the adequacy of applications for septage discharge permits.
- Writes septage discharge permits for issuance to septage haulers and tracks permits through the required approvals to ensure the permit issuing cycle meets established criteria.
- Integrates inspection, sampling, and enforcement activities to develop information for septage discharge permit revisions and new permit issuance.
- Issues and follows up on Notices of Violation and other informal enforcement actions for violations of the requirements for septage discharge and gasoline/oil separators and coordinates with and refers matters requiring escalated enforcement to enforcement staff.
- Attends meetings with industrial and municipal officials as required and maintains contact with municipal plumbing inspectors and sewer systems personnel within the assigned region.
- Assures that industrial waste surveys are complete and up to date in an assigned region, working in coordination with Industrial Coordinators.
- Conducts inspections of construction contracts performed by outside agencies under 8(m) permits, which may affect the Authority's wastewater transport system and water distribution system to ensure that the work of contractors conforms to plans, specifications and standards.

**SECONDARY DUTIES:**

- Participates actively in TRAC multi-disciplinary work groups.
- Drafts reports, memoranda, and other documents.
- Performs related duties as required.

## **MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) A Bachelor's degree in a related engineering or scientific field; and
- (B) Working knowledge of wastewater collection systems and gasoline/oil separators as acquired through at least two (2) years of professional or technical experience working around or sampling wastewater collections systems or a related field such as construction or plumbing; or
- (C) Any equivalent combination of education and/or experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge and understanding of wastewater, plumbing or construction principles and practices.
- (B) Ability to read and interpret engineering maps, construction or plumbing plans and specifications.
- (C) Strong written and oral communication skills.
- (D) Familiarity with Microsoft Office Suite and other software.
- (E) Thorough knowledge and understanding of sanitary engineering practices and principles.
- (F) Understanding of the installation and operation requirements for gasoline/oil separators.
- (G) Ability to open manholes, move manhole covers, and complete dye testing of sewer lines.

## **SPECIAL REQUIREMENTS:**

Valid Massachusetts Class D Motor Vehicle Operators License.

Completion of confined space entry training within six months.

Completion of OSHA 10 hour Construction training within six months.



### **TOOLS AND EQUIPMENT USED:**

Inspection equipment, mobile radio, telephone, personal computer, including word processing and other software, copy and fax machine.

### **PHYSICAL DEMANDS:**

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

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

The employee must occasionally lift and/or move more than 100 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, and the ability to adjust focus.

### **WORK ENVIRONMENT:**

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

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions. The employee occasionally works in high, precarious places and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.

The noise level in the work environment is usually loud in field settings, and moderately quiet in office settings.

June 2024

**MWRA  
POSITION DESCRIPTION**



**POSITION:** Source Coordinator

**DIVISION:** Operations

**DEPARTMENT:** Field Operations/Toxic Reduction and Control (TRAC)

**BASIC PURPOSE:**

Ensures that septage surveillance, inspections, and gasoline/oil separator inspections and reviews, and audits of facilities with group or general permits performed by TRAC meet programmatic and legal requirements. Responds to oil spills. Identifies, reports on, and responds to industrial storm water discharges to combined sewers.

**SUPERVISION RECEIVED:**

Works under the general supervision of the Regional Manager.

**SUPERVISION EXERCISED:**

None.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Provides overall direction to TRAC Regional Inspectors concerning gasoline/oil separators and septage sites and haulers.
- Reviews the work of Regional Inspectors on septage surveillance and inspections and gasoline/oil separator inspections to ensure that they meet programmatic and legal requirements.
- Reviews plans for new gasoline/oil separators to ensure structural integrity and proper design and conducts field inspections to verify plans.
- Conducts inspections of septage hauler facilities and drafts septage hauler permits.
- Identifies instances in combined sewer areas where industrial storm water flows to combined sewers and coordinates TRAC's response to such instances.
- Reviews septage and gasoline/oil separator forms, templates, and other related documents and updates and revises them as appropriate.

- Tracks septage and gasoline/oil separator goals and accomplishments and provides reports on accomplishments.
- Maintains accurate and current information relating to septage and gasoline/oil separators on TRAC databases.

**SECONDARY DUTIES:**

- Acts as On-Call Manager for TRAC in rotation with other TRAC staff.
- Reviews and recommends policies and procedures within TRAC.
- Participates in liaison, coordination, and educational activities within the MWRA and with other governmental agencies and the public.
- Participates actively in TRAC multi-disciplinary work groups.
- Drafts reports, memoranda, and other documents.
- Performs related duties as required.

**MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) A four (4) year undergraduate degree in chemistry, biology, environmental sciences, a related engineering or science discipline, or other related field; and
- (B) Five (5) to seven (7) years of experience in sanitary engineering including working with the installation and operation of gasoline/oil separators; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Thorough knowledge and understanding of sanitary engineering practices and principles.
- (B) Understanding of the installation and operation requirements for gasoline/oil separators.
- (C) Familiarity with computers, including word-processing, spreadsheet, database, and other information systems.
- (D) Ability to open manholes, move manhole covers, and complete dye testing of sewer lines.

(E) Ability to read and interpret engineering maps, plans, and specifications.

(F) Strong written and oral communication skills.

**SPECIAL REQUIREMENTS:**

Valid Massachusetts Class D Motor Vehicle Operators license.

**TOOLS AND EQUIPMENT USED:**

Inspection equipment, mobile radio, telephone, personal computer including word processing and other software, copy and fax machine.

**PHYSICAL DEMANDS:**

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

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

The employee must occasionally lift and/or move more than 100 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, peripheral vision and the ability to adjust focus.

**WORK ENVIRONMENT:**

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

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts and is occasionally exposed to vibration. The employee is occasionally exposed to fumes or airborne particles, and toxic or caustic chemicals.

The noise level in the work environment is usually loud in field settings, and moderately quiet in office settings.

**May 2018**

Page 3 of 3

**MWRA  
POSITION DESCRIPTION**



**POSITION:** Industrial Coordinator  
**DIVISION:** Operations  
**DEPARTMENT:** Toxic Reduction and Control (TRAC)

**BASIC PURPOSE:**

Conducts inspections and audits of commercial and industrial facilities and other sewer dischargers. Writes permits for issuance to sewer dischargers and others subject to MWRA regulations. Coordinates with and refers matters requiring escalated enforcement to enforcement staff.

**SUPERVISION RECEIVED:**

Works under the general supervision of a Regional Manager

**SUPERVISION EXERCISED:**

None.

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Conducts inspections of industry and other sewer dischargers and drafts resulting reports.
- Evaluates the adequacy of permit applications, notices of intent to discharge, and similar documents.
- Utilizes information gathered during inspections and relevant background information, writes permits (including sewer use, landfill, temporary construction site, group permits and others as assigned) for issuance to sewer dischargers and others subject to MWRA regulations. Integrates inspection, sampling and enforcement activities to develop information for permit revisions, new permit issuance, and one time only discharge authorizations.
- Uses TRAC's Pretreatment Information Management Systems (PIMS) to draft permit, and to gather current information relating to permits and inspections.
- Tracks permits through the required approvals to ensure the permit issuing cycle meets established criteria.
- Assures that industrial surveys are complete and up-to-date in an assigned area of

responsibility and that sewer dischargers have the requisite MWRA permits.

- Coordinates with and refers matters requiring escalated enforcement to enforcement staff.
- Reviews plans and specifications for industrial treatment facilities, including piping and instrumentation diagrams, to ensure conformance to accepted engineering practices, and explores opportunities for pollution prevention and source reduction actions by dischargers.
- Coordinates with other MWRA staff, within TRAC and from other MWRA sections, to provide support for specific sewer users.

**SECONDARY DUTIES:**

- Participates actively in TRAC multi-disciplinary work groups.
- Maintains accurate and current information relating to permits and inspections on TRAC databases.
- Drafts appropriate reports, meeting memoranda, file summaries, and other documents.
- Performs related duties as required.

**MINIMUM QUALIFICATIONS:**

Education and Experience:

- (A) A four (4) year undergraduate degree in chemistry, biology, environmental sciences or related engineering field or at least four (4) years of related experience is required; and
- (B) Three (3) to five (5) years experience in sanitary engineering and sampling practices; or
- (C) Any equivalent combination of education and experience.

Necessary Knowledge, Skills and Abilities:

- (A) Knowledge and understanding of industrial and municipal treatment systems, source reduction and pollution prevention principles (including the toxic use reduction planning and certification process), as well as applicable federal, state and MWRA regulations.
- (B) Strong written and oral communication skills.
- (C) Ability to work with computers, including word-processing, spreadsheet, and database programs.

**SPECIAL REQUIREMENTS:**

Valid Massachusetts Class D Motor Vehicle Operators License.

**TOOLS AND EQUIPMENT USED:**

Telephone, personal computer including word processing and other software, copy and fax machine.

**PHYSICAL DEMANDS:**

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

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

The employee must frequently lift and/or move up to 25 pounds and occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception, and the ability to adjust focus.

**WORK ENVIRONMENT:**

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

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts and is occasionally exposed to wet and/or humid conditions and vibration. The employee is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.

The noise level in the work environment is usually loud in field settings, and moderately quiet in office settings.

**April 2018**

**MWRA  
POSITION DESCRIPTION**

**NEW**

**POSITION:** Program Manager, Construction Permitting

**DIVISION:** Operations

**DEPARTMENT:** TRAC

**BASIC PURPOSE:**

Manages the Toxic Reduction and Control (TRAC) Department's Construction Permitting Program. Directs all construction inspection and permitting activities for the 8(m) and TRAPs programs and provides assistance to other sections within the department.

**SUPERVISION RECEIVED:**

Reports to the Sr. Program Manager, Field Operations and Permitting

**SUPERVISION EXERCISED:**

Supervises assigned 8(m) inspection and permitting staff and Oil/Gas Separator Traps Inspector (Septage) TRAPs staff

**ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Provides overall direction and oversees staff responsible for implementing the 8(m), direct connect, and TRAPs programs. Specifically provides direction regarding permitting, coordination with stakeholders, database management, and inspections.
- Oversees coordination of 8(m) and direct connection permitting reviews with appropriate staff from other MWRA Departments such as Water Operations, Wastewater Operations, Engineering & Construction, Planning, Law, and the Executive Office.
- Provides overall direction to TRAPs Inspectors concerning gasoline/oil separators and septage sites and haulers.
- Reviews the work of TRAPs Inspectors on septage surveillance and inspections and gasoline/oil separator inspections to ensure that they meet programmatic and legal requirements.
- Reviews and evaluates engineering reports, Massachusetts Environmental Policy Act (MEPA) filings, and associated technical information, inspection reports, permit applications, and permits and recommends appropriate standards and follow-up actions.



- Develops and implements training programs for staff personnel in inspections and permitting procedures, and Federal, State and local regulations.
- Recommends agency, program or department policy by analyzing all pertinent issues and information regarding the impact of proposed policy and by determining the resources necessary to implement the policy. Reviews, recommends, and manages the implementation of policies and standard operating procedures within TRAC to maintain efficient, high quality programs that are in compliance with EPA and other regulatory requirements.
- Performs administrative duties such as interviewing and recommending staff for hiring and promotion, reviewing and evaluating staff, scheduling work, developing budgets, managing vehicles, equipment, and supply acquisitions and maintenance, approving time sheets, helping to develop and implement training for staff members, and maintaining discipline.
- Ensures that staff coordinate with other TRAC groups and sections and with other MWRA departments and divisions as needed.
- Uses computer systems to schedule and coordinate work, to ensure that staff time and functions are appropriately tracked and reported, and to carry out other job responsibilities.
- Coordinates (as required) TRAC staff preparation and response to emergency spills/releases into sewer system and participates in development and implementation of emergency response policy.
- Participates in development and implementation of TRAC policies and procedures.
- Participates in the selection and hiring of project consultants and oversees the consultant's planning process.
- Participates in liaison, coordination, and educational activities within the MWRA and with other governmental agencies and the public.
- Coordinates, as required, inspection staff preparation and response to emergency infrastructure mark outs, Dig Safe Requests, construction due to emergency infrastructure repair within MWRA easements, emergency spills and releases into the sewer system.
- Reviews and evaluates inspection and permitting documents generated by the inspection staff and ensures that they will support enforcement and legal actions and stand up to scrutiny in actions brought by MWRA or others.

## **SECONDARY DUTIES:**

- Reviews and recommends policies and procedures within TRAC.
- Participates actively in TRAC multi-disciplinary work groups.
- Drafts reports, memoranda, and other documents.
- Performs related duties as required.

## **MINIMUM QUALIFICATIONS:**

### Education and Experience:

- (A) Bachelor's degree in the chemistry, biology, environmental sciences, a related engineering or science discipline, or other related field; and
- (B) Knowledge and understanding of environmental regulatory issues, policies, and practices related to water infrastructure construction and industrial permits, as acquired through at least seven (7) years of experience, of which at least 3 years should be in a supervisory capacity. This should include an understanding of industrial permits, and enforcing environmental requirements; or
- (C) Any equivalent combination of education and experience.

### Necessary Knowledge, Skills and Abilities:

- (A) Knowledge of the use, development, maintenance and management of complex computer-based information systems as a tool for supporting pretreatment program.
- (B) Ability to negotiate and reach agreement in an enforcement setting and to work with attorneys.
- (C) Ability to plan and implement programs.
- (D) Demonstrated effectiveness working across organizational boundaries and with persons at all levels in an organization.
- (E) Strong written and oral communication skills.
- (F) Ability to manage staff, including to organize, direct, train, assign duties to, supervise, motivate, and evaluate staff.

**SPECIAL REQUIREMENTS:**

Massachusetts Class D Motor Vehicle Operators License.

Acts as On-Call Manager for TRAC in rotation with other TRAC staff.

**TOOLS AND EQUIPMENT USED:**

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

**PHYSICAL DEMANDS:**

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

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

The employee must regularly lift and/or move up to 10 pounds, occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision and the ability to adjust focus.

**WORK ENVIRONMENT:**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee regularly works in an office environment.

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

**June 2024**

**STAFF SUMMARY**



**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Extension of Employment Contract of the Director of the Tunnel Redundancy Program

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**COMMITTEE:** Personnel and Compensation

X  VOTE  
     INFORMATION

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**RECOMMENDATION:**

That the Board of Directors adopt the Executive Director’s performance rating of Excellent for Kathleen M. Murtagh, Director of the Tunnel Redundancy Program for FY24 and extend the term of her employment agreement to June 3, 2027.

**DISCUSSION:**

Kathleen M. Murtagh serves as the Director of the Tunnel Redundancy Program under a three-year employment agreement with the Authority that commenced in 2018. The Executive Director has conducted annual reviews of Ms. Murtagh’s performance, which he has rated as “Excellent” for each year of her employment, including for FY24. The Executive Director recommends that the term of Ms. Murtagh’s contract be extended one year, to June 3, 2027. The performance rating of “excellent” also entitles Ms. Murtagh to the amount of any Board-approved salary increase for non-union managers, unless otherwise provided by the Board. There is no recommendation, at this time, from the Executive Director with respect to non-union salary adjustments for FY25 and any such recommendation would be addressed in a separate staff summary.

**BUDGET/FISCAL IMPACT**

There is no financial impact.


**STAFF SUMMARY**



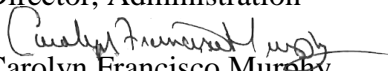
**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Authority Accountability and Transparency Act Compliance

COMMITTEE: Personnel and Compensation

X  INFORMATION  
  VOTE

  
Michèle S. Gillen  
Director, Administration

Wendy Chu, Director, Human Resources  
Preparer/Title

  
Carolyn Francisco Murphy  
General Counsel

*As required by the 2011 Authority Accountability and Transparency Act, the Personnel and Compensation Committee must meet independently of management at least once a year to establish and evaluate executive compensation, and analyze and assess comparable compensation for positions with similar functions and responsibilities at state agencies and authorities, and for-profit and non-profit private sector employers. This meeting will occur at the end of the June 26, 2024 Personnel and Compensation meeting. Analyses of comparable salaries are attached to facilitate the Committee's review.*

**RECOMMENDATION:**

For information only.

**DISCUSSION:**

The Authority Accountability and Transparency Act (G.L. c. 29, §29K) became law in July 2011 and required the Executive Office for Administration and Finance (A&F) to adopt regulations governing accountability and transparency for state authorities. As applicable to MWRA, the statute requires the Board to review executive compensation based on an analysis of comparable public and private-sector compensation; and to prepare an annual report of all Authority expenditures including disclosure of salaries of highly compensated employees who earn more than the Governor's salary. It also prohibits the Commonwealth from subsidizing the health insurance, pension, and other post-employment benefits of employees and retirees of authorities that participate in the state retirement system or the Group Insurance Commission. A&F filed interim emergency regulations in July 2011, and in 2013, A&F promulgated the permanent regulation.

The final regulation:

- Defines the statutory term “executive” as the authority's chief executive officer, chief financial officer, general counsel and others as determined by the authority's compensation committee.
- Defines “highly compensated employees,” whose compensation is reported in the annual financial report, as those whose salary exceeds that of the Governor.
- Defines “meet independently of management” to exclude authority managers from statutorily required meetings of the authority's audit and compensation committees.
- Implements the benefits anti-subsidy statute, by requiring each state authority that participates in the state retirement system or the Group Insurance Commission to:
  - contribute the employer share of the cost attributable to that authority of the state retirement system (as determined by the PERAC actuary), and of the state group insurance system (as determined by the GIC);
  - be responsible for the full actuarial value of its liabilities as determined no less often than every 3 years by PERAC and the GIC after consulting A&F, the State Treasurer, and the State Board of Retirement.

At the April 2012 meeting, the Board took several steps in order to comply with the Transparency Act and the emergency regulations: the Board created the Administration, Finance and Audit Committee, as well as the Personnel and Compensation Committee; made adjustments to the sick leave buy back for executives; and made certain minor adjustments to existing employment contracts. At the April 2012, May 2013, May 2014, May 2015, May 2016, May 2017, May 2018, May 2019, May 2020, May 2021, May 2022, and May 2023 meetings, the Personnel and Compensation Committee met independently of management as required by the regulations. As a result of these actions, MWRA is in compliance with the permanent regulations and Transparency Act. Neither MWRA Board members nor the Administration, Finance and Audit Committee are required to meet independently with respect to the audited financials of the Authority because the statute carves out an exception for state authorities that are otherwise required to retain an outside independent audit firm.

In order to remain in compliance with the statute’s requirements, staff recommend that the Personnel and Compensation Committee meet independently of management at the June 26, 2024 meeting. In order to facilitate the committee's review, analyses of comparable salaries are included with this staff summary.

#### **BUDGET/FISCAL IMPACT:**

The passage and implementation of section 29K of Chapter 29 of the Massachusetts General Laws will not have any impact upon either the FY25 CEB or CIP.

**ATTACHMENTS:**

Attachment A: Summary of Compensation Data for State Agencies, Authorities, Non-Profit Organizations and Private Companies

Attachment B: Survey of Comparable National Water/Wastewater Utilities

Attachment C: American Water Works Association – 2023 Water Utility Survey

## Attachment A

## Summary of Compensation Data for State Agencies, Authorities, Non-Profit and Private Companies

June 2024

<b>MWRA Position:</b>	<b>Executive Director</b>			
<b>Organization</b>	<b>Sector</b>	<b>Title</b>	<b>Reporting Period</b>	<b>Annual Salary</b>
Public Service of New Hampshire, an Eversource Energy company	Private Utility	President and CEO	2022	\$1,273,078
Citizens Energy, Inc.	Non-Profit	Chief Executive Officer	2021	\$911,276
Greater Boston Food Bank, Inc.	Non-Profit	President and CEO	2022	\$497,365
City Year, Inc.	Non-Profit	Chief Executive Officer	2022	\$474,522
Massachusetts Bay Transit Authority (MBTA)	State	General Manager	2024	\$470,000
Boston Foundation, Inc.	Non-Profit	President and CEO	2022	\$455,936
Massachusetts Port Authority (Massport)	Quasi Public	Interim Chief Executive Officer/Director	2024	\$421,144
Massachusetts Housing Partnership	Quasi Public	Executive Director	2024	\$288,100
Conservation Law Foundation	Non-Profit	President	2022	\$283,585
Massachusetts Convention Center Authority	Quasi Public	Executive Director	2024	\$264,618
<b>MWRA</b>	<b>Quasi Public</b>	<b>Executive Director</b>	<b>2024</b>	<b>\$252,443</b>
Boston Harbor Now	Non-Profit	President	2022	\$252,350
Commonwealth Health Insurance Connector Authority	Quasi Public	Executive Director	2024	\$247,086
Massachusetts Clean Energy Center (CEC)	Quasi Public	Chief Executive Officer	2024	\$244,050
Commonwealth of Massachusetts	State	Treasurer	2024	\$238,794
Commonwealth of Massachusetts	State	State Auditor	2024	\$229,377
Commonwealth of Massachusetts	State	Attorney General	2024	\$222,639
Commonwealth of Massachusetts	State	Governor	2024	\$222,185
Commonwealth of Massachusetts	State	Secretary of State	2024	\$202,427
Massachusetts Department of Transportation (MASSDOT)	State	Secretary , MassDOT	2024	\$196,551
Massachusetts Department of Revenue (DOR)	State	Commissioner of Revenue	2024	\$196,083
Save the Harbor/Save the Bay	Non-Profit	Executive Director	2022	\$139,673



Attachment A

Summary of Compensation Data for State Agencies, Authorities, Non-Profit and Private Companies

June 2024

<b>MWRA Position:</b>	<b>Chief Operating Officer</b>			
<b>Organization</b>	<b>Sector</b>	<b>Title</b>	<b>Reporting Period</b>	<b>Annual Salary</b>
Public Service of New Hampshire, an Eversource Energy company	Private Utility	Executive Vice President/Chief Operating Officer	2022	\$787,693
Massachusetts Port Authority (Massport)	Quasi Public	Director, Capitol Programs & Environmental Affairs	2024	\$326,000
City Year, Inc.	Non-Profit	Chief Strategy Officer	2022	\$325,835
Greater Boston Food Bank, Inc.	Non-Profit	Chief Operating Officer	2022	\$302,268
Massachusetts Bay Transit Authority (MBTA)	State	Chief Operating Officer	2024	\$295,000
Massachusetts Housing Partnership	Quasi Public	Managing Director	2024	\$254,000
<b>MWRA</b>	<b>Quasi Public</b>	<b>Chief Operating Officer</b>	<b>2024</b>	<b>\$220,999</b>
Commonwealth Health Insurance Connector Authority	Quasi Public	Chief Operating Officer	2024	\$217,300
Conservation Law Foundation	Non-Profit	Vice President	2022	\$212,690
Massachusetts Department of Transportation (MASSDOT)	State	Deputy Administrator and Chief Engineer	2024	\$192,254
Massachusetts Convention Center Authority	Quasi Public	General Manager	2024	\$183,581
Boston Harbor Now	Non-Profit	Vice President, Park Partnerships and Operations	2022	\$113,702
Citizens Energy, Inc.	Non-Profit	No Match		
Save the Harbor/Save the Bay	Non-Profit	No Match		
Boston Foundation, Inc.	Non-Profit	No Match		
Massachusetts Clean Energy Center (CEC)	Quasi Public	No match		

Attachment A

Summary of Compensation Data for State Agencies, Authorities, Non-Profit and Private Companies

June 2024

<b>MWRA Position:</b>	<b>Director, Finance</b>			
<b>Organization</b>	<b>Sector</b>	<b>Title</b>	<b>Reporting Period</b>	<b>Annual Salary</b>
Citizens Energy, Inc.	Non-Profit	Chief Financial Officer	2021	\$548,767
Public Service of New Hampshire, an Eversource Energy company	Private Utility	Executive Vice President & CFO	2022	\$543,046
Boston Foundation, Inc.	Non-Profit	Chief Financial Officer and Treasurer	2022	\$448,543
City Year, Inc.	Non-Profit	Chief Financial and Administrative Officer	2022	\$306,311
Greater Boston Food Bank, Inc.	Non-Profit	Chief Financial Officer	2022	\$279,970
Massachusetts Port Authority (Massport)	Quasi Public	Deputy Director, Admin & Finance	2024	\$255,164
Massachusetts Bay Transit Authority (MBTA)	State	Chief Financial Officer	2024	\$247,200
Massachusetts Housing Partnership	Quasi Public	Chief Financial & Administrative Officer	2024	\$222,800
Commonwealth Health Insurance Connector Authority	Quasi Public	Chief Financial Officer	2024	\$206,700
<b>MWRA</b>	<b>Quasi Public</b>	<b>Director, Finance</b>	<b>2024</b>	<b>\$197,725</b>
Massachusetts Convention Center Authority	Quasi Public	Chief Financial Officer	2024	\$184,018
Massachusetts Clean Energy Center (CEC)	Quasi Public	Chief Financial Officer	2024	\$181,300
Massachusetts Department of Transportation (MASSDOT)	State	Chief Financial Officer	2024	\$176,436
Massachusetts Department of Revenue (DOR)	State	Chief Financial Officer	2024	\$171,169
Boston Harbor Now	Non-Profit	Director of Finance		not available
Conservation Law Foundation	Non-Profit	No Match		
Save the Harbor/Save the Bay	Non-Profit	No Match		

Attachment A

Summary of Compensation Data for State Agencies, Authorities, Non-Profit and Private Companies

June 2024

<b>MWRA Position:</b>	<b>General Counsel</b>			
<b>Organization</b>	<b>Sector</b>	<b>Title</b>	<b>Reporting Period</b>	<b>Annual Salary</b>
Public Service of New Hampshire, an Eversource Energy company	Private Utility	Executive Vice President and General Counsel	2022	\$685,387
Massachusetts Port Authority (Massport)	Quasi Public	Interim Chief Legal Counsel	2024	\$301,286
City Year, Inc.	Non-Profit	Co-Clerk and General Counsel	2022	\$284,765
Massachusetts Bay Transit Authority (MBTA)	State	Chief Counsel MBTA/Mass DOT	2024	\$220,000
Massachusetts Housing Partnership	Quasi Public	General Counsel	2024	\$217,400
Commonwealth Health Insurance Connector Authority	Quasi Public	General Counsel	2024	\$201,400
<b>MWRA</b>	<b>Quasi Public</b>	<b>General Counsel</b>	<b>2024</b>	<b>\$197,725</b>
Massachusetts Clean Energy Center (CEC)	Quasi Public	General Counsel	2024	\$190,216
Massachusetts Convention Center Authority	Quasi Public	General Counsel	2023	\$184,018
Massachusetts Department of Revenue (DOR)	State	General Counsel	2024	\$182,648
Massachusetts Department of Transportation (MASSDOT)	State	Managing Counsel Corp.	2024	\$174,004
Conservation Law Foundation	Non-Profit	No Match	2022	
Boston Foundation, Inc.	Non-Profit	No match		
Greater Boston Food Bank, Inc.	Non-Profit	No match		
Citizens Energy, Inc.	Non-Profit	Senior Vice President & General Counsel	2020	not available
Save the Harbor/Save the Bay	Non-Profit	No match		
Boston Harbor Now	Non-Profit	No match		

Attachment A

Summary of Compensation Data for State Agencies, Authorities, Non-Profit and Private Companies

June 2024

<b>MWRA Position:</b>	<b>Director, Administration</b>			
<b>Organization</b>	<b>Sector</b>	<b>Title</b>	<b>Reporting Period</b>	<b>Annual Salary</b>
Massachusetts Port Authority (Massport)	Quasi Public	Director Administration & Finance/Sec-Treasurer	2024	\$364,349
City Year, Inc.	Non-Profit	Chief Fiscal and Administrative Officer	2024	\$297,666
Massachusetts Bay Transit Authority (MBTA)	State	Chief Administrative Officer	2024	\$287,553
Massachusetts Housing Partnership	Quasi Public	Chief Financial and Administrative Officer	2024	\$222,800
<b>MWRA</b>	<b>Quasi Public</b>	<b>Director, Administration</b>	<b>2024</b>	<b>\$197,725</b>
Massachusetts Department of Transportation (MASSDOT)	State	Chief Administrative Officer	2024	\$183,972
Massachusetts Department of Revenue (DOR)	State	Deputy Commissioner, Administrative Affairs	2024	\$161,480
Public Service of New Hampshire, an Eversource Energy company	Private Utility	No match		
Commonwealth Health Insurance Connector Authority	Quasi Public	No match		
Massachusetts Convention Center Authority	Quasi Public	No match		
Conservation Law Foundation	Non-Profit	No match		
Boston Foundation, Inc.	Non-Profit	No match		
Greater Boston Food Bank, Inc.	Non-Profit	No match		
Citizens Energy, Inc.	Non-Profit	No match		
Save the Harbor/Save the Bay	Non-Profit	No match		
Boston Harbor Now	Non-Profit	No match		
Massachusetts Clean Energy Center (CEC)	Quasi Public	No match		

Attachment B  
 MWRA Survey of Comparable National Water/Wastewater  
 Utilities - June 2024

<b>Executive Director</b>										
<b>Organization</b>	<b>Location</b>	<b>Operating Budget</b>	<b># Employees</b>	<b>Population Served</b>	<b>Title</b>	<b>2023 Base Salary</b>	<b>2023 Car Allowance</b>	<b>2023 Deferred Comp</b>	<b>2023 Bonus</b>	<b>2023 Employment Contract</b>
Fairfax Water	Fairfax, VA	\$105.24 million	475	2.5 million	General Manager	\$338,525	\$0 - car provided	\$0	\$0	Yes
Metropolitan Water District of Southern California	Los Angeles, CA	Nearly \$2 billion annual	Budgeted for 1929	19 million	General Manager	\$503,942	\$700 or use of District vehicle	4.5% 401k match	\$0	Yes
WSSC Water (formerly known as Washington Suburban Sanitary Commission)	Laurel, MD	\$931.2 million	1,613	1.9 million	General Manager/CEO	\$326,115	\$12,000	\$25,000	\$11,315	Yes
Seattle Public Utilities	Seattle, WA	\$996 million	1,500	1.4 million	General Manager/CEO	\$313,133	\$0	\$0	\$0	No
East Bay Municipal Utility District	Oakland, CA	\$772.7 Million	2,000	1.4 Million	General Manager	\$408,396	\$0	\$30,500	\$0	Yes
					<b>Average Salary</b>	<b>\$378,022</b>				
<b>Massachusetts Water Resources Authority (MWRA)</b>	<b>Boston, MA</b>	\$874.2 million	1,070	3.1 million	<b>MWRA Executive Director</b>	<b>\$252,443</b>	<b>included in salary</b>			
<b>Chief Operating Officer</b>										
<b>Organization</b>	<b>Location</b>	<b>Operating Budget</b>	<b># Employees</b>	<b>Population Served</b>	<b>Title</b>	<b>2023 Base Salary</b>	<b>2023 Car Allowance</b>	<b>2023 Deferred Comp</b>	<b>2023 Bonus</b>	<b>2023 Employment Contract</b>
Fairfax Water	Fairfax, VA	\$105.24 million	475	2.5 million	Deputy General Manager	\$299,200	\$0 - car provided	\$0	\$0	No
Metropolitan Water District of Southern California	Los Angeles, CA	Nearly \$2 billion annual	Budgeted for 1929	19 million	Assistant General Manager/ Chief Operating Officer	\$423,467	\$700 or use of District vehicle	4.5% 401k match	\$0	No
WSSC Water (formerly known as Washington Suburban Sanitary Commission)	Laurel, MD	\$931.2 million	1,613	1.9 million	Deputy General Manager for Operations	\$281,597	\$8,000	\$0	\$0	Yes
Seattle Public Utilities	Seattle, WA	\$996 million	1,500	1.4 million	Chief of Staff	\$233,688	\$0	\$0	\$0	No
East Bay Municipal Utility District	Oakland, CA	\$772.7 Million	2,000	1.4 Million	Director, Operations & Maintenance	\$309,000	\$0	\$0	\$12,500	No
					<b>Average Salary</b>	<b>\$309,390</b>				
<b>Massachusetts Water Resources Authority (MWRA)</b>	<b>Boston, MA</b>	\$874.2 million	1,070	3.1 million	<b>MWRA Chief Operating Officer</b>	<b>\$204,326</b>				

<b>Director Finance</b>										
Organization	Location	Operating Budget	# Employees	Population Served	Title	2023 Base Salary	2023 Car Allowance	2023 Deferred Comp	2023 Bonus	2023 Employment Contract
Fairfax Water	Fairfax, VA	\$105.24 million	475	2.5 million	Director, Finance	\$224,087	\$0	\$0	\$0	No
Metropolitan Water District of Southern California	Los Angeles, CA	Nearly \$2 billion annual	Budgeted for 1929	19 million	Assistant General Manager/ Chief Financial Officer	\$379,870	\$700 or use of District vehicle	4.5% 401k match	\$0	No
WSSC Water (formerly known as Washington Suburban Sanitary Commission)	Laurel, MD	\$931.2 million	1,613	1.9 million	Chief Financial Officer	\$271,350	\$3,000	\$0	\$0	Yes
Seattle Public Utilities	Seattle, WA	\$996 million	1,500	1.4 million	Div Director Finance	\$252,518	\$0	\$0	\$0	No
East Bay Municipal Utility District	Oakland, CA	\$772.7 Million	2,000	1.4 Million	Director, Finance	\$336,768	\$0	\$0	\$5,988	No
					<b>Average Salary</b>	<b>\$248,550</b>				
<b>Massachusetts Water Resources Authority (MWRA)</b>	<b>Boston, MA</b>	\$874.2 million	1,070	3.1 million	<b>MWRA Director, Finance</b>	<b>\$220,999</b>				
<b>General Counsel</b>										
Organization	Location	Operating Budget	# Employees	Population Served	Title	2023 Base Salary	2023 Car Allowance	2023 Deferred Comp	2023 Bonus	2023 Employment Contract
Fairfax Water	Fairfax, Virginia	\$105.24 million	439	2.5 million	No Match					
Metropolitan Water District of Southern California	Los Angeles, CA	Nearly \$2 billion annual	Budgeted for 1929	19 million	General Counsel	\$399,193	\$700 or use of District vehicle	4.5% 401k match	\$0	No
WSSC Water (formerly known as Washington Suburban Sanitary Commission)	Laurel, MD	\$931.2 million	1,613	1.9 million	General Counsel	\$271,954	\$3,000	\$0	\$0	Yes
Seattle Public Utilities	Seattle, WA	\$996 million	1,500	1.4 million	No Match (uses city legal services)					
East Bay Municipal Utility District	Oakland, CA	\$772.7 Million	2,000	1.4 Million	General Counsel	\$314,676	\$0	\$0	\$0	Yes
					<b>Average Salary</b>	<b>\$328,608</b>				
<b>Massachusetts Water Resources Authority (MWRA)</b>	<b>Boston, MA</b>	\$874.2 million	1,070	3.1 million	<b>MWRA General Counsel</b>	<b>\$197,725</b>				

Attachment B  
 MWRA Survey of Comparable National Water/Wastewater  
 Utilities - June 2024

<b>Chief Administrative Officer</b>										
<b>Organization</b>	<b>Location</b>	<b>Operating Budget</b>	<b># Employees</b>	<b>Population Served</b>	<b>Title</b>	<b>2023 Base Salary</b>	<b>2023 Car Allowance</b>	<b>2023 Deferred Comp</b>	<b>2023 Bonus</b>	<b>2023 Employment Contract</b>
Fairfax Water	Fairfax, Virginia	\$105.24 million	439	2.5 million	No match					
Metropolitan Water District of Southern California	Los Angeles, CA	Nearly \$2 billion annual	Budgeted for 1929	19 million	No match					
WSSC Water (formerly known as Washington Suburban Sanitary Commission)	Laurel, MD	\$931.2 million	1,613	1.9 million	Deputy General Manager, External Affairs	\$243,292	\$8,000	\$0	\$0	Yes
Seattle Public Utilities	Seattle, WA	\$996 million	1,500	1.4 million	No match					
East Bay Municipal Utility District	Oakland, CA	\$772.7 Million	2,000	1.4 Million	No match					
					<b>Average Salary</b>	<b>\$243,292</b>				
<b>Massachusetts Water Resources Authority (MWRA)</b>	<b>Boston, MA</b>	\$874.2 million	1,070	3.1 million	<b>MWRA Director, Administration</b>	<b>\$197,725</b>				

<b>Survey Position:</b>	<b>Top Executive</b>				
<b>MWRA Position:</b>	<b>Executive Director</b>				
<b>Survey Scope:</b>	<b>ALL utilities serving a population in excess of 1,000,000</b>				
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>	<b>MWRA Salary</b>
	31	31	\$260,000	\$314,562	\$252,443
<b>Survey Scope:</b>	<b>All <u>water</u> utilities serving a population in excess of 1,000,000</b>				
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>	<b>MWRA Salary</b>
	11	11	\$300,000	\$299,706	\$252,443
<b>Survey Scope:</b>	<b>All <u>water/wastewater</u> utilities serving a population in excess of 1,000,000</b>				
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>	<b>MWRA Salary</b>
	20	20	\$247,295	\$322,733	\$252,443

<b>Survey Position:</b>	<b>Top Operations and Maintenance Executive</b>				
<b>MWRA Position:</b>	<b>Chief Operating Officer</b>				
<b>Survey Scope:</b>	<b>ALL utilities serving a population in excess of 1,000,000</b>				
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>	<b>MWRA Salary</b>
	27	30	\$184,454	\$197,775	\$220,999
<b>Survey Scope:</b>	<b>All <u>water</u> utilities serving a population in excess of 1,000,000</b>				
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>	<b>MWRA Salary</b>
	10	10	\$197,844	\$194,688	\$220,999
<b>Survey Scope:</b>	<b>All <u>water/wastewater</u> utilities serving a population in excess of 1,000,000</b>				
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>	<b>MWRA Salary</b>
	17	20	\$184,454	\$199,591	\$220,999



<b>Survey Position:</b>	<b>Top Finance Executive</b>			
<b>MWRA Position:</b>	<b>Director, Finance</b>			
<b>Survey Scope:</b>	<b>ALL utilities serving a population in excess of 1,000,000</b>			
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>
	28	29	\$195,863	\$215,247
	<b>MWRA Salary</b>	<b>\$197,725</b>		
<b>Survey Scope:</b>	<b>All <u>water</u> utilities serving a population in excess of 1,000,000</b>			
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>
	10	10	\$218,544	\$212,384
	<b>MWRA Salary</b>	<b>\$197,725</b>		
<b>Survey Scope:</b>	<b>All <u>water/wastewater</u> utilities serving a population in excess of 1,000,000</b>			
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>
	18	19	\$189,076	\$216,837
	<b>MWRA Salary</b>	<b>\$197,725</b>		

<b>Survey Position:</b>	<b>Top Legal Executive</b>			
<b>MWRA Position:</b>	<b>General Counsel</b>			
<b>Survey Scope:</b>	<b>ALL utilities serving a population in excess of 1,000,000</b>			
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>
	21	22	\$236,970	\$237,007
	<b>MWRA Salary</b>	<b>\$197,725</b>		
<b>Survey Scope:</b>	<b>All <u>water</u> utilities serving a population in excess of 1,000,000</b>			
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>
	7	7	\$255,000	\$253,305
	<b>MWRA Salary</b>	<b>\$197,725</b>		
<b>Survey Scope:</b>	<b>All <u>water/wastewater</u> utilities serving a population in excess of 1,000,000</b>			
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>
	14	15	\$221,172	\$228,858
	<b>MWRA Salary</b>	<b>\$197,725</b>		

<b>Survey Position:</b>	<b>Top Administration Executive</b>				
<b>MWRA Position:</b>	<b>Director, Administration</b>				
<b>Survey Scope:</b>	<b>ALL utilities serving a population in excess of 1,000,000</b>				
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>	<b>MWRA Salary</b>
	15	17	\$179,265	\$169,272	\$197,725
<b>Survey Scope:</b>	<b>All water utilities serving a population in excess of 1,000,000</b>				
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>	<b>MWRA Salary</b>
	4	4	not available	not available	\$197,725
<b>Survey Scope:</b>	<b>All water/wastewater utilities serving a population in excess of 1,000,000</b>				
	<b># of Utilities</b>	<b># of Employees</b>	<b>50th Percentile Salary</b>	<b>Average Salary</b>	<b>MWRA Salary</b>
	14	15	\$179,265	\$169,272	\$197,725



# MASSACHUSETTS WATER RESOURCES AUTHORITY

Deer Island  
33 Tafts Avenue  
Boston, MA 02128

**Frederick A. Laskey**  
Executive Director

*Chair:* R. Tepper

*Vice-Chair:* A. Pappastergion

*Secretary:* B. Peña

*Board Members:*

P. Flanagan

J. Foti

L. Taverna

H. Vitale

J. Walsh

P. Walsh

M. White-Hammond

J. Wolowicz

## **BOARD OF DIRECTORS' MEETING**

Date: Wednesday, June 26, 2024  
Time: 1:00pm  
Location: Deer Island Reception/Training Building, 1st Floor  
33 Tafts Avenue – Favaloro Meeting Room  
Boston, MA 02128

Telephone: (617) 242-6000

Fax: (617) 788-4899

TTY: (617) 788-4971

A photo ID will be required for entry.

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

### **Webex meeting link (Registration required):**

<https://mwra.webex.com/weblink/register/rddb34d5620c3a54a417bce0acc2913da>

Meeting Number: 2330 473 2709

Password: 6282024

## **AGENDA**

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

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

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

### **IV. EXECUTIVE SESSION**

#### **i. Approval of April 17, 2024 Executive Session Minutes**

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

1. Watershed Land Acquisition (ref. ES 2.a)

### **V. PRESENTATIONS AND SUMMARIES**

1. Approval of Amendments to MWRA regulations for Sewer Use (360 CMR 10.000)
2. Informational Update on Quinapoxet Dam Removal
3. Approval of Revisions to the Lead Service Line Replacement Program Guidelines

### **VI. BOARD ACTIONS**

#### **A. APPROVALS**

1. Final FY2025 Capital Improvement Program (CIP) (ref AF&A B.1)
2. Final FY2025 Current Expense Budget (CEB) (AF&A B.2)
3. Final FY2025 Water and Sewer Assessments (AF&A B.3)

**VI. BOARD ACTIONS****A. APPROVALS (Continued)**

4. Defeasance of Future Debt Service (ref. AF&A B.4)
5. Surplus Water Easement of the Abandoned Mystic Water Mains (AF&A B.5)
6. Amendments to MWRA regulations for Sewer Use (360 CMR 10.000) (ref. V.1)
7. Annual Renewal of Wastewater Advisory Committee (WAC) Contract (WW A.1)
8. Approval of Revisions to the Lead Service Line Replacement Program Guidelines (ref. V.3)
9. Annual Renewal of Water Supply Citizens Committee (WSCAC) Contract (ref. W B.1)
10. June 2024 PCR Amendments (ref. P&C B.1)
11. Extension of Employment Contract for Kathleen Murtagh, Director of Tunnel Redundancy (ref. P&C B.2)

**B. CONTRACT AWARDS**

1. West Roxbury Tunnel Inspection: Black Dog Divers, Inc., Contract 6898 (ref. WW B.1)

**C. CONTRACT AMENDMENTS/CHANGE ORDERS**

1. Maximo Lawson Interface Enhancements: Starboard Consulting, LLC, Contract 7649, Amendment #4 (ref. AF&A C.1)
2. Agency-Wide Technical Assistance Consulting Services: Hazen and Sawyer, P.C., Contract 7990, Amendment 1 (ref. WW C.1)
3. Agency-Wide Technical Assistance Consulting Services: Kleinfelder Northeast, Inc., Contract 7991, Amendment 1 (ref. WW.C.2)
4. Nut Island Headworks Odor Control and HVAC Improvements: Walsh Construction Co. II, LLC, Contract 7548, Change Order 18 (ref. WW C.3)
5. Dam Safety Compliance and Consulting, GZA GeoEnvironmental, Contract 7614, Amendment 3 (ref. W C.1)

**VII. OTHER BUSINESS (BOARD ACTION)**

1. Review and Extension of Contract for Frederick A. Laskey, Executive Director

**VIII. CORRESPONDENCE TO THE BOARD****IX. ADJOURNMENT**

# MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Board of Directors

May 22, 2024

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A meeting of the Massachusetts Water Resources Authority (“MWRA”) Board of Directors was held on May 22, 2024 at MWRA’s Administration Facility in Chelsea, and via remote participation.

Chair Tepper presided from the MWRA Administration Facility. Board Members Flanagan, Peña, Taverna, and Jack Walsh also participated at the Administration Facility. Board Members Foti and Vitale participated remotely. Board Members Pappastergion, Patrick Walsh, White-Hammond and Wolowicz were absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Director of Administration Michele Gillen; Special Assistant for Affirmative Action Patterson Riley; Director of Planning and Sustainability Stephen Estes-Smargiassi; Energy Manager Kristen Patneau; Senior Program Manager, Planning Michael O’Keefe; Chief Engineer Brian Kubaska; Construction Director Marty McGowan; Finance Director Thomas Durkin; Risk Manager Paul Whelan; Deputy Finance Director/Treasurer Matthew Horan; Labor Relations Manager Steve Perry; Human Resources Director Wendy Chu; MIS Director Paula Weadick; Asset Management Analyst Michael Curtis; Chief of Staff Katie Ronan; Associate General Counsel Angela Atchue; and, Assistant Secretary Kristin MacDougall participated at MWRA’s Administration Facility.

Vandana Rao, EEA and Matt Romero, MWRA Advisory Board (“Advisory Board”), also participated at the Administration Facility.

Chair Tepper called the meeting to order at 1:50pm.

## ROLL CALL

MWRA General Counsel Francisco Murphy took roll call of Board Members in attendance and announced that Board Members Foti and Vitale were participating remotely. The Chair announced that the meeting was being held at MWRA’s Chelsea Administration Facility and virtually, via a link posted on MWRA’s website. She added that the meeting would be recorded, and that the agenda and meeting materials were available on MWRA’s website. She also announced that individual roll call votes would be conducted after each motion was made and given an opportunity for discussion.

## APPROVAL OF APRIL 17, 2024 MINUTES

**A motion was duly made and seconded to approve the minutes of the Board of Directors’ meeting of April 17, 2024.**

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

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Foti		
Peña		
Taverna		
Vitale		
J. Walsh		

(ref. I)

#### REPORT OF THE CHAIR

Secretary Tepper thanked MWRA Advisory Board staff for their helpful presentation for the Committee of the Whole, which met at 1:00pm on May 22, 2024. In reference to a discussion conducted during that meeting, the Chair reiterated that Massachusetts forestry guidelines would be released soon. (ref. II)

#### REPORT OF THE EXECUTIVE DIRECTOR

MWRA Executive Director Fred Laskey invited Board Members to attend a groundbreaking ceremony for the removal of the Quinapoxet Dam, to be held on June 17, 2024. He discussed the importance of the project and its benefits for watershed restoration, and for the return of the Quinapoxet River to its natural conditions. He thanked Secretary Tepper for her contributions to the project.

Secretary Tepper noted that dams and culverts were top priorities for the Healey/Driscoll administration.

Mr. Laskey then reported that MWRA has been notified that it would receive \$8 million from the State Revolving Fund, and a \$20 million grant from the Massachusetts Climate Protection and Mitigation Expendable Trust ("Climate Trust"). He added that a presentation on the projects that MWRA plans to submit to MassDEP ("DEP") for funding through the Climate Trust is on this meeting's agenda.

Next, Mr. Laskey announced that MWRA recently received a number of awards, including a certificate of achievement for excellence in financial reporting; the DEP's 2024 Public Water System Award; and, a National Association of Clean Water Agencies Platinum Peak Performance Award for the Deer Island Treatment Plant ("DITP") for the 17<sup>th</sup> year running.

Mr. Laksey then reported that MWRA staff competed in the 2024 Run of the Charles, and congratulated the participants. Finally, he noted that MWRA's water wagons also known as

“Quench Buggies” (portable drinking water fountains) were in high demand for the season, with bookings at community events across the service area. He added that Quench Buggies were an effective way to directly engage with constituents, and thanked the MWRA staff who manage the program.

Secretary Tepper asked if the Quench Buggies are staffed during events. Katie Ronan, MWRA Chief of Staff, explained that employees usually staff the water wagons to answer questions and provide information. There was discussion and questions and answers about Quench Buggy operations, and a similar program run by the Boston Water and Sewer Commission (“BWSC”). Board Member Taverna noted that MWRA’s water wagon was well received by the attendees of a recent public event in Newton (“Bike Newton Day”). (ref. III)

## WATER POLICY AND OVERSIGHT

### Approvals

#### Approval of Lead Service Line Replacement Grant Program

Stephen Estes-Smargiassi, MWRA Director of Planning and Sustainability, reported that all six MWRA communities that had exceeded the lead Action Level (“AL”) during the fall 2023 sampling round had tested below the AL for the spring 2024 round, and discussed a proposed revision to MWRA’s Lead Service Line Grant Program (“LSLR Program”). He noted that the proposed revision, which was developed in cooperation with the MWRA Advisory Board, is intended to accelerate and encourage community lead service line replacements in advance of upcoming EPA Lead and Copper Rule Improvements (“LCRI”) requirements, effective in October, 2027.

Mr. Estes-Smargiassi presented an overview of the LCRI requirements, including the removal of all lead service lines within 10 years, regardless of sample results; a reduced AL (10 parts per billion, rather than 15 parts per billion), which could increase the frequency of exceedances; and sampling and reporting changes, which could increase the likelihood of exceeding the AL. He added that the LCRI also requires the re-optimization of corrosion control for water systems that exceed the AL. He explained that in MWRA’s case, re-optimization could potentially entail the addition of orthophosphates for drinking water treatment. He noted that the LCRI includes the option to defer corrosion control re-optimization if lead service line removal is completed within five years of the rule coming into effect.

He then presented a graph of MWRA’s system-wide lead sampling results from June 1992 through September 2023 and repeated that MWRA could exceed the AL when the LCRI goes into effect.

Next, Mr. Estes-Smargiassi discussed some potential implications of adding orthophosphates to MWRA’s drinking water if required to re-optimize treatment, such as taste and odor changes, impacts to MWRA’s water and wastewater treatment operations; and increased capital and

operating costs (approximately \$60-80 million). He stressed that MWRA and its customer communities should work to meet LCRI requirements within five years in order to avoid mandatory water treatment re-optimization. He referred Board Members to this agenda item's Staff Summary for a more detailed financial analysis.

Mr. Estes-Smargiassi then discussed lead service lines. He noted that data indicates that homes with lead service lines are much more likely to have lead in their tap water; further, according to MWRA data, 91% of service-area sites that tested over the AL had lead service lines. He noted that working with customer communities to accelerate lead service line replacement within the LCRI's five-year deadline (2032) would net public health benefits and help MWRA avoid the expense of mandatory re-optimization. He added that the biggest impediment to lead service line replacement is property-owners' reluctance to assume the expense of replacing the privately-owned portions of their lines. He highlighted BWSC's successful program to fully fund local lead service line replacements, including the portions located on private property. He reported that BWSC's program had increased the rate of lead service line replacements in Boston, and stressed the importance of removing the entire line.

Next, Mr. Estes-Smargiassi reviewed MWRA's proposed changes to the LSLR Program, including the addition of \$100 million in funding to facilitate private side service line replacements, and a 25% grant for service communities that commit to fully replacing the privately-owned portions of local lead service lines at no cost. He then briefly discussed the next steps for the LSLR Program if the proposed revision is approved by the Board, including incorporation into the proposed final budget for FY2025; and the finalization of program guidelines with the MWRA Advisory Board, with a planned startup in July 2024. Finally, Mr. Estes-Smargiassi noted that the proposed revision demonstrates MWRA's and communities' commitments to resolving the public health crisis of lead service lines as quickly as possible, adding that staff will provide more details on the program at a future Board meeting.

Mr. Laskey urged Board Members to approve the proposed revision. He emphasized the critical importance of replacing lead service lines within the MWRA service area, and meeting the LCRI's aggressive deadlines. He stressed that failure to meet LCRI goals would likely require the addition of orthophosphates to MWRA's drinking water treatment, which would have detrimental effects on both MWRA's water and wastewater systems. He briefly noted that MWRA is seeking funding sources to support the revised LSLR Program.

Mr. Estes-Smargiassi agreed with Mr. Laskey, and added that communities' public commitment to the timely replacement of lead service lines at no cost to property owners would be key to the program's success. He noted that starting in October, 2024, communities will be required to mail notifications to residents with service lines made of lead or unknown materials, as well as reports on the number of local lead service lines. He suggested that including language about



MWRA's LSLR Program in those communications would encourage constituents to replace their lines and foster confidence in their water system.

Chair Tepper expressed support for the LSR revision, and discussed her recent visit to Malden to celebrate federal funding for local lead service line replacements. She noted that the City of Malden had conducted a survey to identify the neighborhoods with the most children, and planned to prioritize lead service line replacements in those areas.

In response to a question from Board Member Jack Walsh regarding MWRA communities that have already replaced all of their lead service lines, Mr. Estes-Smargiassi explained that the communities that have completed replacements now benefit from their worthwhile investments in public health. He further explained that the LSLR Program revision is intended to help accelerate the replacement of all lead service lines in MWRA's service area, including those located in communities that are lagging behind. He advised that every customer community will incur added costs for required water treatment optimization if all lead service lines within the MWRA system are not replaced expeditiously.

Mr. Taverna noted that adding orthophosphates to MWRA's drinking water would also impact storm water, and that Newton and other Lower Charles River communities are under an EPA mandate to reduce phosphorous from the storm water system. There was brief discussion with questions and answers about how the LCRI's definition of 100% completion of lead service line replacement could be interpreted.

Board Member Peña asked if MWRA staff had considered offering grants to communities on a sliding scale for affordability. Mr. Estes-Smargiassi explained that the LSLR Program, including the proposed revision, is designed to maximize efficiency and make the application process as simple and quick as possible for communities. He added that staff may propose further LSR Program revisions in the future if needed.

**A motion was duly made and seconded to approve a revision to the Lead Service Line Replacement Program to provide an additional \$100 million in funding, and to provide for a 25 percent grant portion on the revised program balance for communities which fully fund replacement of the portion on private property, to encourage and accelerate community lead removal efforts, as further set forth in the May 22, 2024 Staff Summary presented and filed with the records of this meeting.**

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

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

Yes                      No                      Abstain

Foti

Peña

Taverna

Vitale

J. Walsh

(ref. IV A.1)

## ADMINISTRATION, FINANCE AND AUDIT

### Information

#### MWRA Climate Mitigation Projects Update

Kristen Patneau, MWRA Energy Manager, discussed the Massachusetts Department of Environmental Protection (DEP)'s recent notification to MWRA of its intent to make a \$20 million Best Value Grant Award through their Climate Trust. She explained that funds from the Trust can be used to support programs or projects to reduce greenhouse gas emissions and mitigate the impacts of climate change. She then presented highlights of projects that MWRA intends to propose for this funding.

Ms. Patneau provided background on MWRA's ongoing measures to mitigate greenhouse gasses from its operations, in support of the Commonwealth's leadership and 2050 Net Zero greenhouse gas targets.

She then presented data on MWRA's progress toward meeting Net Zero targets. She reported that MWRA achieved a 41% reduction in emissions from the 2006 baseline in 2022, attributable to energy efficiency, renewable energy and electrification, as well as the greening of the grid. She noted that MWRA has met the state's 2025 reduction target (33%) and is on track to meet the 2030 target (50%).

Ms. Patneau then presented an overview of MWRA's growing portfolio of clean energy projects and planned additional renewable energy developments, including solar parking lot canopies and roofs at DITP, and a large ground mount system at the Norumbega Covered Storage facility. She added that staff will assess the economic feasibility and benefits of incorporating storage into these projects.

Next, Ms. Patneau discussed MWRA's wind turbines at DITP and the DeLauri Pump Station. She noted that opportunities for additional large-scale wind projects are limited due to high development density, height restrictions and low wind resources at MWRA facilities. She reported that staff are planning a new turbine to replace a DITP turbine that was taken offline after its catastrophic failure in 2023. She noted that on-site renewable energy generation allows MWRA to reduce its reliance on grid electricity and reduce emissions, and that exporting

unused power to the grid helps to reduce emissions statewide.

Ms. Patneau then updated Board Members on MWRA's building electrification initiatives, with a goal of heating MWRA facilities without fossil fuels. She explained that staff are studying the feasibility of replacing fuel oil heat with air- or water-sourced heat pumps. She discussed the geothermal heat pump system installed at the Wachusett Pump Station, and water sourced pumps at the Spot Pond Pump Station. She noted that these projects will serve as a guide for further building electrification, and briefly discussed future heat pump projects at various MWRA facilities.

Next, Ms. Patneau explained that MWRA is working with Eversource and National Grid, and performing heat pump-specific site audits at facilities that still use fossil fuel heat, adding that staff will keep Board Members updated on the audit recommendations. She noted that any new project for MWRA facility construction, renovation, or HVAC replacement/upgrade will include a heat pump evaluation, and presented some examples of heat pump technology. Finally, Ms. Patneau thanked Secretary Tepper, as well as EEA and DEP staff, for considering MWRA for the grant opportunity.

Chair Tepper acknowledged DEP Commissioner Heiple and her team for their work on the grant program. She also thanked MWRA staff for their ongoing work on climate change mitigation, and noted that she is looking forward to the replacement of the DITP wind turbine.

Hearing no further discussion or questions from the Board, Committee Chair Foti moved to the next information item. (ref. V A.1)

#### FY2024 Third Quarter Orange Notebook

Michael O'Keefe, MWRA Senior Program Manager, Planning, presented key FY2024 Third Quarter ("Q3") Orange Notebook highlights. He began with a discussion of staffing levels. He noted that external hiring accelerated in Q3, and that total staffing levels slightly decreased due to separations. He noted that FY2024 saw a net increase of approximately six positions overall, and that MWRA was making progress toward filling a large number of vacancies due to separations in FY2022.

Next, Mr. O'Keefe discussed the impacts of lower staffing on some MWRA operations metrics, including valve line exercises; pipeline cleaning; Deer Island maintenance; and, on-time lab results. He explained that the Deer Island maintenance metric remained within the industry standard during Q3 despite the staffing challenges, and that neither critical operations nor regulatory compliance have been negatively impacted.

Mr. O'Keefe then reported that precipitation levels were nearly double the average during Q3, with peaks in January and March 2024, resulting in Deer Island flows that were 28% above average, including a January peak flow rate of 1.3 billion gallons per day. He noted that the

regional trend of higher rain amounts during the winter months is expected to continue, due to climate change.

Next, Mr. O’Keefe presented data on the Q3 impacts of precipitation at DITP, including increases in total power use; total electricity purchased; and, the amount of power generated by MWRA’s combustion turbine generators. He also discussed the impacts of precipitation on MWRA’s water supply. He noted a high percentage increase in the Quabbin Reservoir water supply, which reached over 100% capacity during Q3. He also described increases in water system yields; transfers and diversions; and, river releases. Mr. O’Keefe then noted that the Quabbin Reservoir was no longer at 100% capacity for the fourth quarter of FY2024, attributable in part to early water transfers. He also reported a reduction in river releases for Q4.

Finally, Mr. O’Keefe highlighted some metrics that had shown improvement in FY2024, including significant improvement Toxic Reduction and Control (TRAC) permit issuance rates, attributable to increased staffing levels, and personal computer system update compliance.

Mr. Peña asked if increased Quabbin transfers impact water quality or chemical use. David Coppes, MWRA Chief Operating Officer, responded in the affirmative and explained that the transfers have increased organic matter levels in the Wachusett Reservoir, requiring additional treatment.

In response to a question from Mr. Taverna about whether MWRA changes operations metrics from year to year, Mr. O’Keefe explained that in his experience, most targets have remained steady over time.

Hearing no further discussion or questions from the Board, Mr. Foti moved to the next Information item. (ref. V A.2)

#### Delegated Authority Report – April 2024

Mr. Foti invited Board Members’ questions on the Delegated Authority Report. Hearing none, he moved to the next Information item. (ref. V A.3)

#### Change Orders and Amendments Update No. 3

Brian Kubaska, MWRA Chief Engineer and Marty McGowan, MWRA Construction Director, presented an annual update on Amendments and Change Orders.

Mr. Kubaska briefly explained the purpose of professional services design contracts and typical reasons for time and cost amendments, including MWRA’s programmatic changes such as decarbonization, environmental justice initiatives; added efforts required to address such factors as hazardous materials or code issues found during design; additional scope due to new regulatory requirements; further design efforts due to new community requirements or

permitting restraints; additional services during construction to address more submittals and information requests than anticipated; and, continued services beyond the expected end date.

Mr. Kubaska noted that staff have performed 10-year contract amendment and change order evaluations annually since 2022, and presented amendment statistics. He reported that over 25 of the 61 total design contacts had amendments during the 2024 reporting period, including seven time-only, no cost amendments. He also reported an overall amendment percentage of 7.5%, with 8.1% for Chapter 30 projects, such as pipeline installations or rehabilitations, and 7.1% for Chapter 149 projects, such a vertical construction rehabilitations or new facilities. He noted that the overall amendment percentage was 9.1% in 2022 and 5.5% in 2023, and explained that staff added a new median amendment percentage metric for 2023's analysis, which was 0.0% for all design amendments.

Next, Mr. Kubaska presented a graph of total amendment percentages by start date, including six professional services contracts with amendments over 20%, and 36 contracts with no amendments.

Mr. Kubaska then highlighted some significant outliers, such as the Combined Sewer Overflow ("CSO") post construction monitoring and performance plan, which had the highest amendment percentage over award value. He explained that this project is very complex, with challenging regulatory requirements, and noted that MWRA and its partner communities are working diligently to develop an updated CSO Control Plan. He explained that staff expect further amendments to the CSO contract once a new variance, which is expected to include additional requirements, is issued. Finally, Mr. Kubaska reported that five of the 61 contracts with amendments represented amounts over \$1 million, while the remaining projects had amendments totaling less than \$500,000, including 12 contracts with amendments under \$300,000.

Next, Mr. McGowan presented an annual update on change orders. He began with a summary of change order statistics for 142 construction jobs, totaling over \$1 billion. He noted that the recently-awarded DITP Clarifier Rehabilitation Phase II Project has skewed the 10-year reporting period data somewhat because it is relatively high value (\$289 million), with no change orders to date. He explained that the 10-year change order total of 4.7% would be approximately 6.5% if the DITP Clarifier Project were omitted from the analysis, noting that 2023's 10-year change order total was 5.9%. He reported that new median change order percentage metric was 2.5% for this reporting period.

Mr. McGowan then presented a graph of total change order percentages by start date. He reported that no new projects with outliers have been added since last year's update, and noted that most projects fell within MWRA's standard range for change orders. He then showed data for total change orders by cost. He reported that three projects had over \$1

million in change orders since the 2023 report: Nut Island Headworks Odor Control and HVAC; the Northern Intermediate High Section 89 Replacement Pipeline; and, the Wachusett Dam Lower Gatehouse Pipe and Boiler Replacement. He noted that these are three of MWRA's largest projects to date and fall within MWRA's standard range in terms of percentages.

Mr. McGowan then presented examples of common change order categories, including supply chain issues. He noted that MWRA typically handles supply chain-related change orders by providing additional time at no additional cost. He reported that supply chain issues have reduced slightly since the last reporting period; however, they are not yet at pre-pandemic levels. He continued to discuss change order categories, such as adjustments to work hours or construction start dates to reduce impacts to project host communities; and other unforeseen conditions such as ledges; and soil quantity exceedances.

Next, Mr. McGowan presented a brief review of some ongoing projects, including the Northern Intermediate High Section 89 Pipeline; WASM3 Rehabilitation; Sections 24 and 25 Rehabilitation; Wachusett Lower Gate House Pipe and Boiler Replacement; Carroll Water Treatment Plant SCADA System Improvements; Southborough Headquarter Electrical System Upgrades; Nut Island Odor Control and HVAC Improvements; Braintree-Weymouth Pump Station Improvements; and, Prison Point CSO Discharge Piping Rehabilitation. Finally, Mr. McGowan invited questions from Board members.

Mr. Jack Walsh recommended that staff continue to monitor change orders and amendments, and expressed concern that change orders and amendments could potentially inflate contractors' profits. Mr. McGowan explained that staff are working to improve the quality of contracts before they go out to bid, and that contract terms dictate the amount of money that contractors are entitled to for work performed and accepted by the Authority.

Mr. Peña asked if it was fair to say that change order costs for the removal of unforeseen ledge and excess soil quantities would be similar to costs for the same work if ledge and soil conditions were known prior to contract award. Messrs. Kubaska and McGowan responded in the affirmative.

Board Member Vitale requested that staff forward a comparative list of change order and amendment allocations categorized by contractor. Mr. Kubaska noted that staff will provide this information at a later date.

Hearing no further discussion or questions from the Board, Mr. Foti proceeded to the next Information item. (ref. V A.4)

#### FY24 Financial Update and Summary through April 2024

Thomas Durkin, MWRA Finance Director, provided a financial update and summary through April 2024. He noted that FY2024's expenditure patterns continue and that the budget is

progressing well. He then reported that staff are projecting a \$51.7 million positive budget variance, which is generally in line with prior years. Mr. Durkin stressed that the use of budget variances for defeasances is a critical and effective strategy for managing rates and assessments. He briefly described the defeasance process, and explained that conservative budgeting is beneficial because it has shown to result in positive variances. He then reported that chemical costs are stabilizing, and that electricity costs were higher in FY2024, attributable in part to notably higher rainfall amounts. Finally, Mr. Durkin noted that the budget is expected to remain stable throughout May and June, 2024.

Mr. Jack Walsh asked if it were possible to pay more for expenses as they are incurred. Mr. Durkin explained that it's important to strike a balance; however, using current revenue for capital expenditures has a real impact on rates and assessments, and that MWRA's strategy is aligned with the principle of generational equity. He further explained that staff budget approximately \$20 million for capital, and borrow the remainder. In response to a question from Mr. Jack Walsh, there was brief, general discussion about MWRA's bond defeasances and the budgetary impacts of inflation.

Mr. Vitale requested more information about the Other Services spending variance line item for sludge pelletization as reported in the Staff Summary. Mr. Durkin explained that during the FY2024 budget preparation process, staff factored in the potential that the pellets would need to be landfilled, rather than distributed for beneficial use. He noted that this variance reflects a cost estimate for at least six months of landfilling.

Hearing no further discussion or questions from the Board, Mr. Foti moved to Approvals. (ref. V A.5)

### Approvals

#### MWRA FY25 Insurance Program Renewal

**A motion was duly made and seconded to approve awards to the lowest eligible and responsive proposers for insurance policies, bonds, and related broker services for MWRA's FY25 Insurance Program, and to authorize the Executive Director, on behalf of the Authority, to execute contracts for broker services, for the terms, premiums, and fees, all as described in the May 22, 2024 Staff Summary presented and filed with the records of the meeting, and incorporated by reference for the record, resulting in a total program amount not to exceed \$4,099,073 for FY25.**

Paul Whelan, MWRA Risk Manager, explained that MWRA's Insurance Program is advertised for competitive bid annually, and referred Board Members to the Staff Summary for detailed information about the proposers and costs. Mr. Whelan reported that the overall net result for FY2025's Insurance Program represented a 9.6% increase over FY2024. He noted that the bid results for FY2025 were in line with staff's expectations with regard to the current marketplace

and the responses received. Next, Mr. Whelan explained that MWRA is entitled to a \$545,000 credit from its property insurer, FM Global, a mutual company. He noted that this credit would be applied to MWRA's FY2025 policy. He further noted that these credits are based on FM Global's performance and are not guaranteed every year; therefore, this policy's cost could potentially increase in future years.

Next, Mr. Whelan discussed MWRA's general liability coverage. He noted that market conditions are such that liability insurers are limiting the amount of coverage offered; increasing premiums; and, lowering limits. He explained that the incumbent liability carrier submitted a bid with a coverage limit of \$5 million for FY2025, versus its \$10 million FY2024 limit. He further explained that in order to match the current \$10 million of coverage, MWRA has engaged with a second carrier to provide an additional \$5 million in excess coverage, and that the use of two general liability insurers has increased overall costs.

Chair Tepper asked if insurers' lower coverage limits and higher premiums could be related to climate change concerns. Mr. Whelan responded in the affirmative, citing an increase of claims nationwide due to events such as major storms, floods and wildfires. He added that this trend is expected to continue. There was brief, general discussion about rising insurance costs due to extreme weather events.

Mr. Vitale requested more information about the frequency of MWRA's insurance program procurements. Mr. Whelan briefly described the procurement process. He then explained that staff solicit multi-year policies; however, these policies are uncommon in the current market. He added that most available multi-year policies now include a prohibitive number of subjectives.

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

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Foti		
Peña		
Taverna		
Vitale		
J. Walsh		

(ref. V B.1)



Contract AwardsAccounts Payable and Payroll Depository Services: Webster Bank, N.A. and Citizens Bank, N.A., Contract F278 and F278A

**A motion was duly made and seconded to approve the recommendation of the Consultant Selection Committee to award Contract F278 to Webster Bank, N.A., to provide accounts payable services and Contract F278A to Citizens Bank, N.A. to provide payroll depository services and to authorize the Executive Director, on behalf of the Authority, (i) to execute Contract F278 with Webster Bank, N.A., with no annual fees to the Authority, and with an interest rate payable to MWRA at the top end of the Federal Funds range plus 4 basis points and for a term of 5-years from July 1, 2024 to June 30, 2029 and (ii) to execute Contract F278A with Citizens Bank, N.A. at a not-to-exceed amount of \$78,425, and with an interest rate payable to MWRA at the top end of the Federal Funds range minus 25 basis points and for a term of 5-years from July 1, 2024 to June 30, 2029.**

Matthew Horan, MWRA Deputy Finance Director/Treasurer, noted that staff historically sought one bank to provide both accounts payable and payroll depository services, and that staff now recommend approval for two banks: Webster Bank, N.A., and Citizens Bank, N.A., to provide these services. He explained that engaging in separate banks for each service is in keeping with industry best practices given the failure of some regional banks in 2023. He added that splitting the deposits between two financial institutions will help to minimize MWRA's exposure to a potential economic or operational problem at one of the banks; further, in the event of a problem at one of the banks MWRA would be able to process payroll and accounts payable at the other bank, minimizing any disruption to MWRA's employees or vendors. Finally, he briefly described the vendor selection process.

Mr. Vitale asked if staff had known of any major bank failures in 2024. Mr. Horan briefly described the failure of one smaller bank in the Midwest. He noted that Webster Bank is actively monitoring its portfolios, and that in his view, potential drops in interest rates could improve the outlook on banking.

Mr. Vitale then relayed that he had intended to ask staff questions concerning earlier presentations, and then proceeded to ask staff when the MWRA website was last updated. Paula Weadick, MWRA MIS Director, explained that the website was last updated over 20 years ago, and that a website redesign is currently underway, with an anticipated launch in fall 2024. She noted that the April 2024 Delegated Authority report included information about a task order for additional work on the new website. Next, Mr. Vitale requested more information about the date of the highest recorded daily water system withdrawal in 2023. Mr. Estes-Smargiassi offered to provide that information at a later date.

Hearing no further discussion or questions from the Board. Chair Tepper requested a roll call

vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Foti		
Peña		
Taverna		
Vitale		
J. Walsh		

(ref. V C.1)

MWRA Uniform Services, Action Apparel, LLC, Contract A639

**A motion was duly made and seconded to approve the recommendation of the Selection Committee to award Contract A639, MWRA Uniform Services, to Action Apparel, LLC, to provide MWRA logoed uniforms to eligible employees as described herein, and to authorize the Executive Director, on behalf of the Authority, to execute said contract for a contract term of thirty eight months from the Notice to Proceed, with two options to renew for a period of twelve months each.**

Steve Perry, MWRA Labor Relations Manager, noted that MWRA's current web-based uniform program is administered by ServiceWear Apparel, Inc., and that staff had expressed concerns about the quality of the clothing and delivery services provided. He explained union members were included in the process of selecting a new vendor for this contract cycle, and had the opportunity to assess bidders' available clothing options. He described MWRA's uniform program, which includes three categories: full; fire rated; and partial. Finally, Mr. Perry requested Board approval for a new uniform contract with Action Apparel, LLC.

Chair Tepper asked if staff were satisfied with the clothing provided by Action Apparel, LLC. Mr. Perry explained that staff were optimistic that the new uniforms would be satisfactory.

Mr. Peña relayed a positive experience with the clothing provided by Action Apparel, LLC in the recent past for DPW staff in his community.

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

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

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Taverna		
Vitale		
J. Walsh		

(ref. V C.2)

## PERSONNEL AND COMPENSATION

### Approvals

#### Mau 2024 PCR Amendments

**A motion was duly made and seconded to approve amendments to the Position Control Register (PCR) as presented and filed with the records of this meeting.**

Wendy Chu, MWRA Human Resources Director, noted that staff were seeking approval for six Position Control Register (PCR) amendments, and invited Board members' questions.

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

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Foti		
Peña		
Taverna		
Vitale		
J. Walsh		

(ref. VI A.1)

## CORRESPONDENCE TO THE BOARD

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

## OTHER BUSINESS

There was no Other Business. (ref. VIII)

## ADJOURNMENT

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

A roll call vote was taken in which the members were recorded as follows:

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

Yes                      No                      Abstain

Foti

Peña

Taverna

Vitale

J. Walsh

(ref. IX)

The meeting adjourned at 3:05pm.

Approved:     June 26, 2024

Attest:

\_\_\_\_\_  
Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- Draft Minutes of the April 17, 2024 MWRA Board of Directors' Meeting (ref. I)
- Quinapoxet Dam Removal Groundbreaking Ceremony Invitation (ref. III)
- May 22, 2024 Staff Summary and Presentation – MWRA Climate Mitigation Projects Update (ref. V A.1)
- May 22, 2024 Staff Summary and Presentation – FY2024 Third Quarter Orange Notebook (ref. V A.2)
- May 22, 2024 Staff Summary – Delegated Authority Report – April 2024 (ref. V A.3)
- May 22, 2024 Staff Summary and Presentation – Change Orders and Amendments Update No. 3 (ref. V A.4)
- May 22, 2024 Staff Summary – FY2024 Financial Update and Summary through April 2024 (ref. V A.5)
- May 22 2024 Staff Summary – MWRA FY25 Insurance Program Renewal (ref. V B.1)
- May 22, 2024 Staff Summary – Accounts Payable and Payroll Depository Services: Webster Bank, N.A. and Citizens Bank, N.A., Contract F278 and F278A (ref. V C.1)
- May 22, 2024 Staff Summary – MWRA Uniform Services, Action Apparel, LLC, Contract A639 (ref. V C.2)
- May 22, 2024 Staff Summary – May 2024 PCR Amendments (ref. VI A.1)

**STAFF SUMMARY**

**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Amendments to the MWRA Regulations for Sewer Use




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**COMMITTEE:** Wastewater Policy & Oversight

       INFORMATION  
  X   VOTE

Rebecca Weidman, Deputy Chief Operating Officer  
Matthew Dam, Director, TRAC  
Preparer/Title

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

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**RECOMMENDATION:**

To authorize the adoption of amendments to MWRA’s Regulations for Sewer Use (360 CMR 10.000) as summarized on the attached chart by publication in the Code of Massachusetts Regulations.

**DISCUSSION:**

On February 21, 2024, the Board authorized publication of proposed amendments to MWRA’s Regulations for Sewer Use (360 CMR 10.000). The amendments are summarized in Attachment 1 and generally include:

- changes to incorporate requirements and recommendations from a 2021 EPA audit;
- increases to implementation charges and annual charges paid by permit holders; and
- changes to clean up minor typos and unclear language.

Public Hearing Process

MWRA has the authority to adopt regulations, published in the Code of Massachusetts Regulations, which have the force of law. Before adopting or amending a regulation, MWRA must provide notice of the proposed regulations in the Massachusetts Register and newspapers, send notice to various specified entities, and allow a period for public comment.

Since the Board’s action on February 21, 2024, all statutorily required steps and notices have been completed with respect to the amendment of MWRA’s regulations published as 360 CMR 10.000. On February 26, 2024, electronic copies of the proposed amendments were sent to the U.S. Environmental Protection Agency (EPA), Region 1. EPA staff responded on March 12, 2024, stating that they had reviewed the proposed amendments, found such to be consistent with 40 CFR 403 and, therefore, approved MWRA’s proposed modifications to the regulations. This determination is required in order for MWRA to move forward with the adoption of the proposed amendments.

Copies of the proposed amendments were sent to the Massachusetts Department of Environmental Protection (MassDEP), the Department of Housing and Community Development, the Massachusetts Municipal Association, the MWRA Board of Directors and the MWRA Advisory Board on March 21, 2024 and to MWRA's member communities and existing Sewer Use Discharge permittees on April 10, 2024. Notice of MWRA's intent to adopt the proposed amendments and of a public hearing to be held in conjunction with the amendments was forwarded to the Massachusetts Secretary of State's Office on March 27, 2024. Notices were separately published in the Boston Globe, Worcester Telegram and Gazette, and Massachusetts Register on April 12, 2024. The publications provided for the statutory notice of a public hearing, which was held on Friday, May 3, 2024 at 10:00 a.m.

### Public Comments

At the public hearing on May 3, 2024, MWRA staff received no written or oral comments relative to the proposed amendments to the regulations. However, when the permittees were notified of the permit amendment on April 10, 2024, a question was received via email by a permittee on April 11, 2024, prior to the official comment period.

The permittee was questioning MWRA's need to increase the Sewer Use Discharge permitting and monitoring fees. MWRA permit and monitoring fees directly offset the cost to run the Industrial Pretreatment Program, including drafting and issuing permits, reviewing compliance data and reports, performing facility inspections, monitoring industrial sewer discharges and many administrative tasks. The increases in charges are intended to cover annual increases in TRAC's budget as well as to recover a portion of annual operating cost increases consistent with the typical inflation factor.

### Next Steps

MWRA staff are not recommending that any additional changes be made to the draft Sewer Use regulations (360 CMR 10.000) that were issued for public comment prior to promulgation. Attachment 1 presents a summary table of the amendments. The table identifies the section of the regulations that was amended, the source of the proposed change, a description of the amendment, and an explanation for the amendment. A complete redlined/strikeout version of the final revised regulations will be made available in the Board lounge.

Upon Board approval, staff will transmit the adopted amendments to the Massachusetts Secretary of State for publication in the Massachusetts Register and adoption into the Code of Massachusetts Regulations in July 2024. This will allow for sufficient time for updating the monitoring and permitting fees prior to the fiscal year 2025 annual billing cycle for TRAC permittees.

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

The three percent across-the-board increase to the Sewer Use Discharge fees in FY25 through FY29 will generate an additional \$81,000 in revenue in FY25, \$164,430 in FY26, \$250,362 in FY27, \$338,873 in FY28, and \$430,040 in FY29, as compared to the FY24 estimated revenue. The actual amount invoiced each year will vary based on the number of facilities in each permit category. The increases in charges are intended to cover annual increases in TRAC's budget as well as to recoup a portion of annual operating cost increases consistent with the typical inflation factor.

**ATTACHMENT:**

Summary of Proposed Amendments to Regulations

## Attachment 1

The following table outlines the substantive changes made to the three regulations. In addition to these changes, spelling mistakes and grammatical errors were corrected. These are not listed in this table.

REGULATION	REASON	AMENDMENT	EXPLANATION OF AMENDMENT
<b>360 CMR 10.00</b>			
360 CMR 10.007 (7)	MWRA and EPA	Clarifies language to ensure that permits cannot be extended beyond five years.	EPA's 2021 audit of the MWRA's Industrial Pretreatment Program required language be added to the Sewer Use Discharge Permits (SUDP) to clarify that permits cannot be extended beyond 5 years. This amendment aligns the SUDPs and the regulations. This does not represent a change to existing practice.
360 CMR 10.015 (1) (a)	MWRA	Strikes existing per hourly rate to respond to a request for a one-time only discharge and inserts new hourly rate.	Increase in hourly rate consistent with the hourly rate of staff performing the tasks.
360 CMR 10.015 (1) (b)	MWRA	Strikes existing per hourly rate to respond to a spill or other release of materials and inserts new hourly rate.	Increase in hourly rate consistent with the hourly rate of staff performing the tasks.
360 CMR 10.024 (2) (a)	MWRA and EPA	Strikes the material Vinylidene Chloride from the list of Materials with a Daily Maximum Limit and replaces it with the synonym 1,1 Dichloroethylene.	EPA's 2021 audit recommended changing the material name to match the material name used in the SUDP. With this amendment the permit and the regulations will be the same.
360 CMR 10.091	MWRA	Adds missing language that was omitted during the posting of the previous regulation amendment.	Missing language added to correct the paragraph.
360 CMR 10.101 (1) (a), (b), (c), (d), (e), and (f)	MWRA	Strikes existing list of Permit charges and inserts new ones.	Increase in rates for permit charges.
360 CMR 10.101 (5) (a), (b), (c), (d), (e), and (f)	MWRA	Strikes existing list of Temporary Construction Dewatering Permit charges and inserts new ones.	Increase in rates for Temporary Construction Dewatering Permit charges
360 CMR 10.102 (1) (a), (b), (c), (d), (e), and (f)	MWRA	Strikes existing list of monitoring charges and inserts new ones.	Increase in rates for monitoring charges.
360 CMR 10.102 (7) (a), (b), (c), (d), (e), and (f)	MWRA	Strikes existing list of monitoring charges and inserts new ones.	Increase in rates for late and non-submittal of reports.



360 CMR 10.000: SEWER USE

Section

GENERAL PROVISIONS

- 10.001: Authority
- 10.002: Purpose
- 10.003: Severability
- 10.004: Definitions
- 10.005: Applicability
- 10.006: General Requirements
- 10.007: Permits - General Requirements
- 10.008: Monitoring, Sampling and Reporting
- 10.009: Signatories and Certifications
- 10.010: Record Keeping
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#### GENERAL PROVISIONS

10.001: Authority

360 CMR 10.000 are the rules and regulations of the Massachusetts Water Resources Authority, promulgated under the authority of St. 1984, c. 372, St. 1987, c. 307, and St. 1991, c. 41, governing the discharge of sewage, drainage, substances, and wastes into any sewer under the control of the Authority, or into any sewer tributary thereto. 360 CMR 10.000 is established in compliance with all applicable requirements of federal and state law including, without limitation, the requirements of the Federal Water Pollution Control Act, P.L. 92 500, 33 U.S.C. § 1251 *et seq.*, and the regulations thereunder, 40 CFR Part 403; the National Pollutant Discharge Elimination System program permits issued to the Authority by the United States Environmental Protection Agency and the Massachusetts Department of Environmental Protection; and the Massachusetts Clean Waters Act, M.G.L. c. 21, § 26 *et seq.*, and 314 CMR 2.00: *Permit Procedures*, 314 CMR 7.00: *Sewer System Extension and Connection Permit Program*, and 314 CMR 12.00: *Operation and Maintenance and Pretreatment Standards for Wastewater Treatment Works and Indirect Dischargers*.

10.002: Purpose

360 CMR 10.000 is intended to protect the public health, safety and welfare and the environment and to ensure proper and safe operation of the Authority's wastewater treatment facilities by regulating the direct and indirect discharge of wastewater and pollutants to the Authority Sewerage System.

10.003: Severability

The provisions of 360 CMR 10.000 are severable. If any provision of 360 CMR 10.000, or application to any person or circumstance, is held invalid, such invalidity shall not affect other provisions or applications which can be given effect without the invalid provision or application.

10.004: Definitions

Unless the context specifically indicates otherwise, the meaning of the terms used in 360 CMR 10.000 shall be as follows:

Act shall mean St.1984, c. 372 and St. 1987, c. 307.

Aliquot shall mean a definite part of a whole, such as an aliquot quantity of a sample for analysis.

Authority shall mean the Massachusetts Water Resources Authority.

Authority Fiscal Year shall mean the 12-month period from July 1<sup>st</sup> through the next June 30<sup>th</sup>. The number of the fiscal year is the number of the calendar year in which the fiscal year ends. For example, Authority Fiscal Year 2003 runs from July 1, 2002, through June 30, 2003.

Authority Sewerage District shall mean the Clinton Sewerage Service Area and the Metropolitan Sewerage Service Area.

Authority Sewerage System shall mean the sewerage works under the control of the Authority. This includes the sewers, pump stations, treatment plants, and all other works under the control of the Authority used in collection, storage, transport, treatment, and discharge of waters and wastes and in the operation of the residuals program.

Batch Discharge shall mean a discrete or discontinuous short-term discharge to the sewer, often characterized by a discharge of all or most of the contents of a vessel. Batch Discharge is not a part of a series of episodic discharges taking place with little time between each episode.

Best Management Practices or BMPs shall mean schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the requirements of 360 CMR 10.000 and the prohibitions listed in 40 CFR 403.5(a)(1) and (b). BMPs include, but are not limited to, treatment requirements, operating procedures, and practices to control discharges or potential discharges of materials to the Sewer System.

Blowdown shall mean the minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practice.

Bypass shall mean an intentional or negligent diversion of a wastestream, by direct or indirect means, to the Authority Sewerage System, from any portion of a Pretreatment facility prior to completing pretreatment, or from any industrial process or other source of Wastewater prior to pretreatment.

Centralized Waste Treatment Facility shall have the meaning contained in 40 CFR 437.2(c).

Clinton Sewerage Service Area shall mean the area consisting of the following political subdivisions: Clinton, Lancaster, Sterling, Bolton and Berlin.

10.004: continued

Combined Permit shall mean the Permit described in 360 CMR 10.064. It is substantially equivalent to a combination of the General Permit for Low Flow and Low Pollutant Dischargers, 360 CMR 10.062, and the Group Permit for Photo Processing and Printing Operations, 360 CMR 10.061, the Group Permit for Food Processing, 360 CMR 10.063, or the Group Permit for Dental Discharges, 360 CMR 10.065.

Combined Sewer shall mean a Sewer designed to receive both Wastewater and storm or surface water.

Combined Wastestream Formula shall mean the formula defined in the U.S. Environmental Protection Agency *General Pretreatment Regulations for Existing and New Sources of Pollution* in 40 CFR 403.6(e).

Composite Sample shall mean a combination of a series of aliquots taken on either a time or flow proportional basis over a period of time.

Construction Site Dewatering shall mean groundwater, storm water, surface water, surface runoff, tidewater, or subsurface drainage which accumulates in a construction site.

Contact Cooling Water shall mean water used in a process for cooling purposes that has come in direct contact with a raw material, intermediate product, waste product, or finished product.

Cooling Water shall mean the water discharged from any system of condensation, air conditioning, cooling, refrigeration, or other system of heat transfer.

Daily Maximum Limit shall mean the highest allowable concentration for any Pollutant in a wastestream. The Daily Maximum Limit shall be determined as set forth in 360 CMR 10.024(3).

Dental Discharges shall mean discharges from a Facility where the practice of dentistry is performed including, but not limited to, institutions, permanent or temporary offices, clinics, home offices, and facilities owned and operated by Federal, state, or local governments, that discharges to a Sanitary Sewer, or to a septic system or holding tank whose contents are hauled for Discharge to a Sanitary Sewer in the Authority Sewerage District.

DEP shall mean the Massachusetts Department of Environmental Protection.

Direct Connection Permit shall mean the permit required or issued by the Authority for connection of a building sewer directly into the Authority sewer lines.

Discharge shall mean the introduction or release into any Sewerage System, sewer or sewer infrastructure of wastewater, water of any kind, or waste of any kind, by any means.

EPA shall mean the United States Environmental Protection Agency.

Facility shall mean something containing one or more operations that generate industrial waste.

Food Processing shall mean preparing food for wholesale commercial distribution and sale including, without being limited to: operations which involve washing, cooking, baking, or curing food or food products including, but not limited to: beverage making and bottling; candy making; cereal making; condiment making; dairy product processing; fish cutting, processing and cooking; frozen food making; jams, jellies and fruit filling making; meat processing and packing; nut and nut product processing; pasta making; prepared food making; and vegetable and other produce washing and processing. Food processing does not include: preparing meals or snacks for immediate consumption on the premises, or for take-out; transport and distribution operations which consist solely of packaging for transport and distribution without generating wastewater from the packaging process; and warehousing or other storage solely for transport, distribution, or sale.

10.004: continued

Garage shall mean any structure or property where one or more motor vehicles are kept, stored, or serviced, including a public or private garage, carport, motor vehicle repair shop, paint shop, service station, lubritorium, car wash, gasoline station with grease pits or wash racks or areas, or any building used for similar purposes.

General Permit shall mean a permit in 360 CMR 10.062. It contains requirements for eligibility and coverage and standard conditions that must be met.

Grab Sample shall mean an individual aliquot collected over a period of time not exceeding 15 minutes.

Group Permit shall mean a Permit described in 360 CMR 10.061, 10.063 and 10.065. It is applicable to a specific type or types of industrial processes or discharges. It shall have standard terms and conditions for all Persons to whom it is issued.

Hazardous Waste shall mean a waste, or combination of wastes, that at the time of discharge:

- (a) Has been identified as a hazardous waste by EPA pursuant to the Resource Conservation and Recovery Act, 42 USC 6901, *et seq.*, and is listed in 40 CFR Part 261;
- (b) Has any of the hazardous waste characteristics identified by EPA in 40 CFR Part 261;
- (c) Has been identified by DEP as a hazardous waste pursuant to M.G.L. c. 21C and is listed in 310 CMR 30.000: *Hazardous Waste*;
- (d) Has any of the hazardous waste characteristics identified by DEP in 310 CMR 30.000: *Hazardous Waste*; or
- (e) Has been identified as a Hazardous Waste Pharmaceutical pursuant to 40 CFR 266.500, *et seq.*

For the purposes of 360 CMR 10.000, a waste that would be a hazardous waste pursuant to 360 CMR 10.004: Hazardous Waste(a) through (e), but for the fact that it is discharged to the sanitary sewerage system, shall be, a hazardous waste, unless it is in wastewater which is discharged to the sewer system pursuant to a permit issued under 360 CMR 10.000 and in compliance with Authority discharge limits, except as prohibited by 40 CFR 266.505 and Clean Water Act requirements at 40 CFR 403.5(b).

Improperly Shredded Garbage shall mean Wastes from the domestic and commercial preparation, cooking, and dispensing of food, and from the handling, storage and sale of produce, excluding rubbish and trash, which has particles greater than ½ inch or 1.27 centimeters in any dimension so as to prevent the particles from being carried freely under normal flow conditions in Municipal Sewers.

Indirect Discharge shall mean a Discharge of Wastes or Wastewater to a municipal Sewerage System that is connected to MWRA's system.

Industrial User means a source of discharge of Industrial Waste to a Sewerage System.

Industrial Waste or Industrial Wastewater shall mean any solid, liquid, or gaseous Wastes or Wastewater, resulting from an industrial or manufacturing process, or from a commercial, governmental, or institutional activity, or from the development, recovery, or processing of natural resources.

Infiltration shall mean the water entering a Sewerage System from the ground or a water body, including through such means as, defective building drains and sewers, pipes, pipe joints, connections, or manhole walls.

Inflow shall mean the discharge into a Sewerage System, including service connections, from such sources as, but not limited to, roof leaders, cellars, yards, and area drains, foundation drains, sump pumps, Cooling Water discharges, drains from springs and swampy areas, manhole covers, cross connections from Storm Sewers and Combined Sewers, catch basins, storm water, surface runoff, or street wash water.

10.004: continued

Interference shall mean a discharge which, alone or in conjunction with discharges from other sources, both:

- (1) inhibits or disrupts the Authority Sewerage System, or any Municipal Sewerage System that is a tributary to the Authority Sewerage System, their treatment processes or operations, or the Authority's Sludge processes, use, or disposal; and
- (2) causes a violation of any requirement of the Authority's NPDES permit (including an increase in the magnitude or duration of a violation) or prevents the Authority from using or disposing of its Sludge in compliance with applicable federal, state, or local laws or any permit.

Landfill shall mean a facility or place established for the deposit of wastes on land.

Landfill Leachate shall mean a liquid that has passed through or emerged from wastes deposited at a Landfill, including liquid resulting from the percolation of runoff, subsurface drainage, groundwater, and storm water through the landfill.

Landfill Permit shall mean the permit required or issued by the Authority for discharge from a Landfill.

Metropolitan Sewerage Service Area shall mean the area consisting of the following political subdivisions: Arlington, Ashland, Bedford, Belmont, Boston, Braintree, Brookline, Burlington, Cambridge, Canton, Chelsea, Dedham, Everett, Framingham, the north sewer district of Hingham, Holbrook, Lexington, Malden, Medford, Melrose, Milton, Natick, Needham, Newton, Norwood, Quincy, Randolph, Reading, Revere, Somerville, Stoneham, Stoughton, Wakefield, Walpole, Waltham, Watertown, Wellesley, Westwood, Weymouth, Wilmington, Winchester, Winthrop and Woburn.

mg/l shall mean milligrams per liter.

Municipal Permit shall mean the permit required or issued by the Authority to a Municipality which is served by the Authority Sewerage System.

Municipal Sewer shall mean a Sewer controlled by a Municipality, public body, or authority.

Municipality shall mean any city, town, Sewer District, public body, or similar entity, that operates a public water or sewer system, or both, on behalf of the communities identified in the definitions of Clinton Sewerage Service Area and Metropolitan Sewerage Service Area, that discharges Wastewater and/or Septage into the Authority Sewerage System, including any city, town, District, or public body within the Authority Sewerage District or served by the Authority under a contract or other agreement.

National Categorical Pretreatment Standard shall mean the requirements under 40 CFR 403.6 and 40 CFR chapter I, subchapter N, specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a Publicly Owned Treatment Works by new or existing industrial sewer users in specific industrial categories which are established as separate regulations under the appropriate subpart of 40 CFR chapter I, subchapter N.

National Pretreatment Standard or Pretreatment Standard shall mean the general prohibitions and specific prohibitions of 40 CFR 403.5(a) and (b), and the National Categorical Pretreatment Standards.

NELAP shall mean EPA's National Environmental Laboratory Accreditation Program.

New Source shall mean any building, structure, facility or installation from which there is or may be a discharge to a sewer, the construction of which commenced after the publication of proposed National Pretreatment Standards which will be applicable to such source if such Standards are thereafter promulgated, provided that the source meets the criteria for a New Source in 40 CFR 403.3(m). Construction on a site at which an existing source is located that results in a modification rather than a New Source if the construction does not create a new building, structure, facility or installation meeting the criteria of 40 CFR 403.3(m), but otherwise alters, replaces, or adds to existing process or production equipment.

10.004: continued

Non-contact Cooling Water shall mean water used for cooling that does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

Non-contact Industrial Process Water shall mean water used in an industrial or manufacturing process, or in the development, recovery, or processing of natural resources, that does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

Organics shall mean those chemical compounds based on a carbon structure and also containing hydrogen with or without oxygen, nitrogen, or other elements.

Pass Through shall mean a discharge of Pollutants through an Authority Sewage Treatment Facility into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any federal or state law or of any permit issued to the Authority, including an increase in the magnitude or duration of a violation.

Person shall mean any agency or political subdivision of the Commonwealth or of the federal government, any state, public or private corporation or authority, individual, trust, firm, joint stock company, partnership, association, or other entity, or any group thereof, and any officer, employee, or agent of such person, and any group of persons.

Pesticides shall mean:

- (a) All substances listed in 360 CMR 10.000: *Appendix D*; and
- (b) Any other substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest including, but not limited to:
  - 1. All substances or mixtures registered as pesticides pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136, *et seq.*, and EPA regulations thereunder, 40 CFR Part 152, and all products denied registration for use as pesticides pursuant to those provisions;
  - 2. All substances or mixtures registered as pesticides pursuant to the Massachusetts Pesticide Control Act, M.G.L. c. 132B, and 333 CMR 8.00: *Registration of Pesticide Products*; and
  - 3. All products and by-products of pesticide production prohibited from discharge to Publicly Owned Treatment Works by federal or state law.
- (c) For purposes of 360 CMR 10.004: Pesticides(b), Pesticides shall not include:
  - 1. Any product or substance excluded by EPA from regulation pursuant to 40 CFR Part 152, including but not limited to:
    - a. products or substances that are excluded from the definition of pesticide in 40 CFR 152.3;
    - b. products that are not pesticides because they are not used against pests;
    - c. products that are not pesticides because they are not deemed to be used for a pesticidal effect;
    - d. products of a character not requiring regulation under the FIFRA and exempt from regulation as pesticides pursuant to 40 CFR 125.25; and
  - 2. Any product or substance excluded by EPA from regulation pursuant to 40 CFR Part 455 including, but not limited to:
    - a. products whose only pesticidal active ingredient is a common food/food constituent or non-toxic household item or a substance that is generally recognized as safe;
    - b. pool chemicals as defined in 40 CFR 455.10(q); and
    - c. products whose labeled directions for use result in the product being discharged to the sanitary sewer, that is, products that are sanitizers within the meaning of 40 CFR 455.10(t), including sanitizer solutions as defined by the United States Food and Drug Administration in 21 CFR 178.1010.
- (d) For purposes of 360 CMR 10.004: Pesticides(b), "pest" means:
  - 1. Any insect, rodent, nematode, fungus, weed; and

10.004: continued

2. Any other form of terrestrial or aquatic plant or animal life or virus, bacteria, or other micro-organism that the Authority determines to have been or intended to be treated as undesirable or detrimental.

pH shall mean the logarithm of the reciprocal of the hydrogen ion concentration, expressed in moles per liter. Neutral water, for example, has a pH value of 7 and a hydrogen ion concentration of  $10^{-7}$ .

Photo Processing shall mean processing color and black and white prints and slides, including X-rays and microfilm.

Pollutant shall mean any element, constituent, or property of Wastewater, or of agricultural, industrial, manufacturing, or commercial process Waste, or leachate, or any other substance which causes the alteration of the chemical, physical, biological, or radiological integrity of water through its introduction therein.

Pretreatment shall mean the reduction of the amount of Pollutants, the elimination of Pollutants, or the alteration of the nature of Pollutant properties in Wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing the Pollutant into a Sewerage System. This shall include reduction or alteration by physical, chemical or biological processes, process changes, or other means, except as prohibited by 40 CFR Part 403.

Printing shall mean lithography using presensitized plates.

Public Record shall mean a "public record" as defined by M.G.L. c. 4, § 7(26).

Publicly Owned Treatment Works or POTW shall mean a treatment works as defined in 40 CFR 403.3(q).

Receiving Waters shall mean any watercourse, river, pond, wetland, ditch, lake, aquifer, ocean, or other body of surface or groundwater receiving discharge of Wastewater or effluent.

Reclaimed Water Systems shall have the meaning contained in 314 CMR 20.02: *Definitions*.

Record shall mean a book, paper, map, photograph, recorded tape, financial statement, statistical tabulation, or any other documentary material or data, regardless of physical form or characteristics.

Sanitary Sewage shall mean liquid and water-carried human and domestic Wastes. Groundwater, storm water and surface water, roof and surface runoff, uncontaminated Cooling Water, Non-contact Industrial Process Water, and Industrial Waste are not Sanitary Sewage.

Sanitary Sewer shall mean a Sewer that carries Sanitary Sewage and/or Industrial Wastes.

Separator shall mean a device designed and installed to separate deleterious or undesirable matter from normal Wastes and to retain such deleterious or undesirable matter while permitting normal Sewage or liquid wastes to discharge into the drainage system by gravity.

Septage shall mean liquid and Solid Wastes of primarily Sanitary Sewage origin removed from a cesspool, septic tank, or similar receptacle.

Septage Discharge Permit shall mean the permit required or issued by the Authority for discharge of septage by commercial septage haulers.

Sewage shall mean the spent water of a community, which may be a combination of liquid and water-carried Wastes from residences, commercial buildings, industrial facilities, and institutions, together with any groundwater, surface water, and/or storm water that may be present.



10.004: continued

Sewer shall mean a pipe or conduit that carries Wastewater, including a Storm Drain.

Sewer Use Discharge Permit shall mean the permit required or issued jointly by the Authority and a Municipality for the discharge of industrial waste.

Sewerage System or Sewer System shall mean any device, equipment or works used in the transportation, pumping, storage, treatment, recycling, and reclamation of Wastewater and Industrial Wastes.

Shall is mandatory; may is permissive.

Significant Industrial User shall mean:

- (a) All Industrial Users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; and
- (b) Any other Industrial User that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, non-contact cooling and boiler blowdown wastewater); contributes a process wastestream which makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant or is designated as such by the Authority on the basis that the Industrial User has a reasonable potential for adversely affecting the Authority's operations or for violating any Pretreatment Standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Significant Noncompliance shall have the meaning contained in 40 CFR 403.8(f)(2)(viii).

Sludge shall mean the solid, semi-solid, and liquid residue removed from water, Sanitary Sewage, Wastewater, or Industrial Wastes by a treatment process, including removal by a wastewater treatment process or drinking water treatment process.

Slug or Slug Discharge shall mean:

- (a) that portion of a discharge:
  1. containing a Pollutant that 360 CMR 10.000 prohibits being discharged; or
  2. containing a concentration of a pollutant at least five times above the concentration limit for that Pollutant in 360 CMR 10.022 through 10.024; or
- (b) a discharge from a large vat, vessel, or container into the Sewerage System in a manner that:
  1. harms or threatens to harm the Sewerage System, workers, or Receiving Waters; or
  2. contains a Pollutant in excess of the requirements in 360 CMR 10.000; or
  3. causes a violation of any federal or state permit issued to the Authority; or
  4. constitutes a discharge of a Pollutant without an appropriate permit.

Solid Waste shall mean any unwanted or discarded solid material, consisting of putrescible or nonputrescible solid waste material, including garbage and rubbish.

Standard Silver Recovery System shall mean:

- (a) an electrolytic unit or units in series with a metallic replacement cartridge or cartridges; or
- (b) a fully enclosed, self-contained, and fully automated chemically assisted precipitation system that may be in series with an electrolytic unit or units or metallic replacement cartridge or cartridges. It shall not mean a system that requires a graded or certified operator by 257 CMR 2.00: *Certification of Operators of Wastewater Treatment Facilities*.

Storm Drain or Storm Sewer shall mean a pipe or conduit for conveying ground, storm, or surface waters, roof and surface runoff, uncontaminated Cooling Water, and non-contact industrial process waters.

Temporary Construction Site Dewatering Permit shall mean the permit required or issued by the Authority and a Municipality for the temporary discharge of Construction Site Dewatering drainage.

10.004: continued

Total Toxic Organics or TTO shall mean the sum of the concentrations of all Toxic Organics not otherwise prohibited or limited by 360 CMR 10.000.

Toxic Organics shall mean:

- (a) in the Metropolitan Sewerage Service Area, all substances listed in 360 CMR 10.000: *Appendix A*; and
- (b) in the Clinton Sewerage Service Area, all substances listed in 360 CMR 10.000: *Appendix B*.

Trade Secret shall mean anything which constitutes, represents, evidences, or records a secret scientific, technical, merchandising, production, manufacturing, or management information, design, process, procedure, formula, invention, method, or improvement including, without limitation, trade secrets within the meaning of M.G.L. c. 266, § 30(4).

Treatment System or Pretreatment System shall mean any and all devices, equipment, or works used in the pumping, storing, treating, recycling, and reclaiming of sewage and/or Industrial Waste.

Upset shall mean an exceptional incident in which there is unintentional and temporary noncompliance with the discharge standards of 360 CMR 10.000, or any permit thereunder, due to factors beyond the reasonable control of the Person responsible for the discharge. An Upset does not include noncompliance to the extent caused by operational error, an improperly designed treatment facility, an inadequate treatment facility, lack of preventive maintenance, or careless or improper operation.

User shall mean a source of Discharge to a Sewerage System.

Waste shall mean sewage and all garbage, refuse, sludge, and discarded material, whether in liquid, solid, or gaseous form.

Wastewater shall mean Sewage or other liquid Waste, and the constituents of Sewage, including Septage, Landfill Leachate, waters from construction site dewatering, and Industrial Waste.

Wastewater Residuals shall mean scum, Sludge, Sludge Products, grit, screenings, and residual ash from incineration of Sludge, originating from the Authority's Sewage Treatment Facility or Facilities.

10.005: Applicability

Every Person who directly or indirectly discharges Wastewater to the Authority Sewerage System, including to any tributary thereto, shall ensure that such discharge complies with 360 CMR 10.000. The requirements of 360 CMR 10.000 apply to direct discharges to the Authority Sewerage System and to discharges to the Authority Sewerage System through a municipal sewer.

10.006: General Requirements

(1) Inflow and Infiltration. Each new Sanitary Sewer and replacement or extension that discharges directly or indirectly to the Authority Sewerage System, shall be designed and constructed so as to minimize, to the maximum extent possible, all Inflow and Infiltration into the Municipal or Authority Sewerage System. The owner and/or operator of any Sewerage System which discharges directly or indirectly to the Authority Sewerage System shall operate and maintain the System so as to eliminate any and all contaminated Inflow and Infiltration and any Inflow and Infiltration in quantities above that allowed by the Authority.

## 10.006: continued

(2) Storm Sewers, Sanitary Sewers, and Combined Sewers. The plumbing of any estate or premises discharging directly or indirectly to the Authority Sewerage System shall be arranged so as to keep any groundwater, storm water, surface water, roof and surface runoff, uncontaminated Cooling Water, Non-contact Cooling Water, and Non-contact industrial process waters separate from the Sanitary Sewage of the estate or premises. Groundwater, storm water, surface water, roof and surface runoff, uncontaminated Cooling Water, Non-contact Cooling Water, non-contact industrial process waters, and waters from any lake, swamp, pond, or swimming pool shall not be discharged to a Sanitary Sewer, except:

(a) as authorized in 360 CMR 10.023(1) and (2);

(b) swimming pool water may be discharged when there is no reasonable alternative and upon approval by the Authority, which will not be given when a receiving sewer has insufficient capacity to handle the discharge; and

(c) Inflow to a Municipal Sewer or the Authority Sewerage System is prohibited except in those areas served only by a Combined Sewer. Where the Municipality provides only a Combined Sewer, separate Storm Sewer and Sanitary Sewer connections to the Municipality's Combined Sewer shall be constructed in accordance with any permit issued by the Authority.

(3) Pretreatment Requirement. Every Person who directly or indirectly discharges Wastewater to the Authority Sewerage System shall provide the Pretreatment necessary to ensure that the discharge complies with 360 CMR 10.000. All Pretreatment equipment shall be properly installed, maintained, and operated by the Person at its expense.

(4) Pretreatment Operator's License. The individual responsible for operating a pretreatment system that discharges directly or indirectly to the Authority Sewerage System shall possess the proper operator's license(s) as required by law, including 257 CMR 2.00: *Certification of Operators of Wastewater Treatment Facilities.*

(5) DEP Sewer Connection and Extension Permit. No Person shall connect to a Municipal Sewer or an Authority Sewer, or construct, effect, modify, or maintain a Sewer extension or connection, without a sewer system connection or extension permit issued by DEP pursuant to M.G.L. c. 21, § 43, and 314 CMR 7.00: *Sewer System Extension and Connection Permit Program* where such a permit is required. A Person who must obtain a sewer system connection or extension permit from DEP for a connection or extension that will include a discharge industrial waste within the Authority Sewerage District shall submit a copy of the DEP permit application to the Authority, and to the appropriate Municipality, when it submits the application to DEP.

(6) Bypass. No Person shall cause or allow a Bypass, except as allowed by 40 CFR 403.17.

(7) Notification of Changed Discharge. Every Person who directly or indirectly discharges industrial waste to the Authority Sewerage system shall notify the Authority in advance of any substantial change in the volume or character of pollutants in his discharge, including the listed or characteristic hazardous wastes for which the Person has submitted initial notification under 40 CFR 403.12(p).

10.007: Permits - General Requirements

(1) The permits required by 360 CMR 10.000 are in addition to permits that may be required by other federal, state, or local laws or regulations. The following permits are required by 360 CMR 10.000:

(a) Sewer Use Discharge Permit. Any Person who directly or indirectly discharges Industrial Wastewater or other Industrial Waste to the Authority Sewerage System, or whose operation within the Authority Sewerage District (regardless of whether the operation discharges to the Authority Sewerage System) is subject to a National Categorical Pretreatment Standard, is required to have a Sewer Use Discharge Permit issued by the Authority and the appropriate Municipality, unless specifically exempted by 360 CMR 10.000 from the requirement to have a permit. This requirement to have a Permit includes Persons who discharge Industrial Waste into a septic or other holding tank whose contents are transported and discharged to the Authority Sewerage System. A Person issued a Group Permit, General Permit, or Combined Permit is not required to have a Sewer Use Discharge Permit for the discharge covered by the Group Permit, General Permit, or

Combined Permit.

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10.007: continued

(b) Septage Discharge Permit. Any Person who commercially pumps, transports, or discharges Septage and/or Industrial Waste mixed with Septage and who directly or indirectly discharges Septage and/or Industrial Waste mixed with Septage to the Authority Sewerage System is required to have a Septage Discharge Permit issued by the Authority.

(c) Direct Connection Permit. Any Person seeking to make or modify a direct connection to the Authority Sewerage System is required to have a Direct Connection Permit for such a connection issued by the Authority.

(d) Municipal Permit. Any Municipality that connects a Sewer to the Authority Sewerage System is required to have a Municipal Permit issued by the Authority.

(e) Landfill Permit. Any Person who directly or indirectly discharges Landfill Leachate to the Authority Sewerage System is required to have a Landfill Permit issued by the Authority.

(f) Temporary Construction Site Dewatering Permit. Any Person who directly or indirectly discharges Wastewater from a construction site to the Authority Sewerage System is required to have a Temporary Construction Site Dewatering Permit issued by the Authority and appropriate Municipality.

(g) Group Permit. Any Person who is required to be covered by a Group Permit is required to have that Group Permit to discharge Industrial Waste directly or indirectly to the Authority Sewerage System. The following Group Permits are in effect: 360 CMR 10.061: *Group Permit for Photo Processing and Printing Operations*; 360 CMR 10.063: *Group Permit for Food Processing*; and 360 CMR 10.065: *Group Permit for Dental Discharges*.

(h) Combined Permit. Any Person who is required to be covered by 360 CMR 10.064: *Combined Permit* is required to have that Combined Permit to discharge Industrial Waste directly or indirectly to the Authority Sewerage System.

(i) General Permit. Any Person who is required to be covered by 360 CMR 10.062: *General Permit for Low Flow and Low Pollutant Dischargers* is required to have that General Permit to discharge Industrial Waste, directly or indirectly, to the Authority Sewerage System.

(2) Alternative Permit. Notwithstanding any provision of 360 CMR 10.000 to the contrary, the Authority may issue a Sewer Use Discharge Permit in the place of a Group, General, or Combined Permit if in the Authority's judgment:

(a) the Group, General, or Combined Permit would provide insufficient requirements to regulate the Person's discharge appropriately due to the special nature of the Person's process or pretreatment system; or

(b) it has insufficient information to determine if the Person is eligible for the Group, General, or Combined Permit.

(3) Permit Terms and Conditions. The Authority may include terms and conditions as necessary to comply with federal and state requirements including, without limitation, self-monitoring, reporting, and recordkeeping requirements, and effluent limits, or Best Management Practices, or both, based on applicable general Pretreatment Standards in 40 CFR Part 403, National Categorical Pretreatment Standards, requirements of the Massachusetts Department of Environmental Protection, and all requirements and discharge limits of 360 CMR 10.000.

(4) No Permit Required. Unless specifically required to have a Permit by 360 CMR 10.000, the following do not require a Permit:

(a) Restaurants, cafeterias, and other food preparation facilities that chiefly prepare meals and snacks for consumption on their premises or for take-out by individuals.

(b) Supermarkets, groceries, and other facilities that are chiefly retail purveyors of food to individuals.

(c) Coin operated laundromats; laundries that do not wash any of the following:

1. industrial, hospital/clinic, or commercial uniforms, wipers, mats, or mops;
2. industrial, hospital/clinic, or commercial linens;
3. diapers; or
4. carpets.

Dry cleaners do not require a permit for the discharge from their washing machines if they do not use their washing machines to wash industrial, hospital/clinic, or commercial uniforms, wipers, mats, or mops; industrial, hospital/clinic, or commercial linens; diapers; or carpets, but may not discharge cleaning solvents (e.g., perchloroethylene), including

solvents in their cooling water discharge.

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10.007: continued

- (d) Commercial facilities that discharge only human and domestic wastes.
  - (e) Persons who do not discharge Industrial Waste.
  - (f) A onetime only Discharge that receives prior written approval of the Authority. A request for a onetime only Discharge may be granted if the discharge meets the Authority's limits and regulations, will not have an adverse impact on the Authority Sewerage System or a Municipal Sewer, and if there is adequate capacity for the Discharge. A request to Discharge uncontaminated water will be denied unless the discharger has no reasonable alternative. Written approval may be granted by letter, with the approval of the Municipality, if there are no necessary conditions on the Discharge other than the location, volume, time and duration of the Discharge, and the general requirement to meet Authority limits. A permit is necessary, or an existing permit must be modified, if there are conditions appropriate for the Discharge in addition to location, volume, time, duration and meeting Authority limits, such as sampling, reporting or pretreatment.
  - (g) Other discharges otherwise specifically exempted by 360 CMR 10.000 from the requirement to have a Permit.
- (5) A person shall not discharge or operate without having been issued the appropriate permit for the discharge, or with an expired, suspended, or revoked permit.
- (6) A permit shall not be assigned or transferred without prior written approval of the Authority. After the Authority's approval of a permit assignment or transfer, the permittee shall provide a copy of the permit to the assignee or transferee.
- (7) All Permits except a Direct Connection Permit shall contain an expiration date, which in no case shall be more than five years from the date of issuance. If a permittee files a complete and accurate application or Notice of Intent to renew a permit no later than 60 days before the expiration date of the permit, the permit shall not expire until a new permit is issued, ~~or~~ the application or notice is denied, or the permit duration exceeds five years from the date of issuance, whichever occurs first.
- (8) The Authority may modify a permit as it deems necessary or appropriate or as required by state or federal law.
- (9) A permittee may appeal the terms and conditions in an issuance, renewal, or modification of its Permit, and an applicant may appeal the denial of a Permit, pursuant to the procedures of 360 CMR 2.21: *Appeals of Notices of Noncompliance, Orders, Permits and Permit Actions*, except a Person may not appeal the standard terms and conditions of a Group Permit, General Permit, or Combined Permit.
- (10) The Authority may enforce, pursuant to St. 1984, c. 372 and St. 1987, c. 307, its regulations, and other applicable local, state, and federal laws, the terms and conditions of a permit issued under 360 CMR 10.000. Enforcement actions for violating a term or condition of a permit may include those actions authorized by 360 CMR 2.00: *Enforcement and Administrative Penalties* and those actions authorized by federal and state laws and regulations. In addition, a Municipality may enforce the terms and conditions of a permit which it issued jointly with the Authority, and the terms and conditions of a Group, General, or Combined Permit issued by the Authority to a Person discharging to its Municipal Sewer.
- (11) The issuance of a permit by the Authority shall not relieve the permittee of its obligation to comply with all applicable laws and regulations, including the Federal Water Pollution Control Act, 33 USC §1251 *et seq.*, and federal regulations promulgated thereunder, the Massachusetts Clean Waters Act, M.G.L. c. 1, § 26 *et seq.*, and Massachusetts regulations promulgated thereunder, and 360 CMR 10.000, unless specifically modified by the permit.
- (12) 360 CMR 10.000 shall not be construed to require the Authority to permit itself for Authority activities done to carry out the Authority's responsibilities under any federal or state laws, regulations, or requirements.

10.008: Monitoring, Sampling and Reporting

(1) Monitoring Devices. When required by the Authority, any Person who directly or indirectly discharges Wastewater to the Authority Sewerage System shall install at his expense suitable control or measuring devices and such manholes, chambers, meters (*e.g.*, flow, pH), and other appurtenances, necessary for the observation, sampling and measurement of Waste, Pollutants, and/or water being discharged. Such control or measuring devices and manholes, chambers, or meters and other appurtenances shall be installed at a safe location acceptable to the Authority, shall be accessible to the Authority's staff and monitoring equipment, and where required by the Authority, shall be compatible with the Authority's monitoring equipment. The control or measuring devices and related appurtenances shall be designed and constructed according to applicable engineering standards and shall be properly maintained and calibrated so as to ensure accurate measurement. The Authority may require that the control or measuring devices and related appurtenances be subject to Authority approval.

(2) Sampling, Analysis, and Reporting Procedures.

(a) All measurements, tests, and analyses of the characteristics of Wastewater that are required by 360 CMR 10.000 or any permit or order issued thereunder shall be conducted according to applicable EPA approved procedures in 40 CFR Part 136, unless otherwise authorized or required by the Authority or EPA. If there is no applicable EPA approved procedure, the Authority may specify a procedure to be used.

(b) Any sample analysis required by 360 CMR 10.000 or any permit or order issued thereunder shall be performed by an independent laboratory with DEP certification or NELAP accreditation for the parameters being analyzed. The use of a laboratory with provisional DEP certification is prohibited for the parameters for which it has provisional certification, unless the Authority determines that the factors resulting in the provisional certification should not adversely affect the quality of the analyses the laboratory may submit. A sample analysis performed by a laboratory without DEP certification or NELAP accreditation for the parameter may be submitted with the approval of the Authority. The Authority may grant such approval where DEP does not certify and NELAP does not accredit for the parameter to be analyzed, there is no DEP certified or NELAP accredited laboratory in Massachusetts or an adjoining state that performs the required test method, or in other extraordinary circumstances. The Authority may require a Person to submit a copy of the "Massachusetts Certification for Chemical Analysis of Waters" or the NELAP Certification of Accreditation, whichever is applicable, for each laboratory that performs an analysis submitted to the Authority by or on behalf of the Person. The Authority may limit the laboratories a Person may use for any report required by the Authority. The Authority may specify the quality assurance/quality control methods to be performed by a laboratory for any report required by the Authority.

(c) The sampling required by the Authority shall be performed by a DEP certified or NELAP accredited independent laboratory unless otherwise specified or approved by the Authority. The Authority may by permit or order require sample collection to be performed by specified personnel at specified location(s).

(d) The Authority may require a Person to submit Blind Performance Evaluation samples for analysis, along with its required samples, to the laboratory the Person uses.

(e) The Authority may require a Person to submit a complete data package, including chain of custody records, raw data, and quality assurance/quality control related results, with a report required by the Authority.

(f) The Authority may require that reports be submitted to it on paper copy, and/or by electronic means.

(g) The Authority may require that analytical data and reports, including a complete data package, be submitted to it directly by the laboratory that performed the analyses.

(3) All persons discharging either directly or indirectly to the Authority Sewerage System shall comply with all applicable reporting requirements of EPA regulations including, without limitation, 40 CFR 403.12.

(4) All reports and documents required to be submitted to the Authority by federal regulations, by 360 CMR 10.000, or by a permit, notice, or order shall be submitted as required, shall contain all of the information in the format required by the Authority, and shall be received by the Authority, and by any other Person specified by the Authority to receive the report or document, no later than the due date. If the Authority determines that a report or document is insufficient, incomplete, inadequate, or late, the Authority may:



## 10.008: continued

- (a) require the submittal of additional or revised reports or documents; and
- (b) take enforcement action pursuant to 360 CMR 2.00: *Enforcement and Administrative Penalties*.

(5) Report Containing an Elevated Detection Limit.

(a) For purposes of 360 CMR 10.008(4), an elevated detection limit means a detection limit above a parameter's discharge limit (as set by 360 CMR 10.000 or by any permit or order issued thereunder), generally caused by interference or another factor that prevented the laboratory from quantifying a parameter at or below the discharge limit for that parameter. For any parameter that is prohibited from being discharged, an elevated detection limit shall be a detection limit that is greater than the method detection limit for that parameter.

(b) Any report of a sample analysis required to be submitted to the Authority under 360 CMR 10.000, or any permit or order issued thereunder, that contains an elevated detection limit for a parameter shall be considered an incomplete report. Within 15 days of receiving a report containing an elevated detection limit, the Person required to submit the report to the Authority shall resample the wastestream, analyze the sample for the parameters that had the elevated detection limit, and submit the report of the analysis to the Authority.

Where the report of resampling again contains an elevated detection limit for the same parameter as the previous report, the Person shall, with the report of resampling, submit a report to the Authority explaining why the laboratory has been unable to obtain a lower detection limit and containing a time schedule to correct the problem. The report shall be subject to modification by the Authority. There shall be a presumption that the parameter with an elevated detection limit is in violation of the discharge limits. The presumption will be overcome if the Person corrects the problem causing the elevated detection level, according to the time schedule in its report, and the Person's sample results are then in compliance.

10.009: Signatories and Certifications

Each permit application, discharge monitoring report, compliance report, and any other report or notification required by 360 CMR 10.000 or a permit or order issued thereunder shall be signed by an authorized representative of the Person submitting the application or report, and shall be certified as accurate. The Authority may, in a manner specified by the Authority and in compliance with 40 CFR Part 3: *Electronic Reporting*, allow an application or report to be submitted by electronic means and shall require a verified electronic signature of an authorized representative of the Person submitting the application or report, and shall be certified as accurate. An authorized representative shall be an individual described in 40 CFR § 403.12(1). The Authority may require documents submitted pursuant to 360 CMR 10.000 to contain a certification consistent with the following:

I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

If the Authority requires that discharge monitoring reports be submitted to it by electronic means, and/or authorizes the submission of such reports directly from laboratories used by the Person responsible for submitting the report, it shall require a certification similar to the above certification from the Person, authorizing submissions directly from the laboratory.

10.010: Record Keeping

(1) Unless otherwise provided in 360 CMR 10.010, or in any permit or order issued hereunder, every Person required to obtain a permit pursuant to 360 CMR 10.000 shall maintain for a minimum of three years all records required to be generated or kept by 360 CMR 10.000 or by any permit or order issued thereunder, all records from wastewater control and measuring devices, and all records pertaining to sampling and analysis of the Person's

discharges to the Authority Sewerage System.

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## 10.010: continued

(2) In addition to the record keeping and record submission requirements of 360 CMR 10.000, every Person required to have a permit by 360 CMR 10.000 shall maintain and submit to the Authority all reports for its operations within the Authority Sewerage District it is required to maintain or submit by 40 CFR Part 403, including those required by 40 CFR 403.12 and the National Categorical Pretreatment Standards.

(3) All records referred to in 360 CMR 10.010(1) and (2) shall be made available to the Authority for inspection and copying. The Authority may require that copies of records be produced.

(4) All records pertaining to matters covered by an order issued under 360 CMR 10.000, or to any enforcement action or litigation involving the Authority, shall be retained until the enforcement action is concluded and all appeal periods concerning the order or action have expired, unless a longer period of retention is otherwise required.

10.011: Public Records

(1) Records Available to the Public. Every Record pertaining to a Person governed by 360 CMR 10.000 which is made or received by the Authority, shall be considered a Public Record and shall be available for disclosure to the general public pursuant to a request under 360 CMR 10.011 except the following:

(a) all Records specifically excluded from the definition of a "public record" pursuant to M.G.L. c. 4, § 7(26).

(b) all Trade Secrets the disclosure of which would not be in compliance with the Massachusetts Clean Waters Act, M.G.L. c. 21, § 27(7), or any other provision of Massachusetts law governing the confidentiality of records submitted to a governmental entity;

(c) all Records specifically or by necessary implication exempted from disclosure by law.

(2) Processing Requests for Disclosure of Public Records.

(a) The Authority shall permit any person, under the supervision of Authority personnel, to inspect any Public Record regarding a Person governed by 360 CMR 10.000 which is in the custody of the Authority and not exempted by 360 CMR 10.011(1)(a) through (c) and, upon request, shall supply one copy of such a Record upon payment of a reasonable fee to the Authority. The Authority may require each Person for whom a search of Public Records is made to pay the actual expense of the search.

(b) Every request to inspect a Public Record regarding a Person governed by 360 CMR 10.000 shall be made in writing to the Authority.

(3) Request for Confidentiality. Whenever any Person governed by 360 CMR 10.000 requests in writing that a particular Record be deemed to contain a Trade Secret or otherwise be deemed confidential and exempt from disclosure, the Record shall be treated as confidential and shall not be deemed a Public Record until the Authority has approved or denied the request. Any claim of confidentiality must be made at the time the Record is submitted and each page of the Record shall be clearly marked "CONFIDENTIAL". If no such claim is made, the Authority may make the information available to the public without further notice. In addition, in no event shall the constituents of Wastewater discharges or other effluent data be considered confidential information.

(4) Postponing Denial of Confidentiality Pending Appeal. Whenever the Authority denies a request to deem a Record confidential and not a Public Record, the denial shall take effect only ten days after the date thereof so that the denial can be appealed to the appropriate administrative or judicial forum. During this ten-day period, the Record in question shall be treated as confidential and not deemed a Public Record. The Authority may grant a written extension of the ten-day period upon request for good cause shown.

(5) Protecting the Confidentiality of a Trade Secret. Any Record the Authority determines to be a Trade Secret shall not be deemed a Public Record and shall be exempt from disclosure to the general public.

10.011: continued

(6) Disclosure of Trade Secrets. Notwithstanding 360 CMR 10.011(5), a Trade Secret may be disclosed by the Authority to the extent necessary to comply with the Federal Water Pollution Control Act, 33 U.S.C. § 1251, *et seq.*, as amended, or the Massachusetts Clean Waters Act, M.G.L. c. 21, or to the extent necessary for an administrative, civil, or criminal enforcement action.

(7) Trade Secrets Subject to Confidentiality. A Trade Secret may be treated as confidential and not as a Public Record only if:

- (a) such treatment was requested in writing in accordance with 360 CMR 10.011(9);
- (b) the information meets the criteria of a Trade Secret under 360 CMR 10.011(8); and
- (c) there is an exemption applicable to such information within 360 CMR 10.011(1) that allows for confidential treatment of the information as an exception to its presumed treatment as a Public Record.

(8) Requests for Protecting the Confidentiality of Trade Secrets. No record shall be deemed a Trade Secret, unless the Person requests the Authority in writing to take such action. The request shall be made and substantiated as follows.

- (a) Each Record containing information which is the subject of a confidentiality request shall be clearly marked "CONFIDENTIAL".
- (b) The confidentiality request shall be supported by the following information, which shall be treated as a Public Record and which shall be provided no later than 15 days after the request:
  1. The time period for which confidential treatment is desired;
  2. The reason the Record was provided to the Authority, and the submittal date;
  3. The extent to which the Person making the request has disclosed the contents of that Record to other persons;
  4. A list of all federal, state and local agencies to which the same Record or contents thereof has been submitted, which of those agencies has been requested to keep that Record confidential, the status of the request, and a copy of the response by the agency to the request;
  5. How making the Record a Public Record would harm the Person requesting confidentiality and why such harm should be deemed substantial; and
  6. If the Record was submitted voluntarily and not in compliance with a regulation or order, whether and, if so, why, making the Record a Public Record would tend to lessen the availability to the Authority of similar records in the future.

(9) Criteria for Determining a Trade Secret. The Authority shall apply the following criteria to determine whether a Record is a Trade Secret:

- (a) The extent to which the Trade Secret is known by persons other than the Person submitting the Record;
- (b) The extent to which the Trade Secret is known by employees of the Person submitting the record, and others involved in the Person's business;
- (c) The extent to which measures are taken by the Person submitting the record to guard the secrecy of the Trade Secret;
- (d) The value of the Trade Secret to the Person submitting the record and to the Person's competitors; and
- (e) The ease or difficulty with which the information could be properly acquired or duplicated by others.

(10) Action on Confidentiality Requests. The Authority shall act on confidentiality requests as follows:

- (a) The Authority shall determine whether the Record would be voluntarily submitted under 360 CMR 10.011(7)(b) and whether the Record, if made public, would divulge a Trade Secret. The Authority shall give written notice of its determination to the Person requesting confidential treatment upon request by said Person for notification.
- (b) If the Authority determines that a Record would, if made public, divulge a trade secret, the Record in question shall be deemed confidential and shall not be deemed a Public Record for such length of time, and subject to such terms, conditions and limitations as the Authority may determine.

## 10.011: continued

(11) Nothing in 360 CMR 10.011 shall be construed to authorize the Authority to withhold information from EPA (or from DEP, should it be approved by EPA to oversee the Authority's industrial pretreatment program in *lieu* of EPA). Nothing in 360 CMR 10.011 shall be construed to deny the public's access to records as provided in 40 CFR 403.14.

10.012: Access to Facilities

(1) For purposes of investigating or inspecting any condition relating to the discharge or possible discharge of pollutants, and/or inspecting records relating to such discharge, authorized representatives of the Authority, the Municipality where a discharge occurs, the Executive Office of Environmental Affairs and its departments, and the EPA shall be permitted to enter any public or private property connected directly or indirectly to the Sewer and all areas of any premises owned or controlled by a permittee which the Authority believes may be used in connection with activities governed by 360 CMR 10.000, including any area where wastewater is generated or where chemicals, raw materials, or products are stored.

(2) Without limiting 360 CMR 10.012(1), Authority representatives shall have access for purposes of:

- (a) inspecting, sampling, dye testing, and gauging any Sanitary Sewage and/or Wastewater conveyed through or to a Sewer;
- (b) inspecting, diagramming, and/or photographing any monitoring equipment, Pretreatment equipment or systems, pipes, or any other equipment which the Authority believes may be used in connection with discharges to or through a Sewer;
- (c) examining, copying, and/or photographing any records or matters pertaining to discharges to or through a Sewer or pertaining to the operation of a Pretreatment system or process line that generates Wastewater and/or Sanitary Sewage discharged to a Sewer;
- (d) determining compliance with St. 1984, c. 372, St. 1987, c. 307, and 360 CMR 10.000; and/or
- (e) preventing an imminent danger to the public health, safety, welfare or the environment from the discharge or threatened discharge of Wastewater and/or Sanitary Sewage to a Sewer.

(3) Upon request by an authorized representative of the Authority, every Person whose activities are governed by 360 CMR 10.000 shall make immediately available a person with knowledge and authority regarding the Person's wastewater discharges for purposes of escorting the Authority's representatives through the premises or any portion thereof.

(4) In conducting inspections or other monitoring or surveillance activities pursuant to 360 CMR 10.000 or St. 1984, c. 372 and St. 1987, c. 307, the Authority and Municipality shall be deemed to be performing a governmental function for the benefit of the general public and neither the Authority nor the Municipality nor representatives of either shall be liable for any loss or damage as a result of the performance of such governmental fun.

(5) If a Person governed by 360 CMR 10.000 has security measures in force which require proper identification and clearance before entry into his or her premises, the Person shall make necessary arrangements with his or her security staff so that at any reasonable time, upon request and presentation of suitable identification, representatives of the Authority, the Municipality in which the discharge occurs, the Executive Office of Environmental Affairs and its departments, and the EPA shall be permitted to enter without delay for the purpose of carrying out their responsibilities.

(6) If a Person governed by 360 CMR 10.000 has security measures in force which prohibit the taking of photographs within his or her premises or bringing photographic equipment onto his premises, and an Authority representative wishes to photograph any equipment, materials, or portion of the premises pertaining to discharges to or through a Sewer or pertaining to the operation of a Pretreatment system or process line that generates Wastewater and/or Sanitary Sewage discharged to a Sewer, the Person shall provide a staff member for the purpose of taking the photographs required by the Authority representative and providing those photographs to the Authority representative within a reasonable period of time. The Person may claim that a photograph contains confidential information and may file a request for confidentiality pursuant to 360 CMR 10.012, but such claim of confidentiality shall not authorize the Person to fail to take and provide the photographs required by 360 CMR

10.012(6).

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10.012: continued

- (7) The Authority may have warrantless access:
- (a) during business hours and at any other reasonable time; and
  - (b) at any time: with the consent of the owner or person in charge of the premises; in situations presenting imminent danger to health or safety; in any other exceptional circumstance where time or opportunity to apply for a warrant is lacking; or where a warrant is not required by the laws and constitutions of Massachusetts or the United States.
- (8) 360 CMR 10.000 shall not limit the power to enter and inspect granted by St. 1984, c. 372 and St. 1987, c. 307, and M.G.L c. 21, § 40.

10.013: Non-complying Discharges: Required Notifications and Actions

- (1) Each Person with a discharge governed by 360 CMR 10.000 shall notify the Authority and the appropriate Municipality immediately by telephone of any accidental discharge of a pollutant regulated by 360 CMR 10.000 or by any permit or order issued thereunder, and of any Upset, Slug or Slug Discharge, or spill that may reasonably be expected to discharge to the Municipal or Authority Sewerage System. Such notification shall contain the information necessary to enable the Authority and Municipality to undertake countermeasures to minimize damage to the Authority and Municipal Sewerage Systems, Receiving Waters, and the public health, safety, welfare and the environment, including the following:
- (a) the location of the discharge;
  - (b) the date and time of the discharge;
  - (c) the characteristics of the discharge, including concentration and volume; and
  - (d) any corrective actions taken.
- (2) Within 15 calendar days of the date of the event requiring notice under 360 CMR 10.013(1), the Person required to provide the notice shall submit a detailed written statement to the Authority and the Municipality describing the causes of the discharge and the measures being taken to prevent the discharge from recurring. For a Slug Discharge, such written statement shall be provided within five days of such Slug Discharge. The notification shall include the following:
- (a) A description of the discharge, and the type, concentration, and volume of waste;
  - (b) A statement of the duration of noncompliance caused by the accidental discharge, Upset, spill, or Slug, including exact dates and, if the noncompliance continues, the time by which compliance is reasonably expected to occur; and
  - (c) A description of all steps taken or to be taken to reduce, eliminate, and prevent recurrence of such an accidental discharge, Upset, Slug, or spill.
- (3) If sampling performed by a Person indicates a violation of 360 CMR 10.022, 10.023 or 10.024, or a limit or prohibition contained in the Person's permit, the person shall notify the Authority within 24 hours of becoming aware of the violation. The Person shall also repeat the sampling and analysis and submit the results of the repeat analysis to the Authority within 30 days of becoming aware of the violation, except the Person is not required by 360 CMR 10.013(3) to resample if:
- (a) The Authority performs sampling at the Person's facility at a frequency of at least once per month; or
  - (b) The Authority performed sampling at the Person's facility between the time when the Person performed its initial sampling and the time when the Person received the results of that sampling.
- (4) A Person shall submit to the Authority oral notice of an unanticipated Bypass that violated 360 CMR 10.022, 10.023, or 10.024, or a limit or prohibition contained in the Person's permit, within 24 hours of becoming aware of the Bypass. The Person shall also make a written submission to the Authority within five days of the time the Person became aware of the Bypass. The written submission shall contain a description of the Bypass and its cause; the duration of the Bypass, including exact dates and times, and, if the Bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the Bypass. The Authority may waive the written submission on a case by case basis if the oral report has been received within 24 hours.

## 10.013: continued

(5) The notifications required by 360 CMR 10.013 shall not relieve the Person of liability for costs, damages, or penalties, or prevent the Authority from taking enforcement action.

(a) To raise the affirmative defense that a Violation was caused by an Upset, the requirements for reporting and proving an Upset, as found in 360 CMR 2.23: *Affirmative Defenses*, shall be met. In addition, in the case of an Upset, the Person shall control production or all discharges to the extent necessary to maintain compliance with 360 CMR 10.021 through 10.025, and with any limit or prohibition in the Person's permit, upon reduction, loss, or failure of its treatment system until the system is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment system is reduced, lost, or fails.

(b) The Authority will not take enforcement action for a Bypass if:

1. The Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. For purposes of 360 CMR 10.013(5), severe property damage means substantial physical damage to property, damage to treatment systems which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a Bypass. Severe property damage does not mean economic loss caused by delays in production;
2. There were no feasible alternatives to the Bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
3. The Person provided the notices required by 360 CMR 10.013(4), and, if it knew in advance of the need for a Bypass it submitted prior notice to the Authority, if possible at least ten days before the date of the Bypass.

10.014: User Charges

The Authority may use information contained in permit applications, permits, discharge monitoring reports, and any other information it considers relevant, as a basis for determining user charges.

10.015: Implementation Charges

(1) To recoup costs incurred by the Authority to implement and enforce 360 CMR 10.000, the Authority has adopted the following implementation charges:

(a) To respond to a request to allow a one-time only discharge: ~~\$650~~ per hour. The minimum charge is three hours (~~\$1850~~). Payment of ~~\$1850~~ shall be made before the Authority considers the request. The charge for more than three hours, if appropriate, shall be paid upon notice by the Authority and before the Authority provides a decision on the request. The Authority, in its discretion, may waive all or part of the charge for a request for a *de minimis* discharge.

(b) To respond to a spill or other release of materials that enters or threatens to enter the Authority's sewer system or a tributary to Authority's sewer system: ~~\$1850~~ per hour. The minimum charge is three hours (~~\$54450~~). The Authority may also charge for its sampling and analytical costs and its costs of preventing the materials from entering the sewer and for containing and removing materials from the sewer. The Person responsible for the spill or other release shall pay the charge. If more than one Person is wholly or partially responsible for the spill or other release, each such Person is jointly and severally liable for the charge.

(2) Late Payment and Service Charges. The Authority may assess a late payment charge of 1% per month on an outstanding balance (including interest and service charges) of a charge not fully paid within 30 days of notice of the charge from the Authority. The Authority may also assess a service charge of \$50 for each check returned for insufficient funds or otherwise dishonored.



103.015: continued

(3) Disputes, Appeal Rights, and Procedures.

(a) A Person that disagrees with the amount of its charge shall have 30 days from the date of the notice of the charge from the Authority to file a written petition with the Authority to dispute the charge. The petition may not contest any matter that was previously decided, unless material circumstances have changed since the decision. The petition shall state the facts and contentions supporting the petition. A Person that disputes its charge shall pay the amount it claims is due, if any, within 30 days of the notice of the charge by the Authority, pending resolution of the appeal. A Person that fails to pay timely the amount shall have its petition dismissed.

(b) The Authority may schedule an informal interview with the Person to discuss the petition, or it may review the petition on the basis of the materials submitted by the Person. The Authority may also require additional information and documentation from the Person to support the petition. After the Authority concludes its review of the petition, it shall issue a written ruling on the petition.

(c) The Person may appeal the written ruling issued by the Authority pursuant to division (d) by requesting in writing, within 30 days of the date of the ruling, an adjudicatory hearing under the provisions of 360 CMR 1.00: *Adjudicatory Proceedings*. Within 30 days after the date of the final Authority ruling, the Person shall pay the amount due the Authority, if any, plus interest at the rate of 1% per month on the amount due, computed from the date the appeal was filed.

(4) Nonpayment Procedures. The Authority may take one or more of the following actions if a Person does not fully pay its charge, any late payment charge, or service charge:

(a) Deny the Person's application to renew its permit upon expiration of the permit until full payment is made and, for an initial permit, not issue the permit until full payment is made;

(b) Suspend the Person's permit until full payment is made;

(c) Bring a civil action for collection of the amount owed the Authority, including reasonable attorney fees and costs incurred by the Authority in pursuing such action;

(d) Suspend the Person's water and/or sewer service, with, where required, the approval of the municipal supplier; and

(e) Take any other action available to the Authority under law or regulation.

(5) Charge Not Exclusive Remedy. Imposition of a charge shall not limit the Authority's ability to take any enforcement action authorized by law or regulation, or any other action authorized by law or regulation, regardless of any charge assessed or paid. Payment of a charge does not relieve a Person of any other liability under any federal, state, Authority, or local law or regulation.10.016: Gas/Oil Separators

(1) Garages, parking lots, and places where petroleum-based products are used or stored, where Wastes containing petroleum-based grease in levels above those allowed under 360 CMR 10.023(4), (5), (7), (8) or (10) are produced or stored, or where oily and/or flammable Wastes, sand, or other harmful materials are produced or stored shall have Separators to intercept such substances prior to their discharge to the Authority Sewerage System.

(2) The size, capacity, type, and location of each Separator shall be subject to approval by the Authority.

(3) Separators shall be located to allow ready and easy access for purposes of removing the cover, and for service, maintenance, and inspection.

(4) Separators shall be properly serviced and maintained. The schedule for service and maintenance of a Separator shall be subject to approval by the Authority. The operator of the premises where the Separator is located shall maintain a log describing the date and type of all service and maintenance performed in connection with the Separator, the identity of the Person who performed the service and/or maintenance, the amount of residue removed from the Separator on each date, and the method of disposal of the residue. The log entries shall be

maintained for six years and shall be made available for inspection and copying by the Authority.

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## 10.016: continued

(5) In addition to complying with 360 CMR 10.000, Separators shall conform to the regulations of the Board of State Examiners of Plumbers and Gas Fitters, 248 CMR 10.00: *State Plumbing Code*, and all other applicable laws.

(6) Both the owner of the premises where a Separator is required and the owner and/or operator of the establishment or business conducted on the premises, shall be jointly and severally responsible for installing a Separator acceptable to the Authority and for properly servicing and maintaining the Separator.

10.017: Grease Traps and Grease Interceptors

(1) A Person who is required by Massachusetts law or regulation to have a grease trap or grease interceptor (including by 310 CMR 15.230: *Retreatment Units - Grease Traps* and 248 CMR 10.00: *State Plumbing Code*) shall have grease traps and grease interceptors of the appropriate size, type, construction, and location as required by state law or regulation. Such Person shall assure that its grease traps and grease interceptors are appropriately cleaned and maintained so that they operate efficiently and effectively.

(2) Chemical, biological, or physical means shall not be used to release fats, wax, oil, or grease into the sewer, bypass the trap or interceptor, or otherwise make the trap or interceptor operate less effectively. A chemical or biological agent that the Authority has approved in writing for use in a grease trap or interceptor may be added to a trap or interceptor to convert the fats, wax, oil, and grease in a trap or interceptor to a substance not regulated by 360 CMR 10.021 through 10.024 if the resulting discharge from the trap or interceptor will not cause or contribute to an obstruction or blockage in the sewer or otherwise violate 360 CMR 10.021 through 10.024. Unless so converted, the fats, wax, oil, and grease contents of a grease trap or interceptor shall not be discharged to the sewer system.

10.018: Significant Industrial Users

In addition to the requirements of 360 CMR 10.000, any Person operating a facility in the Authority Sewerage District that is a Significant Industrial User shall comply with the applicable requirements of 40 CFR Part 403, including the reporting requirements of 40 CFR 403.12 and any National Categorical Pretreatment Standard applicable to the facility, including effluent limits and Best Management Practices.

## PROHIBITED WASTES AND LOCAL LIMITS

10.021: General Prohibitions

No Person shall discharge or cause or allow to be discharged, directly or indirectly, to the Authority Sewerage System any Wastewater, Sanitary Sewage, or substance that, either singly or in combination with any other Wastewater, will:

- (1) Harm or interfere with the Authority Sewerage System or a Municipal Sewer;
- (2) Cause Pass Through or Interference, or be otherwise incompatible with the Authority wastewater treatment process, including Sludge use, management, or disposal;
- (3) Cause a violation of any federal or state law or any federal or state permit issued to the Authority;
- (4) Affect adversely Receiving Waters or violate water quality criteria;
- (5) Endanger or threaten to endanger the life, health, or welfare of any person or persons, or the public health, safety, or welfare, or the environment, or public property;
- (6) Constitute a nuisance.

10.022: National Pretreatment Standards

Every Person who discharges Wastewater directly or indirectly to the Authority Sewerage System shall comply with the strictest of the following discharge limits applicable to the discharge: the National Pretreatment Standards, state limits, local limits, limits contained in 360 CMR 10.000, or limits in a permit or order issued under 360 CMR 10.000. If a National Categorical Pretreatment Standard includes a limit in addition to a daily maximum limit (*e.g.*, 30-day, monthly, weekly, four-day, loading, or production-based limit), that limit must be met in addition to the more stringent of the Daily Maximum Limits.

10.023: Specific Prohibitions

No Person shall discharge, or cause or allow to be discharged, directly or indirectly, into the Authority Sewerage System, any of the following:

- (1) Groundwater, storm water, surface water, roof or surface runoff, tidewater, or subsurface drainage, except Construction Site Dewatering in a combined sewer area when permitted by the Authority and municipality.
- (2) Non-contact Cooling Water, non-contact industrial process water, uncontaminated Contact Cooling Water, and uncontaminated industrial process water, except:
  - (a) as permitted by the Authority when the discharger has taken all reasonable efforts to eliminate and minimize the flow, there is not reasonable access to a storm sewer, surface water, or another disposal alternative, and the amount to be discharged will not have an actual or potential adverse impact on the sewer system, the treatment plant, the quality of the receiving water, or the Authority's ability to meet its obligations under any law, regulation, permit, or order; and
  - (b) cooling tower blowdown.
- (3) Fuel oil, crude oil, lubricating oil, or any other oil or grease of hydrocarbon or petroleum origin except:
  - (a) in compliance with the limit for fats, wax, oil and grease in 360 CMR 10.023(10);
  - (b) in compliance with the prohibitions and limits in 360 CMR 10.024;
  - (c) when discharged:
    1. incidental to an industrial process in Industrial Waste authorized to be discharged by a permit issued by the Authority;
    2. incidental to the appropriate use of a gas/oil separator that is in compliance with 360 CMR 10.016 when a permit is not required by 360 CMR 10.000; or
    3. in *de minimis* amounts, and not from the disposal of waste, used, excess, or unwanted oil or grease, when neither a permit nor a gas/oil separator is required by 360 CMR 10.000; and
  - (d) otherwise in compliance with 360 CMR 10.000.
- (4) Any liquid, solid, or gas including, but not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides and methyl ethyl ketone, which by reason of its nature or quantity is or may be sufficient, either alone or by interaction with other substances, to create a fire or explosion hazard or to be otherwise injurious to a Municipal Sewerage System, the Authority Sewerage System, Treatment System, or to Receiving Waters, including:
  - (a) Wastewater with a closed cup flashpoint of less than 140°F (60°C) using the test methods specified in 40 CFR 261.21, and measured at the point of indirect discharge to the Authority Sewerage System, or at such other place as the Authority determines; or
  - (b) any Pollutant which causes an exceedance of 10% of the lower explosive limit as measured by an explosimeter at the point of discharge to the sewer or at any point within the Sewer.
- (5) Any noxious or malodorous liquid, gas, or solid or any other pollutant which either singly or by interaction with any other Waste causes or contributes to the creation of a public nuisance, makes it dangerous for personnel or equipment to enter the Sewer for purposes of maintenance, repair, inspection, sampling, or any other similar activity, or which results in the presence of toxic gases, vapors, or fumes within the Authority Sewerage System or Municipal Sewer in a quantity that may cause acute worker health and safety problems.

10.023: continued

(6) Any water or Wastewater with a pH lower than 5.5 or higher than 12.0 or with any corrosive or injurious property which may cause damage or be hazardous to the Sewer, the Sewerage System, the Treatment System, or any person.

If a Person continuously measures the pH of its wastewater by a properly located, installed, calibrated, maintained, and operated pH measurement system, the pH of the wastewater shall be maintained as required by the Authority, except excursions below a pH of 5.5 are permitted subject to the following limitations:

- (a) The total time during which the pH values are below 5.5 shall not exceed seven hours in any calendar month;
- (b) No individual excursion from the range of required pH values shall exceed 60 minutes; and
- (c) The excursion may not be below a pH of 5.0.

For purposes of 360 CMR 10.023(6), an excursion is an unintentional and temporary incident in which the pH value of discharged wastewater is below the range required by the Authority. The Authority may, by permit or order, reduce the permissible excursion times or eliminate the right to an excursion, as it deems appropriate, based on the treatment system, flow, sewer system needs, and discharge history of the Person.

(7) Any water or Wastewater, not otherwise governed by 360 CMR 10.000, containing pollutants at levels which may adversely affect the Authority's ability to process and/or dispose of its Wastewater Residuals in an environmentally sound and economic manner in accordance with applicable state and federal requirements.

(8) Any solid or viscous substance in an amount or size which obstructs or may obstruct the flow in any Sewer, or which causes or may cause an Interference including, but not limited to, sand, mud, metal, glass, wood, plastics, Improperly Shredded Garbage, rubber, latex, lime or other slurries, grease, animal guts or tissues, bones, hair, hides or fleshings, entrails, feathers, ashes, cinders, stone or marble dust, straw, shavings, grass clippings, rags, spent grains, spent hops, tar, asphalt residues, residues from refining or processing fuel or lubrication oil, or glass grinding or polishing Wastes.

(9) Any liquid or vapor with a temperature higher than 180°F (82°C), unless the Authority approves an alternative temperature limit; however, in no case may any Person discharge heat in such quantity that it causes or may cause the temperature at the Authority's Sewage Treatment Facility to exceed 104°F (40°C).

(10) Any water or Waste containing fats, wax, oil, and grease, in excess of 300 mg/l (based on the materials recovered in the applicable EPA approved procedure, unless otherwise authorized or required by the Authority and EPA), or containing any substance which may solidify or become viscous at temperatures between 32°F (0°C) and 180°F (82°C). Waters or Wastes containing such substances, excluding normal household Waste, shall exclude all visible floating oils, fats and greases. The use of chemical, biological, or physical means to bypass or to release fats, wax, oil, and grease into the sewer is prohibited. If a Person is unable to comply with the 300 mg/l requirement after reasonable pretreatment measures, the Authority may increase the limit on a case by case basis if the Authority and appropriate Municipality are satisfied that such increase will not contribute to nuisance conditions or an adverse impact on the Sewerage System, Receiving Waters, or the Authority's Wastewater Residuals program. In no circumstance will the Authority increase the limit to allow a discharge of more than 300 mg/l of oil or grease of hydrocarbon or petroleum origin, including fuel oil, crude oil, and lubricating oil. The Authority may apply a monetary charge to any increase in the 300 mg/l limit to recover the costs it reasonably expects to incur as a result of the increase.

(11) Waste or Wastewater discharged through a Bypass, unless such discharge through the Bypass was approved in advance by the Authority, or the discharge through the Bypass is allowed by 40 CFR 403.17 and the Person using the Bypass provided to the Authority the notices required by 40 CFR 403.17.

(12) Any radioactive Waste or isotope with a half-life or concentration in excess of any limit established by federal or state law.

10.023: continued

- (13) Any Sludge, except from:
- (a) a water treatment plant owned and operated by a municipality, or by a water district created by a special or general act of the Massachusetts Legislature, and when specifically permitted by the Authority pursuant to 360 CMR 10.057; or
  - (b) a Reclaimed Water System, provided the Reclaimed Water System:
    1. treats only Wastewater that does not require an active permit as described in 360 CMR 10.007(1)(a), (e), (f), (g), (h), or (i) for discharge into the Authority's Sewerage System;
    2. has a Discharge into a Municipal Sewer within the Authority Sewerage District;
    3. has been issued a permit pursuant to 314 CMR 20.00: *Reclaimed Water Permit Program and Standards*; and
    4. has been specifically permitted by the Authority and the Municipality into which it discharges pursuant to 360 CMR 10.051 through 10.056.
- (14) Any substance, including dye water or any vegetable tanning solution, which causes turbidity or discoloration such that the color of the wastewater at the Authority Sewage Treatment Facility changes noticeably.
- (15) Any Slug.
- (16) Any Hazardous Waste, or any Wastewater which results from the treatment of Hazardous Waste, and is discharged to the Authority Sewerage System by dedicated pipe, truck, rail, or by other method.
- (17) Septage containing Hazardous Waste, Septage from haulers other than those permitted under 360 CMR 10.000, or Septage discharged at a location not designated as a Septage discharge location in the Municipal Permit issued by the Authority to the Municipality where the discharge took place.
- (18) Any substance containing pathogenic organisms in such quantities as determined by local, state and/or federal law as hazardous to the public health or the environment including, but not limited to, any "Infectious or Physically Dangerous Medical or Biological Waste" as defined and identified by the Massachusetts Department of Public Health in 105 CMR 480.010: *Storage and Disposal of Infectious or Physically Dangerous Medical or Biological Waste, State Sanitary Code Chapter VIII*, and whose disposal *via* the municipal Sewerage System or *via* a septic system is prohibited by 105 CMR 480.200: *Disposal*.
- (19) Any filter backwash not specifically authorized to be discharged by a permit issued to the discharger by the Authority; any filter backwash that is not treated to meet the limits and prohibitions of 360 CMR 10.000; or any filter backwash which causes or contributes to a violation of 360 CMR 10.021 through 10.025.
- (20) Any trucked or hauled pollutants except at discharge points designated by the Authority in a permit issued by the Authority for the discharge.
- (21) Wastes or Wastewater from outside the Authority Sewerage District, unless the Wastes or Wastewater is discharged with the Authority's approval and pursuant to the Authority policy for sewer connections serving property partially located in a non-Authority community or for requests for sewer service to locations outside MWRA's sewer service area including, where necessary, a general or special law authorizing the discharge from a location outside the MWRA sewer service area.
- (22) Oxygen-demanding pollutants (BOD, *etc.*), released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause Interference with the POTW.

10.024: Specific Discharge Limitations/Local Limits

- (1) Any discharge of the following materials is prohibited:

10.024: continued

- (a) Into the Metropolitan Sewerage Service Area:
  - 1. Mercury (enforced at 0.001 mg/l);
  - 2. Polychlorinated Biphenyls (PCBs);
  - 3. Pesticides, unless the Authority determines upon request that the substance is acceptable for Discharge to the Sanitary Sewer under the criteria for exclusion or exemption in 40 CFR Parts 152 and 455, or that the substance is otherwise acceptable to Discharge, and that the substance would not otherwise violate 360 CMR 10.021 through 310 CMR 10.024; and
  - 4. Hexachlorobutadiene.
- (b) Into the Clinton Sewerage Service Area:
  - 1. Mercury (enforced at 0.001 mg/l);
  - 2. Polychlorinated Biphenyls (PCBs);
  - 3. Pesticides, unless the Authority determines upon request that the substance is acceptable for discharge to the sanitary sewer under the criteria for exclusion or exemption in 40 CFR Parts 152 and 455, or that the substance is otherwise acceptable to discharge, and that the substance would not otherwise violate 360 CMR 10.021 through 310 CMR 10.024;
  - 4. Hexachlorobutadiene; and
  - 5. Substances listed in 360 CMR 10.000: *Appendix C*.

(2) Any discharge of the following materials shall not exceed the daily maximum limit for that material:

- (a) Into the Metropolitan Sewerage Service Area:

<u>Material</u>	<u>Daily Maximum Limit (mg/l)</u>
Acrolein	0.15
Antimony (total)	10.0
Arsenic (total)	0.5
Benzene	0.3
Cadmium (total)	0.1
Chromium (hexavalent)	0.5
Chromium (total)	1.0
Copper (total)	1.0
Cyanide (total)	0.5
Formaldehyde	9.0
Lead (total)	0.2
Nickel (total)	1.0
Phenol	5.0
Selenium (total)	5.0
Silver (total)	2.0
Each Toxic Organic	1.0, unless elsewhere limited in 360 CMR 10.000 for the Metropolitan Sewerage Service Area
Total Toxic Organics	5.0
Vinyl Chloride	0.02
<del>Vinylidene Chloride</del> <u>1,1 Dichloroethylene</u>	0.3
Zinc (total)	1.0

10.024: continued

(b) Into the Clinton Sewerage Service Area:

<u>Material</u>	<u>Daily Maximum Limit mg/l</u>
Acrolein	0.5
Aluminum (total)	30.0
Arsenic (total)	0.5
Benzene	0.4
Bis(2-ethylhexyl)phthalate	0.2
Bromomethane	0.2
Cadmium (total)	0.5
Carbon disulfide	0.6
Carbon tetrachloride	0.1
Chromium (hexavalent)	1.0
Chromium (total)	5.0
Copper (total)	1.0
Cyanide (total)	1.0
Cyclohexane	0.6
1,1-Dichloroethylene	0.2
cis-1,3-Dichloropropene	0.6
trans-1,3-Dichloropropene	0.1
2,4-Dinitrotoluene	0.2
Formaldehyde	9.0
Hexachloroethane	0.2
Lead (total)	0.2
Nickel (total)	2.0
Nitrosamines	0.1
N-Nitrosodibutylamine	0.1
N-Nitrosodiethylamine	0.1
N-Nitrosodimethylamine	0.2
N-Nitrosodiphenylamine	0.5
Pentachlorobenzene	0.2
Selenium (total)	1.0
Silver (total)	1.0, except 2.0 for a Group Permit for Photo Processing and Printing Operations, and a Combined Permit
1,2,4,5-Tetrachlorobenzene	0.1
Trichlorofluoromethane	0.3
Each Toxic Organic	1.0, unless elsewhere limited in 360 CMR 10.000 for the Clinton Sewerage Service Area
Total Toxic Organics	5.0
Zinc	5.0

(3) The Daily Maximum Limit shall be determined on the basis of a Composite Sample, except a Grab Sample or Samples may be used in the following circumstances:

- for a batch discharge, when the Grab Sample would be fairly representative of the batch as a whole;
- for pollutants that are not amenable to composite sampling of an industrial wastestream by use of an automatic wastewater sampler, such as hexavalent chromium and volatile organics; or
- when the Authority determines it is not feasible or appropriate to take a Composite Sample, such as when the discharge is of too short duration for automatic composite sampling or the sampling location is inaccessible for an automatic wastewater sampler.



## 10.024: continued

A Composite Sample shall be taken at preselected intervals throughout the time in a day (or in a consecutive 24-hour period over two days when there is a continuous discharge of at least 24 hours over the course of the two days) during which the wastewater is discharged, except a shorter time period may be used if that shorter time period encompasses all or most of the wastewater discharge that day (or consecutive 24-hour period when there is a continuous discharge over the course of two days) or if a shorter period is authorized by the Authority. A batch discharge may have a Composite Sample taken throughout the discharge of the batch. A flow proportioned Composite Sample shall be taken, except a time interval Composite Sample may be taken when the Authority determines it is not feasible or appropriate to take a flow proportioned Composite Sample.

If a Grab Sample may appropriately be used, and more than one Grab Sample of a Discharge is taken during the day, the Daily Maximum Limit shall be measured by either the mathematical average of the analytical results of the Grab Samples or the analytical result of a composite of the Grab Samples.

10.025: Dilution Prohibition

No person shall achieve, or attempt to achieve, compliance with 360 CMR 10.000 by diluting a Discharge instead of using proper pretreatment. The increased use of process water in place of proper treatment shall be considered dilution prohibited by 360 CMR 10.000.

10.026: Compliance Measurement Location

All limitations imposed by 360 CMR 10.000 shall be applied at the end of the Pretreatment process line, at the end of the process line if there is no Pretreatment, or at or near the discharge location if there is no Pretreatment or process line. This shall not be construed to authorize a Person to introduce a pollutant into a wastestream after the compliance measurement location; rather, a sample taken at the compliance measurement location is intended to measure the pollutants in a discharge to the sewer before dilution of the wastestream.

Where it deems appropriate, the Authority may by permit or order impose alternative limits or compliance measurement locations to assure compliance with 360 CMR 10.000 and with federal, state, and local requirements. This may include use of the Combined Wastestream Formula when authorized by EPA regulations or use of a dilution factor when more than one stream is combined.

The Authority may require samples from individual process waste streams whether such waste streams are pretreated prior to discharge or not. The Authority may require that compliance measurement locations be clearly marked and/or photographed.

## SEPTAGE DISCHARGE PERMITS

10.027: Septage Origination Requirements

(1) No Person shall Discharge or cause or allow to be discharged, directly or indirectly, into the Authority's Metropolitan Sewerage Service Area any Septage that originated outside the Metropolitan Sewerage Service Area.

(2) No Person shall Discharge or cause or allow to be discharged, directly or indirectly, into the Authority's Clinton Sewerage Service Area any Septage that originated outside the Authority's Clinton Sewerage Service Area.

10.031: Requirement for Septage Discharge Permit and Permit Application and Issuance

(1) No Person who engages in the commercial pumping, transporting, or discharging of Septage shall discharge or cause or allow to be discharged, directly or indirectly, into the Authority Sewerage System any Septage, unless such discharge is made pursuant to a Septage Discharge Permit issued by the Authority to the commercial Septage hauler/discharger.

## 10.031: continued

(2) Every Person required to obtain a Septage Discharge Permit pursuant to 360 CMR 10.000 shall complete an application for the permit in the form required by the Authority and shall file the application with the Authority. An application form may be obtained from the Authority. The expense of completing and filing the application, and of the application fee, shall be borne by the applicant.

(3) The Authority shall evaluate the adequacy of the information supplied in each Septage Discharge Permit application. If the application contains insufficient, inaccurate, or incomplete information, the Authority may request that additional information be submitted within a specified period, or may take such other action as is authorized by law. If the applicant fails to supply information requested by the Authority, the Authority may deny the permit application. After review of the application and any additional information, the Authority may issue the permit, and may stipulate special conditions and terms for issuance of the permit.

(4) Any Person who files an application for a Septage Discharge Permit within 60 days after the effective date of 360 CMR 10.031 may discharge Septage without a permit until the Authority either issues the Person a permit or denies the permit application, so long as such discharge otherwise complies with 360 CMR 10.000.

10.032: Terms and Conditions of Septage Discharge Permits

A Septage Discharge Permit issued under 360 CMR 10.000 may require that the permittee:

- (1) Limit the rate, time, characteristic, origin, and discharge location of Septage;
- (2) Implement methods to measure and/or monitor its discharges;
- (3) Submit discharge reports to the Authority;
- (4) Maintain and submit to the Authority records documenting the amount, origin, discharge location, and characteristic of Septage and/or Industrial Waste pumped, transported, and discharged, whether within or outside the Authority Sewerage System District;
- (5) Pay special service charges or fees;
- (6) Comply with Authority Septage monitoring, tracking, manifest, and ticketing procedures; and
- (7) Take any other action deemed necessary or appropriate by the Authority to help ensure compliance with 360 CMR 10.000 and/or local, state, and federal law.

10.033: Permit Modifications

- (1) A permittee shall provide at least 30 days advance written notice to the Authority before it:
  - (a) pumps or discharges Septage in a Municipality not authorized for pumping or discharge by the permittee in its Septage Discharge Permit;
  - (b) transports Industrial Waste, if the Permittee's Septage Discharge Permit does not authorize the transport of Industrial Waste; and/or
  - (c) takes any other action that alters the information provided in its Septage Discharge Permit application or that would be inconsistent with a term or condition of its permit.
- (2) The Authority will review the information provided in the written notification and will inform the permittee if the proposed change requires submission of a new permit application. If the Authority requires a new permit application, the permittee shall file a new permit application and obtain a modified permit before taking the action described in the notice. If the Authority does not require a new permit application, the permittee may take the action described in the notice so long as that action does not violate 360 CMR 10.000 or the Person's Septage Discharge Permit.

10.034: Notice to Employees and Contractors

Every Person who holds a Septage Discharge Permit shall:

- (1) Inform its employees and contractors of the existence of both 360 CMR 10.000 and the Person's current Septage Discharge Permit by posting a copy of the Rules and Regulations and the current permit on a bulletin board at the facility where the Person maintains its operations, or in such other conspicuous location as the Authority may allow; and
- (2) Ensure that there is a copy of the Person's current Septage Discharge Permit in each vehicle used by the Person to pump, transport, or discharge Septage.

10.035: Municipal Permit Requirements

No Person shall discharge or cause or allow to be discharged, directly or indirectly, into the Authority's Sewerage System any Septage unless such discharge complies with the Municipal Permit issued by the Authority to the Municipality in which the discharge occurs.

10.036: Permit Requirement for Industrial Waste and/or Industrial Waste Mixed with Septage

No Person shall discharge or cause or allow to be discharged, directly or indirectly, into the Authority's Sewerage System any Industrial Waste and/or Industrial Waste mixed with Septage unless the person who generated the Industrial Waste has a Sewer Use Discharge Permit from the Authority allowing the discharge of the Industrial Waste and/or Industrial Waste mixed with Septage. If the Industrial Waste and/or Industrial Waste mixed with Septage is trucked or hauled prior to discharge, the permit issued by the Authority shall specifically authorize the hauling or trucking of the Waste and the location of the discharge.

MUNICIPAL PERMITS

10.041: Applicability

Every Municipality shall possess a valid Municipal Permit issued by the Authority covering all existing public and special discharges, Septage disposal sites, and direct connections to the Authority Sewerage System in that Municipality. A Municipality proposing a new or modified connection or the elimination of an existing connection to the Authority Sewerage System shall obtain an amendment to its Municipal Permit prior to constructing or eliminating such discharge or connection.

10.042: Municipal Permit Renewals

- (1) Within 60 days of the expiration of its Municipal Permit, each Municipality shall complete and file at its expense a Municipal Permit renewal form which may be obtained from the Authority.
- (2) Any Person discharging or proposing to discharge Wastewater directly to the Authority Sewerage System shall be identified by the Municipality in which the discharge is located.
- (3) Each Municipality shall: identify all Septage disposal sites within its boundaries and approved by the local board of health and/or DEP under 310 CMR 15.00: *The State Environmental Code, Title 5: Standard Requirements for the Siting, Construction, Inspection, Upgrade and Expansion of On-site Sewage Treatment and Disposal Systems* and for the Transport and Disposal of Septage; list all Septage haulers the Municipality has approved and authorized to discharge Septage at Septage disposal sites within its boundaries; and identify all control and monitoring measures employed at all Septage disposal sites within its boundaries.
- (4) The Authority shall evaluate the adequacy of data furnished in the application form. If insufficient data have been furnished, the Authority will notify the Municipality to provide additional data within a specified time. After reviewing the data, the Authority may issue the Municipal Permit. The Authority may stipulate special conditions and terms upon which the Municipal Permit will be issued.

10.043: Sewer Use Ordinances/User Charges

(1) The Authority may require each Municipality with Sewers connected to the Authority Sewerage System to have in effect a municipal sewer use Bylaw, ordinance, or regulation no less stringent than 360 CMR 10.000 and to have procedures and adequate resources for monitoring and enforcing compliance with such Bylaw or ordinance.

(2) The Authority may require each Municipal Permit application and permit renewal form to be accompanied by a certified copy of the Municipal Sewer use ordinance, Bylaw, or regulation in effect at the time of filing. Such ordinance, Bylaw, or regulation shall be approved by the Authority and appropriate state and federal agencies. Each Municipality shall give the Authority at least 60 days advance written notice of any new sewer use Bylaw or ordinance or change to an existing Bylaw or ordinance.

(3) The Authority may require each Municipality to adopt and administer Sewer use charges that conform to state and federal law and the Authority's regulations and policies on eliminating Infiltration and Inflow and on removal or Pretreatment of Industrial Wastes.

10.044: Terms and Conditions

Municipal Permits may contain the following terms and conditions:

(1) Limits on the constituents and volumes of discharges into the Authority Sewerage System or the Municipal Sewer.

(2) Installation of inspection, flow measurement, and sampling facilities, including access to such facilities.

(3) Specifications for monitoring programs which may include flow measurement, sampling, chemical and biological tests, and a reporting schedule.

(4) Submission of periodic discharge reports.

(5) Special service charges or fees.

(6) Schedules for carrying out and completing Inflow/Infiltration studies and, when required, schedules for carrying out Inflow/Infiltration reduction programs.

(7) A schedule for enacting or amending, as may be necessary, a Municipal Sewer use ordinance.

(8) A schedule for completion of an Industrial Waste survey by the Municipality and periodic identification to the Authority of industrial sewer users within the Municipality.

(9) Submission of user charge data as may be required by the Authority, DEP and EPA.

(10) Schedules for the implementation of municipal user charges.

(11) Requirements for regulation of Septage disposal in accordance with 360 CMR 10.000.

(12) Joint issuance of Sewer Use Discharge Permits with the Authority which require municipal official signatures in a timely manner.

(13) Requirements for reconstruction or repair or connections of any Municipal Sewer to the Authority Sewerage System.

(14) Requirements to comply with the municipal obligations of St. 1991, c. 41, including that the Municipality accept for its own use, and in accordance with any regulations and guidelines for land application and beneficial reuse of sludge developed by DEP and EPA, fertilizer pellets produced by the Boston Harbor residuals pelletizing plant that are not sold or otherwise marketed.

10.044: continued

(15) Other conditions as deemed appropriate by the Authority to ensure compliance with 360 CMR 10.000 and with applicable requirements of federal and state law and regulations.

10.045: Public Participation

The Authority may require each Municipality to establish a public participation program that includes annual publication in a newspaper serving the Municipality of a list of Users in its locality which during the previous 12 months were in Significant Noncompliance with applicable pretreatment requirements, and a summary of control actions taken by the Municipality or Authority. Such list may be provided to the Municipality by the Authority on an annual basis.

10.046: General Responsibilities

Every Municipality shall be responsible for assuring that no discharge from any source originating within its jurisdiction shall be of a nature as to cause obstruction, damage, surcharging or any other impairment of the Authority Sewerage System.

10.047: Septage Controls

Every Municipality shall be responsible for assuring that any discharge of Septage to its Sewerage System complies with 360 CMR 10.000.

10.048: Assessments for Authority Extra Costs

Failure on the part of any Municipality to comply with any of 360 CMR 10.000, or with any permit or order issued hereunder, shall be sufficient cause for the levying and collecting by the Authority from such Municipality of such additional assessments as the Authority reasonably deems necessary to compensate it for any extra costs occasioned by such violation.

SEWER USE DISCHARGE PERMITS

10.051: Sewer Use Discharge Permit Requirements

(1) No Person shall discharge or cause or allow to be discharged, directly or indirectly, into the Authority Sewerage System, any Industrial Wastewater or other Industrial Waste, unless such discharge complies with a Sewer Use Discharge Permit or other written authorization or permit issued to the Person under 360 CMR 10.000, unless exempted by 360 CMR 10.000.

(2) No Person shall discharge or cause or allow to be discharged, directly or indirectly, into the Authority Sewerage System any Industrial Waste, or Industrial Waste mixed with Septage, that is hauled prior to discharge to the Authority Sewerage System unless the Person producing the Waste has a Sewer Use Discharge Permit, or other written authorization or permit authorizing the discharge or such discharge is exempted by 360 CMR 10.000. This includes Persons who discharge Industrial Waste into a septic or other holding tank whose contents are transported and discharged to the Authority Sewerage System.

(3) No Person whose operation within the Authority Sewerage District is subject to a National Categorical Pretreatment Standard shall operate without a Sewer Use Discharge Permit for the operation, regardless of whether the operation discharges to the Authority Sewerage System or not.

10.052: Permit Application and Issuance

(1) Every Person required to obtain a Sewer Use Discharge Permit pursuant to 360 CMR 10.000 shall complete a permit application in the form required by the Authority and shall file the application with the Authority and the Municipality in which the discharge occurs. An application form may be obtained from the Authority. The expense of completing and filing the application shall be borne by the applicant.

10.052: continued

(2) The Authority and the Municipality in which the permit applicant is located shall evaluate the adequacy of the information supplied in each Sewer Use Discharge Permit application. If the application contains insufficient, inaccurate, or incomplete information, the Authority may request that additional information be submitted within a specified period, or may take such other action as is authorized by law. If the applicant fails to supply information requested by the Authority, the Authority may deny the permit application. After review of the application and any additional information, the Authority and Municipality may issue the permit, and may stipulate special conditions and terms for issuance of the permit.

(3) If the Authority approves a Sewer Use Discharge Permit application, but the application has not yet been approved by the appropriate Municipality, the Authority may issue the applicant a Sewer Use Discharge Permit, which shall be withdrawn if the Municipality disapproves the application or Permit.

10.053: Terms and Conditions of Sewer Use Discharge Permits

A Sewer Use Discharge Permit issued under 360 CMR 10.000 may require that the permittee:

- (1) Limit the rate, time, and characteristic of its discharge;
- (2) Implement measures to regulate and/or equalize flow;
- (3) Install inspection, flow measurement, and sampling devices and/or facilities, and provide access to such devices and/or facilities;
- (4) Implement a monitoring program that may include measuring flow, conducting sampling, conducting chemical and biological testing, recording data, and submitting periodic reports;
- (5) Implement Pretreatment measures according to a specified schedule and submit periodic progress reports on implementation of the measures;
- (6) Comply with Best Management Practices that are described therein;
- (7) Submit discharge monitoring reports, and retain and submit hazardous waste manifests;
- (8) Submit reports required by EPA regulations at 40 CFR 403.12, including baseline monitoring reports, compliance schedule progress reports, final categorical compliance reports, periodic monitoring reports, and documentation of the use of required best management practices, if any;
- (9) Submit and implement a slug control plan, as required by EPA regulations at 40 CFR § 403.8(f)(2)(vi).
- (10) Pay service charges or fees;
- (11) Provide for the operation of Wastewater Pretreatment facilities by persons licensed according to state law, including 257 CMR 2.00: *Rules and Regulations for Certification of Operators of Wastewater Treatment Facilities*;
- (12) If a generator of Industrial Waste and/or Industrial Waste mixed with Septage that is pumped to a septic or other holding tank and then hauled and discharged within the Authority Sewerage District, identify the discharge location and hauler; and
- (13) Take any other action deemed necessary or appropriate by the Authority to ensure compliance with 360 CMR 10.000 and/or with local, state, and federal law including, but not limited to, regulations of EPA and DEP.

10.054: Terms and Conditions for Hauled and Discharged Industrial Waste

A Sewer Use Discharge Permit for a generator of Industrial Waste and/or Industrial Waste mixed with Septage that discharges to a septic or other holding tank and is then or later hauled and discharged to the Authority Sewerage System may contain the following conditions in addition to the conditions listed in 360 CMR 10.053:

- (1) A requirement that DEP approve the permittee's septic system;
- (2) A requirement that the permittee use only certain identified haulers to transport the waste to the Authority Sewerage System and certain identified locations for the discharge;
- (3) A schedule for sampling the waste to be discharged to the Authority Sewerage System and for submitting reports to the Authority describing the quantity and characteristic of the material to be discharged, and the date(s) that the material was picked up by the hauler; and
- (4) Any other requirement the Authority believes is necessary to ensure that the discharge complies with 360 CMR 10.000.

10.055: Permit Modifications

(1) A permittee shall provide at least 30 days advance written notification to the Authority before taking any action which may substantially change the volume or nature of its discharge, including a substantial change in the volume or character of pollutants in its discharge, from any compliance measurement location, or from any sewer connection. Such actions may include, but not be limited to, the following:

- (a) substantial expansion or contraction of the facility from which the discharge originates;
- (b) substantial increase or decrease in production;
- (c) modification of any process;
- (d) alteration of the Pretreatment system or the operation of the Pretreatment system;
- (e) discharge from a different or relocated sewer connection; or
- (f) any changes affecting the potential for a Slug Discharge.

(2) The Authority will review the information provided in the written notification and will inform the permittee if the proposed change requires submission of a new permit application. If the Authority requires a new permit application, the permittee shall file a new permit application and obtain a modified permit before taking the action described in the notice. If the Authority does not require a new permit application, the permittee may take the action described in the notice so long as that action does not violate the regulations or the Person's Sewer Use Discharge Permit.

10.056: Posting Requirements

A permittee shall:

- (1) inform its employees in its permitted facility of the existence of both 360 CMR 10.000 and the permittee's Sewer Use Discharge Permit, and shall post one copy of each on the facility's bulletin board or in such other conspicuous location as the Authority may allow;
- (2) post at the permitted facility a permanent notice that is clearly visible at all times which identifies:
  - (a) the individual(s) at the facility who is responsible for ensuring compliance with 360 CMR 10.000 and the permittee's Sewer Use Discharge Permit; and
  - (b) the individual(s) at the facility to be notified in the event of an Upset or other episode requiring notice to the Authority.
- (3) give a copy of its Sewer Use Discharge Permit to each employee working in its Pretreatment operations.

10.057: Terms and Conditions for a Discharge from a Water Treatment Plant Owned and Operated by a Municipality, or by a Water District Created by a Special or General Act of the Massachusetts Legislature

A Sewer Use Discharge Permit for a water treatment plant owned and operated by a municipality, or by a water district created by a special or general act of the Massachusetts Legislature, may authorize the discharge of Sludge and filter backwash directly or indirectly into the Authority Sewerage System. Prior to issuing such Permit, the Authority may require the Person requesting to make such discharge to submit a detailed hydraulic analysis of the Sewers involved to ensure that adequate capacities are available. If Combined Sewers are involved, or if a separate Sewer that is involved does not have adequate capacity to transport existing peak dry or wet weather flows, the analysis shall propose facilities the Person will use to prevent its Discharge from having an adverse impact on a Municipal Sewer or the Authority Sewerage System, including how the Person will control its Discharge so that its Discharge does not cause, contribute to, or prolong a combined sewer overflow event or a sewer surcharge.

Such Permit may contain the following conditions, in addition to the conditions listed in 360 CMR 10.053:

- (1) That the Person implement measures required by the Authority to prevent any adverse impact on a Municipal Sewer or the Authority Sewerage System, based upon the detailed hydraulic analysis of the Sewers involved, the facilities the Person proposed to use to control its discharge, and other information available to the Authority;
- (2) That the Person recycle or reuse its filter backwash to the maximum extent practicable without degrading water quality or causing health or safety problems; and
- (3) Any other requirement the Authority believes is necessary to ensure that the discharge complies with 360 CMR 10.000.

GROUP AND GENERAL PERMITS

10.061: Group Permit for Photo Processing and Printing Operations

- (1) No Person shall discharge or cause or allow to be discharged, directly or indirectly, into the Authority Sewerage System, any Industrial Waste required to be covered by the Group Permit for Photo Processing and Printing Operations, unless such Discharge complies with such Group Permit issued to the discharger. This includes Industrial Waste that is hauled for Discharge to a Sanitary Sewer within the Authority Sewerage District.
- (2) For purposes of 360 CMR 10.061, Photo Processing shall be defined as processing color and black and white prints and slides, including X-rays and microfilm.
- (3) For purposes of 360 CMR 10.061, Printing shall be defined as lithography using presensitized plates.
- (4) A Person doing Photo Processing or printing is eligible for and required to be covered by the Group Permit for Photo Processing and Printing Operations if its Discharge of Industrial Waste to a Sanitary Sewer in the Authority Sewerage District (or to a holding tank whose contents are hauled for Discharge to a Sanitary Sewer in the Authority Sewerage District) consists solely of the Photo Processing and/or Printing wastes it generates, and if it:
  - (a) Performs Photo processing and/or Printing in commercial space;
  - (b) Uses automated Photo Processing equipment;
  - (c) Uses a Standard Silver Recovery System for which the Authority has authorized operations and management practices; and
  - (d) Is not exempted from coverage by 360 CMR 10.061(5) or (6).
- (5) A Person is not required or eligible to be covered by the Group Permit for Photo Processing and Printing Operations, and does not require any other permit from the Authority, if its only industrial sewer discharge is from its Photo Processing and/or Printing operations and it:
  - (a) Performs Photo Processing and/or Printing only in a residence;



10.061: continued

- (b) Discharges X-ray wastes, and such discharges derive solely from the on-site activities of a dental office that is exempt from the Group Permit requirements in 360 CMR 10.065; or
- (c) Performs only hand tray processing.

(6) A Person is not eligible to be covered by the Group Permit for Photo Processing and Printing Operations, but requires a Sewer Use Discharge Permit or other applicable permit to discharge Industrial Waste to the Sewer, if it is not exempted from coverage by 360 CMR 10.061(5), and it:

- (a) Processes motion picture film;
- (b) Processes black and white slides or transparencies or positive microfilm using a reverse dichromate bleach processing solution;
- (c) Discharges Wastewater from screen printing, flexographic or gravure/rotogravure printing, plate developing using a petroleum based additive process, or engraving plate manufacture;
- (d) Discharges Wastewater from the manufacture or distribution of photographic or printing chemicals;
- (e) Discharges Wastewater from the recovery of materials from, or from the reprocessing or recycling of, Photo Processing or Printing wastes, except as part of its silver treatment of wastes generated from its own Photo Processing and Printing operations;
- (f) Discharges other Industrial Wastewater in addition to Photo Processing or Printing wastes;
- (g) Has a total industrial process sewer discharge that averages 25,000 gallons per day or more, or is notified by the Authority that it otherwise is a Significant Industrial User as defined in 360 CMR 10.004;
- (h) Discharges silver bearing wastes without a silver pretreatment system or uses a silver pretreatment system that is not a Standard Silver Recovery System;
- (i) Does not discharge its fixer, bleach fix, stabilizers, or functionally similar solutions containing silver bearing wastes to the sewer, unless it discharges an average of more than 55 gallons per month of spent fountain solution to the sewer; or
- (j) Does not or is unable to meet Authority discharge requirements, 360 CMR 10.021 through 10.025, by using a Standard Silver Recovery System and by following the operations and management practices required by the Group Permit for Photo Processing and Printing Operations, and upon notice from the Authority.

(7) A Person is eligible for and required to have the Combined Permit (360 CMR 10.064) rather than the Group Permit for Photo Processing and Printing Operations if:

- (a) its Photo Processing or Printing operations are eligible for the Group Permit; and
- (b) it has one or more other discharges or operations at its facility that make it ineligible for the Group Permit under 360 CMR 10.061(6)(a) through (f) and all those other discharges and operations are eligible for coverage by the General Permit (360 CMR 10.062).

(8) Before commencing a discharge required to be covered by the Group Permit, the Person that will be discharging shall file with the Authority a Notice of Intent to Discharge, on a form available from the Authority, and shall not begin discharging until it is issued the Group Permit from the Authority.

(9) A Person issued the Group Permit shall comply with the terms and conditions of the Group Permit. The Permit shall contain standard terms and conditions for all Persons it covers. Those terms and conditions shall describe which facilities it covers, required submissions, general conditions to be met, required operations and management practices, and record keeping requirements. It may include information on required monetary charges that must be paid, enforcement information, and other requirements and information that the Authority deems necessary or appropriate to ensure compliance with 360 CMR 10.000 and/or with local, state, and federal laws and regulations.

(10) Any new facility that will be covered by the Group Permit, or substantial change to an existing facility that is covered by the Group Permit, must include plumbing to assure that a representative sample of the Discharge of all Photo Processing and Printing wastes may be

taken at a safe and accessible location after treatment and prior to combining with any other streams.

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10.061: continued

(11) Unless specifically modified by the Group Permit, a Person issued a Group Permit shall comply with 360 CMR 10.000 and is subject to enforcement pursuant to 360 CMR 2.00: *Enforcement and Administrative Penalties*, and St. 1984, c. 372 and St. 1987, c. 307.

(12) A Person issued the Group Permit shall post a copy of the Group Permit on its applicable facility's bulletin board or such other conspicuous location as the Authority shall allow and shall post with the Group Permit the names of the individuals at the facility responsible for compliance with the Group Permit and the names of the individuals at the facility to be notified in the event of an Upset or other episode requiring notice to the Authority.

10.062: General Permit for Low Flow and Low Pollutant Dischargers

The General Permit for Low Flow and Low Pollutant Dischargers authorizes Persons with facilities in the Authority Sewerage District with low industrial flows and no or low levels of regulated pollutants in their Industrial Wastewater to Discharge Industrial Wastewater from those facilities to the Authority sewer system, subject to the requirements of the General Permit, 360 CMR 10.062, and 360 CMR 10.000. A Person with a facility covered by the General Permit is responsible for the discharge from the facility and for compliance with the requirements of the General Permit and 360 CMR 10.000.

(1) Permit Eligibility.

(a) A Person is eligible for and must be covered by the General Permit for a facility that meets one of the following criteria:

1. It discharges less than an average of 25,000 gallons per day of wastewater to the sewer (excluding sanitary, noncontact cooling, and boiler blowdown wastewater) and its processes would result in a sewer discharge before pretreatment and dilution not containing a substance regulated by 360 CMR 10.022 through 10.024;
2. It discharges less than an average of 300 gallons per day of Wastewater to the Sewer (excluding sanitary, noncontact cooling, boiler blowdown, and incoming water treatment reject stream Wastewater) and does not require an active pretreatment system to meet the requirements of 360 CMR 10.021 through 10.025 except it may adjust the pH of its discharge with a chemical addition to meet Authority pH discharge requirements if it:
  - a. has an automatic alarm and chart recorder or electronic memory on its pH adjustment system; or
  - b. discharges in batches, treats each batch if necessary to meet pH discharge requirements, and tests each batch to confirm that it meets pH requirements); and
  - c. it does not otherwise have a reasonable potential to violate 360 CMR 10.021 through 10.025;
3. It is a Photo Processing or Printing operation that is not required or eligible to be covered by the Group Permit for Photo Processing and Printing Operations (360 CMR 10.061) or the Combined Permit (360 CMR 10.064) because:
  - a. its fixer, bleach-fix, stabilizers, and functionally similar solutions containing silver bearing wastes are hauled for disposal outside the Authority Sewerage District; and
  - b. it discharges only rinse water, developer, activator, water from occasional incidental cleaning of pre-wiped equipment with water and detergent, and less than 55 gallons per month of spent fountain solution from its Photo Processing and Printing operations; or
4. It is a Photo Processing or Printing operation whose discharge or discharges from that operation meets the requirements of 360 CMR 10.062(1)(a)3. and it has discharges from other operations that all meet the requirements of 360 CMR 10.062(1)(a)1. or 2.

(b) Notwithstanding 360 CMR 10.062(1)(a), a Person's facility is not eligible to be covered by the General Permit if:

1. It is subject to a Categorical Pretreatment Standard under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N;
2. It is otherwise notified by the Authority that it is a Significant Industrial User as defined in 360 CMR 10.004;

10.062: continued

3. It discharges an average of 300 gallons per day or more of Wastewater to the Sewer (excluding sanitary, non-contact cooling, boiler blowdown, and incoming water treatment reject stream Wastewater) and it adjusts the pH of its Discharge by chemical addition to meet Authority pH discharge requirements (360 CMR 10.023(6)); or
4. It is required to have Septage Discharge Permits (360 CMR 10.031), Group Permit for Photo Processing and Printing Operations (360 CMR 10.061), Combined Permit (360 CMR 10.064), Landfill Discharge Permit (360 CMR 10.071), Temporary Construction Site Dewatering Permit (360 CMR 10.091), or it is a Water Treatment Plant Owned and Operated by a Municipality or by a water district (360 CMR 10.057).

(2) Determining the Average Daily Discharge Amount of a Facility for Purposes of 360 CMR 10.062. To determine the average daily discharge amount of a facility, the amount of Wastewater discharged on each calendar day in an ordinary week shall be totaled and then divided by the number of days in the week during which a discharge occurred, except: if a facility discharges a small amount on a weekend day relative to its discharge on other days, that weekend day shall not be considered; and, if a facility discharges on fewer than five days per week, the amount of Wastewater discharged on each calendar day in an ordinary week shall be totaled and divided by five to determine the average discharge amount per day. The preceding 12 months of a facility's operations shall be used to determine a facility's ordinary week, except a more current time period shall be used if the facility's average amount of discharge changed within the past 12 months or began more recently.

(3) Applying for and Receiving the General Permit.

(a) A Person with a facility eligible for the General Permit must be issued the General Permit for the facility in order to discharge from the facility, except, with the approval of the Authority the Person may discharge under another permit issued by the Authority for the facility if it has applied or will apply for the General Permit for the facility. To apply for the General Permit, a Person must submit a completed Permit Application or Notice of Intent (NOI) for its facility to be covered by the General Permit, on the form prescribed by the Authority, to the Authority and, if required by the Permit Application or NOI, to the municipality into whose Sewer System the facility will discharge. The Authority may require additional information and may deny the application or NOI if the Authority considers the application or NOI to be incomplete or inadequate.

(b) A Person operating a facility under another Authority permit may submit a new and completed Permit Application or NOI to the Authority and, if required by the Permit Application or NOI, to the municipality into whose Sewer System the facility discharges, and request that its other permit be revoked and that its specified facility be covered by the General Permit.

(c) The Authority may require a Person to complete and file a Permit Application or NOI for the General Permit if it has reason to believe that the Person's facility, which has another Permit issued by the Authority, may be eligible for the General Permit.

(d) If the Person's facility is eligible to be covered by the General Permit, and meets all the other requirements of the Authority, the Authority will issue the General Permit to the Person for the facility.

(4) What May Be Discharged to the Authority Sewer System under the General Permit.

(a) A facility that is covered by the General Permit may discharge its Industrial Wastewater to the Authority Sewer System, subject to the requirements of 360 CMR 10.062 and the General Permit.

(b) A facility's discharge to the Authority Sewer System must comply with 360 CMR 10.000, including the regulations on Prohibited Wastes and Local Limits, 360 CMR 10.021 through 10.026.

(c) The only Industrial Waste that 360 CMR 10.062 and the General Permit authorize a facility to discharge to the Authority Sewer System is from the processes generating Wastewater as noted in the Permit Application or NOI submitted to request coverage by the General Permit. A facility covered by the General Permit shall not Discharge Wastewater that would make it ineligible for the General Permit.

10.062: continued

(5) Additional Requirements for Photo Processing and Printing Operations Covered by the General Permit.

(a) A Photo Processing or Printing facility covered by the General Permit may discharge rinse water, developer, activator, water from occasional incidental cleaning of pre-wiped equipment with water and detergent, and less than 55 gallons per month of spent fountain solution.

(b) A Photo Processing or Printing facility covered by the General Permit shall not discharge any of the following to the Authority Sewer System:

1. Treated or untreated fixer, bleach-fix, stabilizers, and functionally similar solutions containing silver bearing wastes;
2. Ink;
3. Chromium based cleaner;
4. Press cleaning solvent; or
5. More than 55 gallons of spent fountain solution in any month.

(c) A Photo Processing or Printing facility covered by the General Permit shall:

1. Have, for employee use, written disposal procedures describing proper methods to dispose of Photo Processing and Printing wastes;
2. Properly label and handle all Photo Processing and Printing wastes;
3. Not use chromium based film processor cleaning solutions; and
4. Post signs near all sinks and drains in the work area indicating that sewer disposal of silver bearing wastes is prohibited. Printing facility signs must also indicate that sewer disposal of press cleaning solvents and inks is prohibited.

(d) A printing facility covered by the General Permit may clean its plates, blankets, press fountains, and rollers in a sink with water and detergents. Before doing so, it must pre-clean the equipment with industrial wipers (rags) to minimize the amount of inks and other products that will be washed off the equipment and enter the sewer. It may not use solvents in a sink connected to the Sewer.

(6) Additional Requirements for Laboratories Covered by the General Permit. A laboratory covered by the General Permit shall have and implement a written laboratory chemicals management plan to control the discharge of regulated materials to the Sewer System. Regulated materials are those that contain pollutants regulated by the Authority at 360 CMR 10.021 through 10.024. At a minimum, the plan shall include procedures to:

- (a) Ensure that regulated materials do not spill or leak into the Sewer System;
- (b) Eliminate or minimize the disposal of regulated materials to the Sewer System so that Authority discharge limits are met;
- (c) Properly handle, store, collect, and dispose of laboratory chemicals and maintain disposal manifests;
- (d) Train laboratory employees in proper laboratory chemical usage and disposal; and
- (e) Ensure that the laboratory chemical management plan is followed by, among other measures, posting appropriate notices of proper chemicals usage and disposal practices at sinks where laboratory chemicals are used.

(7) Additional Requirements for Facilities Required to Have Grease Traps and Covered by the General Permit. A facility covered by the General Permit that is required by Massachusetts law or regulation to have a grease trap or grease interceptor for food related grease or oil (*see* 360 CMR 10.017, 310 CMR 15.230: *Pretreatment Units - Grease Traps* and 248 CMR 10.00: *Uniform State Plumbing Code*) shall:

- (a) Inspect its grease traps and interceptors at least monthly; and
- (b) Have its grease traps and interceptors cleaned, with their contents hauled for disposal, whenever the level of grease is at least 25% of the effective depth of the trap, or at least every three months, whichever is sooner.

(8) Required Notices to the Authority. In addition to the notices otherwise required by 360 CMR 10.000, a Person with the General Permit must notify the Authority in writing at least 30 days before it closes or moves a facility covered by the General Permit, changes its facility's operations such that the discharge will change so that the facility may no longer be eligible for the General Permit, or makes any other substantial change in the volume or character of its facility's discharge.

10.062: continued

(9) Change in Volume or Character of Discharge. If a change in the volume or character of a facility's discharge will make it ineligible for coverage by the General Permit, the Person must obtain the applicable Authority permit for the facility before beginning the changed discharge. The Authority may require a Person to complete and file a Permit Application or NOI if it has reason to believe that the Person's facility may no longer be eligible for the General Permit or the Person has made substantial changes to its facility since receiving the General Permit.

(10) Record Keeping Requirements. A Person with the General Permit for a facility must keep for at least five years all hazardous waste manifests and records of any Photo Processing and Printing wastes and grease trap wastes it had hauled from its facility and make a copy of the documents available to the Authority upon request.

10.063: Group Permit for Food Processing

(1) No Person shall discharge or cause or allow to be discharged, directly or indirectly, into the Authority Sewerage System, any Industrial Waste required to be covered by the Group Permit for Food Processing, unless such discharge complies with such Group Permit issued to the discharger. This includes Industrial Waste that is hauled for discharge to a Sanitary Sewer System within the Authority Sewerage District.

(2) For purposes of 360 CMR 10.063, Food Processing shall be defined as preparing food for wholesale commercial distribution and sale including, without being limited to: operations which involve washing, cooking, baking, or curing food or food products including, but not limited to: beverage making and bottling; candy making; cereal making; condiment making; dairy product processing; fish cutting, processing and cooking; frozen food making; jams, jellies and fruit filling making; meat processing and packing; nut and nut product processing; pasta making; prepared food making; and vegetable and other produce washing and processing. Food Processing does not include: preparing meals or snacks for immediate consumption on the premises, or for take-out; transport and distribution operations which consist solely of packaging for transport and distribution without generating wastewater from the packaging process; and warehousing or other storage solely for transport, distribution, or sale.

(3) A Person performing Food Processing is covered by the Group Permit for Food Processing if its discharge of Industrial Waste to a Sanitary Sewer in the Authority Sewerage District (or to a holding tank whose contents are hauled for discharge to a Sanitary Sewer in the Authority Sewerage District) consists solely of the Food Processing wastes it generates, and if it is not exempted from coverage by 360 CMR 10.063(4) or (5).

(4) A person is not required to be covered by the Group Permit for Food Processing, if its only industrial sewer discharge is from its Food Processing operations and it applies for and is covered by 360 CMR 10.062.

(5) Notwithstanding 360 CMR 10.063(3), a Person discharging Food Processing waste to the Sewer is not covered by the Group Permit for Food Processing, but requires a Sewer Use Discharge Permit to discharge Industrial Waste to the Sewer if it is not exempted by 360 CMR 10.007(3) and it:

- (a) Discharges other Industrial Wastewater in addition to Food Processing wastes;
- (b) Has a total industrial wastewater sewer discharge that averages 25,000 gallons per day or more, or is notified by the Authority that it otherwise is a Significant Industrial User as defined in 360 CMR 10.004;
- (c) Uses a pretreatment system other than passive pretreatment (*e.g.*, a settling tank, grease trap, or a limestone chip tank); or
- (d) Does not or is unable to meet Authority discharge requirements, 360 CMR 10.021 through 10.026, by following the operations and management practices required by the Group Permit for Food Processing, and upon notice from the Authority.

(6) A person who would be covered by the Group Permit for Food Processing, but has other discharges that are subject to a General Permit, shall be covered by and hold the Group Permit

for Food Processing and be subject to the requirements of the General Permit for its other discharges.

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10.063: continued

(7) Before commencing a Discharge required to be covered by the Group Permit, the Person that will be discharging shall file with the Authority and the appropriate Municipality a Notice of Intent to Discharge, on a form available from the Authority, and shall not begin discharging until it is issued the Group Permit by the Authority and Municipality. A Person with a Sewer Use Discharge Permit on the effective date of the Group Permit for Food Processing that is required to be covered by the Group Permit for Food Processing shall submit a Notice of Intent to Discharge to the Authority and the appropriate Municipality within 90 days of the effective date of 360 CMR 10.063, and may continue to discharge subject to its Sewer Use Discharge Permit until the Authority and Municipality act on the Notice of Intent.

(8) A Person issued the Group Permit shall comply with the terms and conditions of the Group Permit. The Permit shall contain standard terms and conditions for all Persons it covers. Those terms and conditions shall describe which facilities it covers, required submissions, general conditions to be met, required operations and management practices, and recordkeeping requirements. It may include information on required monetary charges that must be paid, enforcement information, and other requirements and information that the Authority deems necessary or appropriate to ensure compliance with 360 CMR 10.000 and/or with local, state, and federal laws and regulations.

(9) Any new facility that will be covered by the Group Permit, or substantial change to an existing facility that is covered by the Group Permit, must include plumbing to assure that a representative sample of the discharge of all Food Processing wastes may be taken at a safe and accessible location at the end of the pretreatment process line, or at the end of the process line if there is no pretreatment, and prior to combining with any other streams.

(10) Unless specifically modified by the Group Permit, a Person issued a Group Permit shall comply with 360 CMR 10.000 and is subject to enforcement pursuant to 360 CMR 2.00: *Enforcement and Administrative Penalties*, and St. 1984, c. 372 and St. 1987, c. 307.

(11) A Person issued the Group Permit shall post a copy of the Group Permit on its applicable facility's bulletin board or such other conspicuous location as the Authority shall allow and shall post with the Group Permit the names of the individuals at the facility responsible for compliance with the Group Permit and names of the individuals at the facility to be notified in the event of an Upset or other episode requiring notice to the Authority.

(12) The Group Permit for Food Processing does not preclude the Authority from requiring specific compliance measures at individual facilities including, but not limited to, installation of grease traps at specific location and more frequent maintenance. The Authority may determine that a facility requiring more frequent grease trap maintenance requires an individual Sewer Use Discharge Permit.

(13) The Authority may approve maintenance schedules, compliance schedules, or both, for specific facilities including, but not limited to, schedules that modify the grease trap maintenance requirements of the Group Permit. A Person seeking such a modification must submit a request in writing with supporting documentation. Modifications that allow longer intervals in the grease trap maintenance schedule shall not be approved, unless the Authority and the appropriate Municipality are satisfied that such modification will not contribute to nuisance conditions, or an adverse impact on the Sewerage System, Receiving Waters, or the Authority's Wastewater Residuals program. Approval for such modification is not effective until issued by the Authority in writing.

(14) The Group Permit for Food Processing does not preclude the Municipality from imposing more stringent requirements.



10.064: Combined Permit

- (1) Permit Overview and Coverage. The Combined Permit is intended to cover a Person who would be required to be covered by a Group Permit, except that the Person has one or more other processes or discharges that make it ineligible for coverage by that Group Permit and all those other processes and discharges are eligible to be covered by the General Permit for Low Flow and Low Pollutant Dischargers, 360 CMR 10.062. The Combined Permit includes:
- (a) the equivalent of the conditions and requirements of the Group Permit discharges that are eligible for that Group Permit;
  - (b) the equivalent of the conditions and requirements of the General Permit for Low Flow and Low Pollutant Dischargers for the discharges that are eligible for the General Permit; and
  - (c) other conditions considered appropriate by the Authority.
- (2) Combined Permit Required. A Person with a facility eligible for coverage by the Combined Permit must apply for and receive the Combined Permit in order to discharge from the facility. Such Person is not eligible for a Group Permit set forth in 360 CMR 10.061, 10.063, or 10.065, the General Permit set forth in 360 CMR 10.062, or the Sewer Use Discharge Permit set forth in 360 CMR 10.051 through 10.057 for such facility.
- (3) Application for the Combined Permit. Before beginning a Discharge for which the Combined Permit is required, the Person who will Discharge shall file with the Authority a Notice of Intent to Discharge (NOI) or other application as required by the Authority, on a form available from the Authority, and shall not begin discharging until it is issued the Combined Permit by the Authority. The Authority may:
- (a) require a Person to renew its Combined Permit by filing a new application or NOI;
  - (b) require additional information relating to the application or NOI; and
  - (c) deny an application or NOI for a permit for an incomplete or inadequate application or NOI.
- (4) Permit and Regulatory Compliance. A Person who must apply for and receive the Combined Permit for a facility shall not Discharge or cause or allow to be discharged, directly or indirectly, into the Authority Sewerage System, any Industrial Waste from the facility, unless such Discharge complies with the Combined Permit issued to the Person. Unless specifically modified by the Combined Permit, a Person issued the Combined Permit shall comply with 360 CMR 10.000 and is subject to enforcement pursuant to 360 CMR 2.00: *Enforcement and Administrative Penalties*, and St. 1984, c. 372 and St. 1987, c. 307.
- (5) Sampling Location. Any new facility that will be covered by the Combined Permit, or any substantial change to an existing facility that is covered by the Combined Permit, must include plumbing to assure that a representative sample of the discharge from all operations may be taken at a safe and accessible location after treatment and before combining with any other streams.
- (6) Posting of Permit. A Person issued the Combined Permit shall post a copy of the Combined Permit on a bulletin board in its facility or such other conspicuous location as the Authority shall allow and shall post with the Combined Permit the name of the individuals at the facility responsible for compliance with the Combined Permit and the names of the individuals at the facility to be notified in the event of an Upset or other event requiring notice to the Authority.

10.065: Group Permit for Dental Discharges

- (1) No Person shall Discharge into the Authority Sewerage System, any Industrial Waste required to be covered by the Group Permit for Dental Discharges, unless such Discharge complies with such Group Permit issued to the discharger. This includes Industrial Waste that is hauled for Discharge to a Sanitary Sewer within the Authority Sewerage District.
- (2) For purposes of 360 CMR 10.065, Dental Discharges shall be defined as discharges from a Facility where the practice of dentistry is performed including, but not limited to, institutions, permanent or temporary offices, clinics, home offices, and facilities owned and operated by Federal, state, or local governments, that discharges to a Sanitary Sewer, or to a septic system

or holding tank whose contents are hauled for Discharge to a Sanitary Sewer in the Authority Sewerage District.

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10.065: continued

- (3) A Person performing dental operations is covered by the Group Permit for Dental Discharges if its Discharge of Industrial Waste to a Sanitary Sewer in the Authority Sewerage District consists solely of the dental operations wastes it generates, and if it:
  - (a) Performs dental operations in commercial space;
  - (b) Uses an Amalgam Separator, which meets the criteria set forth in Group Permit for Dental Discharges; and
  - (c) Is not exempted from coverage by 360 CMR 10.065(4) or (5).
- (4) A Person is not required or eligible to be covered by the Group Permit for Dental Discharges, and does not require any other permit from the Authority, if its only Discharge is from its dental operations and it is:
  - (a) a facility that does not generate or Discharge wastewater from amalgam-related processes (*e.g.*, facilities limited to oral and maxillofacial surgery, or orthodontic, periodontic and/or oral medicine practices) or a facility that uses mercury-free filling material and does not place or remove amalgam;
  - (b) a facility that does not discharge any amalgam process wastewater to a POTW, such as dental dischargers that collect all dental amalgam process wastewater for transfer to a Centralized Waste Treatment Facility as defined in 40 CFR Part 437; or
  - (c) a facility that does not place dental amalgam, and does not remove amalgam except in limited emergency or unplanned, unanticipated circumstances, and that certifies such to the MWRA as required in 40 CFR § 441.50 is exempt from any further requirements of this part.
- (5) Notwithstanding 360 CMR 10.065(3), a Person discharging dental operations waste to the sewer is not covered by the Group Permit for Dental Discharges, but requires a Sewer Use Discharge Permit to discharge industrial waste to the sewer if it is not exempted by 360 CMR 10.007(3) and it:
  - (a) Discharges other Industrial Wastewater in addition to dental operations wastes
  - (b) Has a total Industrial Wastewater Sewer Discharge that averages 25,000 gallons per day or more, or is notified by the Authority that it otherwise is a Significant Industrial User as defined in 360 CMR 10.004;
  - (c) Uses a pretreatment system other than an amalgam separator or passive pretreatment (*e.g.*, a settling tank, grease trap, or a limestone chip tank); or
  - (d) Does not or is unable to meet Authority Discharge requirements, 360 CMR 10.021 through 10.026, by following the operations and management practices required by the Group Permit for Dental Discharges, and upon notice from the Authority.
- (6) A Person is eligible for and required to have the Combined Permit (360 CMR 10.064) rather than the Group Permit for Dental Discharges if:
  - (a) its Dental Discharges are eligible for the Group Permit; and
  - (b) it has one or more other discharges or operations at its facility that make it ineligible for the Group Permit under 360 CMR 10.065(5)(a) through (d) and all those other discharges and operations are eligible for coverage by the General Permit (360 CMR 10.062).
- (7) Before commencing a new Discharge required to be covered by the Group Permit for Dental Discharges, the Person that will be discharging shall file with the Authority and the appropriate Municipality a Notice of Intent to Discharge, on a form available from the Authority, and shall not begin discharging until it is issued the Group Permit for Dental Discharges by the Authority and Municipality. A Person with a Sewer Use Discharge Permit on the effective date of the Group Permit for Dental Discharges that is required to be covered by the Group Permit for Dental Discharges shall submit a Notice of Intent to Discharge to the Authority and the appropriate Municipality within 90 days of the effective date of 360 CMR 10.065, and may continue to discharge subject to its Sewer Use Discharge Permit until the Authority and Municipality act on the Notice of Intent.

## 10.065: continued

(8) A Person issued the Group Permit shall comply with the terms and conditions of the Group Permit. Unless otherwise specified in 360 CMR 10.000, the Group Permit shall contain terms and conditions to comply with the requirements set forth 40 CFR Part 441, and 310 CMR 73.00: *Amalgam Wastewater and Recycling Regulations for Dental Facilities*, whichever requirements are more stringent. The Permit shall contain standard terms and conditions for all Persons it covers. Those terms and conditions shall describe which facilities it covers, required submissions, general conditions to be met, required operations and management practices, and recordkeeping requirements. It may include information on required monetary charges that must be paid, enforcement information, and other requirements and information that the Authority deems necessary or appropriate to ensure compliance with 360 CMR 10.000 and/or with local, state, and federal laws and regulations.

(9) Any new facility that will be covered by the Group Permit, or substantial change to an existing facility that is covered by the Group Permit, must include plumbing to assure that a representative sample of the discharge of all dental operations wastes may be taken at a safe and accessible location at the end of the pretreatment process line, or at the end of the process line if there is no pretreatment, and prior to combining with any other streams.

(10) Unless specifically modified by the Group Permit, a Person issued a Group Permit shall comply with 360 CMR 10.000 and is subject to enforcement pursuant to 360 CMR 2.00: *Enforcement and Administrative Penalties*, and St. 1984, c. 372 and St. 1987, c. 307.

(11) A Person issued the Group Permit shall post a copy of the Group Permit on its applicable facility's bulletin board or such other conspicuous location as the Authority shall allow and shall post with the Group Permit the names of the individuals at the facility responsible for compliance with the Group Permit and names of the individuals at the facility to be notified in the event of an Upset or other episode requiring notice to the Authority.

(12) The Group Permit for Dental Discharges does not preclude the Authority from requiring specific compliance measures at individual facilities including, but not limited to, installation of amalgam separators at specific locations and more frequent maintenance. The Authority may determine that a facility requiring more frequent amalgam separator maintenance requires an individual Sewer Use Discharge Permit.

#### LANDFILL DISCHARGE PERMITS

##### 10.071: Landfill Discharge Permit Requirements

(1) No Person who is the owner and/or operator of a Landfill, or who is otherwise responsible for the Landfill, shall discharge or cause or allow to be discharged, directly or indirectly, into the Authority's Sewerage System any Landfill Leachate, unless the discharge complies with a Landfill Discharge Permit issued by the Authority for the Landfill.

(2) The Authority shall not issue a Landfill Discharge Permit, unless the Landfill has all necessary approvals from DEP and the local Board of Health, and the Municipality in which the Landfill is located has certified that the local conveyance system has sufficient capacity to meet peak dry weather flow and the reasonable future needs of the Municipality. In granting or denying a Landfill Discharge Permit, the Authority may determine whether the Authority conveyance system has sufficient capacity to meet peak dry weather flow and the reasonable future needs of serviced communities.

##### 10.072: Permit Application and Issuance

(1) Every Person required to obtain a Landfill Discharge Permit shall complete and file a permit application in the form required by the Authority. An application form may be obtained from the Authority. The expense of completing and filing the application shall be borne by the applicant.

10.072: continued

(2) The Authority shall evaluate the adequacy of the information supplied in each Landfill Discharge Permit application. If the application contains insufficient, inaccurate, or incomplete information, the Authority may request that additional information be submitted within a specified period, or may take such other action as is authorized by law. If the applicant fails to supply the information requested by the Authority, the Authority may deny the permit application. After review of the application and any additional information, the Authority may issue the permit and may stipulate special conditions and terms for issuance of the permit.

(3) The applicant for a Landfill Discharge Permit shall submit to the Authority with the application a plan identifying any proposed connection or discharge point to the Municipal Sewerage System. The Authority shall not approve a direct discharge to the Authority's Sewerage System.

10.073: Terms and Conditions of Landfill Discharge Permits

A Landfill Discharge Permit issued under 360 CMR 10.000 may require that the permittee:

- (1) Limit the rate, time, and characteristic of its discharge, including that the leachate be reintroduced into the Landfill and only discharged when necessary due to a storm;
- (2) Implement measures to regulate and/or equalize flow;
- (3) Install inspection, flow measurement, and sampling devices and/or facilities, and provide access to such devices and/or facilities;
- (4) Implement a monitoring program that may include measuring flow, conducting sampling, conducting chemical and biological testing, recording data, and submitting periodic reports;
- (5) Implement Pretreatment measures according to a specified schedule and submit periodic progress reports on implementation of the measures;
- (6) Comply with Best Management Practices that are described therein;
- (7) Submit discharge monitoring reports;
- (8) Pay service charges or fees;
- (9) Provide that its Wastewater Pretreatment facilities be operated by a person licensed according to state law, including 257 CMR 2.00: *Rules and Regulations for Certification of Operators of Wastewater Treatment Facilities*;
- (10) Prohibit the discharge to the Sewer of groundwater or contaminated groundwater;
- (11) Obtain approval from DEP and/or any other appropriate regulatory authority for operating plans, closure plans, leachate collection and/or treatment plans, and any other relevant plans;
- (12) Obtain certification from DEP that leachate from the Solid Waste Landfill is not subject to regulation as a hazardous waste;
- (13) Accept Wastewater Residuals from the Authority's Sewage Treatment Facilities;
- (14) Ensure that the Landfill is free from Infiltration; and/or
- (15) Take any other action deemed necessary or appropriate by the Authority to ensure compliance with 360 CMR 10.000 and/or with local, state or federal law.

10.074: Permit Modifications

(1) A permittee shall provide written notification to the Authority at least 30 days prior to taking any action which will change the volume or nature of the discharge including, but not limited to, the following actions:

- (a) expansion of the Landfill; or
- (b) alteration to the Pretreatment system or the operation of the Pretreatment system.

(2) The Authority will review each notification and will thereafter inform the permittee whether the proposed change requires modification of the Permit. If Permit modification is necessary, the permittee shall file an application for a Permit modification as required by the Authority, and shall not change or alter its Discharge, unless and until the Authority approves the Permit modification.

DIRECT CONNECTION PERMITS

10.081: Applicability

(1) The use of the Authority's interceptor Sewer lines throughout the Authority's Sewerage District shall be controlled by the Authority. No Person without authorization from the Authority shall uncover, make any connection with or opening into, modify, or disturb in any way the Authority's Sewerage System, including the Sewer manholes.

(2) A Person wishing to make a direct connection to the Authority's Sewerage System or to modify, reconnect, or abandon an existing connection, shall first obtain a Permit from the Authority for such connection, modification, reconnection, or abandonment.

10.082: Permit Applications

(1) A Person wishing to make a direct connection to the Authority's Sewerage System, or to modify, reconnect, or abandon an existing connection, shall file an application for a Direct Connection Permit with the Authority on an application form required by the Authority. An application to make a direct connection shall be accompanied by siting plans demonstrating that the direct connection is required by special engineering or topographical considerations, as well as by construction plans and specifications stamped and signed by a professional engineer registered in Massachusetts. An applicant shall supplement its application with such additional information as the Authority may require. An application must be accompanied by a minimum \$300 permit application charge (minimum charge calculated at six hours at \$50.00/hour). The Authority will waive the charge for an application of a municipality. The Authority may waive the charge in instances in which the connection, modification, reconnection, or abandonment will benefit or improve the Authority's Sewer System, or in other circumstances in which the Authority determines that a waiver is in the public interest. In the event that the Authority's review of the application requires the expenditure of more than six hours, the applicant will be charged for all additional hours at the rate of \$50.00/hour, which charge will be payable at the same time as the \$200 permit issuance charge is due as provided in 360 CMR 10.083.

(2) Before filing an application with the Authority, the Person shall submit the completed application to the municipality in which the connection, modification, reconnection, or abandonment will occur. The municipality shall have 60 days to review and comment on the application. The application filed with the Authority shall be accompanied by any comments and recommendations made by the municipality. The municipality shall provide reasons for any recommendation.

10.083: Permit Issuance

After review of the application and any additional information, the Authority may issue the permit and may stipulate special conditions and terms for issuance of the permit. If the Authority will issue the permit, the Person shall pay a \$200 permit issuance charge to the Authority for the permit. The Authority will waive the charge for a permit of a municipality and may waive the charge if it has requested the connection, modification, reconnection, or abandonment. Within ten days after receiving the permit, the Person shall provide a copy of the permit to the municipality in which the connection will occur. The Authority will not issue the permit if it determines that there are no special engineering or topographical considerations requiring the direct connection or if it determines that the connection, modification, reconnection, or abandonment will have an actual or potential adverse impact on the Authority's Sewerage System or the Authority's responsibilities.

10.084: Costs and Liability

All costs and expenses incident to the application, design, installation, connection, modification, reconnection, abandonment, and maintenance of a direct connection shall be borne by the owner of the connection. The owner shall indemnify the Authority for any loss, damage, or liability directly or indirectly caused or contributed to by the design, installation, connection, modification, reconnection, abandonment, maintenance, or use of the connection.

## TEMPORARY CONSTRUCTION SITE DEWATERING PERMITS

10.091: Applicability

No person shall Discharge, or cause to be discharged, directly or indirectly, into the Authority Sewerage System, any Construction Site Dewatering unless such Discharge conforms to a Temporary Construction Site Dewatering Permit issued jointly by the Authority and the Municipality where the Discharge occurs to the Person for the Discharge. Such permit may be issued only for a construction site:

- (a) in a combined sewer municipality;
- (b) where there is not reasonable access from the site to a separate storm sewer or to surface water; and
- (c) where the amount to be discharged will not have an actual or potential adverse impact on the Sewer System, the treatment plant, quality of the receiving water, or the Authority's ability to meet its obligations under any law, regulation, permit, or order. The duration of a permit shall not exceed the time necessary to keep a site dewatered during construction; it shall not be issued for the purpose of groundwater remediation or permanent site dewatering.

10.092: Permit Application and Issuance

(1) Every Person required to obtain a Temporary Construction Site Dewatering Permit shall complete and file a permit application in the form required by the Authority. An application form may be obtained from the Authority. A permit application shall identify both the site owner and general contractor, who shall be identified on the permit as joint permittees. An applicant may be required to submit with the application copies of all documents submitted to DEP concerning the site. The expense of completing the application shall be borne by the applicant.

(2) The Authority and Municipality shall evaluate the adequacy of the information supplied in each application. If the application contains insufficient, inaccurate, or incomplete information, the Authority may request that additional information be submitted within a specified period, or may take such other action as is authorized by law. If the applicant fails to supply the information requested by the Authority, the Authority may deny the permit application. After review of the application and any additional information, the Authority and Municipality may issue the permit and may stipulate special conditions and terms for issuance of the permit.

(3) If the Authority approves a Temporary Construction Site Dewatering Permit application, but the application has not yet been approved by the appropriate Municipality, the Authority

may issue the applicant a Temporary Construction Site Dewatering Permit, which shall be withdrawn if the Municipality disapproves the application or Permit.

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10.093: Terms and Conditions of Temporary Construction Site Dewatering Permits

A Temporary Construction Site Dewatering Permit issued under 360 CMR 10.093 may require that the permittee:

- (1) Limit the rate, time, and characteristic of its discharge;
- (2) Implement measures to regulate and/or equalize flow;
- (3) Install inspection, flow measurement, and sampling devices and/or facilities, and provide access to such devices and/or facilities;
- (4) Implement a monitoring program that may include measuring flow, conducting sampling, conducting chemical and biological testing, recording data, and submitting periodic reports;
- (5) Implement Pretreatment measures according to a specified schedule and submit periodic progress reports on implementation of the measures;
- (6) Comply with Best Management Practices that are described therein;
- (7) Submit discharge monitoring reports;
- (8) Pay service charges or fees;
- (9) Provide that its Wastewater Pretreatment facilities be operated by a person licensed according to state law, including 257 CMR 2.00: *Rules and Regulations for Certification of Operators of Wastewater Treatment Facilities*;
- (10) Prohibit the Discharge of contaminated groundwater;
- (11) Immediately cease discharging if the Discharge, alone or with other discharges, has an actual or potential adverse impact on the Authority Sewerage System, the operation of a combined sewer overflow, or the Authority's ability to comply with a law, regulation, permit, or order under which it operates; and
- (12) Take any other action deemed necessary or appropriate by the Authority to ensure compliance with 360 CMR 10.000 and/or with local, state or federal law.

10.094: Permit Modifications

- (1) A permittee shall provide written notification to the Authority at least 30 days prior to taking any action which will change the volume or nature of the Discharge.
- (2) The Authority will review each notification and will thereafter inform the permittee whether the proposed change requires modification of the Permit. If Permit modification is necessary, the permittee shall file an application for a Permit modification as required by the Authority, and shall not change or alter its Discharge, unless and until the Authority approves the Permit modification.

## INCENTIVE AND OTHER CHARGES

10.101: Permitting Charge

(1) Amount of Charge. Each holder of a Sewer Use Discharge Permit, Septage Discharge Permit, Landfill Discharge Permit, General Permit, Temporary Construction Site Dewatering Permit, Group Permit, or Combined Permit issued pursuant to 360 CMR 10.000 shall be assessed and shall pay an annual permitting charge per permit. The amount of the charge is:

~~(a) For Authority Fiscal Years 2012, 2013, 2014, 2015, 2016, 2017, 2018 and 2019:~~

<del>1. Category 1 SIU:</del>	<del>\$2,556</del>
<del>2. Category 1 non-SIU:</del>	<del>\$1,686</del>
<del>3. Category 2 SIU:</del>	<del>\$1,644</del>
<del>4. Category 2 non-SIU:</del>	<del>\$1,400</del>
<del>5. Category 3 SIU:</del>	<del>\$1,400</del>
<del>6. Category 3 non-SIU:</del>	<del>\$1,054</del>
<del>7. Category 4:</del>	<del>\$952</del>
<del>8. Category 6:</del>	<del>\$952</del>
<del>9. Category 10</del>	<del>\$244 (Once every five years)</del>
<del>10. Category 12:</del>	<del>\$3,704</del>
<del>11. Category C1</del>	<del>\$266</del>
<del>12. Category G1:</del>	<del>\$218, plus \$82 for the year the Authority receives the Notice of Intent to Discharge</del>
<del>13. Category G2:</del>	<del>\$184, plus \$82 for the year the Authority receives the Notice of Intent to Discharge</del>

(ab) For Authority Fiscal Year 2020:

1. Category 1 SIU:	\$2,660
2. Category 1 non-SIU:	\$1,754
3. Category 2 SIU:	\$1,710
4. Category 2 non-SIU:	\$1,456
5. Category 3 SIU:	\$1,456
6. Category 3 non-SIU:	\$1,098
7. Category 4:	\$992
8. Category 6:	\$992
9. Category 10:	\$100
10. Category 12:	\$3,854
11. Category C1:	\$278
12. Category G1:	\$228, plus \$86 for the year the Authority receives the Notice of Intent to Discharge
13. Category G2:	\$192, plus \$86 for the year the Authority receives the Notice of Intent to Discharge
14. Category D1:	\$192, plus \$86 for the year the Authority receives the Notice of Intent to Discharge

(be) For Authority Fiscal Year 2021:

1. Category 1 SIU:	\$2,740
2. Category 1 non-SIU:	\$1,808
3. Category 2 SIU:	\$1,762
4. Category 2 non-SIU:	\$1,500
5. Category 3 SIU:	\$1,500
6. Category 3 non-SIU:	\$1,132
7. Category 4:	\$1,022

10.101: continued

8. Category 6:	\$1,022
9. Category 10:	\$104
10. Category 12:	\$3,970
11. Category C1:	\$288
12. Category G1:	\$236, plus \$90 for the year the Authority receives the Notice of Intent to Discharge
13. Category G2:	\$198, plus \$90 for the year the Authority receives the Notice of Intent to Discharge
14. Category D1:	\$198, plus \$90 for the year the Authority receives the Notice of Intent to Discharge
<b>(cd) For Authority Fiscal Year 2022</b>	
1. Category 1 SIU:	\$2,824
2. Category 1 non-SIU:	\$1,864
3. Category 2 SIU:	\$1,816
4. Category 2 non-SIU:	\$1,546
5. Category 3 SIU:	\$1,546
6. Category 3 non-SIU:	\$1,166
7. Category 4:	\$1,054
8. Category 6:	\$1,054
9. Category 10:	\$106
10. Category 12:	\$4,090
11. Category C1:	\$298
12. Category G1:	\$244, plus \$94 for the year the Authority receives the Notice of Intent to Discharge
13. Category G2	\$204, plus \$94 for the year the Authority receives the Notice of Intent to Discharge
14. Category D1	\$204, plus \$94 for the year the Authority receives the Notice of Intent to Discharge
<b>(de) For Authority Fiscal Year 2023:</b>	
1. Category 1 SIU:	\$2,910
2. Category 1 non-SIU:	\$1,920
3. Category 2SIU:	\$1,872
4. Category 2 non-SIU:	\$1,594
5. Category 3 SIU:	\$1,594
6. Category 3 non-SIU:	\$1,202
7. Category 4:	\$1,086
8. Category 6:	\$1,086
9. Category 10	\$110
10. Category 12	\$4,214
11. Category C1	\$308
12. Category G1	\$252, plus \$98 for the year the Authority receives the Notice of Intent to Discharge
13. Category G2	\$212, plus \$98 for the year the Authority receives the Notice of Intent to Discharge
14. Category D1	\$212, plus \$98 for the year the Authority receives the Notice of Intent to Discharge

10.101: continued

~~(e)~~ For Authority Fiscal Year 2024: ~~and all later Authority Fiscal Years:~~

1. -Category 1 SIU:	\$2,998
2. Category 1 non-SIU:	\$1,978
3. Category 2 SIU:	\$1,930
4. Category 2 non-SIU:	\$1,642
5. Category 3 SIU:	\$1,642
6. Category 3 non-SIU:	\$1,240
7. Category 4:	\$1,120
8. Category 6:	\$1,120
9. Category 10:	\$112
10. Category 12:	\$4,342
11. Category C1:	\$318
12. Category G1:	\$260, plus \$102 for the year the Authority receives the Notice of Intent to Discharge
13. Category G2:	\$220, plus \$102 for the year the Authority receives the Notice of Intent to Discharge
14. Category D1:	\$220, plus \$102 for the year the Authority receives the Notice of Intent to Discharge

(f) For Authority Fiscal Year 2025:

<u>1. Category 1 SIU:</u>	<u>\$3,088</u>
<u>2. Category 1 non-SIU:</u>	<u>\$2,037</u>
<u>3. Category 2 SIU:</u>	<u>\$1,988</u>
<u>4. Category 2 non-SIU:</u>	<u>\$1,691</u>
<u>5. Category 3 SIU:</u>	<u>\$1,691</u>
<u>6. Category 3 non-SIU:</u>	<u>\$1,277</u>
<u>7. Category 4:</u>	<u>\$1,154</u>
<u>8. Category 6:</u>	<u>\$1,154</u>
<u>9. Category 10:</u>	<u>\$115</u>
<u>10. Category 12:</u>	<u>\$4,472</u>
<u>11. Category C1:</u>	<u>\$328</u>
<u>12. Category G1:</u>	<u>\$268, plus \$106 for the year the Authority receives the Notice of Intent to Discharge</u>
<u>13. Category G2:</u>	<u>\$228, plus \$106 for the year the Authority receives the Notice of Intent to Discharge</u>
<u>14. Category D1:</u>	<u>\$228, plus \$106 for the year the Authority receives the Notice of Intent to Discharge</u>

(g) For Authority Fiscal Year 2026:

<u>1. Category 1 SIU:</u>	<u>\$3,181</u>
<u>2. Category 1 non-SIU:</u>	<u>\$2,098</u>
<u>3. Category 2 SIU:</u>	<u>\$2,048</u>
<u>4. Category 2 non-SIU:</u>	<u>\$1,742</u>
<u>5. Category 3 SIU:</u>	<u>\$1,742</u>
<u>6. Category 3 non-SIU:</u>	<u>\$1,315</u>
<u>7. Category 4:</u>	<u>\$1,189</u>
<u>8. Category 6:</u>	<u>\$1,189</u>
<u>9. Category 10:</u>	<u>\$118</u>
<u>10. Category 12:</u>	<u>\$4,606</u>
<u>11. Category C1:</u>	<u>\$337</u>
<u>12. Category G1:</u>	<u>\$276, plus \$109 for the year the Authority receives the Notice of Intent to Discharge</u>
<u>13. Category G2:</u>	<u>\$235, plus \$109 for the year the Authority receives the Notice of Intent to Discharge</u>

<u>14. Category D1:</u>	<u>\$235, plus \$109 for the year the Authority receives the Notice of Intent to Discharge</u>
<u>(h) For Authority Fiscal Year 2027:</u>	
<u>1. Category 1 SIU:</u>	<u>\$3,276</u>
<u>2. Category 1 non-SIU:</u>	<u>\$2,161</u>
<u>3. Category 2 SIU:</u>	<u>\$2,109</u>
<u>4. Category 2 non-SIU:</u>	<u>\$1,794</u>
<u>5. Category 3 SIU:</u>	<u>\$1,794</u>
<u>6. Category 3 non-SIU:</u>	<u>\$1,355</u>
<u>7. Category 4:</u>	<u>\$1,224</u>
<u>8. Category 6:</u>	<u>\$1,224</u>
<u>9. Category 10:</u>	<u>\$122</u>
<u>10. Category 12:</u>	<u>\$4,744</u>
<u>11. Category C1:</u>	<u>\$348</u>
<u>12. Category G1:</u>	<u>\$284, plus \$112 for the year the Authority receives the Notice of Intent to Discharge</u>
<u>13. Category G2:</u>	<u>\$242, plus \$112 for the year the Authority receives the Notice of Intent to Discharge</u>
<u>14. Category D1:</u>	<u>\$242, plus \$112 for the year the Authority receives the Notice of Intent to Discharge</u>
<u>(i) For Authority Fiscal Year 2028:</u>	
<u>1. Category 1 SIU:</u>	<u>\$3,374</u>
<u>2. Category 1 non-SIU:</u>	<u>\$2,226</u>
<u>3. Category 2 SIU:</u>	<u>\$2,172</u>
<u>4. Category 2 non-SIU:</u>	<u>\$1,848</u>
<u>5. Category 3 SIU:</u>	<u>\$1,848</u>
<u>6. Category 3 non-SIU:</u>	<u>\$1,395</u>
<u>7. Category 4:</u>	<u>\$1,261</u>
<u>8. Category 6:</u>	<u>\$1,261</u>
<u>9. Category 10:</u>	<u>\$126</u>
<u>10. Category 12:</u>	<u>\$4,887</u>
<u>11. Category C1:</u>	<u>\$358</u>
<u>12. Category G1:</u>	<u>\$293, plus \$116 for the year the Authority receives the Notice of Intent to Discharge</u>
<u>13. Category G2:</u>	<u>\$249, plus \$116 for the year the Authority receives the Notice of Intent to Discharge</u>
<u>14. Category D1:</u>	<u>\$249, plus \$116 for the year the Authority receives the Notice of Intent to Discharge</u>
<u>(j) For Authority Fiscal Year 2029 and all later Authority Fiscal Years:</u>	
<u>1. Category 1 SIU:</u>	<u>\$3,476</u>
<u>2. Category 1 non-SIU:</u>	<u>\$2,293</u>
<u>3. Category 2 SIU:</u>	<u>\$2,238</u>
<u>4. Category 2 non-SIU:</u>	<u>\$1,903</u>
<u>5. Category 3 SIU:</u>	<u>\$1,903</u>
<u>6. Category 3 non-SIU:</u>	<u>\$1,437</u>
<u>7. Category 4:</u>	<u>\$1,299</u>
<u>8. Category 6:</u>	<u>\$1,299</u>
<u>9. Category 10:</u>	<u>\$129</u>
<u>10. Category 12:</u>	<u>\$5,033</u>
<u>11. Category C1:</u>	<u>\$369</u>
<u>12. Category G1:</u>	<u>\$302, plus \$119 for the year the Authority receives the Notice of Intent to Discharge</u>
<u>13. Category G2:</u>	<u>\$257, plus \$119 for the</u>

14. Category D1:

year the Authority receives the Notice of Intent to Discharge \$257, plus \$119 for the year the Authority receives the Notice of Intent to Discharge

The amount of the charge shall be based on the Permit category as of June 30<sup>th</sup> immediately prior to the billing done pursuant to 360 CMR 10.103. A change in category after June 30<sup>th</sup> shall not affect that year's charge.

(2) Definition of Category. The categories listed in 360 CMR 10.101(1) and 10.102 are defined as follows:

- (a) Significant Industrial User (SIU): As defined in 360 CMR 10.004. In determining whether a Person is an SIU based on the criterion that the Person has a reasonable potential to violate any Pretreatment standard or requirement, the Authority will take into account the Person's compliance history, the nature and character of the Person's effluent, whether the Person needs to treat the effluent prior to Discharge, and the flow from the facility.
- (b) Category 1: A sewer user whose process results in a Discharge containing one or more substances in a concentration or quantity requiring Pretreatment to meet the requirements of 360 CMR 10.021 through 10.025 and who does not have a Group, General, or Combined Permit for the Discharge.
- (c) Category 2: A sewer user whose process results in a Discharge containing one or more substances regulated by 360 CMR 10.021 through 10.025 at a concentration and quantity not requiring Pretreatment to meet the requirements of 360 CMR 10.021 through 10.025 and who does not have a Group, General, or Combined Permit for the Discharge.
- (d) Category 3: A sewer user whose process results in a Discharge not containing a substance regulated by 360 CMR 10.021 through 10.025 and who does not have a Group, General, or Combined Permit for the Discharge.
- (e) Category 4: An SIU without an Industrial Waste Discharge to the Authority Sewerage System or any tributary thereto.
- (f) Category 6: A Person with a Septage Discharge Permit.
- (g) Category 10: A Person with a General Permit Low Flow and Low Pollutant.
- (h) Category 12: A Person with a Temporary Construction Site Dewatering Permit, even if the Discharge might also meet the definition of another category.
- (i) Category C1: A Person with a Combined Permit.
- (j) Category G1: A Person with a Group Permit for Photo Processing, Printing, and Low Flow Operations.
- (k) Category G2: A Person with a Group Permit for Food Processing.
- (l) Category D1: A Person with a Group Permit for Dental Discharges.

(3) Determining Category. In addition to the definitions of 360 CMR 10.101(2), the following guidelines may be used to determine Category 1, 2 and 3:

## 10.101: continued

- (a) It is presumed that a sewer user with Pretreatment is a Category 1, unless the sewer user can show that its Industrial Wastewater, prior to Pretreatment and prior to dilution, will comply with 360 CMR 10.021 through 10.025.
- (b) It is presumed that a sewer user without Pretreatment is a Category 1 if the sewer user has violated Authority discharge requirements (other than for pH). This presumption shall be overcome if:
1. After the violations occurred, the sewer user changed its process or product or the chemicals it uses;
  2. The sewer user can show that its wastewater, prior to Pretreatment and prior to dilution, will comply with 360 CMR 10.021 through 10.025;
  3. Sampling data since the violation show no further violations;
  4. Dilution is not taking the place of Pretreatment; and
  5. It is unlikely that further violations will occur.
- (c) If the only treatment necessary to meet 360 CMR 10.021 through 10.025 is pH adjustment, the sewer user is not a Category 1; it is either a Category 2 or 3, whichever applies, unless it is eligible for a Group, General, or Combined Permit. pH is considered a condition, not a substance, for purposes of determining a Category.
- (d) If the only treatment necessary to meet 360 CMR 10.021 through 10.025 is temperature adjustment, the sewer user is not a Category 1; it is either a Category 2 or 3, whichever applies, unless it is eligible for a Group, General, or Combined Permit.

(4) Examples of Category Determinations. The following are examples of Category determinations:

- (a) Category 1:
1. A Person with Industrial Wastewater containing one or more substances above 360 CMR 10.021 through 10.025 limits prior to Pretreatment.
  2. A Person whose wastewater contains solids or viscous substances in an amount or size which obstructs or may obstruct flow in the sewer, prior to pretreatment. Although there is no limit on solids, if the release of the solids by the Person would violate 360 CMR 10.023(8), then Pretreatment is required and a Category 1 designation is appropriate.
- (b) Category 2: A Person with a Discharge containing substances regulated by 360 CMR 10.021 through 10.025, but not requiring a pretreatment system because the Person, through source control, waste minimization, process operations, and other management practices has controlled the pollutants in its discharge so that it meets 360 CMR 10.021 through 10.024 limits without a pretreatment system.
- (c) Category 3:
1. A Person has a heat exchange unit, no substances regulated by 360 CMR 10.021 through 10.025, and discharges an average of at least 25,000 gallons per day.
  2. A Person has a discharge from an acid fume scrubber that goes through chemical pH adjustment, no substances regulated by 360 CMR 10.021 through 10.025, and does not meet the requirements for a General Permit.

(5) Temporary Construction Dewatering Permit. Each Person with a facility that requires a Temporary Construction Dewatering Permit (Category 12) shall be assessed the permit charge before the Authority will process the Permit application. The amount of the charge is:

- ~~(a) In Authority Fiscal Years 2013, 2014, 2015, 2016, 2017, 2018 and 2019: \$3,704~~  
~~(b) In Authority Fiscal Year 2020: \$3,854~~  
~~(c) In Authority Fiscal Year 2021: \$3,970~~  
~~(e) In Authority Fiscal Year 2022: \$4,090~~  
~~(e) In Authority Fiscal Year 2023: \$4,214~~ (a) In Authority Fiscal Year 2024: \$4,342  
(b) In Authority Fiscal Year 2025: \$4,472  
(c) In Authority Fiscal Year 2026: \$4,606  
(d) In Authority Fiscal Year 2027: \$4,744  
(e) In Authority Fiscal Year 2028: \$4,887  
~~(f)~~ In Authority Fiscal Year 2029, and all later Authority Fiscal Years: \$5,033,342

A Person who is required to be covered by a Temporary Construction Dewatering Permit shall also pay all other outstanding charges due under 360 CMR 10.101 and 360 CMR 10.102 for the facility that will be covered by the Permit.

10.102: Monitoring Charge

(1) Amount of Charge. Each Person issued a Permit pursuant to 360 CMR 10.000 that requires the Person to monitor its Wastewater and report the result to the Authority shall be assessed and shall pay an annual monitoring charge. The amount of the charge is:

~~(a) For Authority Fiscal Years 2012, 2013, 2014, 2015, 2016, 2017, 2018 and 2019:~~

~~1. For each SIU (as defined in 360 CMR 10.004) with a:~~

~~a. High Monitoring Point Score: \$8,890~~

~~b. Middle Monitoring Point Score: \$5,926~~

~~c. Low Monitoring Point Score: \$2,962~~

~~2. For Categories 1 non-SIU and 2 non-SIU: \$966~~

~~3. For Category 3 non-SIU: \$728~~

~~4. For Category 12: \$2,962~~

~~5. The charge is increased for a Person with more than three sample locations designated in its Permit as follows: for each one to three additional sample locations the amount of the charge is increased for an SIU by the amount of the low monitoring point score and for a non-SIU by the amount of the monitoring charge.~~

(ab) For Authority Fiscal Years 2020:

1. For each SIU (as defined in 360 CMR 10.004) with a:

a. High Monitoring Point Score: \$9,246

b. Middle Monitoring Point Score: \$6,164

c. Low Monitoring Point Score: \$3,082

2. For Categories 1 non-SIU and 2 non-SIU: \$1,006

3. For Category 3 non-SIU: \$758

4. For Category 12: \$3,082

5. The charge is increased for a Person with more than three sample locations designated in its Permit as follows: for each one to three additional sample locations the amount of the charge is increased for an SIU by the amount of the low monitoring point score and for a non-SIU by the amount of the monitoring charge.

(be) For Authority Fiscal Year 2021:

1. For each SIU (as defined in 360 CMR 10.004) with a:

a. High Monitoring Point Score: \$9,524

b. Middle Monitoring Point Score: \$6,350

c. Low Monitoring Point Score: \$3,176

2. For Categories 1 non-SIU and 2 non-SIU: \$1,038

3. For Category 3 non-SIU: \$782

4. For Category 12: \$3,176

5. The charge is increased for a Person with more than three sample locations designated in its Permit as follows: for each one to three additional sample locations the amount of the charge is increased for an SIU by the amount of the low monitoring point score and for a non-SIU by the amount of the monitoring charge.

(ce) For Authority Fiscal Year 2022:

1. For each SIU (as defined in 360 CMR 10.004) with a:

a. High Monitoring Point Score: \$9,810

b. Middle Monitoring Point Score: \$6,542

c. Low Monitoring Point Score: \$3,272

2. For Categories 1 non-SIU and 2 non-SIU: \$1,070

3. For Category 3 non-SIU: \$806

4. For Category 12: \$3,272

5. The charge is increased for a Person with more than three sample locations designated in its Permit as follows: for each one to three additional sample locations the amount of the charge is increased for an SIU by the amount of the low monitoring point score and for a non-SIU by the amount of the monitoring charge.

(de) For Authority Fiscal Year 2023:

1. For each SIU (as defined in 360 CMR 10.004) with a:

a. High Monitoring Point Score: \$10,106

b. Middle Monitoring Point Score: \$6,740

c. Low Monitoring Point Score: \$3,372

2. For Categories 1 non-SIU and 2 non-SIU: \$1,104

3. For Category 3 non-SIU: \$832

4. For Category 12: \$3,372



10.102: continued

5. The charge is increased for a Person with more than three sample locations designated in its Permit as follows: for each one to three additional sample locations the amount of the charge is increased for an SIU by the amount of the low monitoring point score and for a non-SIU by the amount of the monitoring charge.

~~(e)~~ For Authority Fiscal Year 2024 ~~and all later Authority Fiscal Years:~~

1. For each SIU (as defined in 360 CMR 10.004) with a:
  - a. High Monitoring Point Score: \$10,410
  - b. Middle Monitoring Point Score: \$6,944
  - c. Low Monitoring Point Score: \$3,474
2. For Categories 1 non-SIU and 2 non-SIU: \$1,138
3. For Category 3 non-SIU: \$858
4. For Category 12: \$3,474
5. The charge is increased for a Person with more than three sample locations designated in its Permit as follows: for each one to three additional sample locations the amount of the charge is increased for an SIU by the amount of the low monitoring point score and for a non-SIU by the amount of the monitoring charge.

(f) For Authority Fiscal Year 2025:

1. For each SIU (as defined in 360 CMR 10.004) with a:
  - a. High Monitoring Point Score: \$10,722
  - b. Middle Monitoring Point Score: \$7,152
  - c. Low Monitoring Point Score: \$3,578
2. For Categories 1 non-SIU and 2 non-SIU: \$1,172
3. For Category 3 non-SIU: \$884
4. For Category 12: \$3,578
5. The charge is increased for a Person with more than three sample locations designated in its Permit as follows: for each one to three additional sample locations the amount of the charge is increased for an SIU by the amount of the low monitoring point score and for a non-SIU by the amount of the monitoring charge.

(g) For Authority Fiscal Year 2026:

1. For each SIU (as defined in 360 CMR 10.004) with a:
  - a. High Monitoring Point Score: \$11,044
  - b. Middle Monitoring Point Score: \$7,367
  - c. Low Monitoring Point Score: \$3,686
2. For Categories 1 non-SIU and 2 non-SIU: \$1,207
3. For Category 3 non-SIU: \$910
4. For Category 12: \$3,686
5. The charge is increased for a Person with more than three sample locations designated in its Permit as follows: for each one to three additional sample locations the amount of the charge is increased for an SIU by the amount of the low monitoring point score and for a non-SIU by the amount of the monitoring charge.

(h) For Authority Fiscal Year 2027:

1. For each SIU (as defined in 360 CMR 10.004) with a:
  - a. High Monitoring Point Score: \$11,375
  - b. Middle Monitoring Point Score: \$7,588
  - c. Low Monitoring Point Score: \$3,796
2. For Categories 1 non-SIU and 2 non-SIU: \$1,244
3. For Category 3 non-SIU: \$938
4. For Category 12: \$3,796
5. The charge is increased for a Person with more than three sample locations designated in its Permit as follows: for each one to three additional sample locations the amount of the charge is increased for an SIU by the amount of the low monitoring point score and for a non-SIU by the amount of the monitoring charge.

(i) For Authority Fiscal Year 2028:

1. For each SIU (as defined in 360 CMR 10.004) with a:
  - a. High Monitoring Point Score: \$11,717
  - b. Middle Monitoring Point Score: \$7,816
  - c. Low Monitoring Point Score: \$3,910
2. For Categories 1 non-SIU and 2 non-SIU: \$1,281
3. For Category 3 non-SIU: \$966

4. For Category 12: \$3,910
5. The charge is increased for a Person with more than three sample locations designated in its Permit as follows: for each one to three additional sample locations the amount of the charge is increased for an SIU by the amount of the low monitoring point score and for a non-SIU by the amount of the monitoring charge.
- (j) For Authority Fiscal Year 2029 and all later Authority Fiscal Years:
1. For each SIU (as defined in 360 CMR 10.004) with a:
    - a. High Monitoring Point Score: \$12,068
    - b. Middle Monitoring Point Score: \$8,050
    - c. Low Monitoring Point Score: \$4,027
  2. For Categories 1 non-SIU and 2 non-SIU: \$1,319
  3. For Category 3 non-SIU: \$995
  4. For Category 12: \$4,027
  5. The charge is increased for a Person with more than three sample locations designated in its Permit as follows: for each one to three additional sample locations the amount of the charge is increased for an SIU by the amount of the low monitoring point score and for a non-SIU by the amount of the monitoring charge.

(2) Assigning Monitoring Point Scores. The Authority will assign each SIU a monitoring point score once a year, based on the results of sampling and analysis during the previous Authority fiscal year (July 1<sup>st</sup> through June 30<sup>th</sup>).

(3) Determining High, Middle, and Low Monitoring Point Scores.

(a) The Authority will determine a monitoring point score for each compliance monitoring location (location) for each SIU as follows:

Step One. For each location, the Authority will calculate the loading (amount in pounds) of each pollutant discharged during each day of sampling at the location. For purposes of the calculation, a value less than the method detection limit shall be given a value of zero.

Step Two. The Authority will calculate, for each location, the mathematical average loading for each pollutant discharged per day of sampling, using the individual loadings determined in step one.

Step Three. The Authority will create a separate list for each pollutant specified in 360 CMR 10.102(3)(a): Step Five. Each pollutant list will consist of the locations discharging that pollutant, listed in descending order from the highest to lowest average loading per day of sampling determined in step two.

Step Four. The Authority will divide into three parts each pollutant list it created in step three. The top part of each list will consist of those locations in the top third of the total number of locations on the list; the bottom part of each list will consist of those locations in the bottom third of the total number of locations on the list; the middle part of each list will consist of the remainder of the locations on the list.

Step Five. The Authority will assign points to each location on each list, based on whether the location is in the top, middle, or bottom part of each list as described in 360 CMR 10.102(3)(a): Step Four. The pollutant lists have different point values as follows:

1. Antimony (in the Metropolitan Sewerage Service Area), Selenium (in the Metropolitan Sewerage Service Area), and Total Fats, Oils, and Greases: top part = three points; middle part = two points; bottom part = one point.
2. Acrolein, Arsenic, Benzene, Cadmium, Chromium (hexavalent), Chromium (total), Cyanide, Formaldehyde (in the Metropolitan Sewerage Service Area), Fluoranthene, Nickel, Phenol (in the Metropolitan Sewerage Service Area), Selenium (in the Clinton Sewerage Service Area), Silver (in the Metropolitan Sewerage Service Area), Total Toxic Organics, Zinc, and a total of all other materials regulated in 360 CMR 10.024(2) (for the respective sewer service area) and not otherwise listed in Step Five: top part = six points; middle part = four points; bottom part = two points.

## 10.102: continued

3. Aluminum (in the Clinton Sewerage Service Area), Copper, Hexachlorobutadiene, Lead, Mercury, Pesticides, Polychlorinated Biphenyls, Silver (in the Clinton Sewerage Service Area), and a total of all other materials prohibited by 360 CMR 10.000: *Appendix C* (in the Clinton Sewerage Service Area): top part = nine points; middle part = six points; bottom part = three points.

Step Six. The Authority will double the points it assigned a location in Step Five for each pollutant for which the location was in significant noncompliance, as defined at 40 CFR 403.8(f)(2)(vii)(A) and (B), in the fiscal year in which the sampling was done.

Step Seven. The Authority will total the points it assigned to each location in Steps Five and Six to yield each location's total monitoring point score.

(b) After determining the total monitoring point score for each location, the Authority will list all the locations in descending order from highest to lowest total monitoring point score. The locations in the top 10% of the total number of locations on the list shall have a High Monitoring Point Score; the locations in the bottom 50% of the total number of locations on the list shall have a Low Monitoring Point Score; the remainder of the locations on the list shall have a Middle Monitoring Point Score. For locations with the same total monitoring point score: If a point score would place a location in the top 10% all locations with that point score shall be considered in the top 10% if a point score would place a location in the bottom 50%, all locations with that point score shall be considered in the bottom 50%.

(c) For purposes of the monitoring charge, an SIU's monitoring point score shall be based on its location with the highest total monitoring point score.

(4) There shall be no monitoring charge under 360 CMR 10.102(1) for a Category G1, G2, D1 and C1 Permit.

(5) Whether a Person is an SIU and whether a Person's Permit requires the Person to monitor its wastewater and report the result to the Authority shall be based on the Person's SIU status and Permit as of the June 30<sup>th</sup> immediately prior to the billing done pursuant to 360 CMR 10.103. A change in SIU status or monitoring and reporting requirements after June 30<sup>th</sup> shall not affect that year's charge. If a Person's initial Permit is issued after June 30<sup>th</sup>, that initial Permit will be used to determine the monitoring charge for that year.

(6) If an SIU has an operation covered by a National Categorical Pretreatment Standard with no discharge and only a Non-SIU flow requiring monitoring and reporting, the Non-SIU monitoring charge shall be assessed rather than the SIU monitoring charge.

(7) Additional Charge for Late and Non-submittal of Reports. In addition to the monitoring charge required by 360 CMR 10.102(1), each Person shall be assessed and pay an annual monitoring charge for each self-monitoring report required by the Person's Permit that was not submitted to the Authority within 45 days after the date the report was due or that was submitted without a required analytical result. The charge each year will be based on all reports due during the previous Authority fiscal year (July 1<sup>st</sup> through June 30<sup>th</sup>). The amount of the charge is:

<del>(a)</del>	<del>In Authority Fiscal Years 2012, 2013, 2014, 2015, 2016, 2017, 2018 and 2019:</del>	<del>\$164</del>
<del>(b)</del>	<del>In Authority Fiscal Year 2020:</del>	<del>\$170</del>
<del>(c)</del>	<del>In Authority Fiscal Year 2021:</del>	<del>\$176</del>
<del>(d)</del>	<del>In Authority Fiscal Year 2022:</del>	<del>\$180</del>
<del>(e)</del>	<del>In Authority Fiscal Year 2023:</del>	<del>\$186</del>
(af)	In Authority Fiscal Year 2024 and all later Authority Fiscal Years:	__-\$192
(b)	In Authority Fiscal Year 2025:	\$198
(c)	In Authority Fiscal Year 2026:	\$204
(d)	In Authority Fiscal Year 2027:	\$210
(e)	In Authority Fiscal Year 2028:	\$216
(f)	In Authority Fiscal Year 2029 and all later Authority Fiscal Years:	\$223

10.103: Billing, Payment, and Appeals for Permitting and Monitoring Charges

(1) Date of Bill. The Authority shall bill each Person in each Authority fiscal year for the annual amounts due pursuant to 360 CMR 10.101 and 10.102 for permitting and monitoring

charges, and it may bill in the fiscal year in which it will issue an initial Permit (not a renewal or revision) for a facility that was not permitted as of June 30<sup>th</sup>. It may also bill in the fiscal year in which it will issue a notice of coverage for a General Permit or a Permit to a facility that had been operating with a General Permit. There shall be one bill for each Permit; a Person with more than one Permit shall receive one bill for each Permit.

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10.103: continued

(2) Initial Permit - Permitting and Monitoring Charges in the First Bill. For an initial Permit (not a renewal or revised Permit), the charge in the first bill shall be based on the category established with the initial Permit and determined as follows:

(a) The permitting charge shall be:

1. the full charge for a Permit to be issued between July 1<sup>st</sup> and December 31<sup>st</sup>;
2. ½ the full charge for a Permit to be issued between January 1<sup>st</sup> and June 30<sup>th</sup>, except
3. a Category 12 and a General Permit shall have the full charge, regardless of when the Permit is issued, and
4. a D1, G1 and G2 shall pay the full amount for the Notice of Intent, regardless of when the Permit is issued.

(b) The monitoring charge shall be the full charge. For an SIU, the full low monitoring point score charge will be used.

(c) Retroactive Charge: If a Person failed to complete and submit an application or Notice of Intent for a Permit when it was required to have a Permit, the Person shall be responsible to pay the charges that would have been assessed for the time it was required to have had a Permit, up to a period of three years before the date of the bill. The bill for the initial Permit may include those charges.

(3) Payment for an Initial Permit. Full payment for an initial Permit may be required before the Permit is issued.

(4) Category 12 Permit Charges. Full payment of Permit charge shall be paid when the application is submitted. Permit applications will not be processed without full payment of Permit charge. Monitoring charges shall be paid prior to the issuance of the Permit.

(5) Content of Bill. The bill shall indicate the total amount of the charge to be paid, the amount for each of the permitting and monitoring charges, and the payment terms, and shall provide notice of the late payment charges the Authority may assess, the actions the Authority may take for late payment or nonpayment, and the appeal rights of the permittee.

(6) Payment Due Date. Each Person shall pay the charge due to the Authority by the date required by the billing, which shall be 30 days from the date of the bill.

(7) Late Payment and Service Charges. The Authority may assess late payment charges for a charge not fully paid by its due date. The amount of the late payment charges shall be interest at the rate of 1% per month on the outstanding balance (including interest and service charges). The Authority may also assess a service charge of \$50 for each check returned for insufficient funds or otherwise dishonored. The Authority may send statements during the course of the year to each Person that has not fully paid a Permit or monitoring charge, late payment charge, or service charge. The statement shall include the amount that is due.

(8) Disputes, Appeal Rights, and Procedures.

(a) A Person that disagrees with the amount of its permitting or monitoring charge shall have 30 days from the date of the annual bill to file a written petition with the Authority to dispute the charge. The petition may not contest any matter that was previously decided, unless material circumstances have changed since the decision. The petition shall state the permit category and the monitoring category the Person is appealing disputing, the permit and monitoring category the Person claims is correct, and the facts and contentions supporting the petition. A Person that disputes its charge shall pay by the date required by the billing, the amount that is due for the permitting and monitoring category the Person claims is correct, pending resolution of the petition. A Person that fails to pay timely the amount it claims is due shall have its petition dismissed.

10.103: continued

(b) The Authority may schedule an informal interview with the Person to discuss the appeal, or it may review the petition on the basis of the materials submitted by the Person. The Authority may also require additional information and documentation from the Person to support the petition. After the Authority concludes its review of the petition, it shall issue a written ruling on the petition. The Person may appeal the written ruling by requesting in writing, within 30 days of the date of the ruling, an adjudicatory hearing under the provisions of 360 CMR 1.00: *Adjudicatory Proceedings*. Within 30 days after the date of the final Authority ruling, the Person shall pay the amount due the Authority, if any, plus interest at the rate of 1% per month on the amount due, computed from the date the appeal was filed.

(9) Nonpayment Procedures. The Authority may take one or more of the following actions if a Person does not fully pay its permitting or monitoring charge, any late payment charge, or service charge:

- (a) Deny the Person's application to renew its Permit upon expiration of the Permit until full payment is made, and, for an initial Permit, not issue the Permit until full payment is made;
- (b) Suspend the Person's Permit until full payment is made;
- (c) Bring a civil action for collection of the amount owed the Authority, including reasonable attorney fees and costs incurred by the Authority in pursuing such action;
- (d) Suspend the Person's water and/or sewer service with, where required, the approval of the municipal supplier; and
- (e) Take any other action available to the Authority under law or regulation.

10.104: Effect of 360 CMR 10.101 through 10.103 on Enforcement and Other Liability

The provisions of 360 CMR 10.101 through 10.103 shall not limit the Authority's ability to take any enforcement action authorized by law or regulation, or any other action authorized by law or regulation, regardless of any charge assessed or paid. Payment of a charge pursuant to 360 CMR 10.101 through 10.103 does not relieve a Person of any other liability under any federal, state, Authority, or local law or regulation.

REGULATORY AUTHORITY

360 CMR 10.000: St. 1984, c. 372, §§ 6(e) and 8(m); St. 1987, c. 307; St. 1991, c. 41.

## APPENDIX A: METROPOLITAN SEWERAGE SERVICE AREA TOXIC ORGANICS

<u>CAS #</u>	<u>NAME</u>
107-13-1	Acrylonitrile
75-25-2	Bromoform
75-27-4	Bromodichloromethane
74-83-9	Bromomethane
75-15-0	Carbon Disulfide
56-23-5	Carbon Tetrachloride
108-90-7	Chlorobenzene
75-00-3	Chloroethane
110-75-8	2-Chloroethyl Vinyl Ether (mixed)
67-66-3	Chloroform
74-87-3	Chloromethane
124-48-1	Dibromochloromethane
75-34-3	1,1 -Dichloroethane
107-06-2	1,2-Dichloroethane
156-60-5	t-1,2-Dichloroethene
78-87-5	1,2-Dichloropropane
10061-01-5	c-1,3-Dichloropropene
10061-02-6	t-1,3-Dichloropropene
75718	Dichlorodifluoromethane
100-41-4	Ethylbenzene
75-09-2	Methylene Chloride
100-42-5	Styrene
79-34-5	1,1,2,2-Tetrachloroethane
127-18-4	Tetrachloroethene
108-88-3	Toluene
71-55-6	1,1,1-Trichloroethane
79-00-5	1,1,2-Trichloroethane
79016	Trichloroethylene
75-69-4	Trichlorofluoromethane
108-05-4	Vinyl Acetate
1330-20-7	Xylene (total)
83-32-9	Acenaphthene
208-96-8	Acenaphthylene
120-12-7	Anthracene
92-87-5	Benzidine
56-55-3	Benzo(A) Anthracene
205-99-2	Benzo(B) Fluoranthene
207-08-9	Benzo(K) Fluoranthene
191-24-2	Benzo(GHI) Perylene
50-32-8	Benzo(A) Pyrene
85-68-7	Benzyl Butyl Phthalate
111-91-1	Bis (2-Chloroethoxy) Methane
111-44-4	Bis (2-Chloroethyl) Ether
117-81-7	Bis (2-Ethylhexyl) Phthalate
101-55-3	4-Bromophenyl Phenyl Ether
106-47-8	4-Chloroaniline
91-58-7	2-Chloronaphthalene
95578	2-Chlorophenol
7005-72-3	4-Chlorophenyl Phenyl Ether
218-01-9	Chrysene
53-70-3	Dibenzo (A,H) Anthracene
132-64-9	Dibenzo Furan
95-50-1	1,2-Dichlorobenzene
541-73-1	1,3-Dichlorobenzene
106-46-7	1,4-Dichlorobenzene

## APPENDIX A: continued

<u>CAS #</u>	<u>NAME</u>
91-94-1	3,3'-Dichlorobenzidine
120832	2,4-Dichlorophenol
84-66-2	Diethyl Phthalate
105679	2,4-Dimethylphenol
131-11-3	Dimethyl Phthalate
84-74-2	Di-n-butyl Phthalate
51285	2,4-Dinitrophenol
534-52-1	2-Methyl-4,6-Dinitrophenol
121-14-2	2,4-Dinitrotoluene
606-20-2	2,6-Dinitrotoluene
117-84-0	Di-n-octyl Phthalate
122-66-7	1,2-Diphenylhydrazine
206-44-0	Fluoranthene
86-73-7	Fluorene
118-74-1	Hexachlorobenzene
87-68-3	Hexachlorobutadiene
67-72-1	Hexachloroethane
193-39-5	Indeno (1,2,3-cd) Pyrene
78-59-1	Isophorone
91-57-6	2-Methylnaphthalene
95-48-7	2-Methylphenol (o-Cresol)
108-39-4	3-Methylphenol (m-Cresol)
106-44-5	4-Methylphenol (p-Cresol)
91-20-3	Naphthalene
98-95-3	Nitrobenzene
88755	2-Nitrophenol
62-75-9	N-Nitrosodimethylamine
621-64-7	N-Nitroso-di-n-Propylamine
95-95-4	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol
75-07-0	Acetaldehyde
107-18-6	Allyl alcohol
107-05-1	Allyl chloride
628-63-7	Amyl acetate
62-53-3	Aniline
100-47-0	Benzonitrile
100-44-7	Benzyl chloride
123-86-4	Butyl acetate
1395-284-6	Butylamine
417-030-3	Crotonaldehyde
110-82-7	Cyclohexane
119-4-65-6	Dichlorobenil
75-99-0	2,2-Dichloropropionic acid
109-89-7	Diethyl amine
99-65-0	1,3-Dinitrobenzene
124-40-3	Dimethyl amine
106-89-8	Epichlorohydrin
107-15-3	Ethylene diamine
106-93-4	Ethylene dibromide
98-01-1	Furfural
78-79-5	Isoprene
4250-446-1	Isopropanolamine dodecylbenzenesulfonate
115-32-2	Kelthane
203-265-7	Mercaptodimethur



## APPENDIX A: continued

<u>CAS #</u>	<u>NAME</u>
74-93-1	Methyl mercaptan
80-62-6	Methyl methacrylate
75-04-7	Monoethyl amine
74-89-5	Monomethyl amine
1338-24-5	Napthenic acid
1321-12-6	Nitrotoluene
75-44-5	Phosgene
75-56-9	Propylene oxide
108-60-1	2,2'-Oxybis(1-Chloropropane)
91-22-5	Quinoline
108-46-3	Resorcinol
27323-41-7	Triethanolamine dodecylbenzenesulfonate
121-44-8	Triethylamine
75-50-3	Trimethylamine
1300-71-6	Xylenol

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## APPENDIX B: CLINTON SEWERAGE SERVICE AREA TOXIC ORGANICS

<u>CAS #</u>	<u>Name</u>
83-32-9	Acenaphthene
208-95-8	Acenaphthylene
75-07-0	Acetaldehyde
107-18-6	Allyl alcohol
107-05-1	Allyl chloride
628-63-7	N-Amyl acetate
62-53-3	Aniline
120-12-7	Anthracene
191-24-2	Benzo[g,h,i]perylene
50-32-8	Benzo[a]pyrene
100-47-0	Benzonitrile
100-44-7	Benzyl chloride
111-91-1	Bis(2-chloroethoxy)methane
75-27-4	Bromodichloromethane
75-25-2	Bromoform
101-55-3	4-Bromophenyl phenyl ether
123-86-4	N-Butyl acetate
109-73-9	N-Butylamine
85-68-7	Butylbenzylphthalate
27134-26-5	Chloroaniline
108-90-7	Chlorobenzene
124-48-1	Chlorodibromomethane
59-50-7	p-Chloro-m-cresol
75-00-3	Chloroethane
110-75-8	2-Chloroethylvinyl ether
67-66-3	Chloroform
74-87-3	Chloromethane
91-58-7	2-Chloronaphthalene
95-57-8	2-Chlorophenol
7005-72-3	4-Chlorophenyl phenyl ether
4170-30-3	Crotonaldehyde
132-64-9	Dibenzofuran
1194-65-6	Dichlorobenil
95-50-1	1, 2-Dichlorobenzene
541-73-1	1, 3-Dichlorobenzene
106-46-7	1, 4-Dichlorobenzene
75-71-8	Dichlorodifluoromethane
75-34-3	1,1-Dichloroethane
107-06-2	1,2-Dichloroethane
156-60-5	trans -1,2-Dichloroethylene
120-83-2	2,4-Dichlorophenol
78-87-5	1,2-Dichloropropane
542-75-6	1,3-Dichloropropene
75-99-0	2,2-Dichloropropionic acid
109-89-7	Diethyl amine
84-66-2	Diethylphthalate
105-67-9	2,4-Dimethylphenol
131-11-3	Dimethylphthalate
51-28-5	2,4-Dinitrophenol
84-74-2	Di-n-butylphthalate
534-52-1	4,6-Dinitro-o-cresol
606-20-2	2,6 Dinitrotoluene
117-84-0	Di-n-octyl phthalate
106-89-8	Epichlorohydrin
100-41-4	Ethylbenzene
107-15-3	Ethylene diamine
106-93-4	Ethylene dibromide

## APPENDIX B: continued

206-44-0	Fluoranthene
86-73-7	Fluorene
78-59-1	Isophorone
68514-39-6	Isoprene
42504-46-1	Isopropanolamine dodecylbenzenesulfonate
115-32-2	Kelthane
2032-65-7	Mercaptodimethur
534-52-1	2-Methyl-4,6-dinitrophenol
79-09-2	Methylene chloride
74-93-1	Methyl mercaptan
80-62-6	Methyl methacrylate
1321-94-4	Methylnaphthalene
95-48-7	2-Methylphenol
108-39-4	3-Methylphenol
106-44-5	4-Methylphenol
75-04-7	Monoethylamine
74-89-5	Monomethylamine
91-20-3	Naphthalene
1338-24-5	Naphthenic acid
98-95-3	Nitrobenzene
88-75-5	2-Nitrophenol
100-02-7	4-Nitrophenol
930-55-2	N-Nitrosopyrrolidine
1321-12-6	Nitrotoluene
85-01-8	Phenanthrene
108-95-2	Phenol
75-44-5	Phosgene
129-00-0	Pyrene
108-60-1	2,2'-Oxybis(1-Chloropropane)
91-22-5	Quinoline
108-46-3	Resorcinol
128-04-1	Sodium dimethyldithiocarbamate
100-42-5	Styrene
79-34-5	1,1,2,2-Tetrachloroethane
127-18-4	Tetrachloroethylene
108-88-3	Toluene
120-82-1	1,2,4-Trichlorobenzene
71-55-6	1,1,1-Trichloroethane
79-00-5	1,1,2-Trichloroethane
79-01-6	Trichloroethylene
27323-41-7	Triethanolamine dodecylbenzenesulfonate
121-44-8	Triethylamine
75-50-3	Trimethylamine
108-05-4	Vinyl acetate
1300-71-6	Xylenol

See 360 CMR 10.004 and 360 CMR 10.024(2)(b).

## APPENDIX C: CLINTON SEWERAGE SERVICE AREA PROHIBITED POLLUTANTS

<u>CAS #</u>	<u>Name</u>
107-13-1	Acrylonitrile
92-87-5	Benzidine
50-32-8	Benzo[a]pyrene
56-55-3	Benzo[a]anthracene
205-99-5	Benzo[b]fluoranthene
207-08-9	Benzo[k]fluoranthene
111-44-4	Bis(2-chloroethyl)ether
218-01-9	Chrysene
53-70-3	Dibenzo[a,h]anthracene
91-94-1	3,3-Dichlorobenzidine
122-66-7	1,2-Diphenylhydrazine
118-74-1	Hexachlorobenzene
608-73-1	Hexachlorocyclo-hexane-Technical
77-47-4	Hexchlorocyclopentadiene
193-39-5	Indeno(1,2,3-cd)pyrene
621-64-7	N-Nitrosodi-n-propylamine
688-73-3	Tributyltin
95-95-4	2,4,5-Trichlorophenol
88-06-2	2,4,6-Trichlorophenol
75-01-4	Vinyl chloride
1330-20-7	Xylene (total)

See 360 CMR 10.024(1)(b).

## APPENDIX D: PESTICIDES

<u>CAS #</u>	<u>Name</u>
93-76-5	2,4,5-T
93-72-1	2,4,5-TP (Silvex)
94-75-7	2,4-D (2,4-Dichlorophenoxy acetic acid)
72-54-8	4,4'-DDD
72-55-9	4,4'-DDE
50-29-3	4,4'-DDT
309-00-2	Aldrin
319-84-6	<i>alpha</i> -BHC
959-98-8	<i>alpha</i> -Endosulfan
3655-10-7	Amobam
319-85-7	<i>beta</i> -BHC
33213-65-9	<i>beta</i> -Endosulfan
51026-28-9	Busan 40
128-03-0	Busan 85
133-06-2	captan
63-25-2	Carbaryl
1563-66-2	Carbofuran
57-74-9	Chlordane
2921-88-2	Chlorpyrifos
56-72-4	Coumaphos
319-86-8	<i>delta</i> BHC
8065-48-3	Demeton
333-41-5	Diazinon
1918-00-9	Dicamba
not found alone	Dichlorophenoxyacetate
62-73-7	Dichlorvos
60-57-1	Dieldrin
124-40-3	Dimethylamine
85-00-7	Diquat
298044	Disulfoton
330-54-1	Diuron
1031078	Endosulfan Sulfate
72-20-8	Endrin
7421-93-4	Endrin Aldehyde
563-12-1	Ethion
502-55-6	EXD
14484-64-1	Ferbam
98-01-1	Furfural
58899	<i>gamma</i> -BHC (Lindane)
86-50-0	Guthion
76448	Heptachlor
1024573	Heptachlor Epoxide
143-50-0	Kepone
137-41-7	KN Methyl
121-75-5	Malathion
137-42-8	Metham
72-43-5	Methoxychlor
298-00-0	Methyl Parathion
7786-34-7	Mevinphos
315-18-4	Mexacarbate
2385-85-5	Mirex
142-59-6	Nabam
138-93-2	Nabonate
300-76-5	Naled
56-38-2	Parathion
87-86-5	Pentachlorophenol
2312-35-8	Propargite

Appendix D: continued

<u>CAS #</u>	<u>Name</u>
75-56-9	Propylene oxide
121-21-1	Pyrethrins
57-24-9	Strychnine
137-26-8	Thiram
8001-35-2	Toxaphene
52-68-6	Trichlorofon
12122-67-7	Zineb
137-30-4	Ziram

See 360 CMR 10.004 and 360 CMR 10.024(1)(a) and (b).

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NON-TEXT PAGE

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**STAFF SUMMARY**




**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Quinapoxet Dam Removal Construction, Contract 7348, Project Update

**COMMITTEE:** Water Policy & Oversight

X  INFORMATION  
  VOTE

Valerie Moran, P.E., Director, Waterworks  
John J. Gregoire, Sr Progr Manager, Reservoir Operations  
Preparer/Title

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

**RECOMMENDATION:**

For information only.

**DISCUSSION:**

The Quinapoxet Dam is located on the Quinapoxet River, immediately upstream of Wachusett Reservoir and directly adjacent to Quabbin Aqueduct’s Shaft 1 Oakdale Power Station (Figure 1). The Quinapoxet Dam has been deemed obsolete and its removal is scheduled to begin in November 2024. MWRA Contract 7348 will remove the dam and restore the Quinapoxet River. Construction Contract 7348 was awarded on December 5, 2023 to Lucianos Excavation, Inc. in the amount of \$2,470,000.



*Figure 1. Quinapoxet Dam looking upstream (L) and looking downstream (R)*

The rationale for removal includes the following factors. The dam is:

- no longer serving its original sediment management function due to modern reservoir operations, monitoring, and water treatment;



- in need of substantial repairs and required studies at a cost of over \$500,000, which is not a justified investment for an obsolete dam;
- presently a barrier to upstream passage of spawning trout and landlocked salmon in Wachusett Reservoir; and
- an impediment to climate resiliency of the Quinapoxet River.

The site work for this dam removal project will include establishing water controls, a detailed sediment management plan and a turbidity monitoring plan to ensure protection of downstream Wachusett Reservoir water quality during and after construction. The first contractor submittals for these tasks are now under development and review.

Before any work on the dam may begin, river flows must be bypassed around the work zone. Once the river bypass is established, the overflow horseshoe weir structure (Figure 2) will be demolished and removed. The river channel will then be regraded to mimic natural riverine conditions. The river banks will be reestablished with native plantings and a new armored earthen berm will be constructed to separate the river channel from the Oakdale Facility tailrace discharge point.



*Figure 2. Quinapoxet Dam soon after construction in 1905*



*Figure 3. Quinapoxet River prior to dam construction in 1905*

The Quabbin Aqueduct transfer discharges from Shaft 1 in the Oakdale Power station. Modifications to the “tailrace” (or channel for the Quabbin Aqueduct transfer into the Quinapoxet River) is an important component of this project. The tailrace will be extended and will include fish deterrent structures. Because high velocity water is an attractant flow to migrating fish, it is imperative that these fish be prevented from entering the Quabbin Aqueduct tailrace (Figure 4) and instead continue upstream in the flows of the restored river channel. The channel design includes a downstream deterrent structure, essentially a stone speed bump, and an upstream structure at the original tailrace exit point (should any fish enter in). At the upstream stone deterrent there will also be a fish bypass channel, essentially an escape hatch, which is oriented upstream in the river channel to guide fish away from the Quabbin Aqueduct and back into the river.



*Figure 4. Quabbin Aqueduct Tailrace (L) and Wachusett landlocked salmon (R)*

## **Current Construction Activities**

The major construction components of the project have a discrete time-of-year requirement for in-channel work. The major construction work can only occur in the November 2024 through April 2025 period so as not to interfere with seasonal Quabbin Aqueduct transfers to Wachusett Reservoir, which occur from May through October to enhance Wachusett Reservoir water quality.

However, some early site work has occurred to take advantage of a \$156,000 grant from the Massachusetts Division of Ecological Restoration, one of MWRA's partners in this project. That early site work commenced in late May and, to date, includes preconstruction documentation, installation of temporary controls, trailers and related site work to support early construction tasks and ordering materials.

## **Groundbreaking Ceremony**

On June 17, 2023, a groundbreaking event was held at the Quinapoxet Dam. The event was kicked off with remarks from Executive Director Fred Laskey, Commissioner Brian Arrigo of the Department of Conservation and Recreation, Commissioner Tom O'Shea of the Department of Fish and Game, and Beth Lambert, Director of the Department of Ecological Restoration. MWRA's John Gregoire presented a historical overview and rationale for dam removal. The consultant also presented on design considerations including the fish deterrent structure and the contractor discussed construction requirements including the need to minimize sedimentation.

The event was well attended with over 70 people present from several entities, such as the MWRA Board of Directors, the MWRA Advisory Board, local West Boylston Town officials, members of American Rivers and the Nashua River Watershed Associations, and the angler groups Trout Unlimited and Eastern Brook Trout Joint Venture. Several media outlets covered the event, which culminated with the ceremonial removal of a large stone from the spillway.

## **BUDGET/FISCAL IMPACTS:**

The FY25 Draft Final CIP includes \$2,470,000 for Contract 7348. MWRA has received a \$50,000 grant for the ADA-accessible fishing platform and walkway, and a \$156,000 grant from the Massachusetts Department of Ecological Restoration for early site work items.

## **MBE/WBE PARTICIPATION:**

The following MBE/WBE participation requirements were established for this contract: MBE 7.24% and WBE 3.6%. Lucianos Excavation, Inc. is a registered MBE and has committed \$2,000,000 for MBE and \$89,000 for WBE participation.

**STAFF SUMMARY**




**TO:** Board of Directors  
**FROM:** Frederick A. Laskey, Executive Director  
**DATE:** June 26, 2024  
**SUBJECT:** Approval of Revisions to the Lead Service Line Replacement Program Guidelines

COMMITTEE: Water Policy & Oversight

INFORMATION  
 VOTE

Kristen M. Hall, Senior Program Manager  
Rebecca Weidman, Deputy Chief Operating Officer  
Stephen Estes-Smargiassi, Dir. Of Planning and Sustainability  
Preparer/Title

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

*At the May 22, 2024 meeting, the Board approved an additional \$100 million for the Lead Service Line Replacement Program and authorized the inclusion of a 25 percent grant, based on a recommendation from the Advisory Board. Staff have finalized revisions to the Lead Service Line Replacement Program guidelines and seek Board approval of these guidelines in order to begin rolling out the new program, which will become effective July 1, 2024.*

**RECOMMENDATION:**

To approve the revised guidelines for the Lead Service Line Replacement Program as outlined in this Staff Summary.

**DISCUSSION:**

MWRA’s goal in providing financial assistance to member communities is to encourage and facilitate the full removal of all lead service lines in local water systems to reduce lead levels and protect public health, and to meet the proposed Lead and Copper Rule Improvements, expected to be promulgated by EPA later this year.

Staff revised the program guidelines to incorporate the additional funds and establish eligibility requirements for communities to receive the grant portion. The Advisory Board and MWRA Law Division staff have reviewed and provided input into the guidelines. Substantive changes to the guidelines are highlighted in yellow in the attachment. Noteworthy changes to the revised guidelines include:

- to be eligible to receive the grant, a community must commit to fully funding replacement of the portion of the service line on private property at no cost to the resident;
- for communities whose projects meet the eligibility requirement, funds will be distributed as a 25 percent grant, and a 75 percent interest-free loan to be repaid over ten years;

- the new program will be effective as of July 1, 2024. Retroactive funding will not be eligible for the grant; and
- affirmative action participation goals have been updated for consistency with current MWRA procurement goals.

**Next Steps:**

Once the program guidelines have been approved, staff will begin additional outreach on the new program. The Advisory Board hosted a Lead Forum at its May meeting where staff previewed the proposed revisions to the program. After the Board of Directors approved revisions to the program, staff also highlighted the addition of the grant at a community emergency response training conducted by MWRA staff in June. Next, staff will send information about the program to every water community, and conduct individual outreach to all communities with known lead service lines.

Significant outreach will be required to ensure success of the program. Staff will need to be in regular contact with all communities who have any number of lead service lines, whether they utilize MWRA funds or not. In addition to the work staff undertake to review and evaluate individual project applications and determine eligibility under the existing program, staff also anticipate attending additional community meetings, developing outreach materials, tracking and updating lead service line inventories, and providing regular updates to Senior Management. Given the important public health benefits of a successful program and the potential for future treatment avoidance, MWRA is evaluating staffing needs for the program, and is considering supplementing staff levels in the unit.

**BUDGET/FISCAL IMPACTS:**

As discussed in the May 22, 2024 Staff Summary, the modifications to the Lead Service Line Replacement Program bring the total available funding to \$156 million. Similar to the current community assistance programs, the cost of the interest on the ten-year loan and the principal and interest on the grants will be included in the Current Expense Budget. The estimated first year cost of this program is \$1.5 million. Based on a 30-year borrowing for the grant component and ten years of interest on the loans, the total program is estimated to cost \$118 million. The estimated cost for construction and operations (escalated at three percent annually) of the additional corrosion control over 30 years is \$180 million.

MWRA is exploring different funding sources to help mitigate the costs associated with the revised lead line replacement program. Staff are working with the Massachusetts Clean Water Trust to determine if State Revolving Fund (SRF) lead program grants can be provided to MWRA on behalf of its member communities.

**ATTACHMENT:**

Draft Lead Service Line Replacement Program Guidelines

# MASSACHUSETTS WATER RESOURCES AUTHORITY



## LOCAL WATER SYSTEM ASSISTANCE PROGRAM

### **PROGRAM GUIDELINES FOR LEAD SERVICE LINE REPLACEMENT PROGRAM PROJECTS**

**July 2024**

MASSACHUSETTS WATER RESOURCES AUTHORITY  
CHARLESTOWN NAVY YARD  
33 TAFTS AVENUE  
BOSTON, MA 02128

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## SECTION 1 - INTRODUCTION

### 1.1 Establishment of Massachusetts Water Resources Authority's Lead Service Line Replacement Program

The Massachusetts Water Resources Authority (MWRA) Board of Directors, by their vote on March 16, 2016, authorized the enhancement of the Local Water System Assistance Program to provide up to \$100 million in 10-year zero-interest loans to communities under the MWRA Lead Service Line Replacement Loan Program. On June 26, 2024, the Board of Directors authorized an additional \$100 million for the program, and incorporated a twenty-five percent (25%) grant to be offered to communities that fully fund the removal of the private portion of the lead service line, subject to conditions put forth in these guidelines. The original program, referenced as the “Lead Service Line Replacement Loan Program”, “Lead Loan Program” or “LLP”, was strictly an interest-free loan program designed to assist member water communities to remove lead service lines with a goal that all lead pipe is fully removed. **The revised program aims to enhance member water communities’ ability to meet this goal more expeditiously by including the above-referenced grant portion of the new program, hereafter referred to as the “Lead Service Line Replacement Program”, “Lead Replacement Program” or “LRP” for short.** The revised program will continue to help upgrade local water systems to reduce the potential for elevated lead levels at customer taps and maintain high water quality conditions throughout the system. The review of applications for financial assistance, the determination of eligible projects, and the distribution and repayment of funds will be performed in accordance with the provisions of the Lead Replacement Program, as presented in this "Program Guidelines for Lead Service Line Replacement Program" document. The original Program Guidelines were approved by the Board of Directors on May 11, 2016 and the revised Program Guidelines were approved by the Board of Directors on June 26, 2024.

### 1.2 Purpose

The purpose of the MWRA LRP is to provide incentives in the form of grants and interest-free loans to MWRA's water service area communities in order to upgrade both community-owned and privately-owned portions of local water systems to reduce the potential for elevated lead levels at customer taps and maintain high water quality conditions throughout the system. The presence of lead service lines connecting homes and businesses to local water mains can lead to elevated lead levels in tap water, especially if water sits stagnant in a lead service for an extended period. MWRA’s stable water quality and effective corrosion control treatment reduce the risk that lead service lines will cause elevated lead levels. However, the risk of elevated levels remains as long as lead service lines are in use. While the Program's major objective is funding construction projects that will replace the public and private portions of lead service lines, related records research, identification, planning, design, and construction inspection costs required to implement appropriate lead service line replacement projects are also eligible for loan assistance. Eligible and ineligible project costs are listed in Sections 2.7 and 2.8, respectively.

### 1.3 Term of the Program and Annual Review

**The MWRA LRP provides up to \$200,000,000 in grants and interest-free loans to communities beginning in FY17 (July 1, 2016).** The end date for the program has not been established. MWRA staff will provide the Board of Directors annual updates on progress of lead service line replacements and loan distributions.

MWRA reserves the right to seek state and/or federal funding for all or a portion of the work under the Lead Service Line Replacement Program. If any agency of the Commonwealth or United States establishes funding requirements as a condition precedent to the authorization and/or the expenditure of state and/or Federal funds for the project, irrespective of the funding agency or process, the Authority will incorporate those requirements into the agreement with the Local Body.

In the future, the MWRA Board of Directors will establish an end date to conclude the LRP. All loan assistance commitments made prior to the conclusion of new loan distributions under the Program shall be fulfilled under the conditions established in each Financial Assistance and Loan Agreement.

#### 1.4 Definitions and Abbreviations

Definitions and abbreviations are listed in APPENDIX A and APPENDIX B, respectively.

## SECTION 2 - FINANCIAL ASSISTANCE APPLICATION AND DISTRIBUTION OF FUNDS

### 2.1 Overview

Binding commitments to provide financial assistance for local lead service line replacement projects will be issued by MWRA's Executive Director, Director of Finance, or Treasurer in the form of a "Financial Assistance Agreement." An offer for financial assistance will be made by MWRA following the review of a "Financial Assistance Application" and the determination by MWRA that the project is eligible for financial assistance. The filing of a Financial Assistance Application by a community will not constitute a binding commitment by MWRA to provide financial assistance. A Financial Assistance Agreement may be executed at the discretion of MWRA subject to the availability of Program funds. Financial Assistance Agreements will be executed with communities and project funds will be distributed on quarterly funding distribution dates. **The target distribution dates will be on or about February 15, May 15, August 15, and November 15 of each year.** The actual distribution dates will vary and will be determined by MWRA when the Financial Assistance Application is finalized. To be eligible to execute a Financial Assistance Agreement on a particular funding distribution date, the community must have submitted a complete Financial Assistance Application in sufficient time to be reviewed and approved by MWRA staff at least thirty (30) calendar days prior to the proposed funding distribution date. It must also be the community's intent to begin the project within ninety (90) calendar days of execution of the agreement. A Financial Assistance Application may be approved by MWRA if the proposed project meets the eligibility criteria in Section 2.8 and 2.9.

### 2.2 Pool of Funds for Lead Service Line Replacement Program

The approved \$200 million in grant/loan funds will be provided as a pool of funds available to all eligible communities (see Section 2.3 below) to draw from beginning in FY17 via the financial assistance application process for local lead service line identification/removal projects. The funds

will be available for community loans until the MWRA Board of Directors establishes an end date to conclude the LRP.

MWRA reserves the right to seek state and/or federal funding for all or a portion of the work under the Lead Service Line Replacement Program. If any agency of the Commonwealth or United States establishes funding requirements as a condition precedent to the authorization and/or the expenditure of state and/or Federal funds for the project, irrespective of the funding agency or process, the Authority will incorporate those requirement into the agreement with the Local Body.

### 2.3 MWRA Water Communities Eligible for the Lead Service Line Replacement Program

The 47 full and partial MWRA water communities that are currently eligible for water loans under MWRA’s Local Water System Assistance Program are also eligible under the Lead Service Line Replacement Program. These include 34 fully-supplied communities: Arlington, Belmont, Boston, Brookline, Chelsea, Chicopee, Everett, Framingham, Lexington, Lynnfield Water District, Malden, Marblehead, Marlborough Medford, Melrose, Milton, Nahant, Newton, Northborough, Norwood, Quincy, Reading, Revere, Saugus, Somerville, South Hadley Fire District #1, Southborough, Stoneham, Swampscott, Waltham, Watertown, Weston, Wilbraham, and Winthrop; and 13 partially-supplied communities: Ashland, Bedford, Burlington, Canton, Dedham/Westwood Water District, , Needham, , Peabody, Stoughton, Wakefield, Wellesley, Wilmington, Winchester, and Woburn. Five special case water communities are not eligible for LRP funds: Cambridge, which receives MWRA water on an emergency-only basis; Lynn, which receives MWRA water only for the GE plant; as well as Clinton, Leominster (emergency only), and Worcester (emergency only) that draw untreated (raw) water from the Wachusett Reservoir.

### 2.4 Application for Financial Assistance

Each eligible (see Section 2.3) MWRA water service area community may apply for financial assistance funding under the LRP. Based on the type of community project and application submitted to MWRA, LRP funds will be distributed in either of two ways:

1. Under a Local Water System Assistance Program joint application for a *Water Project* and *Lead Service Line Replacement Program Project*, MWRA Lead Service Line Replacement Program funds will be distributed together with Local Water System Assistance Program Water Project funds to finance local projects that combine lead service line identifications/replacements with a water pipeline rehabilitation/replacement project; or,
2. Under a Local Water System Assistance Program application for a *Lead Service Line Replacement Program Project* only, MWRA Lead Service Line Replacement Program funds will be distributed (separate from any *Water Project* funds) for local projects that specifically target lead service line identification and/or replacements.

Financial Assistance Applications should be submitted to:

Massachusetts Water Resources Authority  
2 Griffin Way

Chelsea, MA 02150  
Attn: Planning - Community Support Program

The Lead Service Line Replacement Program Financial Assistance Application is provided as Attachment 1. An electronic copy (MS Word) of the application is available at:

<http://www.mwra.com/comsupport/communitysupportmain.html>, or from:

- David Granados, Project Manager, [david.granados@mwra.com](mailto:david.granados@mwra.com) , or
- Claudia Baptista, Project Manager, [claudia.baptista@mwra.com](mailto:claudia.baptista@mwra.com) .

The Lead Service Line Replacement Program web page is at: <http://www.mwra.com/comsupport/lrp/lrpprogram.html>. The applicant should provide as complete information as possible on the proposed project. The information provided will be reviewed by MWRA staff to determine if the project is a viable Lead Service Line Replacement Program project and assess eligible project costs. Once a proposed project has been approved and an award amount designated, MWRA and the community will cooperatively schedule execution of the Financial Assistance and Loan Agreements and distribution of loan funds on or about one of the quarterly funding distribution dates.

## 2.5 Initiation Dates for Eligible Project Costs

The initial date for determining community project costs that are eligible to receive funding under the MWRA Lead Replacement Program is July 1, 2016. All costs incurred for eligible lead service line replacement work performed within eligible MWRA service area communities on or after July 1, 2016, regardless of the beginning date of the project, will be considered for eligibility during review of a Financial Assistance Application under the terms and conditions of the original Lead Loan Program. **If projects were substantially completed before July 1, 2016 they will not be eligible. All replacement work that includes the full funding of the private portion of the lead service line completed on or after July 1, 2024, will be considered for eligibility of the grant portion of the Lead Replacement Program. Retroactive funding for projects completed prior to July 1, 2024, will not be eligible to receive the grant but may be eligible to receive an interest-free loan.** Eligible and ineligible project costs are outlined in Sections 2.8 and 2.9, respectively.

## 2.6 Financial Assistance Grant/Loan Apportionment

**Under the revised program guidelines set forth on June 26, 2024, communities may be eligible to receive funding in the form of an interest-free loan for seventy-five percent (75%) of the amount determined to be eligible under the program, and the remaining twenty-five percent (25%) as a grant, provided that the community has agreed to fully fund the removal and replacement of the private portion of the lead service line. The loan will be repaid to MWRA in ten (10) equal installments over a ten-year period beginning one year from the original quarterly funding distribution date. For example, if a community is eligible for the grant, and receives a \$1,000,000 distribution from the MWRA Lead Service Line Replacement Program during the November 2024 funding quarter, then the community would repay to MWRA a total of \$750,000 in ten equal payments of \$75,000 each. The ten repayments would be made on November 15 in the years 2025 through 2034. The loan can be repaid over a shorter period, if the community so desires. Loan repayment requirements are presented in Section 4.**

## 2.7 Financial Assistance Agreement, Loan Agreement, and Distribution/Repayment of Funds

All project information submitted as part of the Financial Assistance Application will be used by MWRA to determine the portion of the total project cost eligible under the Lead Replacement Program. Based on the determined eligible project cost, an appropriate "Award Amount" will be established for each project. For MWRA Lead Replacement Program funding, one hundred percent (100%) of the total Award Amount will be provided as an interest-free loan, or as seventy-five percent (75%) loan and twenty-five percent (25%) grant if the community is eligible to receive the grant, as set forth in these guidelines. Determination of grant and loan eligibility shall be made upon MWRA's review of the financial assistance application.

Financial Assistance and Loan Agreements will be executed by MWRA's Executive Director, Director of Finance, or Treasurer on behalf of MWRA and an appropriate representative of the community who has been authorized to act as the municipality's agent. **Throughout the term of the Program, Financial Assistance and Loan Agreements will be executed on (or about) the following quarterly funding distribution dates: February 15, May 15, August 15, and November 15.**

The Loan Agreement will incorporate an opinion from the community's Bond Counsel stating that the loan portion of the financial assistance is a valid general obligation of the municipality. The community must also certify that all actions required by the municipality to expend the financial assistance funds have been obtained; that all permits, easements, and all other project requirements and approvals have been obtained; and that implementation of the project is intended to begin within ninety (90) calendar days of execution of the agreement. The Financial Assistance Agreement will contain the project scope of work, project schedule, and additional project specific terms and conditions. Following execution of the Financial Assistance and Loan Agreements, MWRA will have the entire financial assistance award amount electronically transferred into a Massachusetts Municipal Depository Trust (MMDT) account (or similar account approved by MWRA) designated and arranged by the community. If the community has an existing MMDT account used for previous Local Water System Assistance Program loans, that account can also be used for the Lead Replacement Program. **All financial assistance funds distributed by MWRA for lead service line replacement projects, shall be applied to the cost of approved community lead service line replacement projects. All earnings (interest) from the MMDT account shall be applied either to an approved lead service line replacement project or other approved community water system rehabilitation project, with priority given to lead projects. If all lead service line replacement projects are completed and loan funds and/or interest remain in the MMDT account, those funds must be utilized on MWRA approved community water system rehabilitation projects.**

The interest-free loan will be repaid to MWRA in ten equal payments, over a ten-year period, beginning one year from the original quarterly funding distribution date.

## 2.8 Eligible Project Costs

Financial assistance awarded by MWRA under this program shall be solely for the purpose of rehabilitating or replacing water service lines so that all lead pipe is fully removed. MWRA's Lead Service Line Program will help upgrade local water systems to reduce the potential for elevated

lead levels at customer taps and maintain high water quality conditions throughout the system. While the Program's major objective is funding construction projects that will replace the public and private portions of lead service lines, related records research, identification, planning, design, and construction inspection costs required to implement appropriate lead service line replacement projects are also eligible for loan assistance. Costs that are eligible under MWRA's Lead Service Line Program include, but are not limited to:

- (a) Identification of water service connections (or portions of service connections) constructed of lead including related records research, inventory/database development, house to house inspection, development of outreach/education materials, mapping of lead service lines, and other planning activities incidental thereto.
- (b) Construction, reconstruction, rehabilitation, alteration, remodeling or other improvements to replace lead water service lines to fully remove all lead pipe. Costs for water pipeline rehabilitation incidental to the replacement of lead service lines are eligible. The replacement of lead gooseneck connections is eligible, either when encountered during water system rehabilitation/construction or if targeted through a specific rehabilitation project. Slip lining of lead water services will not be eligible. For each local water service line, all lead service pipe (both public and private) must be fully removed to be eligible. Replacement of galvanized service lines is also eligible.
- (c) Community projects that provide a homeowner incentive for lead service line replacement through rebates for privately funded lead service line replacements or other similar incentive program will be eligible. Projects that provide full funding for the private side replacement shall be eligible for a twenty-five percent (25%) grant/seventy-five percent (75%) interest free loan. Projects that do not provide full funding for the private side replacement are eligible for one hundred percent (100%) interest free loan.
- (d) Costs that are reasonable and necessary to repair private property areas directly impacted by eligible construction work so that the private property is as near as practical to existing conditions. Eligibility of work on private property may need to be reviewed on a project by project basis. Work to improve private property will not be eligible.
- (e) Paving costs that are reasonable and necessary to repair the roadway and/or sidewalk and driveway areas directly impacted by eligible construction work will also be eligible and be reviewed on a project by project basis. Eligibility of trench width pavement versus full width overlay pavement will be reviewed on a project by project basis. Cost for full depth roadway reconstruction will not be eligible.
- (f) Police details associated with eligible project work.
- (g) Engineering services, in connection with project design including surveying, subsurface exploration, test pits, preparation of plans, specifications, and public bidding documents, for eligible lead service line replacement projects and activities incidental thereto.
- (h) Resident engineer inspection and construction administration services in connection with eligible lead service line replacement projects required to ensure that the work is accomplished in accordance with the design drawings and specifications and applicable

State laws and activities incidental thereto.

- (i) Direct labor only (not including overhead or overtime costs) for force account work associated with planning, design, construction, or construction inspection of eligible lead service line replacement projects.
- (j) Establishment of a Massachusetts Municipal Depository Trust (MMDT) or similar account used solely for the deposit, withdrawal, and tracking of financial assistance funds.
- (k) Bond counsel services, or other legal services, in connection with review of the Loan Agreement, Water Bond, and opinion of Bond Counsel.
- (l) Purchase and distribution of certified Point of Use (POU) water filters to remove lead in homes/businesses, as required post-lead service line replacement by EPA's LCR Revisions or Improvements rules. Filters should be certified against the NSF/ANSI Standard 53.

**Please See Section 2.9 (f) and 2.9 (g), below:** Any and all costs associated with the testing, handling, management, and disposal of hazardous waste, as defined under 310 CMR 30.000 are ineligible costs. Any and all costs associated with the testing, handling, management, and disposal of other contaminated or hazardous material (not meeting the definition of hazardous waste, as defined under 310 CMR 30.000) and determined to not be suitable for trench refill shall be limited to ten percent (10%) of the total eligible project cost.

## 2.9 Ineligible Project Costs

Costs which are ineligible under the Lead Replacement Program shall include, but are not limited to:

- (a) Costs in excess of the approved financial assistance Award Amount.
- (b) Costs for services outside the scope of the approved project, except as modified by an MWRA approved revised project scope of services.
- (c) Ordinary operating expenses of public works departments, water departments, water commissions, water districts, or local government, and overtime and overhead costs associated with eligible force account work.
- (d) Excessive paving costs that are not reasonable and necessary to repair the roadway and/or sidewalk areas directly impacted by eligible construction work.
- (e) Excessive costs to repair private property or costs to improve private property that are not reasonable and necessary as directly impacted by eligible construction work.
- (f) Any and all costs associated with the testing, handling, management, and disposal of hazardous waste, as defined under 310 CMR 30.000.
- (g) Any and all costs associated with the testing, handling, management, and disposal of other contaminated or hazardous material (not meeting the definition of hazardous waste, as

defined under 310 CMR 30.000) and determined to not be suitable for trench refill that exceeds ten percent (10%) of the total eligible project cost.

- (h) Costs incurred under third party agreements, absent specific contract language which conveys the applicable terms and conditions of the Financial Assistance Agreement to the third party.
- (i) Costs for which payment has been or will be received under any other MWRA, state, or federal grant or loan funding assistance program.
- (j) Costs for the preparation of an MWRA Financial Assistance Application or preparation of funding applications for any other agency.
- (l) Costs for sewer system maintenance or rehabilitation, except sewer repair work required due to construction conflicts with work directly related to eligible lead service line replacement work.
- (m) Charges for the use of vehicles or equipment owned by the applicant.
- (n) Costs for obtaining permits or licenses by the applicant.
- (o) Bonus payments to contractors for completion of construction earlier than contracted completion date.
- (p) Personal injury compensation, claims related to wrongful deaths, or property damages arising out of the project, however determined.
- (q) Costs of equipment or material procured in violation of state or federal law.
- (r) Fines and penalties.
- (s) Costs of the purchase of real property.
- (t) Costs associated with construction that does not result in a complete removal of lead service lines, including slip lining of lead services. All lead within a service line must be removed to be eligible for the program.

## 2.10 MWRA Recommended Community Lead Service Line Replacement Program

Under the Local Water System Assistance Program application process for both Lead Replacement Program Projects and Water Projects, communities will need to acknowledge the MWRA recommended components for a “**Community Lead Service Line Replacement Program.**” The MWRA recommended program incorporates at least the following:

1. Communities should clearly establish that it is their goal to fully remove all lead pipe from both publicly-owned and privately-owned water service line connections;



2. Communities should commit to a comprehensive lead service line inventory program to compile a listing of properties with full or partial lead service lines that will be made available to the public via web page or other similar public access vehicle (subject to disclaimer for accuracy based on best available information);
3. Communities should target proactive outreach to customers with lead service lines to provide educational information regarding the risks of lead exposure and information encouraging the customer to participate in the community lead service line replacement program so that the privately-owned portion is replaced concurrent with the publicly-owned portion;
4. Communities should maintain ongoing proactive outreach to customers with known privately-owned lead service lines;
5. Communities should include a unit cost bid item for public and private portion service line replacement in all water pipeline projects so that a mechanism exists for full removal of lead service lines; and,
6. As a secondary measure, communities' lead service line replacement programs should include replacement of lead gooseneck connections when encountered during infrastructure rehabilitation or construction.
- 7. Communities should consider and make every effort to fund the full replacement of all lead service lines to reach the highest level of removal possible.**

Applicant communities must acknowledge these seven recommended components for a **Community Lead Service Line Replacement Program**. This acknowledgement is intended to make sure communities understand that implementing a lead service line replacement program, combined with other water system rehabilitation projects, will help maintain high water quality in the distribution systems and at the customer's tap.

#### 2.11 Multiple Financial Assistance Distributions

If a community seeks additional MWRA funding for additional eligible project costs on a previously funded project, a separate Financial Assistance Application may be submitted to MWRA. Financial assistance for additional community project costs or additional projects will be provided through execution of a separate Financial Assistance Agreement. Communities may receive financial assistance through the execution of multiple Financial Assistance Agreements. The repayment amount and schedule established in each Loan Agreement shall not be modified due to the execution of a second (or multiple) Loan Agreements. The repayment amount and schedule for each Financial Assistance Agreement shall be established independently.

#### 2.12 Limitation on Financial Assistance Award

The award of financial assistance by MWRA shall not constitute a commitment for approval of financial assistance for a subsequent project or additional work under the initial project. If a subsequent project or additional work under the initial project is initiated prior to execution of a

Financial Assistance Agreement, the applicant proceeds at its own risk. However, all costs incurred for community lead service line replacement projects on or after July 1, 2016 will be considered for eligibility under the Lead Replacement Program, even if the project is underway prior to submittal of the Financial Assistance Application.

### 2.13 Interaction With Other MWRA Funding Programs, the State Revolving Fund, and Other Programs of Assistance

All costs for which payment has been or will be received under MWRA's Local Water System Assistance Program, MWRA's CSO Program, MWRA's I/I Local Financial Assistance Program, the State Clean Water or Drinking Water Revolving Fund, or any other state, federal, or other program of assistance shall not be considered an "eligible" cost under the MWRA Lead Replacement Program. However, a community's acquisition of other grant or loan funds which are not requested for eligibility under the MWRA Lead Replacement Program, shall not adversely influence the award of MWRA financial assistance.

### 2.14 Massachusetts Municipal Depository Trust (MMDT) Account and Use of Earned Interest

The applicant is required to establish a Massachusetts Municipal Depository Trust (MMDT) account (or similar account approved by MWRA) for the program. MWRA will deposit the financial assistance funds into the MMDT account. The financial assistance funds must remain separated from other community funds and accounts. No other community funds may be deposited to this account. **Funds must be drawn from the MMDT account to pay project expenses, or to reimburse other municipal accounts that have been used to pay project expenses. The MMDT account must be drawn down in parallel with project expenses throughout the life of the project. Investment reports or monthly statements from the account shall be furnished to MWRA on a regular basis. All interest earned on the financial assistance funds shall be used by the community to cover eligible project costs, additional phases of the community's lead service line replacement program, or other community water system rehabilitation projects as approved by MWRA, with priority given to lead projects. If all lead service line replacement projects are completed and loan funds and/or interest remain in the MMDT account, those funds must be utilized on MWRA approved community water system rehabilitation projects.**

## SECTION 3 - FINANCIAL ASSISTANCE AGREEMENT

### 3.1 Overview

Following review of a community's Financial Assistance Application, MWRA will determine the eligible project cost and establish the project Award Amount. Once the Award Amount is determined, MWRA will draft a Financial Assistance Agreement. Prior to the distribution of funds to any community under the Lead Replacement Program, both MWRA and the community will be required to execute a Financial Assistance Agreement. The Financial Assistance Agreement will stipulate all applicable terms and conditions of the grant and loan funding provided by MWRA for the community's lead service line replacement project, including, but not limited to: project scope of work (Attachment A); project schedule (Attachment B); project inspection, reporting, audit, and closeout provisions; and project specific special conditions. The applicant shall signify its

acceptance of the terms and conditions through execution of the Financial Assistance Agreement.

Appended to the Financial Assistance Agreement will be a separate Loan Agreement (Attachment C). The Loan Agreement process includes: (1) an Opinion of the Community's Bond Counsel stating that the loan is a valid general obligation of the municipality; and (2) a Water Bond prepared by the Community's Bond Counsel and executed by authorized community representatives. The loan repayment amount and schedule will be stipulated in the Water Bond.

The Financial Assistance and Loan Agreements will not be executed by the Authority until such time as a draft Water Bond and Opinion of the Community's Bond Counsel have been received by the Authority. Financial assistance funds will not be distributed by the Authority until such time as the original Water Bond and Opinion of the Community's Bond Counsel have been received by the Authority.

### 3.2 Projects With Retroactive Funding

For projects where a community seeks to apply for MWRA loan funds to retroactively reimburse project costs previously advanced via community funds, the community is advised that local authorization (via Town Meeting approval, City Council vote, etc.) approving repayment to MWRA is generally required to have occurred **prior** to the expenditure of project costs. With appropriate approvals, community funds may provide bridge financing for some portion of the project, while awaiting permanent MWRA loan funding. As with all community financing options, the community's financial advisor and Bond Counsel representative should be consulted for advice on proper authorization language and appropriate timing of authorization/borrowings to ensure each community's unique legal requirements are met. Retroactively funded projects will not be eligible for the grant portion of the program.

### 3.3 Assignment of Agreement Requirements to a Third Party

For cost efficiencies, some portion of local projects may be performed under an agreement with a separate agency (third party). Examples of this type of arrangement include water pipeline rehabilitation work contained in contracts performed by Massachusetts DPW, DCR, MBTA, BPDA, Boston Public Works, etc. Absent specific contract language, the third party would not generally be subject to the terms and conditions of the Financial Assistance Agreement. If the applicant demonstrates to MWRA that an agreement exists between the local community and the third party which conveys the applicable terms and conditions of the Financial Assistance Agreement to the third party, then the costs for the lead service line replacement work will be considered for eligibility. If no such agreement exists, then project costs incurred under third party agreements will be considered ineligible.

## **SECTION 4 - LOAN REPAYMENT REQUIREMENTS**

### **4.1 Repayment of Interest-Free Loan**

For projects that fully fund the replacement of the private side of the lead service line, twenty-five percent (25%) of the total Award Amount will be provided as a grant and seventy-five percent (75%) of the total Award Amount shall be provided as an interest-free loan. For projects that do not fully fund the replacement of the private side of the lead service line, one hundred percent (100%) of the total Award Amount will be provided as an interest-free loan. In either circumstance, the interest-free loan will be repaid to MWRA, in ten equal payments, over a ten-year period, beginning one year after the original quarterly funding distribution date (as established in Section 2.6). Each loan repayment will be due to MWRA annually on the quarterly distribution date.

Forty-five (45) days prior to each annual loan repayment date, MWRA will send the community an invoice that will include the following:

- (1) the terms that will be 45 days from the invoice date;
- (2) the loan repayment due date;
- (3) the annual loan repayment amount;
- (4) a description of the charge;
- (5) the remit address for checks and wires; and,
- (6) the phone number of the MWRA Treasury Office and contact person to call with questions on repayment procedures.

The loan may be repaid early, in less than ten years, if the community so desires. Payments should continue to be made on the anniversary date of the loan, but the amount can be increased if the community wishes to pay off the loan early. If a community wishes to pay an amount in advance of the anniversary date and prior to receiving an invoice, identifying correspondence should accompany the payment in order for MWRA's Treasury Department to properly credit the remaining balance due the proper account. All payments should be clearly identified on the remittance copy of the invoice, especially if the amount paid differs from the amount of the invoice.

## **SECTION 5 - EXPENDITURE VERIFICATION REQUIREMENTS, PROJECT INSPECTION, PROJECT CLOSEOUT, AND AUDIT PROVISIONS**

### **5.1 Expenditure Verification Requirements**

The community shall submit progress reports to MWRA that outline the overall progress of the project, the progress of key project tasks, and the financial status of the project relative to the initial project budget. MWRA will provide standardized forms for progress reporting. Progress reports will be submitted to a designated MWRA Project Manager who will be the key MWRA contact person for all community inquiries regarding the MWRA Lead Service Line Replacement Program. To enable MWRA to track project expenditures, the community shall append to each progress report appropriate backup information that will document the costs specific to the funded project. Appropriate cost backup information shall include, but not be limited to, consultant and/or

contractor invoices and/or pay applications, purchase orders, force account time sheets, etc. The frequency of progress reporting will depend on the project cost, duration, and schedule. Most progress reports are expected to be semi-annual.

## 5.2 Project Inspection

A community receiving funding under MWRA's Lead Replacement Program shall make the project site and all project records available to MWRA staff for review during the course of the project. MWRA staff will periodically monitor the progress of work for which MWRA financial assistance has been provided. The intent of these periodic inspections will be to insure that the project is: (1) proceeding substantially as defined in the Scope of Work (Attachment A) and Project Schedule (Attachment B) of the executed Financial Assistance Agreement; and (2) proceeding in a manner which will produce a successful project as proposed in the Financial Assistance Application. Appropriate wording which will allow MWRA staff access to the project site and project records shall be included in the Financial Assistance Agreement and project contracts related to performance of work for which the community is receiving financial assistance funding.

## 5.3 Project Closeout Provisions

Upon completion of the project, the community shall notify MWRA that the project is complete and shall certify that all work included in the Scope of Work section of the executed Financial Assistance Agreement has been completed and performed in accordance with said Agreement. MWRA will provide the community with a project closeout package that includes a summary of all project expenditures and identifies the final project cost. The community shall review, execute, and return the project closeout package to MWRA. Prior to project closeout, MWRA will work cooperatively with the community to make every effort to expend the total project financial assistance Award Amount on project related expenditures (or other approved lead service line replacement eligible costs). To ensure that the total project financial assistance Award Amount is expended, MWRA will consider allowing: (1) an increase in the quantity of existing eligible items in the project Scope of Work (e.g. additional service line replacements), (2) additions to the project Scope of Work, or (3) the transfer of unused funding to a second (or future) funded project which has additional eligible project costs which were not already funded under a separate Financial Assistance Agreement.

## 5.4 Project Audit Provisions

The community, the community's engineer(s), and the community's contractor(s) shall maintain books, records, documents, and other evidence directly related to the performance of all work receiving funding under the Financial Assistance Agreement in accordance with generally accepted professional practice and appropriate accounting procedures and practices. The community, the community's engineer(s), and the community's contractor(s) shall also maintain the financial information and data used by the engineer(s) and contractor(s) in the preparation or support of the cost submission and a copy of the cost summary submitted to the community. MWRA shall have access to such books, records, documents, and other evidence for inspection, audit, and copying during normal business hours, upon ten (10) days of notice and at MWRA's expense. The community, the community's engineers, and the community's contractors shall provide proper facilities for such access and inspection. All of the documents shall be kept for at least seven (7) years after the final payment to the engineer or contractor, or at least seven (7) years

after closeout of the project, whichever is later.

The community shall agree to include the wording of the above paragraph in all contracts and subcontracts related to performance of work for which the community is receiving MWRA financial assistance funding.

Audits conducted by MWRA, or its duly authorized representatives, shall be in accordance with generally accepted auditing standards and established procedures and guidelines of MWRA. Such audits shall be conducted at the expense of MWRA upon ten (10) days of notice to the community.

The community agrees to provide MWRA with a copy of the community's annual audited financial statements within a reasonable time after the issuance thereof, together with a certificate of the community stating that the community is in compliance with its obligations under this agreement.

## **SECTION 6 - EQUAL EMPLOYMENT OPPORTUNITY, ANTIDISCRIMINATION, AND AFFIRMATIVE ACTION**

### 6.1 Overview

The community shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, handicap status or national origin. The community, the community's engineer(s), and the community's contractor(s) shall comply with all applicable laws and regulations pertaining to nondiscrimination, equal opportunity and affirmative action, including without limitation, executive orders and rules and regulations of federal and state agencies of competent jurisdiction. As detailed below, the community shall make positive efforts to use minority-owned business enterprises (MBE) and woman-owned business enterprises (WBE) for professional services, non-professional services and construction related work that has received funding under the MWRA Lead Replacement Program. The community shall also require all construction contractors and subcontractors to make positive efforts to meet the percentage goal for minority employee work force hours and woman employee work force hours, as detailed below. Minority and women-owned businesses (MBEs and WBEs) who participate as part of this Program should be certified as such by the Supplier Diversity Office (SDO).

For the purpose of establishing MBE/WBE participation goals and minority/woman employee work force hour goals for projects receiving funding under the MWRA Lead Replacement Program, all eligible project costs should be designated to one of the following four categories of work:

- (a) Professional Services (see Section 6.2);
- (b) Non-professional Services (see Section 6.3);
- (c) Construction (see Section 6.4); and,
- (d) Force Account Work (see Section 6.5).

The goals for MBE/WBE participation and minority/woman employee work force hour percentages are specific to the category of work being performed. The goals for each category of work are detailed below.

## 6.2 Goals for Professional Services

A community that receives MWRA Lead Replacement Program funds for a project under the Professional Services category of work should make positive efforts to achieve a goal of 7.18 percent participation of Minority-owned Business Enterprise(s) and 5.77 percent participation of Woman-owned Business Enterprise(s) within the project contracts. At a minimum, the community should allow MBEs and WBEs the maximum feasible opportunity to compete for sub-agreements to be performed under the project. The community will not be required to include MWRA's MBE/WBE Compliance Forms or MWRA's Requirements for Minority and Woman Business Enterprise and Equal Employment Opportunity Consultant Services Forms within its professional services contracts.

## 6.3 Goals for Non-Professional Services

A community that receives MWRA Lead Replacement Program funds for a project under the Non-Professional Services category of work should make positive efforts to achieve a goal of 5.61 percent participation of Minority-owned Business Enterprise(s) and a goal of 4.88 percent participation of Woman-owned Business Enterprise(s) within project contracts. At a minimum, the community should allow MBEs and WBEs the maximum feasible opportunity to compete for sub-agreements to be performed under the project. The community will not be required to include MWRA's Supplemental Provisions for Equal Employment Opportunity, Antidiscrimination and Affirmative Action Forms within its construction contracts/specifications or non-professional services contracts.

The community shall agree to include the wording of the above paragraph in all contracts and subcontracts related to performance of work for which the community is receiving MWRA financial assistance funding.

## 6.4 Goals for Construction

A community which receives MWRA Lead Replacement Program funds for a project under the Construction category of work should make positive efforts to achieve: (1) a minority employee work force goal of 15.6 percent, (2) a woman employee work force goal of 6.90 percent, (3) a goal of 7.24 percent participation of Minority-owned Business Enterprise(s), and (4) a goal of 3.60 percent participation of Woman-owned Business Enterprise(s) within project contracts. At a minimum, the community should allow MBEs and WBEs the maximum feasible opportunity to compete for sub-agreements to be performed under the project. The community will not be required to include MWRA's Supplemental Provisions for Equal Employment Opportunity, Antidiscrimination and Affirmative Action Forms within its construction contracts/specifications or non-professional services contracts.

The community shall agree to include the wording of the above paragraph in all contracts and subcontracts related to performance of work for which the community is receiving MWRA financial assistance funding.

## 6.5 Force Account Work

The Community shall strive to achieve on the MWRA's Lead Replacement Program the labor

participation goals contained herein. Said participation goals shall apply in each job category on this program including but not limited to bricklayers, carpenters, cement masons, electricians, ironworkers, operating engineers and those classes of work enumerated in Section 44F of Chapter 149 of the Massachusetts General Laws. The participation goals for this project shall be 15.6 percent for minorities and 6.9 percent for women. The participation goals, as set forth herein, shall not be construed as quotas or set-asides; rather, such participation goals will be used to measure the progress of the Commonwealth's equal opportunity, non-discrimination and affirmative action program.

## **SECTION 7 - INSTRUCTIONS FOR COMPLETING FINANCIAL ASSISTANCE APPLICATION**

### 7.1 Application Instructions

Each eligible MWRA water community, as set forth in Section 2.3, may apply to MWRA for funding under MWRA's Lead Replacement Program by completing and filing a Financial Assistance Application. MWRA will review each submitted application to determine the adequacy, accuracy and completeness of the information contained therein. MWRA may request the applicant provide additional project information and/or request the applicant attend a meeting to review details of the proposed project.

Based on the type of community project, one of the two MWRA Local Water System Assistance Program applications should be submitted to MWRA, as explained below:

1. Under a Local Water System Assistance Program joint application for a *Water Project* and *Lead Replacement Program Project*, MWRA Lead Replacement Program funds will be distributed together with Local Water System Assistance Program Water Project funds to finance local projects that combine lead service line identifications/replacements with a water pipeline rehabilitation/replacement project. To apply for MWRA financial assistance for a joint *Water Project* and *Lead Replacement Program Project*, use the Financial Assistance Application for Water Projects (Note that Water Projects may include a Lead Service Line Replacement Component). The Financial Assistance Application for Water Projects is presented as Attachment 1 to the Program Guidelines for Water Projects.
2. Under a Local Water System Assistance Program application for a *Lead Replacement Program Project* only, MWRA Lead Replacement Program funds will be distributed (separate from any *Water Project* funds) for local projects that specifically target lead service line identification and/or replacements. To apply for MWRA financial assistance for a *Lead Replacement Program Project* only, use the Financial Assistance Application for Lead Service Line Replacement Program Projects that is presented as Attachment 1 to this document.

All questions within the application must be answered completely and accurately. The application and all supporting documentation should be submitted to:

Massachusetts Water Resources Authority  
2 Griffin Way  
Chelsea, MA 02150



Attn: Planning - Community Support Program

An electronic copy (MS Word) of the application is available at:  
<http://www.mwra.com/comsupport/communitysupportmain.html>, or from:

- David Granados, Project Manager, [david.granados@mwra.com](mailto:david.granados@mwra.com) , or
- Claudia Baptista, Project Manager, [claudia.baptista@mwra.com](mailto:claudia.baptista@mwra.com) .

The Lead Replacement Program webpage is at: <http://www.mwra.com/comsupport/lrp/lrpprogram.html>. The applicant should provide as complete information as possible on the proposed project. The information provided will be reviewed by MWRA staff to determine if the project is a viable Lead Service Line Replacement Program project and assess eligible project costs.

A discussion of each section of the Financial Assistance Application is presented below.

### **Section 1 - Financial Assistance Requested**

This section is self-explanatory.

### **Section 2 – Acknowledge MWRA Recommended Community Lead Service Line Replacement Program**

Each community participating in the Lead Replacement Program must acknowledge the MWRA recommended components for a **Community Lead Service Line Replacement Program** as part of the Financial Assistance Application Process.

### **Section 3 - Project Description**

The applicant should provide complete and detailed information on the proposed project. The information provided will be reviewed by MWRA staff to determine if the project is a viable lead service line replacement project and assess the eligible project costs. It is important that the project proponent state the estimated number of lead service connections anticipated to be removed from completion of the project construction phase, and also should include a discussion about how the community plans to fund the replacement of the private side of the lead service line.

### **Section 4 - Documentation of Project Need**

Identify records that document the project's need, including, but not limited to: water system records, physical surveys and internal inspections; housing stock age; other pertinent DPW/Water Department maintenance records; and a summary of the community's most up to date lead service line inventory.

### **Section 5 - Project Schedule**

The application must contain a realistic schedule outlining important milestones in the planning, design, or construction phases of the project. If final paving and/or project closeout

are anticipated to be delayed due to winter season, please note this in the project schedule. The estimated project start date must be included and must be within ninety days of the distribution of funds.

### **Section 6 - Map of Project**

As appropriate, the application should be accompanied by a project map denoting the general area of work. If no map or plan is submitted with the application, please explain why a map is not appropriate.

### **Section 7 - Project Funding**

The applicant must identify if 100 percent of the proposed project funding will come from MWRA's Lead Replacement Program or if a portion of the project funds will come from other funding sources. If additional funds are required to perform the project, the applicant must identify them in this section of the application. Documentation of the availability of the additional funds should be included with the application or, if the additional funding is anticipated through a future action, the anticipated availability date of the additional funds should be provided.

### **Section 8 - Summary of Costs**

In the space provided (or as an attachment) list each project phase (i.e. Inventory/Planning, Design, Construction, Construction Services, etc.). Under each phase list the major tasks of work required to complete the project. **Note that if construction paving costs represent more than ten percent (10%) of the project cost, they should be identified as a separate project phase or subtask in Section 8 - Summary of Costs.**

At the bottom of the Summary of Costs section, provide the date of the cost estimate, the appropriate Engineering News Record (ENR) Construction Cost Index, and the name of the person or firm who developed the cost estimate. Engineering costs should be broken down into the major engineering tasks as outlined in a standard engineering agreement. The following information should be provided for each engineering task: staff labor category, staff hours, hourly rates, direct labor costs, indirect labor costs, other direct costs and/or expenses, etc. For ease of preparation, a cost spreadsheet form may be submitted. Construction costs should be documented through an engineering cost estimate or bid tabulation, if available.

### **Section 9 – Lead Removal Program Details**

The applicant must provide a description of the community's lead removal program, along with documentation of the program's authorization. This documentation may be in the form of a warrant or authorization from the City Council or Town Meeting, and includes specific language that permits the community to work on private property.

### **Section 10 - Interdependent Projects**

The application must note whether financing has been received or is being requested for this project, or a separate phase of the project, from a non-MWRA grant, the Drinking Water State

Revolving Fund (DWSRF) program, or any other federal, state or other funding program. The applicant must specify interdependent projects or portions of projects. For example, if the applicant is performing the design phase of a project under State grant or DWSRF funding, and MWRA financial assistance is being requested for the construction phase, then the construction phase is dependent on completion of the design.

### **Section 11 - Intermunicipal Projects**

If the project will serve two or more municipalities, or one community's project extends into another community, the applicant must explain the circumstances. State whether the municipalities have, or propose to have, an intermunicipal agreement or another legally binding document covering financing, construction, and/or operation of the proposed improvements. If not, detail historic cooperative service relationships between the parties.

### **Section 12 - Project Permits and Certificates**

The applicant should specify permits and/or certificates that have been obtained or may be required prior to initiation of the proposed project. A list of permits and certificates, which may be applicable, is provided in the application. Additional permits and/or certificates may be required which are not shown on the list provided.

### **Section 13 - Construction Plans, Specifications, and Bidding Documents**

For proposed construction projects and equipment/material purchases, the applicant should outline the status of the plan, specification, and bidding document preparation, and the time schedule for completion. If these documents are not required for the project, an explanation should be included in this section.

### **Section 14 - Engineering Agreement**

For proposed planning and design projects, the applicant should outline the status of an engineering agreement and time schedule for its completion. If no engineering agreement is required for the project, an explanation should be included in this section.

### **Section 15 - Force Account Work**

If the applicant proposes to perform any funding eligible portion of the project (inventory/planning, design, construction services, construction activities, etc.) using its own staff (City, Town, District, or Commission employees), interns, or temporary employees (force account work), a description of the proposed activities must be provided. The use of the applicant's own employees is defined as "force account work".

Only direct labor costs associated with force account work may be approved as eligible costs if documentation of the direct labor hours and cost per hour are provided to MWRA. Charges for overhead, overtime, and/or the use of vehicles or equipment owned by the applicant and

staff time to obtaining permits or licenses are ineligible.

To document Force Account Work, MWRA requires detailed records of staff hours worked on the project. As part of its regular project progress reports to MWRA, the community must provide a breakdown of staff names, titles, job duties, hours worked on the project, and hourly pay rates. Detailed records such as weekly time sheets should be submitted as backup to summary spreadsheet information. If weekly time sheet information is not available for submittal, an appropriate community representative with direct knowledge of the project activities will be required to certify via signed statement that the force account hours being submitted to MWRA as eligible work are authentic.

### **Section 16 - Other Project Information**

The applicant is encouraged to provide any other additional information that may enable MWRA to determine that the project is a viable lead service line replacement project and assess the eligible project costs.

**APPENDIX A - DEFINITION OF TERMS**

Authority - Massachusetts Water Resources Authority

Board of Directors - Board of Directors of the Massachusetts Water Resources Authority

Director of Finance – Director of Finance of the Massachusetts Water Resources Authority

Executive Director - Executive Director of the Massachusetts Water Resources Authority

Financial Assistance - Monies provided to public entities

Grant - Monies provided to public entities that do not require repayment

Loan - Monies provided to public entities that are required to be repaid over a specified time period

Service Area Communities - All municipalities, water districts and commissions served by the MWRA's Waterworks System

Treasurer - Treasurer of the Massachusetts Water Resources Authority

**APPENDIX B - ABBREVIATIONS**

BPDA:	Boston Planning and Development Authority
CMR:	Commonwealth of Massachusetts Regulation
CSO:	Combined Sewer Overflow
CVA:	Chicopee Valley Aqueduct
DCR:	Department of Conservation and Recreation
DPW:	Department of Public Works
DOT:	Massachusetts Department of Transportation
DWSRF:	Drinking Water State Revolving Fund
EIR:	Environmental Impact Report
ENF:	Environmental Notification Form
ENR:	Engineering News Record
EPA:	United States Environmental Protection Agency
FY:	Fiscal Year
GIS:	Geographic Information System
LRP:	Lead Replacement Program
LWSAP:	Local Water System Assistance Program
MassDEP:	Massachusetts Department of Environmental Protection
MBE:	Minority-owned Business Enterprise
MBTA:	Massachusetts Bay Transit Authority
MMDT:	Massachusetts Municipal Depository Trust
MWRA:	Massachusetts Water Resources Authority
O&M:	Operation and Maintenance
SOMWBA:	State Office of Minority and Women Business Assistance
WBE:	Woman-owned Business Enterprise